

**MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION**

**CHIEF STATE SANITARY INSPECTOR  
OF THE RUSSIAN FEDERATION**

**RESOLUTION No. 36  
November 14, 2001**

**ON ENACTMENT OF SANITARY RULES**

(as amended by Amendments No.1, approved by Resolution No. 27 of Chief State Sanitary Inspector of the RF dated 20.08.2002, Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 5, approved by Resolution No. 42 of Chief State Sanitary Inspector of the RF dated 25.06.2007, No. 6, approved by Resolution No. 13 of Chief State Sanitary Inspector of the RF dated 18.02.2008, No. 7, approved by Resolution No. 17 of Chief State Sanitary Inspector of the RF dated 05.03.2008, No. 8, approved by Resolution No. 26 of Chief State Sanitary Inspector of the RF dated 21.04.2008, No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, Amendments No.11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008, No. 12, approved by Resolution No. 58 of Chief State Sanitary Inspector of the RF dated 10.10.2008, Amendment No. 13, approved by Resolution No. 69 of Chief State Sanitary Inspector of the RF dated 11.12.2008, Amendments No.14, approved by Resolution No. 28 of Chief State Sanitary Inspector of the RF dated 05.05.2009, Amendments and Additions No. 15, approved by Resolution No. 73 of Chief State Sanitary Inspector of the RF dated 08.12.2009, Amendment No. 16, approved by Resolution No. 6 of Chief State Sanitary Inspector of the RF dated 27.01.2010, Amendments No.17, approved by Resolution No. 27 of Chief State Sanitary Inspector of the RF dated 21.04.2010, Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010, Amendments No.19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010, Amendments and Additions No. 21, approved by Resolution No. 145 of Chief State Sanitary Inspector of the RF dated 12.11.2010, Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendments No.23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011, Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011, as amended by Resolution No. 18 of Chief State Sanitary Inspector of the RF dated 31.05.2002)

On the basis of Federal Law No. 52-FL "On Sanitary and Epidemiological Well-being of Population" dated March 30, 1999 and Regulation on "State Sanitary and Epidemiological Control" approved by Resolution No. 554 of the Government of the Russian Federation dated July 24, 2000 <\*>, hereby order:

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<\*> Collection of laws and regulations of the Russian Federation No. 31, Article 3295, dated 2000.

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Enactment date of sanitary and epidemiological rules and regulations 'Hygienic Requirements for Safety and Nutrition Value of Food Products. Sanitary Rules and Regulations (SanPin) 2.3.2.1078-01' was postponed from July 1 to September 1, 2002 (Resolution of Chief State Sanitary Inspector of the RF No.18 dated 31.05.2002)

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1. To put in force the sanitary and epidemiological rules and regulations 'Hygienic Requirements for Safety and Nutrition Value of Food Products. SanPin 2.3.2.1078-01', approved by Chief State Sanitary Inspector of the RF on 06.11.2001, on July 1, 2002.

G. G. ONISHCHENKO

Approved  
Chief State  
Sanitary Inspector  
of the Russian Federation  
First Deputy Minister of  
Health  
of the Russian Federation  
G. G. ONISHCHENKO  
November 6, 2001

## **2.3.2. FOOD RAW MATERIAL AND FOOD PRODUCTS**

### **HYGIENIC REQUIREMENTS FOR SAFETY AND NUTRITION VALUE OF FOOD PRODUCTS**

#### **SANITARY AND EPIDEMIOLOGICAL RULES AND REGULATIONS SanPin 2.3.2.1078-01**

(as amended by Amendments No.1, approved by Resolution No. 27  
of Chief State Sanitary Inspector of the RF dated 20.08.2002,  
Amendments and Additions No. 2, approved by Resolution No. 41  
of Chief State Sanitary Inspector of the RF dated 15.04.2003,  
No. 5, approved by Resolution No. 42 of Chief State Sanitary Inspector of the RF dated 25.06.2007,  
No. 6, approved by Resolution No. 13 of Chief State Sanitary Inspector of the RF dated 18.02.2008,  
No. 7, approved by Resolution No. 17 of Chief State Sanitary Inspector of the RF dated 05.03.2008,  
No. 8, approved by Resolution No. 26 of Chief State Sanitary Inspector of the RF dated 21.04.2008,  
No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008,  
No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008,  
Amendments No.11, approved by Resolution No. 56  
of Chief State Sanitary Inspector of the RF dated 01.10.2008,  
No. 12, approved by Resolution No. 58 of Chief State Sanitary Inspector of the RF dated 10.10.2008,  
Amendment No. 13, approved by Resolution No. 69  
of Chief State Sanitary Inspector of the RF dated 11.12.2008,  
Amendments No.14, approved by Resolution No. 28  
of Chief State Sanitary Inspector of the RF dated 05.05.2009,  
Amendments and Additions No. 15, approved by Resolution No. 73  
of Chief State Sanitary Inspector of the RF dated 08.12.2009,  
Amendment No. 16, approved by Resolution No. 6  
of Chief State Sanitary Inspector of the RF dated 27.01.2010,  
Amendments No.17, approved by Resolution No. 27  
of Chief State Sanitary Inspector of the RF dated 21.04.2010,  
Amendments and Additions No. 18, approved by Resolution No. 71  
of Chief State Sanitary Inspector of the RF dated 28.06.2010,  
Amendments No.19, approved by Resolution No. 102  
of Chief State Sanitary Inspector of the RF dated 10.08.2010,  
Amendments and Additions No. 21, approved by Resolution No. 145  
of Chief State Sanitary Inspector of the RF dated 12.11.2010,  
Amendments and Additions No. 22, approved by Resolution No. 177  
of Chief State Sanitary Inspector of the RF dated 27.12.2010,  
Amendments No.23, approved by Resolution No. 30  
of Chief State Sanitary Inspector of the RF dated 11.04.2011,  
Amendment No. 24, approved by Resolution No. 79  
of Chief State Sanitary Inspector of the RF dated 01.06.2011)

## **I. Scope of Application**

1.1. Sanitary and epidemiological rules and regulations 'Hygienic Requirements for Safety and Nutrition Value of Food Products' (hereinafter referred to as the 'Sanitary Rules') set forth hygienic requirements for safety and nutrition value of food products for an individual as well as compliance requirements for the said regulations under manufacturing, importing and turnover of foodstuff.

1.2. These Sanitary Rules have been developed on the basis of Federal Laws 'On Sanitary and Epidemiological Well-being of Population' (Collection of laws and regulations of the Russian Federation

No. 14, Article 1650, dated 1999), 'On Quality and Safety of Food Products' (Collection of laws and regulations of the Russian Federation No. 2, Article 150 dated 2000), 'On Radiation Safety of People' (Rossiyskaya Gazeta dated January 17, 1996), 'On Protection of Consumers' Rights' (Collection of laws and regulations of the Russian Federation No. 3, Article 140 dated 1996), 'Fundamentals of Legislation of the Russian Federation on Public Health Care' (Bulletin of the Congress of People's Deputies of the Russian Federation and the Supreme Council of the Russian Federation No. 33, Article 1318 dated 1993), Resolution of the Government of the Russian Federation No. 554 'On Approving the Regulation on State Sanitary and Epidemiological Service of the Russian Federation and Regulation on State Sanitary and Epidemiological Control' dated July 24, 2000 (Collection of laws and regulations of the Russian Federation No. 31, Article 3295 dated 2000).

1.3. Sanitary rules are designed for individuals, entrepreneurs and legal entities, the activity of which is carried out in the field of manufacturing, importing and turnover of foodstuff, provision of services in food retail business and public catering as well as for agencies and organizations of the State Sanitary and Epidemiological Service of the Russian Federation (hereinafter referred to as the "GosSanEpidemNadzor of Russia"), which carry out sanitary and epidemiological supervision and control.

1.4. Hygienic requirements for materials and items coming in contact with foodstuff shall be established by special sanitary and epidemiological rules and regulations.

## II. General Provisions

2.1. Food products shall satisfy physiological needs of human beings in required substances and energy, meet demands generally placed on foodstuff with respect to organoleptic and physicochemical parameters and comply with requirements of regulatory documents as per permissible content of chemical, radiological, biologically active substances and their compounds, microorganisms and other biological organisms endangering health of current and future generations.

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

2.2. Foodstuff produced, imported and circulating in the territory of the Russian Federation shall comply with sanitary rules as per their safety and nutrition value.

2.3. Manufacturing, importing and turnover of food products which fail to comply with the requirements provided for by these Sanitary Rules shall be not permitted.

2.4. These Sanitary Rules requirements must be complied with when working out regulatory and technical documentation governing the issues of manufacturing, importing and turnover of foodstuff.

2.5. When developing new types of foodstuff, new manufacturing technology, packaging, storage, and transportation entrepreneurs and legal entities shall justify quality and safety requirements, requirements for maintaining quality and safety, develop programs of quality and safety in-process control, procedures of testing thereof, and set shelf life of such foodstuff.

2.6. Drafts of technical documents shall be subject to sanitary and epidemiological examination according to the established procedure.

2.7. Manufacturing of new food products in the territory of the Russian Federation and import of food products to the territory of the Russian Federation, which is carried out for the first time, shall be allowed only after their state registration in accordance with the established procedure.

2.8. Imported foodstuffs shall be subject to state registration prior to import thereof to the territory of the Russian Federation.

2.9. Manufacturing of foodstuff shall be carried out in compliance with regulatory and technical documents and shall be confirmed by foodstuff quality and safety certificates provided by the manufacturer (hereinafter referred to as the quality and safety certificate).

2.10. Food products for public catering shall not require execution of a quality and safety certificate.

2.11. Compliance of foodstuffs and drafts of technical documents with sanitary rules shall be confirmed during sanitary and epidemiological compliance examination to be carried out according to the established procedure.

2.12. When the sanitary rules lack safety and nutrition value requirements for a specific type of a new food product or a food product imported for the first time the requirements shall be set during sanitary and epidemiological examination subject to the following parameters:

- established by the developer of a new type of product in the draft of the regulatory and/or technical document;
- established by applicable sanitary rules for a product similar in its composition and properties;
- required from the product in the country of its origin;
- recommended by international organizations.

2.13. Foodstuff safety and nutrition value requirements shall be recorded in the sanitary and epidemiological opinion executed according to the established form, which shall be issued by authorities and departments of GosSanEpidemNadzor of Russia on the basis of results of sanitary and epidemiological examination.

2.14. Food raw material of plant origin compulsory requires information on pesticides used during cultivation of crop plants, fumigation of premises and packaging for their storage, pest control of food supply as well as the date of the last treatment using such pesticides.

Food raw material of animal origin compulsory requires information on usage (if any) of pesticides for control of ectoparasites or diseases of animals and fowl, for treating cattle-breeding and poultry facilities, fish farming and water basing for fish reproduction as well as specification of pesticide and end date of its use.

2.15. Import, use and turnover of food raw material of animal and plant origin, which lacks information on the use of pesticides for its production, shall not be allowed.

2.16. Food raw material and foodstuffs shall be pre-packed and packaged into materials allowed to come into direct contact with food products, so that to ensure maintaining of quality and safety during storage, transportation, sale thereof, including with extended shelf-life.

(Clause 2.16 as amended by Amendments and Additions No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008)

2.17. Entrepreneurs and legal entities engaged in manufacturing and turnover of foodstuffs, provision of services in the field of foodstuff retail and public catering shall be obliged to provide customers or consumers as well as state control and supervision authorities with complete and credible information on quality and safety of foodstuffs, compliance with requirements of regulatory documents under manufacturing and turnover of foodstuff and provision of services in the field of retail trade and public catering.

2.18. For certain kinds of food products (baby food, dietary and specialized food products, probiotic products, food additives, biologically active food additives, foodstuffs containing components, produced with the use of genetically modified organisms (hereinafter referred to as the GMO), etc.) the following shall be specified:

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 5, approved by Resolution No. 42 of Chief State Sanitary Inspector of the RF dated 25.06.2007)

- scope of application (for baby food, dietary and specialized food products, food additives, biologically active food additives);

- name of ingredients comprising food product, food additives, microbic cultures, starter cultures and substances used for foodstuffs enrichment; percentage of the daily physiological need, if such a need is foreseen, shall be specified for biologically active agents for biologically active food additives and enriched products;

- recommendations for use, application, and, if required, contraindications for their use;

- for biologically active additives the following information shall obligatory be specified: 'Not a medicine';

- for food products produced with the use of GMO, including those not containing deoxyribonucleic acid (DNA) and proteins, the following information shall be specified: 'genetically modified product' or 'product received from genetically modified organisms' or 'product contains components from genetically modified organisms' (for foodstuffs containing 0.9% or less of components received with the use of GMO it is an incidental or technically non-removable impurity, and food products containing the said quantity of GMO components are not classified as products containing components received with the use of GMO)

(as amended by Amendments and Additions No. 5, approved by Resolution No. 42 of Chief State Sanitary Inspector of the RF dated 25.06.2007)

- information on state registration.

The paragraph is excluded from September 1, 2007. - Amendments and Additions No. 5, approved by Resolution No. 42 of Chief State Sanitary Inspector of the RF dated 25.06.2007,

- for food products received from/ or with the use of genetically modified organisms (bacteria, yeast and filamentous fungi, the genetic material of which was changed with the help of genetic engineering methods) (hereinafter referred to as the GMM), the following shall be specified:

(the paragraph was introduced by Amendments and Additions No. 6, approved by Resolution No. 13 of Chief State Sanitary Inspector of the RF dated 18.02.2008)

- for products containing living GMM - 'The product contains living genetically modified microorganisms';

(the paragraph was introduced by Amendments and Additions No. 6, approved by Resolution No. 13 of Chief State Sanitary Inspector of the RF dated 18.02.2008)

- for products containing inviable GMM - 'The product was received with the use of genetically modified microorganisms';

(the paragraph was introduced by Amendments and Additions No. 6, approved by Resolution No. 13 of Chief State Sanitary Inspector of the RF dated 18.02.2008)

- for products freed from engineering GMM or for products produced with the use of components freed from engineering GMM - 'The product contains components received with the use of genetically modified microorganisms';

(the paragraph was introduced by Amendments and Additions No. 6, approved by Resolution No. 13 of Chief State Sanitary Inspector of the RF dated 18.02.2008)

- for food products produced with the use of technologies, allowing to receive them from the raw material, received without the use of pesticides or other plant protecting agents, chemical fertilizers, animal growth stimulants and feeding stimulants, antibiotics, hormonal agents, veterinary drugs, GMO, not treated with exposure to ionizing radiation and meeting these sanitary rules (hereinafter referred to as organic products), the following shall be specified: 'organic product';

(the paragraph was introduced by Amendments and Additions No. 8, approved by Resolution No. 26 of Chief State Sanitary Inspector of the RF dated 21.04.2008 N 26)

- for specialized food products for sportsmen, possessing the set nutritional and energy value and directed effectiveness, consisting of a set of nutrients or separate types of nutrients, the following shall be specified: 'specialized food product for sportsmen';

(the paragraph was introduced by Amendments No. 14, approved by Resolution No. 28 of Chief State Sanitary Inspector of the RF dated 05.05.2009)

- for specialized food products for sportsmen the following additional information shall be printed on the consumer packaging: information on nutrition and energy value of the product, share of the physiological need; recommended dosages, methods of preparation (if necessary), conditions and length of usage.

(the paragraph was introduced by Amendments No. 14, approved by Resolution No. 28 of Chief State Sanitary Inspector of the RF dated 05.05.2009)

- for meat of slaughter animals and poultry meat, edible offal of slaughter animals and poultry, as well as slaughter animals meat and poultry meat, contained in all types of food products, heat treatment type - 'chilling' (chilled meat includes: meat of slaughter animals, obtained directly after slaughter, and its offal, chilled to 0 °C to +4 °C in the muscles, with unmoistened surface, and a drying up crust; poultry meat obtained directly after slaughter and its offal chilled to 0°C - +4°C in the muscles);

(the paragraph was introduced by Amendments and Additions No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008)

- for food products enriched with vitamins and mineral substances the following shall be specified: 'food product enriched with vitamins and/ or mineral substances'.

(the paragraph was introduced by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

Marking printed on the consumer packaging, wrapping of fish products shall contain additional information regarding the homogeneous food fish products of the following groups:

- frozen fish products:

a) glazed - net mass shall be given without the glaze mass;

b) produced from frozen fish products - information on refreezing;

- frozen salted and pickled fish products - words 'Frozen products'.

(the paragraph was introduced by Amendments No. 17, approved by Resolution No. 27 of Chief State Sanitary Inspector of the RF dated 21.04.2010)

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ConsultantPlus: note:

For references related to quality and safety of food products see also Federal Law No. 29-FZ dated 02.01.2000.

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2.19. Terms "dietary", "medical", "preventive" "baby", probiotic product" or their equivalents in designation of foodstuffs, in consumer packaging information and packaging inserts for the product shall be used in accordance with the established procedure.

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

The term 'green product' as well as other terms not having legal or scientific grounding must not be used in names and in consumer packaging information printed on the specialised food product.

(the paragraph was introduced by Amendments No. 14, approved by Resolution No. 28 of Chief State Sanitary Inspector of the RF dated 05.05.2009)

2.20. When manufacturing food raw material of animal origin the use of feed additives, animal growth-promoting substances, pharmaceuticals, drugs for treating animals and fowl as well as preparations for treating premises for their keeping which have not undergone sanitary and epidemiological examination and state registration according to the established procedure shall be prohibited.

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

2.21. Foodstuffs containing feed additives, animal growth-promoting substances (including hormonal agents), drugs, pesticides, agrochemicals which have not undergone sanitary and epidemiological examination and state registration according to the established procedure shall not be liable to import, manufacturing and turnover in the territory of the Russian Federation. Their recycling or destruction shall be carried out according to the established procedure.

2.22. In-process control and state sanitary and epidemiological surveillance and monitoring shall be exercised in respect of compliance of food products with requirements for safety and nutrition value.

2.23. Individual entrepreneurs and legal entities engaged in production, import and turnover of food products must carry out in-process control including laboratory analysis and testing of foodstuff safety and nutrition value indexes as per compliance with requirements of these Sanitary Rules according to sanitary rules of a company and carrying out of in-process control.

2.24. Individual entrepreneurs and legal entities engaged in manufacturing and turnover of food products upon the results of carrying out of measures aimed at ensuring quality and safety of foodstuffs, compliance with requirements of regulatory and technical documents including carrying out of in-process control shall receive quality and safety certificate for every batch of food products.

2.25. Individual entrepreneurs and legal entities engaged in manufacturing and turnover of food products shall carry out laboratory analysis and testing independently or with engagement of laboratories accredited according to the established procedure.

2.26. For conducting laboratory analysis and testing of quality and safety parameters of food products only those techniques and methods will be allowed which are metrologically certified and comply with requirements for provision of uniformity of measurements and measuring accuracy characteristics, with methods of testing product samples and control of their parameters as well as those methods which comply with the said requirements and approved according to the established procedures.

2.27. Regulatory and technical documents for culture medium intended for control over microbiological indices of safety and nutrition value of foodstuffs shall be subject to sanitary and epidemiological examination according to the established procedure.

2.28. In case of unacceptable results of analysis even for one of the safety parameters, this parameter is subject to recurrent examination under double volume of sample capture taken from the same batch. The results of the second examination shall apply to the whole batch.

2.29. State sanitary and epidemiological surveillance and control over compliance of foodstuffs with these Sanitary Rules shall be carried out by agencies and departments of GosSanEpidemNadzor of Russia according to the established procedure.

### III. Hygienic Requirements for Safety and Nutrition Value of Food Products

3.1. These Sanitary Rules shall establish hygienic requirements for safety of foodstuffs and their ability to satisfy physiological need of a man in major nutrient materials and energy.

3.2. Organoleptic properties of food products shall be defined by such properties as flavour, colour, smell and consistency, specific for each type of product and must meet traditionally established tastes and habits of people. Organoleptic properties of food products shall not be changed during storage, transportation and distribution.

3.3. Foodstuffs shall not have foreign odours, after-tastes, inclusions, differences in colour and consistency incidental to the given type of product.

3.4. Safety of foodstuffs regarding their microbiological and radiological safety as well as with respect to content of chemical contaminants shall be determined by their compliance with hygienic standards provided for by these Sanitary Rules (Annex 1).

3.5. Determination of parameters of safety and nutrition value of food products including biologically active food additives, mixed composition shall be carried out for basic type(s) of raw materials both by the mass fraction and by permissible levels of controlled contaminants.

3.6. Determination of safety parameters of dry, concentrated or diluted food products shall be carried out in terms of original product subject to content of dry substances in the raw and final product.

3.7. Hygienic standards shall apply to potentially hazardous chemical compounds and biological subjects the presence of which in foodstuffs must not exceed permissible levels of their content in the weight specified (volume) of product under examination.

3.8. The content of major chemical contaminants endangering human health shall be monitored in food products.

Hygienic requirements for permissible level of content of toxic elements shall apply to all types of food raw material and foodstuffs.

3.9. Content of mycotoxins - aflatoxin B1, deoxynivalenol (vomitoxin), zearalenone, T-2 toxin, patulin shall be controlled in food raw material and food products of plant origin, aflatoxin M1 – in milk and dairy products. Most dangerous contaminants are: for cereal products - deoxynivalenol; for nuts and oil seeds - aflatoxin B1; for fruit and vegetable derivatives - patulin.

The content of ochratoxin A shall be controlled in food grain and flour-cereal products.  
(the paragraph was introduced by Amendments No. 12, approved by Resolution No. 58 of Chief State Sanitary Inspector of the RF dated 10.10.2008)

3.10. Occurrence of mycotoxins in baby food and dietary products shall be excluded.

3.11. Pesticides shall be controlled in all types of food raw material and food products: hexachlorocyclohexane (alpha-, beta-, gamma isomers), DDT and its metabolites. Organomercury pesticides, 2, 4-D acid, its salts and esters shall be controlled in grain and its derivatives. 2, 4-D acid, its salts and esters shall also be controlled in fish and fish derived products.

3.12. Control of food raw material and food products as per the content of residual quantity of pesticides and agrochemicals including fumigants is based on information provided by the product manufacture (supplier) on use of pesticides and agrochemicals during the processes of manufacturing and storage of food products.

3.13. Sanitary and epidemiological examination of food raw material and foodstuffs containing pesticides shall be carried out in compliance with the applicable hygienic standards of pesticide content in the objects of environment.

3.14. Residual quantities of animal growth-promoting substances (including hormonal agents), pharmaceuticals (including antibiotics) used in cattle breeding for fattening up, treatment and prevention of diseases of livestock and fowl shall be controlled in food products of animal origin, including in baby food.

The following feed and medical antibiotics most commonly used in animal breeding and veterinary (Annex 1 of these Sanitary Rules) shall be controlled:

- bacitracin (bacitracin A,B,C, zincbacitracin);
- tetracycline group (tetracycline, oxytetracycline, chlortetracycline –sum of the original substances and their 4-epimers);
- penicillin group (benzylpenicillin, phenoxymethylpenicillin, ampicillin, amoxicillin, penethamate);
- streptomycin;
- laevomycetin (chloramphenicol).

(Clause 3.14 as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

3.15. Control over the content of animal growth-promoting substances (including hormonal agents), pharmaceuticals (including antibiotics) used in cattle breeding for fattening up treatment and prevention of diseases of livestock and fowl, preparations not specified in Clause 3.14 shall be based on information provided by the product manufacture (supplier) on the preparations used during manufacturing and storage of such products (Annex 21 of these Sanitary Rules).

(Clause 3.15 as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

3.16. Polychlorinated biphenyls shall be controlled in fish, fish products; benzopyrene – in grain, in smoked meat and fish products.

3.17. Occurrence of benzopyrene in baby food and dietary products shall be excluded.

3.18. The following shall be controlled in separate food products: the content of nitrogen compounds: histamine – in salmonids and scombrids (including the tuna group); nitrates – in horticulture product; N- nitrosamines – in fish and fish products, meat products and brewer's malt.

Phycotoxins shall be controlled in non-fish products (shell-fish, internal organs of crabs).  
(the paragraph was introduced by Amendments No. 12, approved by Resolution No. 58 of Chief State Sanitary Inspector of the RF dated 10.10.2008)

3.19. Indications of oxidative deterioration shall be controlled in fatty products: acid and peroxide value.

3.20. The content of radionuclides shall be controlled in food products.

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Radiological safety of foodstuffs for Caesium-137 and Strontium-90 shall be determined by their permissible levels of specific activity of radionuclides provided for by these Sanitary Rules. Compliance factor – B shall be used for determining compliance of foodstuffs with criteria of radiological safety, the value of it is calculated using results of measuring specific activity of Caesium-137 and Strontium-90 in a sample:

$B = (A/H) 90\text{Sr} + (A/H) 137\text{Cs}$ , where A - is the value of specific activity of 90Sr and 137Cs in a food product (Bq/kg), H - is a permissible level of specific activity for 90Sr and 137Cs in the same product (Bq/kg).

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Radiological safety of foodstuffs contaminated with other radionuclides shall be determined by sanitary rules that specify radiological safety standards.

3.21. Presence of pathogenic microorganisms and pathogens of parasitic diseases, their toxins causing infectious and parasitic diseases or endangering human and animal health shall be excluded from food products.

3.22. Sanitary and epidemiological examination of meat and meat products, fish, shell fish, molluscs, amphibians, reptiles and products of their processing for the presence of pathogens of parasitic

diseases shall be carried out in accordance with sanitary rules for conducting parasitological control and parasitological parameters of safety (Annex 6).

3.23. Presence of pathogens of parasitic diseases in meat and meat products shall not be tolerated: bladder worms (cysticercus), larvae of trichinella and echinococci, cysts of sarcocystis and toxoplasma.

3.24. Presence of living larvae of parasites threatening human health shall not be tolerated in fish, shellfish, molluscs, amphibians, reptiles and products of their processing.

When finding living helminths larvae one should be governed by sanitary rules for parasitic diseases preventive measures.

3.25. Presence of helminths eggs and cysts of enteric pathogens shall not be tolerated in fresh and quick-frozen table greenery, vegetables, fruits and berries.

3.26. Hygienic standards for parasitological safety parameters of drinking water shall be determined in accordance with hygienic standards specified for quality of centralized drinking water supply systems.

3.27. Hygienic standards for microbiological parameters of safety and nutrition value of foodstuff shall include the following groups of microorganisms:

- sanitary-indicative ones, which include: number of mesophilic aerobic and facultative-anaerobic microorganisms (NMAFAnM), Coliform bacteria - coliforms, bacteria of Enterobacteriaceae family, enterococcus;

- opportunistic pathogens, which include: E. coli, S. aureus, Proteus class bacteria, B. cereus and sulfite-reducing clostridia, Vibrio parahaemolyticus;

- pathogenic microorganisms, including salmonella and Listeria monocytogenes, Yersinia class bacteria;

- spoilage microorganisms – yeast and mold fungi, lactic-acid microorganisms;

- starter population microorganisms and probiotic microorganisms (lactic-acid microorganisms, propionate microorganisms, yeast, bifidobacteria, acidophilic bacteria and etc.) – in products with controlled level of biotechnological flora and probiotic products.

3.28. Controlling of microbiological parameters of safety of foodstuff shall be carried out for majority groups of microorganisms under the alternative principle, i.e. the mass of a product is controlled, where coliforms, majority of opportunistic pathogens, as well as pathogenic microorganisms including Salmonella and Listeria monocytogenes shall be excluded. In other cases the standard reflects the number of colony-forming units in 1 g (ml) of the product (CFU/g, ml).

3.29. Criteria of safety of preserved food products (manufacturing sterility) is the absence of microorganisms capable of developing under temperature of storage specified for certain type of canned food and microorganisms and bacterial toxins endangering human health life in preserved food products (Annex 8).

3.30. Biologically active food additives are the source of food, minor, pro- and prebiotic natural (identical to natural) biologically active food substances (components), which provide their intake into a human body while eating or introducing into the composition of food products.

Biologically active substances, food components and products being their sources and used during manufacturing of biologically active food additives must ensure their efficiency and must not negatively affect human health (Annex 5a).

Biologically active substances, food components and products being their sources that pose - according to current research data – a hazard to human life and health when used as a component of biologically active food additives shall not be allowed for use when manufacturing biologically active food additives (Annex 5b).

3.31. The parameters of nutrition value shall be established in food products. Parameters of nutrition value of food products shall be established by a manufacturer (developer of technical documents) on the basis of analytical methods of research and/or with the use of calculating method subject to composition of a food product and data on composition of raw materials.

3.32. Specific foodstuffs as per parameters of nutrition value must comply with requirements of these Sanitary Rules (Annex 2).

3.33. Baby food must comply with physiological conditions of a child with account of his/her age and must be safe for baby health.

3.34. Baby food and its components, foodstuff for pregnant and breast feeding women (hereinafter referred to as the specialized products) must comply with hygienic standards of safety and nutrition value provided for by these Sanitary Rules (Annex 3)

3.35. Foodstuffs shall allow the use of food additives which - according to the data of current research - do not negatively affect human life and health as well as life and health of future generations (Annex 7).

Foodstuffs containing food additives not specified in Annex 7 shall not be allowed for manufacturing, import and distribution in the territory of the Russian Federation. Their recycling or destruction shall be carried out according to the established procedure.



3.36. Application of food additives and permissible levels of their content in food products are governed by sanitary rules for application of food additives.

3.37. It is not allowed to use poultry meat, except chilled, mechanically separated poultry meat, and collagen containing raw material from poultry meat for production of baby food (for all age groups, including organised children groups) dietary food products (curative and preventive), specialized food products for pregnant and nursing women, delicatessen from poultry meat (pastrami, raw smoked and raw cured products).

(Clause 3.37 was introduced by Amendments and Additions No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008 as amended by Amendments and Additions No. 21, approved by Resolution No. 145 of Chief State Sanitary Inspector of the RF dated 12.11.2010)

3.38. It is not allowed to use poultry meat, except chilled, for production of chilled natural semi-manufactured products from poultry meat and food products from poultry meat without heat treatment.

(Clause 3.38 as amended by Amendments and Additions No. 21, approved by Resolution No. 145 of Chief State Sanitary Inspector of the RF dated 12.11.2010)

3.39. Control over the content of melamine in milk and milk products is performed if there are reasonable assumptions about the possibility of its presence in the food raw materials. Food safety regarding melamine content shall be determined by its conformity with hygienic standards set by these Sanitary Rules (Annex 1 and Annex 3). Presence of melamine in food products shall not be tolerated.

(Clause 3.39 was introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)

3.40. Control over the content of dioxins in food products shall be carried out in cases of deterioration of environmental situation associated with man-made and natural disasters, which lead to formation and penetration of dioxins in the environment; in case there are reasonable assumptions about the possibility of their presence in food raw materials. Food safety regarding dioxin content shall be determined by its conformity with hygienic standards set by these Sanitary Rules (Annex 1 and Annex 3).

(Clause 3.40 was introduced by Amendments No. 12, approved by Resolution No. 58 of Chief State Sanitary Inspector of the RF dated 10.10.2008)

3.41. Food products must not contain melamine (detection limit shall be less than 1 mg/kg). The content of dioxins must not exceed the permissible levels from 0,000001 to 0,00000075 in the respective food groups, according to the requirements of Annex 1. Dioxins are not allowed in all baby food products.

(Clause 3.41 was introduced by Amendment No. 13, approved by Resolution No. 69 of Chief State Sanitary Inspector of the RF dated 11.12.2008)

3.42. When treating fish fillet with the use of food additives water content in it after the taking off of glaze shall not exceed 86 per cent of the fish fillet.

Mass of glaze, applied to the frozen fish, fish products must not exceed 5% of net mass, mass of glaze, applied to shellfish products and products of their processing, must not exceed 7% of net mass, mass of glaze, applied to products produced from other (except shellfish) non-fish products (molluscs, invertebrates, algae), amphibians, reptiles and products of their processing, must not exceed 8% of net mass of the glazed frozen fish products.

(Clause 3.42 as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

IV. Organization of Activity of the Federal Service  
on Customers' Rights Protection and Human Well-  
being Surveillance for Carrying out State  
Registration and Assessment of Safety of Foods  
Products Derived from Genetically Modified  
Organisms of Plant Origin

(introduced by Amendments and Additions No. 6,  
approved by Resolution No. 13 of Chief State  
Sanitary Inspector of the RF dated 18.02.2008)

4.1. New food products derived from GMO of plant origin produced in the Russian Federation, as well as food products derived from GMO of plant origin, imported to the territory of the Russian Federation for the first time, shall be subject to State registration.

4.2. Federal Service on Customers' Rights Protection and Human Well-being Surveillance (hereinafter referred to as the Rospotrebnadzor) performs state registration of food products derived from GMO of plant origin (hereinafter referred to as the state registration of GMO).

4.3. State registration of GMO is carried out in accordance with Federal Law 29-FZ dated 02.01.2000 'On Quality and Safety of Food Products' (Collection of laws and regulations of the Russian Federation No.2, Article 150, dated 2000; No. 1, (part I), Article 2, dated 2002; No. 2, Article 167 dated 2003; No. 27 (part I), Article 2700, dated 2003; No.35, Article 3607, dated 2004; No. 19, Article 1752,

dated 2005; No. 50, Article 5242, dated 2005; No. 1, Article 10, dated 2006; No. 14, Article 1458, dated 2006; No. 1 (part I), Article 29, dated 2007 and Resolution No. 988 of the Government of the Russian Federation dated 21.12.2000 'On State Registration of New Food Products, Materials and Goods' (Collection of laws and regulations of the Russian Federation No. 1 (part II), Article 124, dated 2001; No. 18, Article 1863, dated 2001; No. 3, Article 222, dated 2002; No. 7, Article 653, dated 2003; No. 6, Article 760, dated 2007; No. 10, Article 1244, dated 2007; No. 12, Article 1414, dated 2007).

4.4. For state registration of GMO individual entrepreneurs or organisations engaged in development and (or) the preparation for the production or importation of imported goods (hereinafter referred to as the applicant) shall submit documents to Rospotrebnadzor in accordance with the Resolution of the Government of the Russian Federation No. 988 dated 21.12.2000 'On State Registration of New Food Products, Materials and Goods'.

4.5. State registration of GMO includes, in particular, examination of results of medical-biological safety assessment carried out in authorized institutions, performing sanitary-epidemiological examination, toxicological, hygienic and other types of assessments for the purposes of state registration.

4.6. Medical-biological safety assessment of food products derived from GMO of plant origin includes:

- Expert analysis and evaluation of data submitted by the applicant;
- Expert analysis of methods for detection, identification and quantitative measurement of GMO in food products;
- Medical-genetic evaluation;
- Evaluation of functional and technological properties;
- Medical and biological examinations.

4.7. The list and volume of medical and biological examinations required to assess safety of food products derived from GMO of plant origin, shall be determined by the Expert (Scientific) Boards of the respective authorized organisations based on the analysis of documents submitted by the applicant, containing:

- 1) Information allowing to identify GMO (type, variety, transformational event);
- 2) Information about the source of the parental organism (taxonomic characterization, the method of reproduction and distribution; data on toxic, allergenic and other unfavourable properties);
- 3) Information on the organisms-donors of the introduced genes (taxonomic characterization, history of use);
- 4) Information about the method of genetic modification (description of the method of modification, structure of the vector, structure of the insertion);
- 5) Information about GMO (description of properties acquired by the plant as a result of modification, description of the structure of the genetic construction (introduced or removed) and place of its localization, characterization of expression of embedded genes (expression during ontogeny plants, the intensity of expression of the structural components of plants, etc.), characterization of differences with the parental organism (method of reproduction, ability of cross – pollination, resistance to stresses, etc.), characterization of genetic and phenotypic stability (it is necessary to submit data from studies of several generations of GMO), characterization of the ability to transfer genes to other organisms (plants, microorganisms);

6) Results of safety assessment of food products derived from GMO of plant origin:

- Results of analysis of compositional equivalence (comparison of the chemical composition of GMO with the chemical composition of its traditional counterpart by the following parameters: protein content, amino acid composition, fat content, fatty acid composition, carbohydrate composition, vitamin content, the content of macro-and micronutrients, content of biologically active substances, allergens content, the content of anthropogenic and natural contaminants, the content of antinutrients and other substances that are characteristic of plant organisms of this type). The list of indices varies depending on the properties of the studied plant organism;

- The results of toxicological research (safety assessment of one or more proteins that determine appearance of the set properties in GMO (molecular and biochemical characterization of the protein, the presence or absence of homology with the toxins of protein nature, as well as with proteins with pharmacological or other biological activity; the study of stability of the protein during processing, storage, engineering processing; the impact of temperature and pH, possible modification and / or formation of stable protein fragments resulting from various influences; stability of the protein to processing with proteolytic enzymes in in vitro experiments; study of acute oral toxicity of the protein in the experiments with rodents; additional research);

- Results of the safety assessment of the native product (results of studies on rodents, young rapidly growing animals, if such studies were carried out; additional research);

- Results of allergy research (evaluation of allergenic properties of one or several proteins that determine appearance of the set properties in GMO (comparison with known allergens, using databases containing information on the three-dimensional structure and function of the known allergens and proteins related thereto); identification of potential allergenicity of proteins in immuno-chemical studies in

vitro using IgE, isolated from the serum of patients suffering from allergies; identification of resistance to proteolytic enzymes; screening studies with the use of blood serum of patients suffering from allergies; additional research (including in vivo);

- Evaluation of allergenic properties of the native product (comparison of a set of allergens of the studied GMO with a set of allergens of its traditional counterpart, etc.), if any information is available on the allergenic properties of the donor organism;

- Results of other studies (determination of food and biological value; use of sophisticated analytical techniques such as specialised technologies, etc.), in case these studies were conducted;

- Results of control carried out in countries using GMO in the production of food products;

7) Information necessary for the implementation of state control (supervision) over food products derived from GMO of plant origin: identification and quantification methods of one or more transformation events, testing protocols, description of primers, standard samples of composition and properties;

8) Materials on registration of food products derived from GMO of plant origin in other countries.

4.8. Information constituting a state, commercial and (or) official secret, obtained by Rospotrebnadzor in the exercise of its powers, shall not be subject to disclosure, except in cases established by the legislation of the Russian Federation.

4.9. Medical and biological evaluation of safety of food products, derived from GMO of plant origin, shall be carried out with the use of samples of the specified food products and their conventional counterparts, provided by the applicant.

4.10. Authorized organisations shall prepare and submit to Rospotrebnadzor reports (expert opinions) on the results of medical and biological safety assessment of GMO.

4.11. Rospotrebnadzor shall take a decision on state registration on the basis of the results of studying of documents and expert opinions and issue a certificate on state registration to the applicant.

4.12. Information about GMO that have undergone state registration shall be included into the State Register of Food Products, Materials, and Goods Allowed for Production in the Territory of the Russian Federation or Import into the Territory of the Russian Federation and Circulation thereof (hereinafter referred to as the State Register).

V. Organization of Activity of the Federal Service on  
Customers' Rights Protection and Human Well-being  
Surveillance when Performing Supervision (Control)  
over Circulation of Food Products  
Derived from/ or with the Use of  
Genetically Modified Microorganisms

(introduced by Amendments and Additions No. 6,  
approved by Resolution No. 13 of Chief State Sanitary Inspector of the RF  
dated 18.02.2008)

5.1. Food products derived from / or with the use of genetically modified microorganisms (hereinafter referred to as GMM), as well as products derived from / or with the use of natural biotechnological microorganisms, traditionally used in food industry and having a genetically-modified analogues (hereinafter referred to as GMA), which have undergone state registration in the established manner and included into the State Register or sanitary-epidemiological expertise and included into the Register of Certificates on Sanitary-Epidemiological Conformity (Non-Conformity) of activities (works, services), products, project documentation, requirements of state sanitary - epidemiological rules and regulations (hereinafter referred to as the Register of Sanitary-Epidemiological Opinions), shall be monitored for compliance with sanitary rules and regulations for carrying out examinations of legal entities and individual entrepreneurs at the following stages:

- imported from abroad;
- production
- storage and transportation;
- sale.

5.2. Selecting food products which are subject to a sanitary-epidemiological examination regarding the presence of GMM (GMA), it is necessary to proceed from its belonging to one of three groups of products, production technology of which provides for the use of microorganisms of technological microflora or microorganisms-producers (Table 1).

Table 1

Food Products Subject to Examination on the Content of Genetically Modified Microorganisms or  
Microorganisms Having Genetically Modified Analogues

Group of Products Depending on the Condition of their Technological Microflora or Microorganisms-Producers	Field of Application and Main Types of Products
Group I - food raw material, food products and food components containing viable technological microflora	Milk, fat oil industry and cheese production
	Starters, bacteria concentrate and biomass on the basis of pure cultures and natural symbiosis of lactic acid, probiotic, propionic acid (bifidobacteria, lactobacilli), acetic acid, leuconostoc, thermophilic streptococci and other microorganisms, yeast and molds for production
	Fermented milk products and yogurts, including baby and dietary food, probiotic, cottage cheese, sour cream, etc.
	Cheeses (all types)
	Acid cream butter and products based on it
	Children's fermented dried milk mixture, dried fermented milk products of mass consumption and dietary food.
	Margarine, mayonnaise
	Production of biologically active food additives
	BAA to food on the basis of probiotic microorganisms, biomass and bacteria concentrate for their production
	Plant-based BAA to food with addition of microorganisms-probiotics
	Meat and poultry processing industry
	Starting cultures for meat fermentation on the basis of lactic acid, propionic acid microorganisms, Micrococci, non-pathogenic Staphylococci, Pediococci, molds, yeast, etc.
	Smoked and dried meat and poultry products
	Fish processing industry
	Fermented fish products and preserves
	Bakery industry; production of fermented beverages, brewing, alcohol and starch industry, sugar production:
	Beer
	Kvas, drinks based on tea fungus, etc.
	Yeast
	Starters for bakery products based on lactic acid and other microorganisms for production of bakery products
	Microorganisms and yeast cultures, processing aids for directed fermentation of raw material in the production of alcohol, sugar, vinegar, etc.
	Horticultural industry and vegetable products processing
	Salted and pickled vegetables, mushrooms and cereals products and starter cultures for production thereof
	Pickled, salted, soaked vegetables and fruits
	Fermented products based on vegetable soybean milk
	Fermented soy and grain products (sauces, national dishes, etc.)
	Others
	Cultures of microorganisms for the use as processing aids.

	Producer strains for the production of ferments, vitamins and biological preserving agents etc
Group II - food products containing inviabile technological microflora	Baking industry
	Bread, products from yeast and sour dough
	Dairy industry
	Heat treated fermented milk products
	Canned milk and milk containing products based on or containing fermented milk components, including for baby food
	Production of juices and juice drinks, winemaking:
	Clarified fruit and citrus juices, grape and fruit wines
	Production of biologically active additives to food, production of food concentrates, enriched and specialized products
	Extracts, lysates, proteins, protein products, nucleotide mixture on the basis of yeast and other inactivated microbial biomass
	Starch industry
	Modified starches obtained through microbial fermentation
Group III - food components and substances, food additives and micronutrients, produced with the use of strain - producers, but exempt from them during technological process	Enzyme agents for food industry
	Vitamins (beta-carotene, riboflavin), fatty acids, amino acids
	Flavouring agents, sweetening agents
	Preserving agents (nizin, lactic acid, etc.)
	Processing aids for production of alcohol
	Vinegar
	Edible organic acids (citric, tartaric, apple, etc.)
	Prebiotics (fructooligosaccharides), dextrin and other products of starch Industry
	Protein hydrolysates on the basis of milk raw materials, meat and poultry raw materials, raw fish materials and non-fish products, plant material, including soybean
	Glucose-galactose syrups

5.3. Control over food products from GMM allowed to be sold to population and to be used in food industry in the Russian Federation shall be exercised subject to using the information on food products obtained from or with the use of GMM, included into the State Register and the Register of Sanitary-Epidemiological Opinions in the established manner.

5.4. Control over food products from GMA, sold to population and used in food industry, shall be exercised taking into account the information about the availability of permits for the use of GMM in food industry (Table 2), as well as information about the cultures of microorganisms used in food industry and about their genetically modified analogues, potentially suitable for production of food products (Table 3).

Table 2

## GMM and Food Products Based on GMM, Allowed to be Used in Food Industry in the World

No .	Type of Food Raw Material or Food Product	Microorganisms (Groups, Genera, Species), Used for Production thereof		Field of Application - in Production of:
		Standard Natural Strains	GM Strains	
1	Starters, bacteria concentrate, starter cultures for fermented products and fermentation products			
	Yeast culture	Saccharomyces cerevisiae	Strains containing Amylase gene from Saccharomyces diastaticus	beer
2	Enzyme agents for the food industry, food additives			
	Hemicellulose	Aspergillus oryzae Aspergillus niger  Bacillus subtilis Humicola insolens Trichoderma reesei	Aspergillus oryzae, containign Hemicellulose gene and endo-1,4-a-xylanase from Aspergillus aculeatus Aspergillus oryzae, containign Hemicellulose gene and endo-1,4-a-xylanase from Thermomyces lanuginosus	
	Xylanase	Aspergillus niger Aspergillus oryzae B. amyloliqueefaciens or subtilis B. licheniformis Trichoderma reesei or longibrachiatum Bacillus subtilis	Fusarium venetatum with the gene of Thermomyces lanuginosum Aspergillus oryzae d-Thermomyces lanuginosus Bacillus subtilis with the gene, coding xylanase from Bacillus subtilis Trichoderma reesei d-Trichoderma reesei Aspergillus niger var. awamori d-Aspergillus var. Aspergillus niger with the gene, coding production of endo-1,4-xylanase from Aspergillus niger	bakery products
	Monoacylglycerol lipase	Penicillium camembertii	-	

	Triacylglycerol lipase	Aspergillus oryzae Aspergillus niger Rhizopus arrhizus Rhizomucor miehei Rhizopus niveus Rhizopus oryzae	Aspergillus oryzae, containing triacylglycerol lipase gene from Humicola lanuginosa Aspergillus oryzae d- Aspergillus oryzae Aspergillus oryzae d- Thermomyces lanuginosus	
	Lactase (U-galactosidase)	Aspergillus niger Aspergillus oryzae Saccharomyces fragilis Saccharomyces lactis		
	Invertase	Saccharomyces cerevisiae		Starches, syrups
	Hemicellulose (multicomponent enzyme)	Aspergillus niger Bacillus subtilis Trichoderma reesei		
	Inulinase	Aspergillus niger		
	Maltogenase (maltogenic amylase)	B. subtilis	B. subtilis with B. stearothermophilus gene, B. subtilis with B. brevis gene	
	Alpha-amylase	1. B. subtilis item F 2. Aspergillus oryzae var. 3. B. stearothermophilus 4. Bacillus licheniformis 5. Aspergillus niger 6. Bacillus amyloliquefaciens 7. Microbacterium imperiale 8. Rhizopus oryzae 9. Thermococcales 10. Pseudomonas fluorescens	1. B. subtilis with alpha-amylase gene from B. megaterium, included in plasmid pCPC800 2. B. subtilis with alpha-amylase gene from B. stearothermophilus, included in plasmid pCPC720 Bacillus licheniformis d- Bacillus licheniformis Aspergillus niger d- Aspergillus niger Bacillus licheniformis with the gene, coding alpha-amylase from B. stearothermophilus Bacillus amyloliquefaciens with the gene, coding alpha-amylase from Bacillus amyloliquefaciens Bacillus amyloliquefaciens/ Bacillus subtilis Pseudomonas fluorescens with the gene, coding alpha-amylase from Thermococcales	bakery products, beverages, starches

	Dextranase	Chaetomium erraticum Chaetomium gracile		
	Fructosyltransferase	Aspergillus japonicus		
	Glycogenase	B. stearothermophilus	-	bakery products
	Aminoglucosidase	Aspergillus niger	Aspergillus niger, bearing the gene coding aminoglucosidase	bakery products
	Carbohydrase	Aspergillus niger, var. Aspergillus awamori, var. Bacillus licheniformis Rhizopus oryzae, var. Saccharomyces spp.	-	
	Catalase	Micrococcus lysodeikticus Aspergillus niger	Aspergillus niger - donor organism	cheeses



	Cellulase	Penicillium funiculosum Trichoderma reesei Trichoderma viride Aspergillus niger Aspergillus aculeatus	Trichoderma reesei-d- Trichoderma reesei	
	Chymosin A (rennin) for cheesemaking		E. coli K-12 IA 198, containing chemically synthesized coding DNA sequence identical to the bovine prochymosin A gene, included in vector PPFZ-87A	cheeses
	Chymosin A for cheesemaking		Aspergillus niger var. awamori, containing bovine prochymosin gene (NRRZ3112) Vector - pgAMpR	cheeses
	Chymosin B for cheesemaking	Kluyveromyces lactis	Kluyveromyces lactis (Dombr. Van del Walt) with bovine prochymosin gene, amplified on plasmid PUC18	cheeses
	Chymosin B for cheesemaking		Trichoderma reesei, containing bovine prochymosin B gene	cheeses
	B-glycanase	Aspergillus niger var. Trichoderma harzianum Trichoderma reesei or longibrachiatum Talaromyces emersonii B. subtilis or amyloliquefaciencis Aspergillus aculeatus Disporotrichum dimorimorphosporum	Organism - donor  Trichoderma sp. Bacillus sp. B. amyloliquefaciencis d- B. amyloliquefaciencis	
	Xylose isomerase	B. coagulans, Streptomyces olivaceous, Streptomyces rubiginosus, Streptomyces violaceoniger		

	Glucose oxidase and catalase	Aspergillus niger	Aspergillus niger d- Aspergillus niger	
	Hemicellulose	Aspergillus niger	-	
	Lipase	Aspergillus oryzae Rhizopus oryzae Rhizopus niveus Penicillium roquefortii Penicillium camembertii  Mucor javanicus Rhizomucor miehei  Fusarium oxysporum Termomyces lanuginosus	Organism - donor Candida antarctica Rhizomucor spp. and Thermomyces spp. Aspergillus niger with lipase gene from Candida antarctica Aspergillus oryzae with lipase gene from Rhizomucor miehei  Aspergillus oryzae with lipase gene from Fusarium oxysporum Aspergillus oryzae with the gene, coding lipase from Termomyces lanuginosus	fat-and-oil products,  triglycerides alcohol products, bakery products
	Mixture of carboaminhydrase and protease	B. subtilis var.	-	
	Pectinase	Aspergillus niger Rhizopus oryzae Aspergillus aculeatus Aspergillus oryzae	Aspergillus oryzae d- Aspergillus aculeatus Aspergillus niger d- Aspergillus niger	
	Protease	Aspergillus niger Aspergillus oryzae. Aspergillus melleus Streptomyces fradias Bacillus licheniformis. B. amyloliquefaciens Bacillus subtilis Bacillus thermoprotolyticus Bacillus stearothermophilus Rhizopus niveus Rhizopus oryzae	Organism - donor Rhizomucor Bacillus subtilis d- B. amyloliquefaciens Bacillus amyloliquefaciens d-B. amyloliquefaciens Aspergillus oryzae d- Rhizomucor miehei Bacillus amyloliquefaciens plasmid pUBnpr2, bearing neutral protease gene as a part of vector DNA pUB110 from Bacillus amyloliquefaciens	Aspartame

	Pullulanase	Klebsiella arogenes Bacillus acidopullulyticus Bacillus naganoensis Bacillus circulans Klebsiella planticola	Bacillus licheniformis d- Bacillus deramificans Bacillus subtilis d- Bacillus naganoensis Klebsiella planticola d- Klebsiella planticola	
	Chymosin (rennin) for cheesemaking	B. cereus, Mucor miehei, Mucor pysillus, Rhizomucor miehei, Rhizomucor susillus B. mesentericus. Cryphonectria parasitica Aspergillus oryzae	Cryphonectria parasitica d- Cryphonectria parasitica Aspergillus oryzae d- Rhizomucor miehei	cheeses
	Alpha-amylase+gluco-amylase	Aspergillus oryzae	-	starch Industry products
	Beta-amylase	Aspergillus niger	-	
	Alpha-acetolactate decarboxylase		B. subtilis UW-193 with alpha-decarboxylase gene from B. brevis on plasmid PUW 235	
	Alpha-acetoacetate decarboxylase		B. subtilis with alpha-decarboxylase gene from B. brevis	
	Hemicellulose	Aspergillus niger B. amyloliqueefaciens or subtilis	Organism - donor of Bacillus spp.	
	Lactase	Aspergillus niger Aspergillus oryzae Saccharomyces spp. Candida pseudotropicalis Kluyveromyces marxianus var. lactis	Aspergillus oryzae with the gene of Myceliophthora thermophilus Kluyveromyces marxianus var. lactis d-Kluyveromyces marxianus var. lactis Aspergillus oryzae d- Aspergillus oryzae	

	Xylanase	Aspergillus niger Aspergillus oryzae B. amyloliquefaciens or subtilis B. licheniformis Trichoderma reesei or longibrachiatum	Fusarium venetatum with the gene of Thermomyces lanuginosum Aspergillus oryzae d- Thermomyces lanuginosus Bacillus subtilis d- Bacillus subtilis Trichoderma reesei d- Trichoderma reesei Aspergillus niger var. awamori d-Aspergillus var. Aspergillus niger d- Aspergillus niger	
	Invertase	Saccharomyces cerevisiae	-	
	Glucoamylase	Lactobacillus amylovorus Aspergillus niger Aspergillus oryzae Rhizopus oryzae Rhizopus niveus Rhizopus delemar Penicillium funiculosum	Aspergillus niger d- Aspergillus niger	
	Aminopeptidase	Trichoderma reesei or longibrachiatum Aspergillus niger Aspergillus oryzae	Organism - donor Aspergillus spp.	
	Arabinofuranosidase	Aspergillus niger	Organism - donor of Aspergillus niger	
	Cyclodextrin glycosyltransferase	B. licheniformis	Organism - donor of Thermoanaerobacter	
	Glucoamylase	Aspergillus niger	Organism - donor of Aspergillus spp.	

	Glucose isomerase	Streptomyces lividans Streptomyces rubiginosus Actinoplanes missouriensis Streptomyces olivochromogenes Streptomyces murinus Streptomyces olivaceus Microbacterium arborescens Actinoplane missouriensis Bacillus coagulans	Streptomyces rubiginosus d- Streptomyces rubiginosus	
	Hemicellulose	Aspergillus niger Trichoderma reesei Aspergillus aculeatus Aspergillus foetidus B. amyloliquefaciens or subtilis	Organism - donor of Bacillus spp.	
	Malt amylase	B. amyloliquefaciens or subtilis	Organism - donor of Bacillus spp.	
	Pektin liase	Aspergillus niger Trichoderma reesei or longibrachiatum	Organism - donor of Aspergillus spp.	
	Pectinesterase	Trichoderma reesei or longibrachiatum Aspergillus aculeatus	Organism - donor of Aspergillus spp. Aspergillus oryzae with the gene, coding pectinesterase from Aspergillus aculeatus	
	Phospholipase A	Trichoderma reesei or longibrachiatum	Organism - donor of Aspergillus spp.	
	Phospholipase B	Trichoderma reesei or longibrachiatum	Organism - donor of Aspergillus spp.	
	Phospholipase A2		Streptomyces violaceruber with phospholipase A2 gene of the same genera	Soya and egg yolk lectin hydrolysis

	Phospholipase A2	Aspergillus niger	Aspergillus niger PLA-54 with the gene, coding phospholipase of pig pancreas from Aspergillus niger GAM-53 and DNA of pig pancreas Aspergillus niger PLA-54 with the gene, producing phospholipase A2 from Aspergillus niger GAM-53 (NRRL3122 Aspergillus niger)	bakery products, phospholipide hydrolysis
	Phospholipase C		Pichia pastoris C with heterogeneous gene of phospholipase C	vegetable oils
	Polygalactouronidase	Trichoderma reesei or longibrachiatum Aspergillus niger	Aspergillus niger EPG-102 with the gene, producing polygalactouronidase from Aspergillus niger GAM-53 from NRRL3122 Aspergillus niger	bakery products
	Pullulanase	Bacillus licheniformis Bacillus subtilis Bacillus deramificans 18-IN T13 13 Klebsiella planticola	Organism - donor Bacillus spp. Klebsiella spp. B. subtilis with pullulanase gene from B. acidopullulyticus A164delta5 Bacillus subtilis with pullulanase gene Bacillus deramificans 18-INT13	beer
	Asparaginase	Aspergillus niger	Aspergillus niger d- Aspergillus niger	Lowering of the level of asparagine in bread, cereal and potato products
	Asparaginase	Aspergillus oryzae	A. oryzae with asparaginase gene from A. oryzae	
	Urea amidolyase		Saccharomyces cerevisiae ECMo01 with an increased expression of urea amidolyase	Lowering of ethyl carbamate in fermented beverages

	Glutaminase	Bacillus subtilis		
	B-D-glucosidase	Aspergillus niger Trichoderma reesei		
	Urease	Lactobacillus fermentum		
	alpha-galactosidase	Morteirella vinaceae var. raffinoseutilizer	-	sugar from sugar beet
Feedstuff, micronutrients and food additives				
	Riboflavin	Streptomyces griseus	B. subtilis with excess production of riboflavin	BAA to food, enriched products
	Beta-carotene		Blakeslea trispora, received by means of co-fermentation of two strains of fungus(+) and (-)	BAA to food, enriched products
	Nizin (preserving agent E-234)	Lactococcus lactis subs. lactis	Lactococcus lactis subs. lactis with the gene, coding stability to bacteriophages	cheese spreads, canned vegetables
	Lycopene	Blakeslea trispora	Recombinant strain	BAA to food, enriched products
	Citric acid	Candida guilliermondii Candida lipolytica Aspergillus niger	Recombinant strain	

Table 3

## Microorganisms Allowed and Proposed to be Used in Food Industry

Microorganisms of Natural Origin (Groups, Genera, Species)	Genetically Modified Analogues
Mesophilic Lactococcus	
Lactococcus lactis subsp. lactis	Bacteria of the genus Lactococcus, containing DNA sequence of Lactococcus, coding: 1. resistance to bacteriophages, 2. diacetyl production, 3. beta-galactosidase production, 4. aminopeptidase production, 5. peptidases production by genes of Propionibacterium shermani, 6. alanine racemase production,
Lactococcus lactis subsp. cremoris	-
Lactococcus lactis subsp. lactis biovar diacetylactis	-
Leuconostocs	
Leuconostoc lactis	-
Leuconostoc mesenteroides subsp. dextranicum	-
Leuconostoc mesenteroides subsp. mesenteroides	-
Thermophilic streptococci	
Streptococcus salivarius	-
Streptococcus thermophilus	S. thermophilus, possessing the gene of endoplasmic reticulum synthesis; S. thermophilus, possessing the gene of chloramphenicol-acetyltransferase
Bacteria of the genus Lactobacillus	
Lactobacillus acidophilus	Strains, possessing plasmids from Lactobacillus acidophilus, coding production of bacteriocins
Lactobacillus alimentarius	-
Lactobacillus amylovorus	Organism - donor of Aspergillus spp.
Lactobacillus bavaricus	-
Lactobacillus brevis	-
Lactobacillus buchneri	-



Lactobacillus casei	Strains, possessing the genes from Lactobacillus spp., controlling stability of starter cultures to low pH value
Lactobacillus casei	1. L. casei with the gene of beta-galactosidase E. coli 2 L. casei with Alkoholdehydrogenase gene Zymomonas mobilis 3. L. casei with beta-lactamase gene E. coli 4. L. casei with cholesterol oxidase gene Streptomyces spp.
Lactobacillus casei, subsp. rhamnosus GG	-
Lactobacillus coryneformis	
Lactobacillus curvatus	Recombinant strain for biopreservation of meat
Lactobacillus crispatus	
Lactobacillus delbruecki subsp. delbrueckii	-
Lactobacillus delbrueckii subsp. Bulgaricus	-
Lactobacillus delbrueckii subsp. Lactis	-
Lactobacillus farciminis	-
Lactobacillus fermentum	-
Lactobacillus gasseri	1. L. gasseri with msd gene from E. coli for production of superoxide dismutase 2. L. gasseri with temperate phage introduced into the chromosome 3. Strains containing endonuclease gene from Clostridium thermocellum
Lactobacillus johnsonii	Strains containing endonuclease gene from Clostridium thermocellum
Lactobacillus helveticus	Strains of the same genera with endopeptidase production for reducing the bitter taste in the process of cheese ripening
Lactobacillus heterohiochi (= L. fructivorans)	-
Lactobacillus hilgardii	-
Lactobacillus xylosus (= L. lactis subsp. lactis)	Strains containing genes for accelerated ripening of cheeses from Lactobacillus spp.

Lactobacillus zeae (= L. casei subsp. casei/L. rhamnosus)	
Lactobacillus sakei subsp. sakei	Strain with production of bacteriocin saccacin
Lactobacillus sakei subsp. carnosus (= L. curvatus)	Strains containing Catalase gene from Lactobacillus sakei
Lactobacillus salivarius	-
Lactobacillus sanfrancisco (= L. sanfranciscensis)	-
Lactobacillus sanfranciscensis (= L. sanfrancisco)	-
Lactobacillus kefirgranum	
Lactobacillus kefiri	-
Lactobacillus lactis	-
Lactobacillus paracasei	-
Lactobacillus pentosus	-
Lactobacillus plantarum	Strains of the same genera with: 1. Deletion of the gene, coding conjugation hydrolysis of bile acids 2. With alpha amylase gene from L. amylovorus 3. With deletion of the gene, coding alanine racemase 4. Producing bacteriocins
Lactobacillus reuteri	Strains containing Xylanase gene from Neocallimastix patriciarum, beta-glucanase gene from Fibrobacter succinogenes, Cellulase gene from Piromyces rhizinflata
Lactobacillus rhamnosus	-
Staphylococcus, Pediococci, Brevibacteria:	
Staphylococcus carnosus	
Staphylococcus carnosus subsp. carnosus	-
Staphylococcus carnosus subsp. utilis (= S. carnosus)	-
Staphylococcus equorum	-
Staphylococcus sciuri	-
Staphylococcus xylosus	-
Staphylococcus vitulinus (= S. pulveri)	-
Brevibacterium casei	-

Brevibacterium linens	-
Pediococcus acidilactici	-
Pediococcus pentosaceus	-
Corynebacterium	
Corymbacterium ammoniagenes	-
Corynebacterium flavescens	-
Enterococcus	
Enterococcus durans	-
Enterococcus faecium	-
Arthrobacter	
Arthrobacter nicotianae	-
Acetobacter	
Acetobacter xylinum	-
Acetobacter suboxydans	-
Acetobacter aceti	-
Propionibacterium	
Propionibacterium acidipropionici	-
Propionibacterium arabinosum	-
Propionibacterium freudenreichii subsp. freudenreichii	Recombinant strain of Propionibacterium freudenreichii with increased production of propionicin T1
Propionibacterium freudenreichii subsp. shermanii	-
Propionibacterium thoenii	-
Bifidobacterium	
Bifidobacterium adolescentis	-
Bifidobacterium animalis	-
Bifidobacterium bifidum	-
Bifidobacterium breve	-
Bifidobacterium infantis	-
Bifidobacterium lactis = (B. animalis)	-
Bifidobacterium longum <*>	Strains with vector from B. longum-Escherichia coli based on replicons

Bifidobacterium pseudolongum	-
Bacillus	
B. cereus	-
Bacillus coagulans (= obsolete Lactobacillus sporogenes)	Organism - donor of genes for production of bacteriocin coagulin
Bacillus licheniformis	Organism - donor of Thermoanaerobacter
B. mesentericus	-
B. subtilis or amyloliquefaciens	Organism - donor
B. amyloliquefaciens	B. amyloliquefaciens with the gene of Subtilisin from B. subtilis
Bacillus amyloliquefaciens	Bacillus amyloliquefaciens 1. with the gene, coding alpha amylase from Bacillus amyloliquefaciens 2. With neutral protease gene from Bacillus amyloliquefaciens
Bacillus licheniformis	B. licheniformis with alpha-amylase gene from B. stearothermophilus
Bacillus licheniformis	B. licheniformis with thermoresistant alpha-amylase gene from B. licheniformis
Bacillus licheniformis	Bacillus licheniformis with the gene, coding pullulanase from Bacillus deramificans
B. subtilis	B. subtilis UW-193 with alpha-decarboxylase gene from B. brevis ... on plasmid PUW 235
B. subtilis	B. subtilis with alpha-decarboxylase gene from B. brevis
B. subtilis	Bacillus subtilis with the gene, coding pullulanase from Bacillus deramificans
B. subtilis	B. subtilis with excess production of riboflavin
B. subtilis	B. subtilis with the gene B. stearothermophilus, B. subtilis with the gene B. brevis
Bacillus subtilis	B. subtilis with pullulanase gene from B. acidopullulyticus
B. subtilis item F	B. subtilis with alpha-amylase gene from B. megaterium, included in plasmid pCPC800 2. B. subtilis with alpha-amylase gene from B. stearothermophilus, included in plasmid pCPC72 0

B. stearothermophilus	-
B. thermototolyticus	-
Micrococcus	
Micrococcus varians (= Kucuria varians)	-
Micrococcus lysodeicticus	-
E. coli	
E. coli	E. coli K-12 IA 198, containing chemically synthesized coding DNA sequence identical to the bovine prochymosin A gene, included in vector PPFZ-87A
Klebsiella	
Klebsiella alrogenes	-
Klebsiella planticola	Klebsiella spp.
Thermococcales	Pseudomonas fluorescens with alpha-amylase gene
Filamentous fungi (moulds)	
Fusarium	
Fusarium solani	-
Fusarium venetatum	Fusarium venetatum with Thermomyces lanuginosum gene Organism - donor of Aspergillus sp. Thermomyces sp. Trichoderma spp., Bacillus spp.
Aspergillus	
Aspergillus niger	-
Aspergillus niger	Aspergillus niger var. awamori, containing bovine prochymosin gene (NRRZ3112) Vector- pgAMpR A. niger with lipase gene from Candida antarctica Aspergillus niger, bearing the gene coding aminoglucosidase of the strain of the same genera Aspergillus niger 1. With Aspergillus niger genes, coding lysophospholipase 2. With Aspergillus niger genes, coding production of endo-1,4-xylanase 3. with acetoamylase genes from A. nidulans 4. with genes, coding phospholipase of pig pancreas from Aspergillus niger 5. with Aspergillus niger genes, coding production of

	endopolygalacturonase 6. with <i>Aspergillus niger</i> genes, coding production of asparaginase 7. with <i>Aspergillus niger</i> genes, coding production of pectin methylesterase 8. with <i>Aspergillus niger</i> genes, coding production of glucoamylase
<i>B. amyloliquefaciens</i> or <i>subtilis</i>	Organism - donor of <i>Bacillus</i> spp.
<i>Aspergillus awamori</i>	-
<i>Aspergillus oryzae</i>	Strains of <i>Aspergillus oryzae</i> , possessing the following genes: 1. hemicellulase-xylanase from <i>Aspergillus aculeatus</i> and <i>Thermomyces lanuginosus</i> 2. triacylglycerol lipase from <i>Humicola lanuginosa</i> 3. lactase from <i>Myceliophthora thermophila</i> 4. phospholipase A1 from <i>Fusarium venetatum</i> 5. glucose oxidase from <i>Aspergillus niger</i> 6. lipase from <i>Thermomyces lanuginosus</i> and <i>Fusarium oxysporum</i> 7. proteinase aspartat from <i>Rhizomucor miehei</i> 8. exopeptidase from <i>Aspergillus sojae</i>
<i>Aspergillus oryzae</i>	<i>A. oryzae</i> with asparaginase gene from <i>A. oryzae</i>
<i>Aspergillus oryzae</i> var.	Organism - donor of <i>Candida</i> sp. <i>Rhizomucor</i> sp. <i>Thermomyces</i> sp.
Penicillium	
<i>Penicillium album</i> (= <i>P. caseicolum</i> , <i>P. candidum</i> , or <i>P. camembertii</i> )	-
<i>Penicillium camembertii</i> (= <i>P. caseicolum</i> , <i>P. candidum</i> , or <i>P. album</i> )	-
<i>Penicillium candidum</i> (= <i>P. caseicolum</i> , <i>P. camembertii</i> , <i>P. album</i> )	-
<i>Penicillium funiculosum</i>	-
<i>Penicillium roquefortii</i>	-
Verticillium	
<i>Verticillium lecanii</i>	-
Trichoderma	
<i>Trichoderma reesei</i> or	Organism - donor of the same species

longibrachiatum	
Trichoderma reesei	T. reesei, possessing bovine prochymosin B gene
Trichoderma harzianum	Organism - donor
Trichothecium	
Trichothecium domesticum	-
Humicola	
Humicola insolens	-
Rhizopus	
Rhizopus arrhizus	-
Rhizophus niveus	-
Rhizophus oryzae	-
Rhizopus oryzae, var. Sacharomyces spp.	-
Mucor	
Mucor miehei	-
Mucor pusillus	-
Mucor lusitanicus Institute of Microbiology, Russian Academy of Sciences (INMI)	-
Rhizomucor	
Rhizomucor miehei	-
Rhizomucor pusillus	-
Streptomyces	
Streptomyces olivaceous	-
Streptomyces rubiginosus	Organism - donor of Streptomyces spp. and Acinoplanes spp.
Streptomyces rubiginosus	Streptomyces rubiginosus with the gene producing immobilized glucose isomerase from Streptomyces rubiginosus
Streptomyces violaceoniger	S. violaceoniger with the gene received from the same genera, coding phospholipase A2
Streptomyces fradias	-
Streptomyces livadans	Organism - donor of Streptomyces spp. Acinoplanes spp.
Actinoplanes	

Actinoplanes missouriensis	-
	-
Blakeslea	
Blakeslea trispora	Blakeslea trispora, obtained by means of co-fermentation of two strains of fungus (+) and (-)
Yeast	
Saccharomyces	
Saccharomyces bayanus	-
Saccharomyces cerevisiae	Strains containing Amylase gene from Saccharomyces diastaticus
Saccharomyces cerevisiae	S. cerevisiae Y-1986 with alpha-amylase gene from B. licheniformis
Saccharomyces cerevisiae	S. cerevisiae ECMo01 with an increased expression of urea amidolyase
Saccharomyces cerevisiae subsp. boulardii	-
Saccharomyces florentius	-
Saccharomyces fragilis	-
Saccharomyces lactis	-
Saccharomyces unisporus	-
Kluyveromyces	
Kluyveromyces fragilis (= Kluyveromyces marxianus)	-
Kluyveromyces lactis	Kluyvenomyces lactis (Dombr. Van del Walt) with bovine prochymosin gene, amplified on plasmid PUC18 for enzymatic agent production
Kluyveromyces marxianus (= Kluyveromyces fragilis)	-
Hansenula	
Hansenula mrakii (= Williopsis mrakii)	-
Candida	
Candida famata	-
Candida kefyr (= C. pseudotropicalis)	-
Candida friedricchi	-



Candida holmii	-
Candida krusei	-
Candida pseudotropicalis (= C. kefyr)	-
Candida utilis	-
Candida valida	-
Debaryomyces	
Debaryomyces hansenii	-
Geotrichum	
Geotrichum candidum	-
Williopsis	
Williopsis mrakii (= Hansenula mrakii)	-
Pichia	
Pichia pastoris	-
Carnobacterium maltaromaticum	-
Mortierella vinacea var. raffinoseutilizer	-
Pseudomonas fluorescens	Pseudomonas fluorescens with alpha-amylase gene from Thermococcales

‘-’ - no analogues.

5.5. The global production volumes, the use in food industry and import of GMM and GMA based products into the Russian Federation shall be taken into consideration when carrying out examinations. The list of such products is given in descending order:

- a) based on GMM:
  - enzymatic agents;
  - GMM strains-producers of food substances and food additives for cheesemaking, starch industry, bread-making, production of beverages and strong alcohol products;
  - GMM strains of yeast for brewing, winemaking, strong alcohol production;
- b) based on GMA:
  - starters, starter, probiotic, yeast cultures used as raw material;
  - cheeses, fermented milk and probiotic products (BAA to food), fermented sausages and meat products;
  - beer, kvas and fermentation beverages;
  - acid cream butter, margarine, mayonnaise;
  - fermented soy-based products;
  - fermented products from fruits and vegetables;
  - enzymatic agents;
  - strains-producers of food substances and food additives;
  - products from yeast and sour dough;
  - protein-based products on the basis of yeast and other inactivated microbial biomass;
  - modified starches obtained by means of microbial fermentation;
  - clarified fruit and citrus juices, grape and fruit wines.

5.6. Sanitary and epidemiological examination of food products from/ or with the use of GMM and GMA provides for:

a) examination of accompanying documentation;

b) laboratory control over products samples regarding the presence or absence of GMM, GMM selective markers (nucleotide sequences used as a label for genetic manipulation as part of genetic structures) and / or over target genes of GMM, as well as products of expression of target genes of GMM or GMA. Laboratory control is not required subject to absolute compliance with established requirements based on data on examination of the supporting documents;

c) additional laboratory control over products samples (if required) regarding the presence of any other signs that indicate the presence in food products of GMM (GMA) with modified properties due to instability of GMM and / or unwanted recombinations of genes, and unfavourable to consumers (transmissible antibiotic resistance, pathogenic factors of GMM or GMA; plasmid DNA of GMA; presence of toxicity, genotoxicity, residual quantities of antibiotics, mycotoxins and other foreign substances in food products derived from / or with the use of GMM and GMA).

5.6.1. Further examination of food products shall be carried out in case any discrepancies appear between the results of laboratory examinations and information provided in the documents; in case it is known about some deviations in the technological process, complaints, and reported disease caused by food products with GMM and GMA. In such cases samples of food products shall be sent to research institutes authorised for carrying out the research and testing centres that are accredited in this field.

5.6.2. In case additional examinations are requested most likely potential risk factors of GMM in food products (Table 7) shall be taken into account, which are connected with the peculiarities of specific genera and species of parental strains of microorganisms.

5.6.3. Laboratory control of GMM (GMA) and samples of food products derived from / or with the use of GMM (GMA) shall be based on a specially developed methodology and testing algorithms by means of microbiological, molecular-genetic, hygienic examinations in accordance with the approved methods.

5.6.4. Sanitary and epidemiological examination of food products from GMM and GMA released from technological microflora, and not containing protein or DNA, for the purpose of stating the presence or absence of DNA, GMM or GMA, shall be carried out by means of laboratory examinations (molecular and genetic tests) on the basis of submitted documentation; if necessary a request for strains-producers and reference-strains of GMM or GMA can be made.

5.7. Measures for performing state sanitary and epidemiological surveillance and control over food products derived from / or with the use of GMM or GMA when importing from abroad, shall include:

5.7.1. An official of the controlling authority shall verify whether the owner of the cargo (freight carrier) possesses the accompanying documentation, which should include:

- Certificate of state registration of the products or sanitary-epidemiological conclusion on its compliance with the sanitary rules;
- Security certificate of the country of origin;
- Declaration on the presence of GMM in the batch of food products;
- label on consumer packaging indicating the presence of information about the content of GMM in the given type of product taking into account Clause 2.18 of the present Sanitary Rules.

5.7.2. In case of identification of a breach of sanitary legislation, which threatens the appearance and spread of infectious diseases and mass non-infectious diseases (poisoning), Chief State Sanitary Inspector (Deputy Chief State Sanitary Inspector) is entitled to take measures, as provided for by law, to suspend the import of products into the territory of the Russian Federation in case such products do not have sanitary-epidemiological conclusion on compliance thereof with sanitary rules or not registered in the manner provided for by the legislation of the Russian Federation.

5.7.3. Sanitary and epidemiological examination of food products produced from /or with the use of GMM and GMA when they are imported from abroad shall be carried out in the established manner.

5.7.4. In case of import of food products into the territory of the Russian Federation, the scope of application and types of which are provided for in Table 1, selective laboratory examinations shall be carried out in order to identify the presence or absence of GMM (and / or target genes of GMM, products of expression of target genes of GMM, selective markers of GMM), and if necessary (Clause 5.6.1) - examination of the presence of adverse properties for the consumers of GMM or GMA, isolated from the products (for group III products - in the products themselves or with reference strains of their producers).

5.8. In case of production of food products derived from / or with the use of GMM and GMA the presence of regulatory and technical documentation for such products approved in the established manner shall be verified.

5.8.1. For manufacturing and processing of food products derived from or with the use of GMM and GMA, only food raw materials and food products can be used that have passed state registration or sanitary-epidemiological examination for compliance with sanitary rules and which are included into the State Register and the Register of Sanitary-Epidemiological Opinions

5.8.2. Sanitary and epidemiological examination of food products derived from / or with the use of GMM and GMA shall be carried out in the established manner at the process of manufacturing.

5.8.3. State sanitary and epidemiological control during the process of manufacturing of food products, derived from / or with the use of GMM and GMA ,shall be carried out be means of:

a) examination of technological instructions for production (hereinafter referred to as the TI), which establish requirements for the processes of manufacturing, inspection, packaging, marking of products at a particular plant, including drafts of label prints on consumer packagings (package inserts, instructions for use) as well as draft production plans with production control programme;

b) selective laboratory examinations of samples of raw materials and foodstuffs from the pilot batches of products;

c) examination of production conditions (at plants manufacturing viable GMM or GMA or using viable GMM or GMA in the technological process of food production).

5.8.4. Presence of requirements and parameters governing the use of GMM or GMA in the technological process shall be controlled in the process of examination of TI for a particular type of food product:

a) in the section 'Technical Requirements' - information about the presence or absence in the raw material and components of this type of product, their generic and specific belonging;

b) in the section 'Methods of Control' - a description of methods of analysis (references to approved methods) of microorganisms of controlled technological microflora which should contain 1 g of food products and methods of identification of generic and specific belonging (in cases provided for by the regulatory and technical documentation - the lack of living cells of strains-producers); in products derived from / or with the use of GMM - the lack of genes of transmissible antibiotic resistance (selective markers of antibiotic resistance); if necessary - the target genes of GMM, products of expression of target genes of GMM, as well as other methods of analysis, allowing to confirm the type and properties of GMM or GMA contained in the product;

c) in the section "Marking" and on the label of consumer packaging - information about the relevance of the product and GMM and information for consumers about the presence of GMM in the given type of product, taking into account Clause 2.18 of this Sanitary Rules;

d) regarding production preparation - description of the production control system, including incoming inspection of raw materials and components (presence of sanitary-epidemiological conclusions and other documents confirming their relation to the GMM and GMA), laboratory control (regarding the absence or presence of GMM (GMA) and / or selective markers of GMM, if necessary - target genes of GMM, products of expression of target genes of GMM); at plants producing strains-producers of food substances - additional control over production conditions, control over working area air, surfaces and equipment - for the presence of living cells of GMM (GMA) producers.

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ConsultantPlus: note:

The official text of the document obviously contains a misprint - Clause 5.7 has no Sub-clauses. Apparently Sub-clause 'b' of Clause 5.6 is meant.

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5.8.5. While monitoring the production process food samples shall be selected from the pilot batch and laboratory test shall be carried out for determination of the presence of GMM and / or selective markers of GMM, and if necessary - additional tests of products and raw materials in accordance with Clause 5.7 'b'.

5.8.6. Production examination shall be carried out by means of:

a) conformity assessment of business units (laboratories, starter shops, shops or sites), working with living fermentation, starter, probiotic, yeast cultures and strains-producers of food substances and food additives, with the requirements of sanitary rules for the corresponding industries and, if necessary (at plants, generating strains-producers) - with the requirements of sanitary rules for safety of working with microorganisms and for procedures of registration, storage, transfer and transportation of microorganisms;

b) examination of programme of production control of products performed at the manufacturing plant monitoring control of GMO and GMA regarding meeting the requirements of sanitary rules for organization and exercising production control over compliance with sanitary rules and implementation of sanitary and epidemic (prevention) activities;

c) examination of documentation for raw materials and components, food products, which are in production and expedition, regarding the records about the presence of GMM in technical specifications for the ingredient composition, in label prints and in quality and safety certificate for finished product.

5.9. When carrying out state sanitary and epidemiological control over food products derived from / or with the use of GMM and GMA, during the processes of production, storage, transportation and sale it is required to check the presence of regulatory and technical documents for specific types of products (standards, technical specifications, composition, specifications for imported products), certificates of state registration and sanitary-epidemiological conclusions on conformity with sanitary rules, issued in the established manner.

5.9.1. The sanitary and epidemiological examination of food products derived from / or with the use of GMM and GMA, during the processes of production, storage, transportation and sale includes selective laboratory tests for identification of the presence in the product of GMM and / or selective markers of GMM, and if necessary - additional product and material testing in accordance with Clause 5.6 'b'.

5.9.2. State sanitary and epidemiological control includes examination of documents for raw materials and components, food products, which are located at the site under control and intended for storage, transportation and sale, regarding the information about the presence of GMM in the technical documents, on the label, as well as in the quality and safety certificate for the batch of finished products.

5.9.3. State sanitary and epidemiological control over organisation and implementation of production control of GMM and GMA at plants manufacturing or using GMM or GMA in food production shall be carried out in accordance with the requirements of Sub-clauses 5.8.4 'd' and 5.8.6 'b'

5.10. Methodology of sanitary-epidemiological evaluation of food products derived from / or with the use of GMM and GMA when performing control of circulation thereof in the territory of the Russian Federation includes:

5.10.1. Collection of samples of food products for laboratory testing for the purpose of identification of presence of GMM and GMA, performed at the entry stage for import, development and production start-up, manufacturing, transportation and sale in accordance with the established procedures and standards for sampling, as specified in Table 4 or in the regulatory and technical documents for products depending on the species thereof.

Table 4

Standards for Sampling of Food Products for Examination for the Presence of GMM and GMA

Product Name	Mass of Samples for Microbiological and Molecular and Genetic Examinations
Dairy products:	
Yoghurts and liquid fermented milk products(kefir, kumis, etc.) <*> and heat treated products based on them	0.5 l
Sour cream of all kinds <*> and heat treated products based on it	0.5 kg or 2 packages with net mass of not less than 250 g
Cottage cheese, cottage cheese products <*> and heat treated products based on them	not less than 200 g
Ice cream based on fermented milk <*>	0.5 kg or 2 packages of not less than 0.5 kg
Dry fermented milk products <*>	not less than 200 g
Acid cream cow butter <*>	300 g or 1 package of not less than 200 g
Rennet hard cheese, soft, brine, etc. <*>	200 g 1 package of not less than 200 g
Cheese spread	not less than 200 g
Milk sugar, milk whey proteins	not less than 200 g
Meat products:	
sausages and sausage products	400 g
Fermented meat products	500 g
Fish products, shellfish and algae and products based on them:	
canned and semi-preserved fish, including caviar	3 packages of up to 1 kg, 1 package of more than 1 kg, caviar - 125 g
Products of processing of molluscs, crustaceans, invertebrates, marine algae	500 g
Beverages:	
wines, wine materials, cognac	0.5 l
beer (bottled, draught)	1 bottle or 0.5 l

kvas	
- bottled	0.5 l
- draught	0.5 l
no-alcoholic beverages, juices	1 l (freshly squeezed - 200 ml)
Horticulture products:	
vegetables, fruits, mushrooms (pickled, marinated, fermented, soaked)	500 g
Bread, bakery and confectionery products:	
Bread, bakery and fancy bakery products	2 packages (not less than 500 g)
bakery products, bread-rings	Piece-products - 3 items (not less than 300 g)
flour confectionery products: biscuits, hardtacks, gingerbreads, waffles, crackers, flour eat sweets, tortes, cakes, buns	500 g
Oily raw materials and fat products:	
mayonnaise	300 g or 1 package
margarine, confectionery, baking and cooking fats	200 g
BAA to food:	
on the basis of probiotic and lactic-acid microorganisms	
Dry	
Liquid	200 g 200 ml
On the basis of food substances derived by biotechnological means (oligosaccharides, vitamins, etc.)	200 g
Products for children and dietary nutrition:	
Breastmilk substitutes, enriched with probiotics and fermented milk:	200 ml
Liquid	
Dry	200 g
Complementary feeding products:	
Kashas enriched with probiotics	200 g
Complementary feeding products on fruit and vegetable basis with addition of yoghurt, fermented milk products, cottage cheese and sour cream, heat treated and canned	3 tins with net mass of not less than 200 g
Enzyme agents for food industry:	

Powder-like Liquid	50 ml 200 ml
Bacteria starters, bacteria concentrate, biomass, probiotic and yeast cultures Liquid, including frozen Dry	200 ml 50 g
Starter cultures for production of meat products Liquid, including frozen dry	200 ml 50 g
Baking, beer, wine yeast Dry, pressed	100 g
Flavourings:	
Yeast lysates	100 g
Fermented soy products (tofu, soy sauce, fermented drinks, ice cream, mayonnaise)	200 g, 100 ml, 0.5 kg, 0.5 kg, 300 ml
Starch products (corn steep liquors, starches, maltodextrins, syrups, treacle etc.)	100 g or not less than 1 package

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<\*> Including probiotic.

5.10.2. Selection, transportation and storage of food samples shall be carried out in accordance with the requirements of regulatory and technical documents for this type of product.

5.10.3. The following information contained in Clause 5.3 and Tables 2 and 3 shall be used for selection of food samples for study and examination of documents for the presence of GMM or GMA :

- about food products, admitted for circulation in the territory of the Russian Federation and included into the State Register and the Register of Sanitary-Epidemiological Opinions;
- about GMM allowed to be used in food industry in the world;
- about the cultures of microorganisms used in food industry and potentially suitable for production of food products of their genetically modified analogues.

5.10.4. When determining the required scope and content of sanitary-epidemiological examination of food products produced from / or with the use of GMM and GMA it is necessary to be guided by the requirements of sanitary rules and make decisions with account of the origin of the product - whether it belongs to one of three groups depending on the state of its technological microflora or microorganisms-producers (Table 1).

5.10.5. When choosing the tests and methods to be used for carrying out sanitary and epidemiological assessment of specific products, manufactured with the use of GMM or GMA, it is required to proceed from the tasks of the basic and additional (if required) laboratory control and include microbiological, molecular and genetic and hygienic examinations of such products.

5.10.6. The total number of microbiological and molecular and genetic testings is the main examination in the process of performing basic laboratory control.

5.10.7. When conducting the basic and additional laboratory examinations it is required to be guided by research schemes, specified in Tables 5 and 6.

Table 3

Scheme of Studies of Food Products Based on GMM and GMA as Regard Control in Circulation

Group of Methods	Controlled Indices and Tests <*>  <*>	I Group		II Group	III Group
		Products and Raw Materials with Viable GM Microflora		Products with Non-Viable GM Microflora	Products Free from GM Microflora
		Starter and Strains- Producers	Products Ready for Use		
Microbiological and immunological					
	Isolation of GMM (GMA), definition of quantifation in 1 g of the product and confirmation of species belonging compared with the reference-strain	+	+	-	-
	Absence of microorganisms-producers cells	-	-	+	+
	Presence of pathogenicity factors of strains including toxigenicity  <*>	+	+	-	-
Molecular genetic					
	Confirmation of species (strain) belonging using the method of PCR GMM (GMA), isolated from the products or –the presented strains-producers including as compared with reference strain <*>	+	+	+	+
	Presence of selective markers (antibiotic resistance and others) in GMM (GMA), isolated from the product or in the product itself	+	+	+	+ <*> in the presence of DNA and protein in the product
	Identification of products of expression of target genes GMM <*>	-	+	+	+ <*> - "-
	Identification of specific target genes GMM	-	+	+	+ <*> - "-



	Plasmid profile of GMM (GMA), isolated from the product when compared with reference strain <*>	+	+	-	-
	Indicators of sanitary and chemical and sanitary- microbiological security according to SanPiN 2.3.2.1078-2001 and SanPiN 2.3.2.1293-03 <*>	+	+	+	+
	Toxicity in tests in vitro and in vivo <*>	-/-	-/+	-/+	-/+
	Ames test for genotoxicity <*>	-/-	+/+	+/+	-/-

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Note <\*> - studies shall be appointed additionally.

Table 3

## Additional Types of Hygienic Testings for Examination of GMM (GMA)

Generic (Specific) Belonging of GMM in Food	Potential Risk Factor	Control Test
Mold fungi	Production of mycotoxins; antibiotics	Determination of mycotoxigenicity of GMM; genes encoding production of mycotoxins; determination of mycotoxins in food products derived from/ or with the use of GMM or GMA; definition of antibiotics in the product
Yeast- saccharomyces	Extra production of ethanol; allergenicity	Concentration of ethanol in the product; structural and mass distribution (protein profile) in the product or other tests confirming allergenicity
Streptomyces	Production of antibiotics	Determination of antibiotics in the product
Spore bacilli	Extra proteolytic activity; hemolytic activity; formation of antibiotic substances	Tests for acute toxicity of the product; hemolysis of erythrocytes under the influence of GMM; determination of antibiotics in the product
Enterococci	Formation of N-nitrosamines, histamine; antibiotic resistance	Determination of histamine, N-nitrosamines in the product; identification of resistance genes to vancomycin and rifampicinum
Lactobacilli heterofermentative	Excess formation of D (-) - lactic acid	Determination of concentration of D (-) - lactic acid in the product

5.10.8. Microbiological assessment is required for all types of food products derived from/ or with the use of GMM or GMA:

- containing GMM in the living state – fermented milk, probiotic products, unpasteurized fermented beverages and beer, ready meat products, prepared using starter cultures;
- containing GMM or GMA in inviable state (which were inactivated in the process of manufacturing (heat-treated fermented milk products, certain types of fermented beverages and pasteurized beer).

5.10.9. Microbiological assessment of GMM and GMA used for food production include:

- determination of quantity in 1 g of the product and its authenticity (confirmation of generic and species belonging by microbiological methods) of technological microflora;
- comparative analysis of phenotypic properties of GMM, of the strain-recipient or referent (control) strain;
- determination of pathogenic properties of GMM, the strain-recipient and the reference (control) strain (adhesiveness, invasiveness, virulence) in vitro and in vivo.

Food products, in which GMM (GMA) are completely inactivated, or from which they are released during the manufacturing process, are subject to microbiological assessment to confirm the absence of living cells of technological microflora or producer strain in the mass (volume) of the product established by scientific and technical documentation, but not less than in 1 g.

5.10.10. Microbiological assessment shall be carried out in accordance with the approved regulations and methodical documents.

5.10.11. Molecular genetic assessment of the food products derived from/ or with the use of GMM (GMA); GMM and GMA isolated from food products, shall be carried out in accordance with the approved methodical documents and shall include the following:

5.10.11.1. Identification of marker genes using PCR. As marker genes for each group of microorganisms (lactic acid, yeast, fungi, bacilli, etc.) shall be selected antibiotic resistance genes, vector sequences, selective markers, "ori" sequences, auxotrophic sequences most frequently used in the design of GMM.

5.10.11.2. Confirmation of generic and specific belonging by polymerase chain reaction (PCR) using 16S pRNA genes, and, if necessary - strain belonging by DNA-DNA hybridisation.

5.10.11.3. Identification of specific target genes of GMM shall be carried out: by PCR with appropriate primers and subsequent sequencing, restriction or hybridisation analysis of amplicon if the nucleotide sequence of the target gene and its regulatory element is known; by laboratory studies in the accredited research centre in accordance with the approved methodological documents, if information on the nucleotide composition of the target gene is not available.

5.10.11.4. Identification of the products of expression of the target gene shall be carried out by:

- determination of iRNA, transcribed from the target gene by reverse transcription - polymerase chain reaction (RT-PCR);
- determination of protein expressed by target gene of GMM - by electrophoretic separation in polyacrylamide gel (PAG - SDS);
- determination of the specificity of the protein expressed by GMM target gene - by immunoblot method.

5.10.11.5. Determination of the presence-absence of plasmids shall be carried out (with additional control).

5.10.12. Hygienic assessment of food products derived from/ or with the use of GMM or GMA shall be carried out with additional control including random checks of samples for compliance with the requirements of this Sanitary Rules for sanitary chemical and sanitary microbiological quality and safety or other examinations in accordance with Table 5 and 6.

5.10.13. Algorithms for carrying out of laboratory studies of food products samples include three options based on information on the belonging of the used microorganisms to GMA or GMM:

- 1) study of food products samples containing living microorganisms having genetically-modified analogues (GMA);
- 2) study of food products samples containing living genetically modified microorganisms (GMM);
- 3) study of food products samples containing non-viable genetically modified microorganisms and microorganisms having genetically modified analogues, as well as released from technological microflora.

5.10.14. Algorithm for laboratory studies of food products samples containing living GMA provides as follows:

5.10.14.1. The subjects of studies shall be samples of food products and raw materials of group I and II (Table 1) obtained with the use of or containing living GMA. Studies procedure is given in Table 7.

Algorithm for Laboratory Studies of Products Containing Living GMA

Test Samples	Study Contents	Study Results	Decision
Products of group I and II	1. Quantity determination of viable GMA of technological microflora in 1 g of the product	1. Quantity of microorganisms in the product corresponds to a normalized or the level claimed by the manufacturer	Positive decision on the study results
	2. Confirmation of generic and/or specific belonging of microorganism	2. Generic or specific belonging of the microorganism has been confirmed according to the documentation submitted by the applicant	
	3. Identification of DNA of marker vector genes (e.g. antibiotic resistant genes) in the food products sample	3. Absence of DNA of marker genes, plasmid DNA	
	4. Analysis of additional quality and food product safety indicators (Clause 5.6.1)	4. Characteristics adverse for customers have not been detected	
Products of group I and II	1. Quantity determination of viable GMA of technological microflora in 1 g of the product	1. Quantity of microorganisms in the product does not correspond to a normalized or the level claimed by the manufacturer	Negative decision on the study results
	2. Confirmation of generic and/or specific belonging of microorganism	2. Generic or specific belonging of the microorganism has not been confirmed	
	3. Identification of DNA of marker vector genes (e.g. antibiotic resistant genes) in the food products sample	3. DNA of marker genes has been detected	
	4. Analysis of additional quality and food product safety indicators	4. Pathogenicity factors, plasmid DNA or non-compliance with the safety regulations of these Sanitary Rules have been detected	

5.10.15. Algorithm for laboratory study of food products samples containing living GMM (food products and raw materials of group I and II obtained with the use of or containing living GMM registered in the Russian Federation) includes:

5.10.15.1. Quantity determination of viable GMM of technological microflora in 1 g of the product; if the detected quantities are not less than the normalized level or the level claimed by the manufacturer in the normative and technical documentation, go to Clause 5.10.15.2.

5.10.15.2. Detection and identification of living GMM in the studied sample by microbiological methods. If the detected GMM do not comply with the manufacturer's declaration, go to Clause 5.10.15.13, if the detected GMM correspond to the ones stated in the technical documentation on the product and the data sheet attached to the certificate of depositing, go to Clause 5.10.15.3, the reference strain from the depositary (culture collections) shall be studied in parallel with the test strain of GMM from the product sample.

ConsultantPlus: note:

The numbering of Clauses is given in accordance with the official text of the document.

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5.10.15.4. It is required to make sure that the microorganism – donor of the target gene and the microorganism – recipient of that gene have been well studied, allowed and have long been used in food industry, if this is the case - go to Clause 5.10.15.5, if not - go to Clause 5.10.15.13.

5.10.15.5. Confirmation of generic and specific belonging of the microorganism by PCR - the analysis of the genome of GMM, if the result is positive, go to Clause 5.10.15.6, if not go to Clause 5.10.15.13.

5.10.15.6. Detection of marker genes (vector sequences, selective markers, "ori" sequences, auxotrophic sequences. In case only the stated marker sequences are detected, go to Clause 5.10.15.7, in case non-declared marker sequences are detected, go to Clause 5.10.15.13.

5.10.15.7. Detection of antibiotic resistance genes encoding resistance to antibiotics that have an clinical significance in medicine and veterinary, if the stated genes are detected, go to Clause 5.10.15.13, if not, go to Clause 5.10.15.8.

5.10.15.8. Detection of the target gene by PCR followed by a confirmation of the nucleotide composition of the amplicon by the restriction or hybridisation analysis, if the target gene is detected, go to Clause 5.10.15.12, if not, go to Clause 5.10.15.13.

5.10.15.9. Determination of the nucleotide sequence of the target gene by sequencing and comparison with the declared nucleotide sequence, if the result is positive, go to Clause 5.10.15.12, if not, go to Clause 5.10.15.13.

5.10.15.10. Confirmation of the identity of the products of expression of target gene on the declared level and RNA (by RT-PCR) or by methods of electrophoresis in PAG and immunoblotting, if the result is positive, go to Clause 5.10.15.12, if not, go to Clause 5.10.15.13.

5.10.15.11. Analysis of additional quality and food product safety indicators for compliance with these Sanitary Rules. If the product meets the requirements, go to Clause 5.10.15.12, if not, go to Clause 5.10.15.13.

5.10.15.12. When the positive conclusion is issued, the product sample shall be assessed as complying with the requirements of these Sanitary Rules, in the part of requirements for marking and information.

5.10.15.13. When the negative conclusion is made, the product sample does not comply with these Sanitary Rules, further studies are quitted.

5.10.16. Algorithm for laboratory study of food products samples of group II and III containing non-viable GMM or GMA or released from technological microflora includes:

5.10.16.1. Detection of the growth of viable microorganisms of technological microflora and producer strains in the studied sample and their identification by microbiological methods. If living microorganisms-producers <\*> correspond to the specified in the technical documentation on the product, or representatives of microorganisms closely related to them, which may not be related to external residual microflora, have been detected, go to Clause 5.10.16.10, if they have not been detected, go to Clause 5.10.16.2.

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<\*> Except for the cases when additional identification studies are carried out in order to confirm generic and specific belonging of the referent strain from the depositary (culture collections).

5.10.16.2. It should be verified by analysis of the supporting documentation if a producer strain has been obtained with the use of genetic engineering technologies or not, if the strain belongs to GMM, go to Clause 5.10.16.3, if not, further actions are analogous to the ones given in Table 7.

5.10.16.3. It should be verified whether the microorganism-donor of the target gene (for example, the gene encoding the synthesis of the enzyme) and the microorganism-recipient (producer strain) have been thoroughly studied and have safely been used for a long period in food industry. If GMM has such characteristics, go to Clause 5.10.16.4, if the strains are new, go to Clause 5.10.16.10.

5.10.16.4. To test the presence of DNA of producer strain in the analysed food product sample and the presence of generic and/or specific sequences, marker genes and the target gene. If the DNA of microbial origin in the analysed food product sample may not be detected within the sensitivity of the method, go to

Clause 5.10.16.9, if the DNA target sequences have been detected in the isolated DNA, go to Clause 5.10.16.5, if not, go to Clause 5.10.16.10.

5.10.16.5. To render concrete the marker genes encoding resistance to antibiotics that have an essential clinical significance in medicine and veterinary, if the stated genes are detected, go to Clause 5.10.16.10, if not, go to Clause 5.10.16.6.

5.10.16.6. Determination of the nucleotide sequence of the target gene and comparison with the declared nucleotide sequence, if the DNA target sequences have been detected, go to Clause 5.10.16.9, if not, go to Clause 5.10.16.7.

5.10.16.7. Detection of the protein identity expressed by the target gene of GMM to the declared protein (enzyme) by electrophoresis in PAG and immunoblot, if such correspondence has been detected, go to Clause 5.10.16.9, if not, go to Clause 5.10.16.10.

5.10.16.8. Analysis of additional quality and food product safety indicators shall be carried out with additional control in accordance with these Sanitary Rules.

5.10.16.9. The decision is made, according to which the product sample shall be assessed as complying with the requirements of these Sanitary Rules, in the part regarding requirements for marking and information.

5.10.16.10. The decision is made, according to which the product sample does not comply with these Sanitary rules, further studies are quitted.

5.11. After the accomplishment of the samples testing, examination of the enclosed documentation and production, based on the obtained results analysis, the decision on the GMM (GMA) products compliance with the requirements of the Sanitary Rules for labelling shall be made.

5.11.1. Depending on the results, the decision is made in the following way:

- if it is found that the food products samples contain GMM (and/or target genes of GMM, products of expression of target genes) and/or GMA, corresponding to the manufacturer's declaration, if their belonging to microorganisms -producers is confirmed as declared in the technical documentation and allowed for circulation in the Russian Federation, and if the food products do not contain DNA and protein, but it is confirmed that they contain microorganisms-producers declared in the technical documentation allowed for circulation in the Russian Federation based on the results of the documentation examination or the additional testing, such products shall be considered as meeting the requirements of the sanitary rules;

- if the samples contain food products obtained from/or with the use of GMM:

- a) GMM (and/or target genes of GMM, products of expression of target genes, selective markers of GMM), not corresponding to the declaration of the manufacturer, not specified in the technical documentation, not registered and not allowed for circulation in the Russian Federation;

- b) GMM or selective markers of GMM, plasmid DNA in the samples of the traditional food products, obtained from/or with the use of GMA;

- c) genes of transmissible antibiotic resistance and/or factors (markers) of pathogenicity in the food products samples from GMM and GMA;

- d) toxicity, genotoxicity, residual quantities of antibiotics, mycotoxins and other alien substances in the food products samples, obtained from/or with the use of GMM and GMA, the decision is made on the non-compliance of the products with the sanitary rules.

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ConsultantPlus: note:

The numbering of Clauses is given in accordance with the official text of the document.

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5.13. In the Section "Hygienic Characteristics of Products" of the sanitary and epidemiological opinions issued on the food products, obtained from/or with the use of GMM in the column "Substances, Indices (Factors)" the following line shall be additionally included: "GMM". Correspondingly, in the column "Hygienic Standard" of this line it is required to specify the relation of the products to GMM, and particularly:

- "Contains GMM ( the name of the strain and the particular genetic modification)";

- "Obtained with the use of GMM ( the name of the strain and the particular genetic modification)";

5.12.1. Depending on the condition of technological microflora in the product the forms of the records in the sanitary and epidemiological opinions on the food products obtained from/or with the use of GMM shall provide for:

- when the food product contains viable and non-viable GMM, the generic and specific name(s) of the culture(s) used for production for food products shall be indicated in the Latin language, as well as the number of the strain;
- for products obtained with the use of microorganisms-producers, but released from them during the technological process, - the information on strain-source of the products origin.

5.12.2. The examples of records in the sanitary and epidemiological opinions on the food products obtained from/or with the use of GMM are given in Table 8.

Table 8

## Options for Execution of Sanitary and Epidemiological Opinion in the Part Of Requirements for Technological Microflora

Substances, Indicators (Factors)	Hygienic Standard (SanPiN, Maximum Allowed Level, Maximum Permissible Concentrations, etc.)
Option 1 Processing aid - powder of pure culture of alcohol yeast <i>Saccharomyces cerevisiae</i> Y-1986 for alcohol production from starch-contained raw material	
GMM: contains genetically modified strain	<i>Saccharomyces cerevisiae</i> strain Y-1986 with the gene of alpha amylase from <i>Bacillus licheniformis</i> in the quantity of $1 \times 10^{10}$ CFU/g of the product, not less
Option 2. Agarinic culture - producer of the lipase enzyme <i>Aspergillus oryzae</i> based on GMM	
GMM: contains genetically modified strain	Consists of <i>Aspergillus oryzae</i> strain ATCC-92341 with Lipase triacylglycerol gene from <i>Humicola lanuginosa</i>
Option 3. Food additive - enzyme agent "XXXX" of alpha amylase of microbial origin for starch industry	
GMM: obtained with the use of genetically modified strain	<i>Bacillus amyloliquefaciens</i> strain EBA-1 with the gene of alpha amylase from <i>Bacillus amyloliquefaciens</i> strain BZ53 in 1 g of the product - absent

5.13. Label inscriptions on consumer packages of the food products obtained from/or with the use of GMM shall include information on GMM presence provided for by Clause 2.18 of these Sanitary Rules.

## VI. SANITARY AND EPIDEMIOLOGICAL REQUIREMENTS FOR ORGANIC PRODUCTS

(introduced by Amendments and Additions No. 8, approved by Resolution No.26 of Chief State Sanitary Inspector of the RF dated 21.04.2008)

6.1. For production of agricultural crops and plants, animal products, products of poultry farming and beekeeping, obtained with the use of technologies, ensuring food products manufacture from raw materials, obtained without use of pesticides and other plant-protecting agents, chemical fertilizers, animal growth stimulants and feeding stimulants, antibiotics, hormonal agents, veterinary drugs, GMO, not exposed to ionizing radiation, and their derived products containing not less than 95% of ingredients obtained with consideration of these Sanitary Rules requirements, and the content of the remaining ingredients in the final product does not exceed 5% of the total mass of all ingredients (except for edible salt and water) (hereinafter referred to as the organic products), the following is used:

- farmery fields, agricultural lands, farms, the transition period for which is not less than 2 years from the time of seedage or in case of permanent crops (except for grass) is minimum three years prior to the first gathering of the organic products;
- only natural flavouring agents;
- agents form microorganisms and enzymes allowed in the established procedure, used when processing food products or as processing aids, except for genetically modified microorganisms or enzymes, obtained by genetic engineering;

6.2. Acquisition and storage of materials with unclear origin and not allowed for production of organic products is not permissible.

6.3. Equipment used for organic products manufacturing and pipelines for irrigation shall be maintained and operated in accordance with the regulatory and technical documentation, be allowed for use in the established manner.

6.4. Harvest equipment, vehicles and containers shall be marked according to their application designation (only for organic products) and after their application shall be sanitary treated and stored in conditions which exclude their contamination after treatment and prior to their application.



All vehicles used for transportation of organic products shall be in appropriate technical condition, have a certificate of hygiene.

6.5. Products of organic production are allowed to be transported and sold only in packagings, with the marking "organic product" and they shall be supported by documents confirming their origin as organic products, their quality and safety.

Each batch of organic products shall be supported by documentation, allowing to trace the origin of the product and its quality (a quality and safety certificate).

6.6. Imported organic products shall undergo sanitary epidemiological examination with confirmation of organic product identification from the authorized body of the importing country.

6.7. Requirements for production of organic products of plant origin:

6.7.1. When growing organic products of plant origin it is necessary to provide the exclusion of influence of other productions not related to organic products production in order to prevent their contamination by radioactive, chemical, biological substances and their compounds, microorganisms and other biological organisms posing threat to health of the present and future generations (hereinafter referred to as pollutants).

6.7.2. Land plots used for organic products production shall meet the hygienic requirements for soil.

Land plots in which the hygienic standards of pollutants content for soil are exceeded shall be discharged from crop rotation system when organic products are being produced.

6.7.3. Water used for washing or processing agricultural crops shall satisfy sanitary and epidemiological safety requirements for drinking water.

6.7.4. Materials on the basis of polyethylene, polypropylene and other polycarbonates allowed for use in accordance with the established procedure may be applied for covering of protected structures, synthetic mulch, screens protecting from insects and for wrapping of silage. Products on the basis of polychloride shall not be used.

6.7.5. The culture may be dried by air or by other physical methods including the use of heaters but end products of fuel combustion shall not contaminate the culture. The use of these methods shall provide complete fuel combustion. The premises for drying shall be equipped with forced combined extract and input ventilation.

6.7.6. Food additives and processing aids may be used meeting the requirements specified in Table 9 and 10.

6.7.7. Only means to control pests quantity and plant diseases and agrochemicals which have undergone state registration in accordance with the established procedure may be used, they are specified in Table 11 and 12.

6.7.8. Fertilizers obtained during processing of side-products of slaughter and fresh blood, as well as urea and Chilean nitrate are not allowed for use.

6.7.9. Synthetic herbicides, fungicides, pest control chemicals and other pesticides are not allowed for use.

6.7.10. Products containing copper in amounts exceeding 3 kg/ha per year are not allowed for use.

6.7.11. Synthetic growth regulators and synthetic dyes are not allowed for use. The exception is ethylene which may be used as a growth regulator for plants.

6.7.12. Organic products storages shall be kept clean and sanitary treated by means allowed for these purposes and specified in Table 12 of these sanitary rules.

6.8. Requirements for production of organic products of beekeeping and animal breeding.

6.8.1. Hive brood chambers shall be located in such a way that all farm units within a radius of 6 km from the beeyard meet the requirements of these sanitary rules.

It is allowed to locate other farm units within this radius which do not pose threat of contamination by radioactive, chemical, biological substances and their compounds, microorganisms and other biological organisms posing threat to health of the present and future generations, and which do not include pesticides. Beekeeping products shall be sold as organic products provided they have been obtained in compliance with these sanitary rules upon expiration of one year since the beginning of the beeyard activity.

6.8.2. When working with bees (during gathering of beekeeping products) one shall only use repellents allowed in accordance with the established procedure. It is not allowed to use synthetic chemical repellents.

6.8.3. For combating pests and bee diseases it is allowed to use the following substances and means: lactic acid, ethane diacid, formylic acid, acetic acid, sulfur, natural essential oils (menthol, eucalyptol, camphor), vapour and open flame, as well as allowed bacterial agents (*Bacillus thuringiensis*).

6.8.4. It is allowed to use food additives and processing aids for treatment of animal and beekeeping organic products in compliance with the requirements specified in Tables 13 and 14.

6.8.5. Animal products shall be considered as organic products if their production included the use of feeding grounds which have not been treated by any means not included in Tables 11 and 12 of these sanitary rules for 3 last years. The amount of fertilizers used in farm units shall not exceed 170 kg of nitrogen per year for 1 ha of farmlands.

6.8.6. Bovine cattle from the animal stock in which bovine spongiform encephalopathy (BSE) has been registered for the last six years cannot be used for organic products production.

6.8.7. It is not allowed to store on the territory of animal husbandry construction and other materials treated by dyes, preserving agents and toxic substances, which may negatively affect the organic product safety.

6.8.8. It is not allowed to keep agents to combat rodents and parasites within animals reach.

6.8.9. For cleaning and disinfection of cattle-breeding premises and buildings for keeping animals and birds, as well as for equipment and devices the following substances and agents are allowed for use: Potassium soap, sodium hydroxide soap, lime cream, lime, burnt lime, sodium hypochloride, sodium hydrate, potassium hydroxide, hydrogen peroxide, natural plant essences, citric acid, peroxyacetic acid, formylic acid, lactic acid, ethane diacid, acetic acid, ethanol, hydrogen nitrate, phosphoric acid, calcium carbonate.

6.8.10. It is necessary to use animal and birds feeding stuff satisfying their physiological needs at different development stages and used for achievement of product high quality. It is not allowed to use feeding stuff with additives designated for intensive production (hormones, etc.), as well as feeding stuff with the use of genetically modified organisms.

6.8.11. It is allowed to use feeding stuff prepared without use of organic solvents. Macro-and micronutrients, vitamins, allowed for organic products production, are specified in Table 15 of these sanitary rules.

6.8.12. It is allowed to use silage, produced with the use of the following additives and treatment agents only: sorbic acid (E200), formylic acid (E 236), acetic acid (E 260), lactic acid (E 270), propionic acid (E 280), citric acid (E330), sea salt, rock salt, whey, sugar, sugar beet bagasse, grain flour, molasses, in compliance with the technical rules for their application, established by the sanitary epidemiological examination.

6.8.13. Enzymes, microorganisms, binders (calcium stearate of natural origin (E 470), colloidal silicon dioxide (E 551), bentonite (E 558), aluminum silicate (E 559), potassium silicate (E 560), vermiculite, sepiolite, perlite), beer yeast, in compliance with the norms, established by the Sanitary epidemiological examination thereof are allowed to be used for animals feeding.

6.8.14. It is not allowed to use antibiotics, coccidiostats, and other pharmaceutical agents, growth and galactosis stimulants in the animals food ration.

6.8.15. It is not allowed to use chemical and synthetic allopathic agents or antibiotics as preventive measures.

FOOD ADDITIVES USED IN PRODUCTION OF ORGANIC PRODUCTS OF  
PLANT ORIGIN

Table 9

N	Name of Food Additives	Application Conditions
n/n		
1	2	3
1.	Calcium carbonate (E 170)	In accordance with SanPiN 2.3.2.1293-03 <*>
2.	Sulphur dioxide (E 220)	For winemaking products, in accordance with SanPiN 2.3.2.1293-03
3.	Lactic acid (E 270)	For fermented vegetable products, in accordance with SanPiN 2.3.2.1293-03
4.	Carbon dioxide (E 290)	In accordance with SanPiN 2.3.2.1293-03
5.	Malic acid (E 296)	In accordance with SanPiN 2.3.2.1293-03
6.	Ascorbic acid (E 300)	In accordance with SanPiN 2.3.2.1293-03



7.	Tocopherols, mixed tocopherols concentrate, natural (E306)	In accordance with SanPiN 2.3.2.1293-03
8.	Lecithin (E 322), obtained without use of bleaching agents and organic solvents	In accordance with SanPiN 2.3.2.1293-03
9.	Citric acid (E330)	For vegetable and fruit products, in accordance with SanPiN 2.3.2.1293-03
10.	Sodium tartrates (E 335)	For cakes and confectionery products, in accordance with SanPiN 2.3.2.1293-03
11.	Potassium tartrates (E 336)	For grain, confectionery products, cakes, in accordance with SanPiN 2.3.2.1293-03
12.	Monocalcium orthophosphate (E 341 i)	Only for the dough volume increase, in accordance with SanPiN 2.3.2.1293-03
13.	Alginate acid (E 400)	In accordance with SanPiN 2.3.2.1293-03
14.	Sodium alginate (E 401)	In accordance with SanPiN 2.3.2.1293-03
15.	Potassium alginate (E 402)	In accordance with SanPiN 2.3.2.1293-03
16.	Agar (E 406)	In accordance with SanPiN 2.3.2.1293-03
17.	Carrageenan (E 407)	In accordance with SanPiN 2.3.2.1293-03
18.	Carob gum (E 410)	In accordance with SanPiN 2.3.2.1293-03
19.	Guar gum (E 412)	In accordance with SanPiN 2.3.2.1293-03
20.	Tragacanth gum (E 413)	In accordance with SanPiN 2.3.2.1293-03
21.	Gum arabic (E 414)	For dairy products, fats and confectionery products, in accordance with SanPiN 2.3.2.1293-03
22.	Xanthane gum (E 415)	For vegetable and fruit products, products based on fat, for cakes and biscuits, salads, in accordance with SanPiN 2.3.2.1293-03
23.	Karaya gum (E 416)	In accordance with SanPiN 2.3.2.1293-03
24.	Pectins (E 440)	In accordance with SanPiN 2.3.2.1293-03
25.	Sodium carbonates (unmodified) (E 500)	For cakes and biscuits, confectionery products, in accordance with SanPiN 2.3.2.1293-03
26.	Potassium carbonates (E 501)	For grain products, cakes and biscuits, confectionery products, in accordance with SanPiN 2.3.2.1293-03
27.	Ammonium carbonates (E 503)	In accordance with SanPiN 2.3.2.1293-03
28.	Magnesium carbonates (E 504)	In accordance with SanPiN 2.3.2.1293-03
29.	Potassium chloride (E 508)	For frozen fruit and vegetables, canned fruits and vegetables, vegetable sauces, ketchup and mustard, in accordance with SanPiN 2.3.2.1293-03
30.	Calcium chloride (E 509)	For dairy products, products based on fats, fruits and vegetables, soya products, in accordance with SanPiN 2.3.2.1293-03
31.	Magnesium chloride (E 511)	For soya products, in accordance with SanPiN 2.3.2.1293-03.
32.	Calcium sulphates (E 516)	For cakes and biscuits, soya products, yeast, in accordance with SanPiN 2.3.2.1293-03.
33.	Sodium hydroxide (E 524)	For grain products, in accordance with SanPiN 2.3.2.1293-03.
34.	Argon (E 938)	In accordance with SanPiN 2.3.2.1293-03

35.	Nitrogen (E 941)	In accordance with SanPiN 2.3.2.1293-03
36.	Oxygen (E 948)	In accordance with SanPiN 2.3.2.1293-03

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 <\*> SanPiN 2.3.2.1293-03 "Hygienic Requirements for the Application of Food Additives", registered by Ministry of Justice on 02.06.2003 Russia, registration number 4613.

Table 10

PROCESSING AIDS, WHICH CAN BE USED FOR PRODUCTION OF ORGANIC PRODUCTS OF PLANT  
ORIGIN

N n/n	Name	Special Application Terms
1	2	3
1.	Calcium chloride	Firming agent
2.	Calcium carbonate	
3.	Calcium hydroxide	
4.	Calcium sulphate	Firming agent
5.	Magnesium chloride	Firming agent
6.	Potassium carbonate	For the purpose of grapes drying
7.	Carbon dioxide	
8.	Nitrogen	
9.	Ethanol	Solvent
10.	Tannic acid	For filtering purposes
11.	Egg white albumines	
12.	Casein	
13.	Gelatin	
14.	Fish adhesive	
15.	Vegetable oils	
16.	Silicon dioxide	Application as a gel or colloid solution
17.	Activated carbon	
18.	Agilite	
19.	Bentonite	
20.	Kaolin	
21.	Diatomaceous earth	
22.	Perlite	
23.	Hazelnut shells	
24.	Beeswax	Anti-adhesion additives
25.	Carnauba wax	Anti-adhesion additives
26.	Sulphuric acid	pH correction for water deletion in sugar syrup
27.	Sodium hydroxide	pH correction for sugar production
28.	Tartaric acid and its salts	
29.	Calcium carbonate	Sugar production
30.	Agents based on tree bark	
31.	Potassium hydroxide	pH correction for sugar production
32.	Citric acid	pH correction

AGROCHEMICALS ALLOWED TO BE USED FOR PRODUCTION OF  
ORGANIC PRODUCTS <\*>

No. item	Means	Requirements for Composition and Conditions of Use
1	2	3
1.	Farmyard manure and bird droppings, obtained within organic products production system conditions	After composting, worm breeding or thermal processing subject to presence of positive veterinary conclusion and application of regulations for use established during the sanitary epidemiological examination
2.	Manure from farms producing organic products	After composting, if introduced into the soil 120 days prior to harvest, intended for food purposes and regulations for use, determined during the sanitary epidemiological examination
3.	Remaining quantities of agricultural crops and green manure fertilizers obtained from the farm unit producing organic products	In accordance with the regulations for use, determined during the sanitary epidemiological examination
4.	Straw and other mulch obtained from the farm unit producing organic products	In accordance with the regulations for use, determined during the sanitary epidemiological examination
5.	Composted animals feces, including bird droppings, obtained from the farm unit producing organic products	In accordance with the regulations for use, determined during the sanitary epidemiological examination. It is necessary to specify animal species
6.	Compost and composted farmyard manure, obtained from the farm unit producing organic products	In accordance with the regulations for use, determined during the sanitary epidemiological examination
7.	Dry farmyard manure and dry bird manure, obtained from the farm unit producing organic products	In accordance with the regulations for use, determined during the sanitary epidemiological examination
8.	Guano	In accordance with the regulations for use, determined during the sanitary epidemiological examination
9.	Straw	After composting it shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
10.	Compost and mushroom waste and vermiculite substrate	In accordance with the regulations for use, determined during the sanitary epidemiological examination
11.	Sorted, composted or fermented household food waste	In accordance with the regulations for use, determined during the sanitary epidemiological examination
12.	Compost from by-products of plant origin	In accordance with the regulations for use, determined during the sanitary epidemiological examination
13.	Processed animal products from slaughtering and fish plants	In accordance with the regulations for use, determined during the sanitary epidemiological examination

14.	By-products of food and textile industry not processed by synthetic additives	In accordance with the regulations for use, determined during the sanitary epidemiological examination
15.	Algae and products thereof	Shall only be obtained by means of: 1) physical processes, including dehydration, freezing and pulverizing, 2) water extraction or aqueous acid solution and/or alkaline solution, 3) fermentation and be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
16.	Sawdust, bark and woodwaste	After cutting the timber shall not be treated with chemicals, it shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
17.	Wood and charcoal	After cutting the timber shall not be treated with chemicals, it shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
18.	Natural phosphates	Content of cadmium shall not exceed 90 mg / kg P <sub>2</sub> O <sub>5</sub> , it shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
19.	Basic slag	In accordance with the regulations for use, determined during the sanitary epidemiological examination
20.	Potassium salts (Cainites, sylvinite and etc.)	Content of chlorine shall not be more than 60% it shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
21.	Potassium sulphate (patenkali, etc.)	Obtained as a result of physical processes with subsequent enrichment by chemical means in order to improve solubility. It shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
22.	Calcium carbonate of natural origin (chalk, marl, limestone, phosphate-containing chalk )	In accordance with the regulations for use, determined during the sanitary epidemiological examination
23.	Magnesium rock of natural origin	In accordance with the regulations for use, determined during the sanitary epidemiological examination
24.	Lime-magnesium rock of natural origin	In accordance with the regulations for use, determined during the sanitary epidemiological examination
25.	Epsom salt (magnesium sulphate)	In accordance with the regulations for use, determined during the sanitary epidemiological examination
26.	Natural gypsum (calcium sulfate) from natural sources only	In accordance with the regulations for use, determined during the sanitary epidemiological examination
27.	Grains and grains extract except ammonium grains	In accordance with the regulations for use, determined during the sanitary epidemiological examination
28.	Sodium chloride	Only mine salt shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
29.	Aluminum - calcium phosphate	Shall not be used as defoliant or herbicide. The use of chlorides and nitrates of the said microelements shall not be allowed. Content of cadmium shall not exceed 90 mg / kg P <sub>2</sub> O <sub>5</sub> . It shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination



30.	Microelements (e.g, boron, copper, iron, manganese, molybdenum, zinc)	Shall not be used as defoliant or herbicide. The use of chlorides and nitrates of the said microelements shall not be allowed. It shall be used in accordance with the regulations for use, determined during the sanitary epidemiological examination
31.	Sulfur	In accordance with the regulations for use, determined during the sanitary epidemiological examination
32.	Stone powder (crushed basalt)	In accordance with the regulations for use, determined during the sanitary epidemiological examination
33.	Alumina (e.g bentonite, perlite, zeolite)	In accordance with the regulations for use, determined during the sanitary epidemiological examination
34.	Biological organisms found in the wild (e.g, worms)	In accordance with the regulations for use, determined during the sanitary epidemiological examination
35.	Vermiculite	In accordance with the regulations for use, determined during the sanitary epidemiological examination
36.	Peat	Except for peat with the addition of synthetic additives. It shall be used for germination of seeds in peat pots. It is not allowed to be used as a soil conditioner. Other methods of using peat - in accordance with the regulations for use, determined during the sanitary epidemiological examination
37.	Humus from worms and insects	In accordance with the regulations for use, determined during the sanitary epidemiological examination
38.	Humic acid of natural origin (water and alkali extracts only)	In accordance with the regulations for use, determined during the sanitary epidemiological examination
39.	Bleaching powder	In accordance with the regulations for use, determined during the sanitary epidemiological examination
40.	By-products of sugar production (e.g, grains)	In accordance with the regulations for use, determined during the sanitary epidemiological examination
41.	By-products of processing of Guinea palms, coconut and cocoa (including palm combs and residues, filtered press cake, cocoa husks)	In accordance with the regulations for use, determined during the sanitary epidemiological examination
42.	By-products obtained as a result of organic products processing	In accordance with the regulations for use, determined during the sanitary epidemiological examination
43.	Calcium chloride solution	For processing of leaves in the case of proven calcium deficiency

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<\*> Agrochemicals shall undergo state registration in the Russian Federation in the established manner.

Table 12

MEASURES FOR PESTS AND PLANT DISEASES CONTROL ALLOWED  
TO BE USED FOR PRODUCTION OF ORGANIC PRODUCTS <\*>

No. item	Name	Application Terms
1	2	3
1.	Of plant and animal origin	
1.1.	Preparations based on pyrethrin, derived from <i>Chrysanthemum cinerariaefolium</i> , which can contain synergists	Shall be used only in case of direct threat to harvest, except piperonyl butoxide used as a synergist
1.2.	Preparations based on rotenone, obtained from species of <i>Derris elliptica</i> , <i>Lonchocarpus</i> spp, <i>Thephrosia</i> spp	Shall be used only in case of direct threat to harvest
1.3.	Preparations based on <i>Quassia amara</i>	Shall be used only in case of direct threat to harvest
1.4.	Preparations based on <i>Ryania speciosa</i>	Shall be used only in case of direct threat to harvest
1.5.	Products based on shoals (azadirachtin) from <i>Aradiachta indica</i>	Shall be used only in case of direct threat to harvest
1.6.	Propolis	Shall be used only in case of direct threat to harvest
1.7.	Vegetable and animal oils (e.g. mint, pine, thyme oil)	Shall be used only in case of direct threat to harvest
1.8.	Seaweed, flour and seaweed extracts, sea salt and salty water, which were not subjected to chemical processing	Shall be used only in case of direct threat to harvest
1.9.	Gelatin	Shall be used only in case of direct threat to harvest
1.10.	Casein	Shall be used only in case of direct threat to harvest
1.11.	Lecithin	Shall be used only in case of direct threat to harvest
1.12.	Natural acids (e.g. acetic)	Shall be used only in case of direct threat to harvest
1.13.	Fermented products from <i>aspergilli</i>	Shall be used only in case of direct threat to harvest
1.14.	Mushroom extract ( <i>Shiitake</i> fungus)	Shall be used only in case of direct threat to harvest
1.15.	<i>Chlorella</i> extract	Shall be used only in case of direct threat to harvest
1.16.	Chitin nematicides of natural origin	Shall be used only in case of direct threat to harvest
1.17.	Natural herbal preparations (except drugs based on tobacco)	Shall be used only in case of direct threat to harvest
1.18.	Beeswax	Shall be used only in case of direct threat to harvest
1.19.	<i>Sabadilla</i>	Shall be used only in case of direct threat to harvest
2.	Of mineral origin	
2.1.	Copper in the form of hydroxide, oxychloride (tribasic), sulfate, suboxide, Bordeaux and Burgundy fluid	The necessity to be used, purpose and dosage shall be confirmed in the established manner. Can be applied as a fungicide conditioned that the use of preparations will not cause accumulation of copper in soil above the established level.

2.2.	Sulphur	Shall be used only in case of direct threat to harvest
2.3.	Mineral powders (stone powder, silicates, bentonite)	Shall be used only in case of direct threat to harvest
2.4.	Diatomaceous earth	Shall be used only in case of direct threat to harvest
2.5.	Sodium silicate	Shall be used only in case of direct threat to harvest
2.6.	Sodium bicarbonate	Shall be used only in case of direct threat to harvest
2.7.	Potassium permanganate	Shall be used only in case of direct threat to harvest of fruit trees, grapes
2.8.	Iron phosphate	Shall be used as molluscicide
2.9.	Burnt lime	Shall be used this way to minimize accumulation of copper in soil
2.10.	Mineral oils (except oil)	Shall be used only in case of direct threat to harvest
2.11.	Paraffin oil	Shall be used only in case of direct threat to harvest
2.12.	Silica sand	
3.	Microorganisms used for biological pest control	
3.1.	Preparations of <i>Bacillus thuringiensis</i> , granulosis virus, etc.	Shall be used only in case of direct threat to harvest
4.	Other	
4.1.	Homeopathic and Ayurvedic drugs	Shall be used only in case of direct threat to harvest
4.2.	Carbon dioxide and nitrogen	Shall be used only in case of direct threat to harvest
4.3.	Potassium soap (soft soap)	
4.4.	Ethanol	Shall be used only in case of direct threat to harvest
4.5.	Herbal and biodynamic preparations	
4.6.	Sterilized insect males	Shall be used only in case of direct threat to harvest
4.7.	Predatory insects	Shall be used only in case of direct threat to harvest
4.8.	Beeswax	Shall be used only as substance in case of tree chopping
5.	Physical barriers	
5.1.	Processing by electromagnetic field	Shall be used only in case of direct threat to harvest
5.2.	Sound	Shall be used only in case of direct threat to harvest
5.3.	Steam as a sterilizing method	Shall be used only in case of direct threat to harvest
5.4.	Ammonium carbonate	Shall be used only as a repellent for large animals. No contact with soil or edible crops is not allowed
5.5.	Hydrogen peroxide	Shall be used only in case of direct threat to harvest
6.	Traps	
6.1.	Mechanical	Shall be used only in case of direct threat to harvest

6.2.	Pheromones - only in traps and dispensers	Traps and / or dispensers shall prevent release of substances used into the environment and contact thereof with the grown cultures. After completion of work traps shall be collected and safely disposed of
6.3.	Sticky traps	Shall be used only in case of direct threat to harvest
6.4.	Mineral oils (except oil)	Shall be used only in case of direct threat to harvest
6.5.	Preparations based on metaldehyde, containing repellents for scaring away more highly organized animals, also used in the traps	Shall be used only in case of direct threat to harvest

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<\*> Means for pests and plant diseases control shall undergo state registration in the Russian Federation in the established manner.

Table 13

FOOD ADDITIVES, WHICH CAN BE USED IN PRODUCTION OF ORGANIC ANIMAL AND BEE  
PRODUCTS

No. item	Name	Field of Application
1	2	3
1.	Vegetable carbon (E 153)	For some types of cheeses in accordance with SanPiN 2.3.2.1293-03 <*>
2.	Calcium carbonate (E 170)	For dairy products, in accordance with SanPiN 2.3.2.1293-03. Shall not be used as colouring agent
3.	Lactic acid (E 270)	For sausage casings, in accordance with SanPiN 2.3.2.1293-03
4.	Carbon dioxide (E 290)	In accordance with SanPiN 2.3.2.1293-03
5.	Lecithin (E 322), obtained without use of bleaching agents or organic solvents	For dairy products, baby food based on milk, products based on fat, mayonnaise, in accordance with SanPiN 2.3.2.1293-03
6.	Sodium citrate (E 331)	For sausages, egg white pasteurization, dairy products, in accordance with SanPiN 2.3.2.1293-03
7.	Agar (E 406)	In accordance with SanPiN 2.3.2.1293-03
8.	Carrageenan (E 407)	For dairy products, in accordance with SanPiN 2.3.2.1293-03.
9.	Carob gum (E 410)	For dairy and meat products, in accordance with SanPiN 2.3.2.1293-03.
10.	Guar gum (E 412)	For dairy products, canned meat, egg products, in accordance with SanPiN 2.3.2.1293-03
11.	Tragacanth gum (E 413)	In accordance with SanPiN 2.3.2.1293-03
12.	Gum arabic (E 414)	For dairy products, products based on fat, confectionery, in accordance with SanPiN 2.3.2.1293-03
13.	Pectins (unmodified) (E 440)	For dairy products, in accordance with SanPiN 2.3.2.1293-03.
14.	Calcium chloride (E 509)	For dairy products, in accordance with SanPiN 2.3.2.1293-03.
15.	Argon (E 938)	In accordance with SanPiN 2.3.2.1293-03
16.	Nitrogen (E 941)	In accordance with SanPiN 2.3.2.1293-03
17.	Oxygen (E 948)	In accordance with SanPiN 2.3.2.1293-03

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<\*> SanPiN 2.3.2.1293-03 "Hygienic Requirements for Use of Food Additives", registered by  
Ministry of Justice of the RF on 02.06.2003, registration number 4613.

Table 14

PROCESSING AIDS, WHICH CAN BE USED FOR TREATMENT OF ORGANIC ANIMAL AND BEE PRODUCTS

No. item	Name	Special Application Terms
1	2	3
1.	Calcium carbonate (E 170)	
2.	Calcium chloride (E 509)	Used as thickening agent in cheese making to give density
3.	Kaolin	To extract propolis
4.	Lactic acid (E 270)	For dairy products as thickening agent . To correct pH of salt bath in cheese making
5.	Calcium carbonate (E 500)	For dairy products as neutralizing agent

Table 15

FEEDSTUFF, PRODUCED WITHOUT CHEMICAL SOLVENTS, MACRO-AND MICROELEMENTS, VITAMINS, ALLOWED TO BE USED FOR PRODUCTION OF ORGANIC PRODUCTS

1.	Cereals, grain, products of processing thereof and by-products	Oats in the form of grains, flakes, feed flour, bran; barley in the form of grains, protein and feed flour; rice in the form of grains, chops, feed flour, germ press cake; millet sowing in the form of grains, rye in the form of grains, feed flour and bran; sorghum in the form of grains; wheat in the form of grains, feed flour , bran, gluten, germ; triticale in the form of grains; maize in the form of grains, bran, feed flour, germ press cake and gluten; malt sprouts; brewing grains.
2.	Oil seeds, oilseeds products, products of processing thereof and by-products	Rapeseed, rapeseed press cake and rapeseed hulls; soybeans, heated by steam, soybean press cake and hulls of soybeans, sunflower seeds and their press cake, cotton seed and their press cake, flax seeds and their press cake, sesame seed and press cake, palm kernel press cake, winter cress seed press cake and winter cress seed hulls; pumpkin press cake; extracted olive oil cake (through physical extraction of olives).
3.	Grain legumes, products of processing thereof and by-products	Garbanzo in the form of seeds, seeds of French lentils; lathyrus in the form of seeds subjected to appropriate heat treatment; peas in the form of seeds, feed flour, bran, horse beans in the form of seeds, feed flour, bran; broad beans in the form of seeds, vetch and lupins in the form of seeds.
4.	Root crop, products of processing thereof and by-products	Leached beet chips, sugar beet bagasse, potatoes, sweet potatoes in the form of tubers, cassava in the form of roots, potato pulp (by-product when receiving starch) potato starch, potato protein and sago.
5.	Other seeds and fruits, products and by-products	Carob tree, carob tree pods and products thereof, pumpkin; citrus squeezing residues, apples, quinces, pears, peaches, figs, grapes and bagasse from them; chestnut walnut press cake, hazelnut, cocoa husks and their press cake; acorns.

6.	Green and gross feedstuff	Alfalfa, grass meal from alfalfa, clover, grass meal from clover, green feedstuff (obtained from forage plants), grass meal, hay, silage, straw of grain and root vegetables for green feedstuff.
7.	Other plants, products of processing thereof and by-products	Molasses only as a binder agent in animal compound feedstuff, flour made from seaweed (obtained by drying and grinding of sea algae, followed by washing for reduction of iodine content), extracts and flour of shredded plants, vegetable protein extracts (only for feeding of young stock) spices, herbs.
8.	Milk and dairy products	Raw milk, dry milk, skimmed milk, dry skimmed milk, buttermilk, dried buttermilk, whey, dry whey, dry whey partially sugar-free, whey protein powder (extracted by physical treatment), dry casein and dry lactose.
9.	Fish and other marine animals, products of processing thereof and by-products	Fish, fish oil and unrefined cod fat obtained by an enzyme method, soluble or insoluble autolysates, hydrolysates and protolysates of parts of fish, invertebrates and crustaceans, only for feeding of young stock, fishmeal.
10.	Feed materials of mineral origin	Sodium (crude sea salt, large rock salt, sodium sulphate, sodium carbonate, sodium bicarbonate, sodium chloride). Calcium (litotamnion and maerl, sinks of aquatic organisms, including bones of cuttlefish, calcium carbonate, calcium lactate, calcium gluconate). Phosphorus (sedimentary bone disubstituted acid calcium phosphate, defluorinated disubstituted calcium phosphate, defluorinated monosubstituted phosphate calcium, calcium-magnesium phosphate, calcium - sodium phosphate). Magnesium (magnesium oxide, magnesium sulfate, magnesium chloride, magnesium carbonate, magnesium phosphate). Sulfur (sodium sulfate).
11.	Microelements (the need to be used shall be confirmed in the established manner)	Iron: carbonate (II), sulfate (II) monohydrate and / or heptahydrate, oxide (III). Iodine: calcium iodate (anhydrous), calcium iodate, hexahydrate, potassium iodide. Cobalt: cobalt acid sulfate (II) monohydrate and / or heptahydrate, basic cobalt acid sulfate (II) monohydrate. Copper: oxide (II), basic copper carbonate (II) monohydrate, copper acid sulfate (II) pentahydrate. Manganese: carbon (II), oxide, sulfate (II) mono- and / or tetrahydrate. Zinc: carbon, oxide, sulfate, mono and / or heptahydrate, Molybdenum: molybdate acid ammonium, molybdate acid sodium. Selenium: sodium selenate, sodium selenite.
12.	Vitamins, pro-vitamins and chemically well-defined substances with similar action	Vitamins, pro-vitamins and chemically well-defined substances similar effect are allowed to be used. Preferably, they shall be received from materials naturally contained in feedstuffs. Synthetic vitamins identical to natural, intended only for monogastric animals.

VII. Sanitary-Epidemiological Requirements for Safety  
and Nutrition Value of Specialised Food Products  
for Sportsmen

(introduced by Amendments No. 14,  
approved by Resolution No. 28 of Chief State Sanitary Inspector of the RF  
dated 05.05.2009)

7.1. Food products of specified chemical composition, increased nutrition value and/or intended effectiveness, consisting of a complex of food products or represented by their certain types, which have a specific influence on the improvement of human adaptive capabilities to physical and emotional loads and are intended for achievement of high sport results (hereinafter referred to as the specialised food products for sportsmen) and their components (raw material) shall comply with the hygienic requirements for safety and nutrition value established by these Sanitary Rules including safety parameters of the provisions of Annex 1 and requirements established by technical regulations for certain types of food products.

7.2. Vitamins and mineral salts shall be used in the forms specified in Annex 18 of these Sanitary Rules.

7.3. The composition of raw material used for the production of specialised food products for sportsmen as well as of ready food products may not include psychotropic, narcotic, toxic, strong, doping substances and/or their metabolites, other prohibited substances which are on the list of WADA (the World Anti-Doping Agency).

7.4. Food additives which do not negatively affect human health, specified in Annex 7 of these Sanitary Rules, may be used when manufacturing specialised food products for sportsmen.

7.5. Food value criteria, content of proteins, fats and hydrocarbons provided for by Annex 2 and Annex 17 of these Sanitary Rules shall be taken into account when manufacturing specialised food products for sportsmen.

7.6. Specialised food products for sportsmen shall be sold in consumer packaging only.

7.7. Quality and safety requirements for specialised food products for sportsmen shall be complied with when developing technical documents governing the issues of manufacturing and turnover of foodstuff and confirmed by sanitary and epidemiological examination of such products to be carried out according to the established procedure.

7.8. When carrying out expertise, research (tests) of specialised food products for sportsmen, their declared effectiveness shall be additionally appraised as well as the lack of unfavourable by-reactions shall be confirmed and special features of their use shall be detailed.

7.9. Specialised food products for sportsmen shall be allowed for manufacturing, storage, transportation and sale after their state registration.

VIII. Hygienic Requirements for Safety  
and Nutrition Value of Food Products Enriched  
with Vitamins and Mineral Substances

(introduced by Amendments and Additions No. 22,  
approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF  
dated 27.12.2010)

8.1. Basic Requirements for Enrichment of Food  
Products with Micronutrients

8.1.1. Enrichment of food products by adding one or several vitamins, macro- and/or microelements shall be performed pursuant to the requirements:

- food products of mass consumption used regularly and universally in every day alimentation of adult population and children over 3 years as well as food products which undergone refinement and other processing treatments which result in sufficient losses of vitamins and mineral substances shall be enriched;

- those vitamins and mineral substances shall be used for enrichment, underconsumption and/or deficit symptoms of which are actually detected among the population;

- the use of a more complex set of vitamins, macro- and/or microelements in enriching additives in the form of premixes shall be allowed;

- it shall be allowed to enrich products with vitamins and/or mineral substances regardless of the fact whether they are present or not in the original product;



- the criteria for choice of a list of enriching micronutrients, their dosage and forms shall be safety and effectiveness for the increase of ration food value;
- the number of vitamins and mineral substances additionally added into products enriched by them shall be calculated with regard to their natural content in the original product or raw material used for its manufacturing as well as losses during the manufacturing process or storage so that to ensure the content of these vitamins and mineral substances within the whole storage life of the enriched product at the level not less than the specified one;
- the choice of combination, forms, techniques and stages of addition of enriching additives shall be made with regard to a possible chemical interaction between them and components of the enriched product and shall ensure maximal safety during the manufacturing process and storage;
- enrichment of food products with vitamins and mineral substances shall not deteriorate their consumer properties: decrease the content and absorbency of other food substances contained in them, materially change organoleptic properties of food products, reduce their shelf life;
- enrichment of food products with vitamins and mineral substances shall not influence safety indices:
  - the ensured content of vitamins and mineral substances in products enriched by them shall be specified on an individual packaging of such products;
  - the effectiveness of addition of vitamins and/or mineral substances into new and specialised food products for the purpose of their enrichment shall be confirmed by special studies proving their safety and capability to improve the provision of vitamins and mineral substances added into the content of enriched products to the organism and positively influence the state of health.

8.1.2. The following groups of food products shall be recommended for the enrichment with vitamins and/or mineral substances:

- flour and bakery products,
- dairy products,
- alcohol-free beverage,
- juice products from fruits (including berries) and vegetables (juices, fruit and (or) vegetable nectars, fruit and (or) vegetable juice drinks)
- fat-and-oil products (vegetable oils, margarines, spreads, mayonnaises, sauces),
- edible salt,
- grain products (ready breakfasts, extruded and ready for consumption products, macaroni products and cereal instant products),
- food concentrates (kissels, instant beverages, instant dishes, instant porridge concentrates),
- protein products from grains of cereal, grain legumes and other crops, as well as food products intended for certain population groups:
  - baby food,
  - dietary (curative and prophylactic) food products,
  - functional food products,
  - specialised food products including those with a specified chemical composition.

It is possible to enrich confectionery products (sugary and flour) and fruit and berries concentrates with sugar with vitamins and / or mineral substances.

8.1.3. Products of mass consumption shall be enriched with vitamins and/or mineral substances pursuant to the recommendations specified in Annex No. 19 of these sanitary rules.

8.1.4. The following products shall not be enriched with vitamins and mineral substances:

- food products which are not subject to engineering processing (fruits, vegetables, meat, poultry meat, fish),
- fermented beverages as well as beverages with 1.2 % of alcohol content (excluding low-alcohol tonic beverages into which minerals and mineral substances are added for another purpose).

## 8.2. Forms and List of Vitamins and Mineral Substances Used for the Enrichment of Food Products

8.2.1. When manufacturing food products enriched with vitamins and mineral substances, there shall be used the form of vitamins and mineral substances specified in Annex No. 18 and Annex No. 19 of these sanitary rules. It is possible to use vitamin K2 (menaquinone) and calcium L-methylfolate to enrich food products.

8.2.2. It is not allowed to enrich food products of mass consumption with natrium, choline, inositol, carnitine, taurine, cuprum, manganese, molybdenum, chromium and selenium except for specialised food products (for sportsmen, dietary (curative and and prophylactic) food products with a specified chemical composition), functional food products and baby food as well as biologically active food additives.

8.2.3. When adding a set of micronutrients into enriched products, it is necessary to use food enriching agents - vitamin, mineral or vitamin and mineral mixtures (premixes) - ready homogeneous mixtures of food enriching agents (vitamins and/or mineral substances) manufactured based on the

carrying agent, which increases the accuracy of addition and ensures more uniform distribution of vitamins and mineral substances in a product being enriched. The use of premixes makes it possible to control the amount of added premix by the content of several micronutrients and, hence, to control the content of other added vitamins and/or mineral substances in ready products added into the composition thereof.

### 8.3. Specified Levels of Content of Vitamins and Mineral Substances in Enriched Products

8.3.1. The product shall be considered enriched on condition that its averaged daily serve contains from 15 % to 50 % of vitamins and/or mineral substances of the standard of human physiological need. The mass (volume) of the averaged daily serve shall be established by Annex No. 20 of these sanitary rules.

When enriching a food product, supplemental addition of an enriching agent shall be not less than 10 % of the standard of human physiological need.

For enriched high-energy food products (with the energy value of 350 kcal and more per 100 g), the content of vitamins and mineral substances shall be equal from 15 % to 50 % of the standard of human physiological need in terms of 100 kcal (1 standard food serve).

8.3.2. When manufacturing enriched food products, it is possible to increase the content of vitamins in them with respect to the declared indicators but not more than by 70 per cent for vitamin C and not more than by 50 per cent for other vitamins due to a natural reduction in the number of vitamins in enriched food products when they are stored during their storage life.

8.3.3. The limits of permissible deviations of real content of vitamins and mineral substances in enriched food products from the ensured one (specified on the label at marking) or the one stipulated by the receipt shall amount to:

- +/- 20 % for vitamins C, B1, B2, B6, pantothenic acid, niacin and mineral substances of magnesium, calcium, phosphorus, iron, zinc;
- +/- 30 % for vitamins A, D, E, B12, folic acid, biotin and mineral substance of iodine;
- +/- 38 % for the mineral substance of iodine in iodine-treated salt.

### 8.4. Special Requirements for Food Products Enriched with Vitamins and Mineral Substances

8.4.1. The developer of enriched food products and (or) their manufacturer shall be obliged to include additionally an ensured content of vitamins and/or mineral substances by the end of storage life into regulatory and technical documentation as well as requirements for their packaging and marking, storage lives and quality and safety control methods.

8.4.2. The control of content of vitamins and mineral substances in enriched food products when enriching additives in the form of vitamins and/or vitamin and mineral premixes are added can be performed by the content of several components comprising the content of enriching agents; the manufacturer shall be responsible for the compliance of the number of vitamins and/or mineral substances with the one ensured in the regulatory and technical documentation.

8.4.3. Enriched food products shall be produced according to regulatory and technical documentation and shall comply with technical regulations on each type of products; in case there are no such documents, they shall comply with sanitary rules and regulations of the Russian Federation in the sphere of ensuring its quality and safety and shall be confirmed by the declaration of compliance.

8.4.4. Enriched food products imported into the territory of the Russian Federation shall comply with the legislation of the Russian Federation in the sphere of food product safety and requirements of these sanitary rules.

8.4.5. The specified content of vitamins and mineral substances in enriched food products shall be controlled by the manufacturer.

8.4.6. Packaging of enriched food products shall ensure their quality and safety at all stages of products turnover.

The manufacturer of enriched food products shall release them packed and marked according to the Russian Federation legislation and requirements of these sanitary rules, regulatory and technical documentation.

### 8.5. Requirements for Information at Marking of Food Products Enriched with Vitamins and Mineral Substances

8.5.1. Food products enriched with vitamins and mineral substances shall be accompanied by information for consumers which conforms to the requirements of the Russian Federation legislation.

8.5.2. There shall be a word 'enriched' on the consumer packaging of enriched products in the name of such products or close to it. In addition, there shall be names of vitamins and/or mineral substances added into the content of such products, their ensured content by the end of storage life of the food product in mg per 100 g (ml) or averaged daily serve of the product as well as the content of the standard of human physiological need for such food substances expressed in per cent and recommendations for use or special features of use of such products, in case they are established.

8.5.3. The use of vitamins (C, E, beta-carotene) as food additives, namely, antioxidants, vitamin B2, beta-carotene and other carotinoids as colouring agents shall not be considered as the ground for specifying the following on the consumer packaging of the product: 'With vitamin...'.

8.5.4. Information for consumers about the content of vitamins and/or mineral substances shall be specified on each unit of consumer packaging of enriched food products, on each unit of multi-unit packaging and on each unit of transportation packaging.

to SanPin 2.3.2.1078-01, approved by  
Resolution No. 36 of Chief State  
Sanitary Inspector of the RF dated  
November 14, 2001

# 1. HYGIENIC REQUIREMENTS FOR SAFETY AND NUTRITION VALUE OF FOOD PRODUCTS

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of  
Chief State Sanitary Inspector of the RF dated 15.04.2003

No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated  
23.05.2008,

No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF  
dated 16.07.2008,

Amendments No.11, approved by Resolution No. 56 of Chief State Sanitary Inspector  
of the RF dated 01.10.2008

Amendment No. 16, approved by Resolution No. 6 of Chief State Sanitary Inspector of  
the RF dated 27.01.2010,

Amendments and Additions No. 18, approved by Resolution No. 71  
of Chief State Sanitary Inspector of the RF dated 28.06.2010,

Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State  
Sanitary Inspector of the RF dated 27.12.2010

Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of  
the RF dated 01.06.2011)

## 1.1. Meat and Meat Products; Poultry, Eggs and Products of their Processing

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more than	Note
1	2	3	4
1.1.1. Meat, including semi-manufactured products, steamed, chilled, slightly frozen, frozen (all types of butchers, trade and wild animals), including:	Toxic elements: lead arsenic cadmium mercury	0.5 0.1 0.05 0.03	
	Antibiotics (except for wild animals) <*>:		
	laevomycetin (chloramphenicol)	0.01 0.0003	Expiring on 01.01.2012. Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	
(as amended by Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			
	Pesticides <***>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its - metabolites.	0.1 0.1	
	Radionuclides: caesium - 137	200 300	(Bq/kg) Boneless meat the same, boneless venison, boneless meat of wild animals
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
	Dioxins <****>:	0.000003 0.000001	beef, mutton (in terms of fat) pork (in terms of fat)
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

Microbiological indicators:							
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria (coliforms)	Pathogenic bacteria, including Salmonella	Yeast, CFU/g not more than	Moulds, CFU/g, not more than	Note
1	2	3	4	5	6	7	
1.1.1.1. Meat (all types of butchers): - steamed meat in carcasses, half carcasses, quarter carcasses, junctures - slightly frozen meat in carcasses, half carcasses, quarter carcasses, junctures	10           1 x 1E3	1.0           0.1	25           25	           -	           -	sample collection from the deep layers           L. monocytogenes in 25 g are not allowed           the same	
(as amended by Amendments and Additions No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008)							
- chilled meat in carcasses, half carcasses, quarter carcasses, junctures	3 1 x 10	0.1	25				L. monocytogenes in 25 g are not allowed. For products with the shelf life of not more than 7 days bacteria of the genus Proteus in 0.1 g are not allowed. For production of baby food, dietary (curative and prophylactic) food products bacteria of the genus Proteus in 1.0 g are not allowed
(introduced by Amendments and Additions No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008)							
- chilled meat in junctures (boneless or with bone), vacuum-packed or in modified gas atmosphere	4 1 x 10	0.01	25	1 x 3 10			L. monocytogenes in 25 g are not allowed. Sulfite-reducing clostridia in 0.01 g are not allowed
(introduced by Amendments and Additions No. 9, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 23.05.2008)							
1.1.1.2. Frozen meat of butchers: - in carcasses, half carcasses, quarter carcasses, junctures - With bone, boneless, trimmed meat blocks - meat mass after butcher deboning	1 x 1E4        5 x 1E5   5 x 1E6	0.01        0.001   0.0001	25        25   25	-           -	-           -	L. monocytogenes in 25 g are not allowed           the same           the same sample preparation	

						without flame cleaning of the surface
1.1.1.3. Boneless meat semi-manufactured products (chilled, slightly frozen, frozen), including marinated:						
- large-sized	5 x 1E5	0.001	25	-	-	L. monocytogenes in 25 g are not allowed
- small-sized	1 x 1E6	0.001	25	-	-	the same
1.1.1.4. Chopped meat semi-manufactured products (chilled, frozen):						
- formed, including bread-crumbed	5 x 1E6	0.0001	25	-	500 <*>	L. monocytogenes in 25 g are not allowed; <*> for semi-manufactured products with the shelf life of more than 1 month
- Semi-manufactured products in dough coating, stuffed (cabbage rolls, marrows), chopped meat containing semi-manufactured products	2 x 1E6	0.0001	25		500 <*>	L. monocytogenes in 25 g are not allowed; <*> for semi-manufactured products with the shelf life of more than 1 month
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
- minced beef, pork, from meat of other butchers	5 x 1E6	0.0001	25			L. monocytogenes in 25 g are not allowed
1.1.1.5. Meat-bone semi-manufactured products (large-sized, chops, small-sized)	5 x 1E6	0.0001	25	-	-	L. monocytogenes in 25 g are not allowed

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more than	Note
1	2	3	4
1.1.2. Chilled, frozen offal of butchers (liver, kidneys, tongue, brains, heart), pork skin, alimentary blood and products of processing thereof	Toxic elements:  lead  arsenic cadmium mercury  Antibiotics, pesticides and radionuclides  Dioxins <****>:	  0.6 1.0 1.0 0.3 1.0 0.1 0.2  according to Clause 1.1.1  0.000006	  kidneys  kidneys kidneys   liver and its products (in terms of fat)
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed			Moulds, CFU/g not more than	Note
		Colif orm bacte ria (coli forms )	Sulfit e- reduci ng clostr idia	Pathog enic, includ ing salmon ella		
1	2	3	4	5	6	7
1.1.2.1. Chilled, frozen, frozen in blocks offal of slaughter cattle, pork skin				25		sample preparation with flame cleaning of the frozen blocks; L. monocytogenes in 25 g are not allowed
1.1.2.2. Alimentary blood	5 x 1E5	0.1	1.0	25	-	S. aureus in 1 g are not allowed
1.1.2.3. Products of blood processing: - food albumin  - dry concentrate of blood plasma (serum)	2.5 x 1E4  5 x 1E4	0.1  0.1	1.0  1.0	25  25		S. aureus and Proteus in 1 g are not allowed

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more than	Note
1	2	3	4
1.1.3. Beef, pork, mutton, and other butchers raw tallow (chilled, frozen), salted pork fat and products thereof	See Section "Oily Raw Material and Fat Products", Clause 1.7.4 Dioxins <****>:	0.000003 0.000001	beef, mutton (in terms of fat) pork (in terms of fat)
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			
1.1.4. Sausage products <***>, products from meat of all butchers, culinary products from meat	Toxic elements: lead arsenic cadmium mercury Benz(a)pyrene Antibiotics, pesticides and radionuclides Nitrosamines: Sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine Dioxins <****>:	0.5 0.1 0.05 0.03 0.001 according to Clause 1.1.1 0.002 0.004 0.000003 0.000001	    for smoked products  for smoked products from beef, mutton (in terms of fat) from pork (in terms of fat)
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			



Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria (coliforms)	Sulfit-reducing clostridia	S.aureus	Pathogenic, including salmonella	
1	2	3	4	5	6	7
1.1.4.1. Sausages and products from butchers meat, raw smoked and raw cured, including cut and vacuum-packaged		0.1	0.01	1.0	25	E. coli - in 1 g are not allowed; L. monocytogenes in 25 g are not allowed
1.1.4.2. Semi-smoked and cooked and smoked sausages	-	1.0	0.01	1.0	25	L. monocytogenes in 25 g are not allowed
1.1.4.3. Cooked and smoked and semi-smoked sausages the shelf life of which exceeds 5 days, including cut and vacuum-packaged, in modified atmosphere		1.0	0.1	1.0	25	L. monocytogenes in 25 g are not allowed
1.1.4.4. Cooked sausage products (sausages, sausage rolls, frankfurters, meat loaves) - of the best and first category, without a category	1 x 1E3	1.0	0.01	1.0	25	L. monocytogenes in 25 g are not allowed in sausage rolls and frankfurters
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
- of the second and third category	2.5 x 1E3	1.0	0.01	1.0	25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.4.5. Cooked sausages with addition of preserving agents, including delicatessen	1 x 1E3	1.0	0.1	1.0	25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.4.6. Cooked sausages the shelf life of	1 x 1E3 <*>	1.0	0.1	1.0	25	L. monocytogenes in 25 g are not

which exceeds 5 days, cut and vacuum-packaged, in modified atmosphere						allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.4.7. Cooked meat products: gammon, pork and beef rolls, pressed beef and pork, ham, bacon, pressed meat of pork heads, mutton in a form	1 x 1E3	1.0	0.1		25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.4.8. Smoked and cooked meat products: - gammons, rolls, daisy, brisket, neck, pork cured fillet and in coating	1 x 1E3	1.0	0.1	-	25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
- cheek meat (whiskers), fore shank	1 x 1E3	1.0	0.01		25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.4.9. Smoked and baked, baked meat products	1 x 1E3	1.0	0.1	-	25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.4.10. Cooked, baked, cooked and baked products the shelf life of which exceeds 5 days, including cut and vacuum-packaged, in modified atmosphere	1 x 1E3 <*>	1.0	0.1	1.0	25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.4.11. Meat ready-to-eat meals, quick-frozen: - from meat chops of all types of butcher meat (without sauces), fried, boiled	1 x 1E4	0.01	-	0.1	25	L. monocytogenes in 25 g are not allowed

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
- from chopped meat with sauces; pancakes with stuffing from meat and by-products, etc.	2 x 1E4	0.01		0.1	25	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.5. Meat products with the use of by-products (pates, liver sausages, headcheese, broth jelly, etc.) and blood. Cooked products with the use of by-products, blood, chilled and frozen (meat loaves, sausage, broth jellies, liver sausage, galantine)	Toxic elements:	according to Clause 1.1.2	
	Benz(a)pyrene and nitrosamines	according to Clause 1.1.4	
	Antibiotics, pesticides and radionuclides	according to Clause 1.1.1	
	Dioxins <****>:	according to Clause 1.1.2	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria (coliforms)	Sulfite-reducing clostridia	S.aureus	Pathogenic, including salmonella	
1	2	3	4	5	6	7
1.1.5.1. Blood sausages	2 x 1E3	1.0	0.01	- <*>	25	<*> for products, the shelf life of which exceeds 2 days: S. aureus in 1.0 g is not allowed; sulfite-reducing clostridia in 0.1 g are not allowed
1.1.5.2. Headcheese, salceson	2 x 1E3	1.0	0.1	- <*>	25	<*> S. aureus in 1.0 g are not allowed
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.1.5.3. Liver sausage	2 x 1E3	1.0	0.01	- <*>	25	<*> for products, the shelf life of which exceeds 2 days: S. aureus in 1.0 g are not allowed; sulfite-reducing clostridia in 0.1 g are not allowed
1.1.5.4. Pates from liver and (or) meat, including in coatings	1 x 1E3	1.0	0.1	0.1 <*>	25	<*> for products, the shelf life of which exceeds 2 days: S. aureus in 1.0 g are not allowed; L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						

1.1.5.5. Jellied meat products (broth jellies, aspic, galantines, etc.)	2 x 1E3	0.1	0.1	0.1	25	the same
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Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.6. Canned meat, meat and cereal <***>	Toxic elements: lead	0.5 1.0	for canned food in assembled tin container
	arsenic cadmium	0.1 0.05 0.1	for canned food in assembled tin container
	mercury stannum	0.03 200.0	for canned food in assembled tin container
	chrome	0.5	for canned food in assembled tin container
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its metabolites Nitrosamines: Sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.1  0.1  0.002 <*>	<*> for canned food with the use of sodium nitrite
	Nitrates	200	meat and cereal with vegetables
	Radionuclides	according to Clause 1.1.1	
	Dioxins <****>:	according to Clause 1.1.1	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			
	Microbiological indicators:		
Index, Group of Products			
1.1.6.1. Pasteurized canned food: - from beef and pork - chopped and Lyubitel'skaya ham	Shall satisfy requirements for industrial sterility for canned food of group "D" in accordance with Annex 8 to these Sanitary Rules		
1.1.6.2. Sterilized canned food from beef, pork, horse meat, etc.: - natural - with cereal, vegetable garnish	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules		

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.7. Canned food from by-products, including pate canned food (from all types of butcher and fur-bearing animals)	Toxic elements:		
	lead	0.6 1.0	for canned food in assembled tin container
	arsenic	1.0	
	cadmium	0.3	
	mercury	0.6 0.1	kidneys
	stannum	0.2 200.0	kidneys
	Chrome	0.5	for canned food in assembled tin container for canned food in chromed containers
	Nitrosamines: Sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.002	
	Antibiotics, pesticides and radionuclides	according to Clause 1.1.1	
	Microbiological indicators:	Sterilized canned food shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules	
	Dioxins <****>:	according to Clause 1.1.2	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			
1.1.8. Meat of sublimation drying and heat dehydration	Toxic elements	according to Clause 1.1.1	in terms of original product subject to content of dry substances in it and final product
	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.002	
	Antibiotics, pesticides and radionuclides	according to Clause 1.1.1	

Dioxins <****>:	according to Clause 1.1.1	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed		Moulds, CFU/g, not more than	Note
		Coliform bacteria – (coliforms)	Pathogenic including salmonella		
1.1.8.1. Dry food concentrates from meat or by-products	2.5 x 1E4	1.0	25	100	

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.9. Poultry, including semi-manufactured products, chilled, frozen (all types of poultry for slaughter, wild fowl)	Toxic elements: lead	0.5	
	arsenic	0.1	
	cadmium	0.05	
	mercury	0.03	
	Antibiotics (except for wild birds) <*>:		
	laevomycetin (chloramphenicol)	0.01 0.0003	Expiring on 01.01.2012. Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	
(as amended by Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers), DDT and its metabolites	0.1 0.1	
	Dioxins <****>:	0.000002	poultry (in terms of fat)
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			



Microbiological indicators:				
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed		Note
		Coliform bacteria - (coliforms)	Pathogenic including salmonella	
1	2	3	4	5
1.1.9.1. Poultry carcass and meat - chilled	1 x 1E4		25	Sample collection from the deep layers of muscles L. monocytogenes in 25 g are not allowed
- frozen	1 x 1E5		25	L. monocytogenes in 25 g are not allowed
- packaged, chilled, slightly frozen, frozen	5 x 1E5		25	the same
1.1.9.2. Natural semi-manufactured products from poultry meat:				
- sludge and bone, boneless without coating	1 x 1E5		25	L. monocytogenes in 25 g are not allowed
- sludge and bone, boneless with coating, with spices, sauce, marinated	1 x 1E6		25	the same
- lump boneless meat in blocks	1 x 1E6		25	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
1.1.9.3. Chopped semi-manufactured products from poultry meat (chilled, slightly frozen, frozen):				
- in dough	1 x 1E6	0.0001	25	L. monocytogenes in 25 g are not allowed
- in natural coating, including kupaty	1 x 1E6		25	the same
- in coating and without it	1 x 1E6		25	the same
1.1.9.4. Mechanically separated poultry meat, bone residue, chilled, frozen in blocks, frozen semi-manufactured bone products.	1 x 1E6		25	L. monocytogenes in 25 g are not allowed
1.1.9.5. Poultry skin	1 x 1E6		25	the same

Index, group of products	Indicators	Permissible Levels, mg/kg, not more	Note
1.1.10. . Poultry offal, semi-manufactured products from them	Toxic elements: lead	0.6	
	arsenic	1.0	
	cadmium	0.3	
	mercury	0.1	
	Antibiotics, pesticides	according to Clause 1.1.9	
	Dioxins <****>:	0.000006	poultry liver (in terms of fat)
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:

Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed		Note
		Coliform bacteria - (coliforms)	Pathogenic including salmonella	
1.1.10.1. Poultry offal, semi-manufactured products from them	1 x 1E6	-	25	L. monocytogenes in 25 g are not allowed

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.11. Sausage products, smoked products, culinary products with the use of poultry	Toxic elements:		
	Lead	0.5	
	Arsenic	0.1	
	Cadmium	0.05	
	Mercury	0.03	
	Benz (a)pyrene	0.001	for smoked products
	Nitrosamines: Sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.002 0.004	for smoked products
	Antibiotics, pesticides	according to Clause 1.1.9	
	Dioxins <****>:	according to Clause 1.1.9	
	(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria (coliforms)	Sulfite-reducing clostridia	S. aureus	Pathogenic, including salmonella	
1	2	3	4	5	6	7
1.1.11.1. Sausage products raw cured, raw smoked		0.1	0.01	1.0	25	E. coli - in 1.0 g are not allowed; L. monocytogenes in 25 g are not allowed
1.1.11.2. Sausage products, raw cured, raw smoked, cut and vacuum-packaged, in modified atmosphere		0.1	0.1	1.0	25	E. coli - in 1.0 g are not allowed; L. monocytogenes in 25 g are not allowed
1.1.11.3. Semi-smoked sausage products - cut and vacuum-packaged, in	-	1.0 1.0	0.01 0.1	1.0 1.0	25 25	

modified atmosphere						
1.1.11.4. Cooked sausage products (sausages, meat loaves, sausage rolls, frankfurters, meat rolls, ham, etc.)	1 x 1E3	1.0	0.1	1.0	25	L. monocytogenes in 25 g are not allowed for sausage rolls and frankfurters
1.1.11.5. Cooked and smoked sausages	-	1.0	0.1	1.0	25	
1.1.11.6. Poultry carcasses and parts thereof and baked, cooked and smoked, smoked products	1 x 1E3	1.0	0.1	1.0	25	
1.1.11.7. Poultry carcasses and parts thereof and raw smoked and raw cured products	1 x 1E3	1.0	0.1	1.0	25	E. coli in 1.0 g are not allowed L. monocytogenes in 25 g are not allowed
1.1.11.8. Culinary products from chopped meat	1 x 1E3	1.0	0.1	1.0	25	
1.1.11.9. Ready-to-eat quick-frozen meals from poultry: - fried, boiled	1 x 1E4	0.1		1.0	25	Enterococcus not more than 1 x 1E3 CFU/g
- from chopped meat with sauces and/or garnish	2 x 1E4	0.1	-	1.0	25	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.12. Meat products with the use of poultry by-products, skin (pates, liver sausages, etc.)	Toxic elements	according to Clause 1.1.10	
	Benz(a)pyrene and nitrosamines	according to Clause 1.1.4	
	Antibiotics, pesticides	according to Clause 1.1.9	
	Dioxins <****>:	according to Clause 1.1.10	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria (coliforms)	Sulfite-reducing clostridia	S.aureus	Pathogenic, including salmonella	
1	2	3	4	5	6	7
1.1.12.1. Pates from poultry, including the ones produced with the use of giblets	2 x 1E3	1.0	0.1	1.0	25	L. monocytogenes in 25 g are not allowed
1.1.12.2. Pates from poultry liver	5 x 1E3	1.0	0.1	0.1	25	L. monocytogenes in 25 g are not allowed
1.1.12.3. Jellied products from poultry: headcheese, broth jelly, galantine, etc., including made dishes with the use of meat of butcher animals	2 x 1E3	1.0	0.1	1.0	25	
1.1.12.4. Liver sausages from poultry and by-products	5 x 1E3	1.0	0.1	1.0	25	

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.13. Poultry canned food (from poultry and meat and cereal <*>, including pates and minced meat)	Toxic elements: lead  arsenic  cadmium   mercury  stannum   chrome	0.5 0.6 1.0  0.1 1.0 0.05 0.3 0.1  0.03 0.1 200.0  0.5	Pates for canned food in assembled tin container  Pates for canned food in assembled tin container  Pates for canned food in assembled tin container  Pates for canned food in assembled tin container  The same
	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylami	0.002	

ne		
Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers), DDT and its metabolites	0.1	
Nitrates	200	Meat and cereal
Antibiotics, pesticides	according to Clause 1.1.9	
Dioxins <*>:	according to Clause 1.1.9	

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:	
Index, group of products	
1.1.13.1. Pasteurized poultry canned food	Shall satisfy requirements for industrial sterility for canned food s of group "D" in accordance with Annex 8 to these Sanitary Rules
1.1.13.1. Pasteurized poultry canned food with and without vegetable additives, including pates	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.14. Poultry products of sublimation drying and heat dehydration	Toxic elements	according to Clause 1.1.9	In terms of original product subject to content of dry substances in it and final product
	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	according to Clause 1.1.13	
	Antibiotics, pesticides	according to Clause 1.1.9	
	Dioxins <*>:	according to Clause 1.1.9	

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in - which the indicator is not allowed			Note
		Coliform bacteria - (coliforms)	S. aureus	Pathogenic, including salmonella	
1	2	3	4	5	6
1.1.14.1. Chicken minced meat of sublimation drying	1 x 1E4	0.01	0.1	25	Proteus in 1 g are not allowed
1.1.14.2. Chicken minced meat of heat dehydration	5 x 1E3	0.1	0.1	25	the same
1.1.14.3. Dry products from poultry meat;	1 x 1E4	0.1	0.01	25	the same

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.15. Eggs and liquid egg products (egg melange, white, yolk)	<p>Toxic elements:</p> <p>lead 0.3</p> <p>arsenic 0.1</p> <p>cadmium 0.01</p> <p>mercury 0.02</p> <p>Antibiotics &lt;*&gt;:</p> <p>laevomycetin 0.01</p> <p>(chloramphenicol) 0.0003</p> <p>tetracycline group 0.01</p> <p>bacitracin 0.02</p>		Expiring on 01.01.2012. Shall become effective since 01.01.2012.
(as amended by Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			
	<p>Pesticides &lt;*&gt;:</p> <p>Hexachlorocyclohexane (alpha-, beta-, gamma-isomers) 0.1</p> <p>DDT and its - metabolites 0.1</p>		
	Dioxins <****>:	0.000003	Hen eggs and products thereof (in terms of fat)
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria - (coliforms)	S. aureus	Proteus	Pathogenic, including salmonella	
1	2	3	4	5	6	7
1.1.15.1. Dietary hen, quail egg	1 x 1E2	0.1	-	-	5 x 25 <*>	<*> the analysis shall be carried out for yolks
1.1.15.2. Hen eating egg and eggs of other birds	5 x 1E3	0.01	-	-	5 x 25 <*>	<*> the same
1.1.15.3. Liquid egg products: - egg mixtures for omelette, filtered, pasteurized  - frozen: egg melange, white, yolk, including with salt and sugar, mixtures for omelette	1 x 1E5  5 x 1E5	0.1  0.1	1.0  1.0	1.0  1.0	25  25	



Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1	2	3	4
1.1.16. Dry egg products (egg powder, white, yolk)	Toxic elements: lead	3.0	In terms of original product subject to content of dry substances in it and final product
	arsenic	0.6	
	cadmium	0.1	
	mercury	0.1	
	Antibiotics, pesticides	according to Clause 1.1.15	
	Dioxins <****>:	according to Clause 1.1.15	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria - (coliforms)	S. aureus	Proteus	Pathogenic, including salmonella	
1.1.16.1. Egg powder, egg melange for enteral nutrition products	5 x 1E4	0.1	1.0	1.0	25	
1.1.16.2. Dry egg melange, white, yolk, mixtures for omelette	1 x 1E5	0.1	1.0	1.0	25	
1.1.16.3. Egg products of sublimation drying						
- yolk	5 x 1E4	0.01	1.0	-	25	
- white, albumin	1 x 1E4	0.1	1.0	-	25	

Index, Group of Products	Indicators	Permissible Levels, mg/kg, not more	Note
1.1.17. Dry egg white (albumin)	Toxic elements:		
	lead	0.5	
	arsenic	0.2	
	cadmium	0.05	
	mercury	0.03	
	Antibiotics, pesticides	according to Clause 1.1.15	In terms of original product subject to content of dry substances in it and final product
	Microbiological indicators	according to Clause 1.1.16.3	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

<\*> It is also required to control residual quantities of the antibiotics used for production of food raw material (see Clause 3.15).

(the note is amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

<\*\*\*> For sausage products and meat and cereal canned food the calculation of safety indicators shall be made for the basic type(s) of raw material, both by the mass fraction and by permissible levels of controlled contaminants.

Note:

<\*\*\*\*> the maximum level shall not be applied to products containing less than 1% of fat;

- hereinafter dioxins shall be understood to represent the sum of polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF), expressed as a sum of toxic equivalency factors (TEF) according to the WHO scale (WHO-TEFs):

TOXIC EQUIVALENCY FACTORS (according to WHO scale) <\*>

Congener	TEF Value
Dibenzo-p-dioxin (PCDD)	
2,3,7,8-Tetrachlorodibenzodioxin	1
1,2,3,7,8-Pentachlorodibenzodioxin	1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,7,8,9-Hexachlorodibenzodioxin	0.1
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	0.01
Octachlorodibenzodioxin	0.0001
Dibenzofurans (PCDF)	
2,3,7,8-Tetrachlorodibenzofuran	0.1
1,2,3,7,8-Pentachlorodibenzofuran	0.05
2,3,4,7,8-Pentachlorodibenzofuran	0.5
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1
1,2,3,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01
Octachlorodibenzofuran	0.0001

(the note was introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

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 <\*> 1 pg TEF means that this is a mixture of PCDD and PCDF which corresponds to 1 pg of 2,3,7,8-Tetrachlorodibenzodioxin (TCDD).

## 1.2. Milk and Milk Products

Index, group of products	Indicators	Permissible levels, mg/kg (l), not more than	Note
1	2	3	4
1.2.1. Milk, raw and heat treated cream, buttermilk, milk whey, liquid fermented milk products, including yoghurt, sour cream, milk based drinks	Toxic elements: lead		
	arsenic	0.1	
	cadmium	0.05	
	mercury	0.03	
		0.005	
	Mycotoxins: aflatoxin M1	0.0005	
	Antibiotics <*>:		
	laevomycetin (chloramphenicol)	0.01 0.0003	Expiring on 01.01.2012. Shall become effective since 01.01.2012.
(as amended by Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			
	Inhibitory substances:	not allowed	milk and raw cream
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.05  1.25	Milk, buttermilk, milk whey, liquid fermented liquid milk products, milk based drinks, cream, sour cream in terms of fat
	DDT and its metabolites	0.05  1.0	Milk, buttermilk, milk whey, liquid fermented liquid milk products, milk based drinks, cream, sour cream in terms of fat
	Radionuclides: Caesium - 137	100	Bq/kg
	Strontium-90	25	the same
	Dioxins <***>:	0.000003	(in terms of fat)
	Melamine	not allowed	< 1 mg/kg
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)			

Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Index, group of products	QMAFAnM, CFU/cm <sup>3</sup> (g), not more than	Mass of products (g, cm <sup>3</sup> ) in which the indicator is not allowed		Note
		Coliform bacteria - (coliforms)	Pathogenic, including salmonella	
1	2	3	4	5
1.2.1.1. Raw milk:				
- of premium grade	3 x 1E5		25	somatic cells not more than 5 x 1E5 in 1 cm <sup>3</sup>
- of first grade	5 x 1E5		25	Somatic cells not more than 1 x 1E6 in 1 cm <sup>3</sup>
- of second grade	4 x 1E6	-	25	the same
1.2.1.2. Pasteurized milk, milk whey, buttermilk				
- in a consumer packaging	1 x 1E5	0.01	25	S. aureus in 1 cm <sup>3</sup> are not allowed; L. monocytogenes in 25 cm <sup>3</sup> are not allowed
- in cans and tanks	2 x 1E5	0.01	25	S. aureus in 0.1 cm <sup>3</sup> are not allowed; L. monocytogenes in 25 cm <sup>3</sup> are not allowed
1.2.1.3. Pasteurized cream:	1 x 1E5	0.01	25	S. aureus in 1 cm <sup>3</sup> are not allowed; L. monocytogenes in 25 cm <sup>3</sup> are not allowed
- in a consumer packaging				
- in cans	2 x 1E5	0.01	25	S. aureus in 0.1 cm <sup>3</sup> are not allowed; L. monocytogenes in 25 cm <sup>3</sup> are not allowed
1.2.1.4. Baked milk	2.5 x 1E3	1.0	25	
1.2.1.5. Sterilized milk and raw cream	Shall satisfy requirements for industrial sterility for sterilized milk and cream in a consumer packaging in accordance with Annex 8 to these Sanitary Rules			

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief  
State Sanitary Inspector of the RF dated 15.04.2003)

Index, group of products	Quantity of lactic-acid - microorganisms, CFU/cm3 (g)	Mass of products (g, cm3) in which the indicator is not allowed			Yeast, moulds, CFU/cm3 (g), not more than	Note
		Coliform bacteria - (coliforms)	S.aureus	Pathogenic, including salmonella		
1	2	3	4	5	6	7
1.2.1.6. Liquid fermented milk products, including yoghurt, with the shelf life of not more than 72 hours		0.01	1.0	25	'	
1.2.1.7. Liquid fermented milk products, including yoghurt, with the shelf life of more than 72 hours	not less than 1 x 1E7 <*>	0.1	1.0	25	yeast - 50 <*> moulds - 50	<*> except for drinks produced with the use of starters, containing yeast <*> for heat treated products the norms are not established
1.2.1.8. Liquid Fermented milk products, enriched with bifidobacteria, with the shelf life of more than 72 hours	not less than 1 x 1E7; bifidobacteria - not less than 1 x 1E6	0.1	1.0	25	yeast - 50 <*> moulds - 50	<*> except for drinks produced with the use of starters, containing yeast
1.2.1.9. Ryazhenka (fermented baked milk)	-	1.0	1.0	25	-	
1.2.1.10. Sour cream and products on its basis		0.001 <*>	1.0	25	yeast - 50 <*> moulds - 50 <*>	<*> for heat treated products - 0.01; <*> for products with the shelf life of more than 72 hours

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.2.2. Curds and curd products, milk protein paste-like products	Toxic elements: lead arsenic cadmium mercury	 0.3 0.2 0.1 0.02	
	Mycotoxins: aflatoxin M1	0.0005	
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	1.25	in terms of fat
	DDT and its - metabolites.	1.0	the same
	Antibiotics and radionuclides	according to Clause 1.2.1	
	Dioxins <*>:	according to Clause 1.2.1	

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

Microbiological indicators:  
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Index, group of products	Mass of products (g) in which the indicator is not allowed			Yeast, moulds, CFU/g, not more than 5	Note
	Coliform bacteria (coliforms)	S.aureus3	pathogenic, including salmonella		
1.2.2.1. Curds and curd products with the shelf life of not more than 72 hours	0.001	0.1	25	-	
1.2.2.2. Curds and curd products with the shelf life of more than 72 hours, including frozen	0.01	0.1	25	yeast - 100 moulds - 50	
1.2.2.3. Heat treated curd products	0.01	1.0	25	yeast and moulds - 50	

1.2.2.4. Albumin mass from milk whey	0.1	0.1	25	yeast - 100 moulds - 50	QMAFAnM - not more than 2 x 1E5 CFU/g, except for products produced with fermented milk microflora
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Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.2.3. Canned milk (milk, cream, buttermilk, milk whey, condensed milk with sugar; condensed sterilized m- ilk)	Toxic elements:		
	lead	0.3	
	arsenic	0.15	
	cadmium	0.1	
	mercury	0.015	
	stannum	200.0	for canned food in assembled tin containers
	chrome	0.5	for canned food in chromed containers
	Mycotoxins: aflatoxin M1	0.0005	
	Pesticides	according to Clause 1.2.2	
	Antibiotics	according to Clause 1.2.1	
	Radionuclides:		
	caesium - 137	300	Bq/kg
	strontium-90	100	the same
	Dioxins <***>:	according to Clause 1.2.1	
	Melamine	not allowed	< 1 mg/kg
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)			



Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed		Note
		Coliform bacteria - (coliforms)	Pathogen ic, includin g salmo- nella	
1.2.3.1. Condensed sterilized milk in cans	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules			
1.2.3.2. Condensed milk with sugar: - in a consumer packaging - in a shipping packaging	2 x 1E4  -	1.0  1.0	25  25	
1.2.3.3. Condensed buttermilk, milk whey with sugar	5 x 1E4	1.0	25	
1.2.3.4. Cocoa, natural coffee with condensed milk and sugar, condensed cream with sugar	3.5 x 1E4	1.0	25	

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1.2.4. Dry milk products: milk, cream, fermented milk products, drinks, ice-cream mixtures, whey and buttermilk	Toxic elements, mycotoxins and antibiotics	according to Clause 1.2.1	in terms of reconstituted products
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its - metabolites.	1.25  1.0	in terms of fat  the same
	Radionuclides: cesium-137 strontium-90	500 200	Bq/kg the same
	Dioxins <*>:	according to Clause 1.2.1	
	Melamine	not allowed	< 1 mg/kg
	(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed			Note
		Coliform bacteria - (coliforms)	S. aureus	Pathogenic, including salmonella	
1	2	3	4	5	6
1.2.4.1. Dry whole cow milk	5 x 1E4	0.1	1.0	25	
1.2.4.2. Dry milk skimmed:					
- for direct consumption	5 x 1E4	0.1	1.0	25	
- for industrial processing	1 x 1E5	0.1	1.0	25	
1.2.4.3. Dry milk drinks	1 x 1E5	0.01	1.0	25	moulds - not more than 50 CFU/g
1.2.4.4. Dry cream and sweetened dry cream	7 x 1E4	0.1	1.0	25	
1.2.4.5. Dry milk whey	1 x 1E5	0.1	1.0	25	yeast - not more than 50 CFU/g, moulds - not more than 100 CFU/g
1.2.4.6. Dry buttermilk	5 x 1E4	0.1	1.0	25	yeast - not more than 50 CFU/g, moulds - not more than 100 CFU/g

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.2.5. Milk protein concentrates, casein, caseinates, milk protein hydrolysates	See Section "Other Products", Clause 1.9.2		
1.2.6. Cheeses (hard, semi-hard, soft, brine and cheese spread)	Toxic elements: lead	0.5	
	arsenic	0.3	
	cadmium	0.2	
	mercury	0.03	
	Mycotoxins and antibiotics	according to Clause 1.2.1	
	Pesticides	according to Clause 1.2.2	
	Radionuclides: caesium - 137	50	Bq/kg
	strontium-90	100	the same
	Dioxins <***>:	according to Clause 1.2.1	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria - (coliforms)	Pathogenic, including salmonella
1	2	3	4	5
1.2.6.1. Cheeses (hard, semi-hard, brine, soft)		0.001	25	S. aureus not more than 500 CFU/g L. monocytogenes in 25 g are not allowed
1.2.6.2. Cheese spreads				
- without any filling agents	5 x 1E3	0.1	25	moulds not more than 50 CFU/g, yeast not more than 50 CFU/g
- with filling agents	1 x 1E4	0.1	25	moulds not more than 100 CFU/g, yeast not more than 100 CFU/g

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.2.7. Milk based ice-cream	Toxic elements, mycotoxins, antibiotics and radionuclides	according to Clause 1.2.1	
	Pesticides	according to Clause 1.2.2	

Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					
Index, group of products	QMAFAnM, CFU/cm3 (g), not more than	Mass of products (g, cm3) in which the indicator is not allowed			Note
		Coliform bacteria - (coliforms)	S.aureus	Pathogenic including salmonella	
1.2.7.1. Frozen ice-cream	1 x 1E5	0.01	1.0	25	L. monocytogenes in 25 g are not allowed
1.2.7.2. Soft ice-cream	1 x 1E5	0.1	1.0	25	the same
1.2.7.3. Liquid mixtures for soft ice cream	3 x 1E4	0.1	1.0	25	the same
1.2.7.4. Dry mixtures for soft ice cream	5 x 1E4	0.1	1.0	25	the same

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1.2.8. Cow butter	See Section "Oily Raw Material and Fat Products", Clause 1.7.6 Dioxins <***>: 0.000003  (as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
1.2.9. Starter bacterial cultures for fermented milk products production, acid cream butter and cheeses, probiotic products	Toxic elements: lead  arsenic cadmium mercury	 1.0 0.2 0.2 0.03	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)			

Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					
Index, group of products	Quantity of lactic acid and (or) other micro-organisms of starters, CFU/cm <sup>3</sup> (g), not less than	Mass of products (g, cm <sup>3</sup> ) in which the indicator is not allowed:			Note
		Coliform bacteria - (coliforms)	S.Aureus	Pathogenic including salmonella	
1	2	3	4	5	6
1.2.9.1. Symbiotic (liquid) starters for kefir	-	3.0	10.0	100	moulds not more than 5 CFU/g
1.2.9.2. Starters from pure cultures for production of fermented milk products, acid cream butter and cheese, probiotic products: - liquid, including frozen	1 x 1E8 <*>	10.0	10.0	100	moulds and yeast not more than 5 CFU/g; <*> for concentrated starters - not less than 1 x 1E10
- dry	1 x 1E9 <*>	1.0	1.0	10	moulds and yeast not more than 5 CFU/g; <*> for concentrated starters - not less than 1 x 1E10
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.2.10. Dry food solutions on the milk basis for cultivation of starter and probiotic microflora	Toxic elements: lead	0.3	
	arsenic	1.0	
	cadmium	0.2	
	mercury	0.03	
	Mycotoxins: aflatoxin M1	0.0005	
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its - metabolites	1.25   1.0	in terms of fat   the same
	Radionuclides: caesium - 137 strontium-90	160  80	Bq/kg  the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)			

Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed		Note
		Coliform bacteria - (coliforms)	Pathogenic, including salmonella	
1	2	3	4	5
1.2.10.1. Dry food solutions for cultivation of starter and probiotic microflora	5 x 1E4	0.01	25	sulfite-reducing clostridia in 0.01 g are not allowed

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1.2.11. Milk containing products with non-milk components, including ice-cream	Toxic elements, mycotoxins, antibiotics, pesticides and radionuclides	Shall be established with consideration of non-milk components content and safety requirements thereof	
	Microbiological indicators:	according to Clause 1.2.1 - 1.2.7	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)			

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 <\*> It is also required to control residual quantities of the antibiotics used for production of food raw material (see Clause 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

Note:

<\*\*\*> the maximum level shall not be applied to products containing less than 1% of fat;

- hereinafter dioxins shall be understood to represent the sum of polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF), expressed as a sum of toxic equivalency factors (TEF) according to the WHO scale (WHO-TEFs):



TOXIC EQUIVALENCY FACTORS (according to WHO scale) <\*>

Congener	TEF Value
Dibenzo-p-dioxin (PCDD)	
2,3,7,8-Tetrachlorodibenzodioxin	1
1,2,3,7,8-Pentachlorodibenzodioxin	1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,7,8,9-Hexachlorodibenzodioxin	0.1
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	0.01
Octachlorodibenzodioxin	0.0001
Dibenzofurans (PCDF)	
2,3,7,8-Tetrachlorodibenzofuran	0.1
1,2,3,7,8-Pentachlorodibenzofuran	0.05
2,3,4,7,8-Pentachlorodibenzofuran	0.5
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1
1,2,3,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01
Octachlorodibenzofuran	0.0001

(the note was introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

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<\*> 1 pg TEF means that this is a mixture of PCDD and PCDF which corresponds to 1 pg of 2,3,7,8-Tetrachlorodibenzodioxin (TCDD).

### 1.3. Fish, Shellfish and Algae and Products Based on them:

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.3.1. Live fish, chilled, frozen raw fish, minced fish, filet, meat of marine mammals	Toxic elements: lead	1.0 2.0	tuna, swordfish, freshwater sea beluga
	arsenic	1.0 5.0	freshwater sea beluga
	cadmium	0.2	freshwater nonpredatory
	mercury	0.3 0.6	freshwater predatory sea
		0.5 1.0	tuna, swordfish, beluga
	Histamine	100.0	tuna, mackerel, salmon, herring
	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.003	
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.2 0.03	sea, meat of marine mammals freshwater
	DDT and its metabolites	0.2 0.3 2.0	sea freshwater sturgeons, salmons, fat herring
		0.2	meat of marine mammals
	2, 4-D acid, its salts and esters	not allowed	freshwater
	Polychlorinated biphenyls	2.0	
	Radionuclides: caesium - 137	130	Bq/kg
	strontium-90	100	the same
Dioxins <*>: 0.000004			
Antibiotics (in pond fish and fish of cage culture fishery) <*>:			
tetracycline group		0.01	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed			Note
		Coliform bacteria - (coliforms)	S. aureus	Pathogenic, including salmonella and L. monocytogenes	
1	2	3	4	5	6
1.3.1.1. Raw fish and live fish	5 x 1E4	0.01	0.01	25	V. parahaemolyticus - not more than 100 CFU/g, for sea fish
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					
1.3.1.2. Chilled, frozen fish	1 x 1E5	0.001	0.01	25	the same
1.3.1.3. Chilled and frozen fish products: - fish fillet, fish of special cutting	1 x 1E5	0.001	0.01	25	the same; sulfite-reducing clostridia in 0.01 g are not allowed in vacuum-packaged products, the same
- eating minced fish, formed minced fish products, including with flour component	1 x 1E5	0.001	0.01	25	
- mince fish of special condition	5 x 1E4	0.01	0.1	25 <*>	sulfite-reducing clostridia in 0.01 g are not allowed in vacuum-packaged products, <*> only salmonella

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1.3.2. Canned and semi-preserved fish	Toxic elements: lead, arsenic, cadmium, mercury, stannum	according to Clause 1.3.1	in assembled tin containers in chromed containers <*> for smoked products
	chrome  benz(a)pyrene	200 0.5 0.005 <*>	
	Dioxins <*>:	according to Clause 1.3.1	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			
	Histamine, nitrosamines, pesticides, polychlorinated biphenyls and radionuclides	according to Clause 1.3.1	

Microbiological indicators:

Index, group of products	QMAFAn M, CFU/g not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria - (coliforms)	S. aureus	Sulfite-reducing clostridia	Pathogenic, including salmonella and L. monocytogenes	
1	2	3	4	5	6	7
1.3.2.1. Semi-preserved food products of spiced and special salting from whole and cut fish	1 x 1E5	0.01		0.01	25	moulds - not more than 10 CFU/g, yeast - not more than 100 CFU/g
1.3.2.2. Lightly-salted semi-preserved fish products of spiced and special salting - whole - cut	1 x 1E5	0.01	1.0	0.01	25	moulds - not more than 10 CFU/g, yeast - not more than 100 CFU/g the same the same
	5 x 1E4	0.01	1.0	0.01	25	
1.3.2.3. Semi-preserved	2 x 1E5	0.01	1.0	0.01	25	

food products from cut fish with addition of vegetable oils, dressings, sauces, with and without garnish (including from salmon)						
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(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.3.2.4. Semi-preserved food products "Paste":						
- fish pastes	5 x 1E5	0.01	0.1	0.01	25	the same
- from the protein paste	1 x 1E5	0.1	0.1	0.1	25	the same
1.3.2.5. Semi-preserved food products from heat-treated fish	5 x 1E4	1.0	1.0	1.0	25	
1.3.2.6. Fish canned food products in glass, aluminium and tin containers	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules					
1.3.2.7. Semi-canned fish products in glass containers	Shall satisfy requirements for industrial sterility for canned food of group "D" in accordance with Annex 8 to these Sanitary Rules					

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.3.3. Dried, cured, smoked, salted, spiced, marinated fish, fish cookery and other fish products, ready for consumption	Toxic elements, histamine and polychlorinated biphenyls	according to Clause 1.3.1	in terms of original product - subject to content of dry substances in it and final products
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)			
- smoked, salted, marinated and other fish products - dried, cured fish	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.003	
	Radionuclides:		
	caesium - 137	130	Bq/kg (except for dried and cured fish)
		260	Bq/kg - for dried and cured fish
	strontium-90	100	Bq/kg (except for dried and cured fish, for which norms of strontium-90 are not established)
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers), DDT and its metabolites	0.2 0.4 2.0	balyk products, fat herring
	Benz(a)pyrene	0.005	smoked fish
	Dioxins <*>:	according to Clause 1.3.1	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

Microbiological indicators:						
Index, group of products	QMAFAn M, CFU/g not more - than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria - (coliforms)	S. aureus	Sulfit e-reducing clostridia	Pathogenic, including salmonella and L. monocytogenes	
1	2	3	4	5	6	7
1.3.3.1. Hot smoked fish products, including frozen	1 x 1E4	1.0	1.0	0.1 <*>	25	<*> vacuum-packaged
1.3.3.2. Cold smoked fish products, including frozen: - whole	1 x 1E4	0.1	1.0	0.1 <*>	25	the same <*> V. parahaemoliticus - not more than 10 CFU/g, for sea fish
- cut, including sliced (in pieces, served)	3 x 1E4	0.1	1.0	0.1 <*>	25	the same <*> V. parahaemoliticus - not more than 10 CFU/g, for sea fish
- balyk products of cold smoking, including in slices	7.5 x 1E4	0.1	1.0	0.1 <*>	25	vacuum-packaged <*>
- fish made dish, sausage products, balyk minced meat, spiced products	1 x 1E5	0.01	1.0	0.1 <*>	25	the same <*>
(Clause 1.3.3.2 as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.3.3.3. Soft smoked, light-salted cut fish, including fillet	5 x 1E4	0.1	1.0	0.1 <*>	25	V. parahaemoliticus - not more than 10 CFU/g, for sea fish <*>, vacuum-packaged



(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.3.3.4. Salted, spiced, marinated fish, including frozen: - whole	1 x 1E5	0.1	-	0.1 <*>	25	<*> vacuum-packaged
- cut salted and light-salted, including salmon without preserving agents, fillet, in slices; with dressings, spices, garnish, oil	1 x 1E5	0.01	0.1	0.1 <*>	25	<*> vacuum-packaged
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.3.3.5. Cured fish	5 x 1E4	0.1		1.0	25 <*>	<*> only salmonella moulds - not more than 50 CFU/g, yeast - not more than 100 CFU/g
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.3.3.6. Stockfish	5 x 1E4	0.1		1.0 <*>	25 <*>	<*> vacuum-packaged <*> only salmonella; moulds and yeast not more than 100 CFU/g
1.3.3.7. Dried fish	5 x 1E4	0.1	-	0.01 <*>	25 <*>	<*> the same; <*> the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.3.3.8. Dry soups with fish, requiring cooking	5 x 1E5	0.001			25 <*>	<*> only salmonella; moulds and yeast not more than 100 CFU/g
1.3.3.9. Heat-treated culinary products: - fish and minced fish products, pastes, pates,	1 x 1E4	1.0	1.0	1.0 <*>	25 <*>	<*> vacuum-packaged

baked, fried, boiled, in dressings, etc.; with flour component (pies, ravioli, etc.); including frozen - multi-component products - solyanka, pilaf, snacks, stewed seafood with vegetables, including frozen - jellied products: jellied fish, fish in aspic, etc.	5 x 1E4	0.01	1.0	1.0 <*>	25 <*>	<*> only salmonella; moulds and yeast not more than 100 CFU/g  <*> vacuum-packaged <*> only salmonella
	5 x 1E4	0.1	1.0		25 <*>	<*> only salmonella
1.3.3.10. Culinary products without heat-treatment: - salads from fish and seafood without dressing - chopped salted fish; pates, pastes - herring, caviar, krill butter, etc. - salads from fish and seafood with dressing (mayonnaise, sauce, etc.)	1 x 1E4	1.0	1.0	-	25	Proteus in 0.1 g are not allowed
	2 x 1E5	0.01	0.1		25	the same
	2 x 1E5	0.001	0.1		25	the same
	5 x 4 10	0.1	0.1		25 g	E. coli in 0.1 g are not allowed; Proteus in 0.1 g are not allowed; moulds - not more than 50 CFU/g; yeast - not more than 100 CFU/g
(introduced by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.3.3.11. Cooked and frozen products: - quick-frozen ready-made dinner and snack fish meals, pancakes with fish, fish stuffing, including vacuum-packaged	2 x 1E4	0.1	0.1	0.1 <*>	25	Enterococcus - 1 x 1E3 CFU, not more than (in sliced products) <*> vacuum-packaged
- constructed products ('crab sticks', etc.)	1 x 1E3	1.0	1.0	1.0	25	Enterococcus - 2 x 1E3 CFU/g, not more than (in minced fish products)
1.3.3.12. Mayonnaise on		0.01			25 <*>	<*> only sal-

the fish broth basis						monella; moulds not more than 10 CFU/g, yeast not more than 100 CFU/g
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Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.3.4. Fish caviar and milt and products from them; caviar analogues	Toxic elements: lead arsenic cadmium mercury	1.0 1.0 1.0 0.2	
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers), DDT and its - metabolites	0.2 2.0	
	Polychlorinated biphenyls, radionuclides	according to Clause 1.3.1	
	Antibiotics (for pond fish and fish of cage culture fishery) <*>: tetracycline group	0.01	
(as amended by Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			

Microbiological indicators:								
Index, group of products	QMAFAN M, CFU/g not more - than	Mass of products (g) in which the indicator is not allowed				Moulds, CFU/g not more - than	Yeast, CFU/g not more - than	Note
		Coliform bacteria - (coliforms)	S. aureus	Sulfit-reducing clostridia	Pathogenic, including salmonella			
1	2	3	4	5	6	7	8	9
1.3.4.1. Chilled and frozen milt and roe caviar	5 x 1E4	0.001	0.01		25			L. monocytogenes in 25 g are not allowed; V. parahaemolyticus - not more than 100 CFU/g, for sea fish
1.3.4.2. Salted milt	1 x 1E5	0.1	0.1		25			L. monocytogenes in 25 g are not allowed;
1.3.4.3. Culinary caviar products: - heat-treated - multi-component meals without heat-treatment after mixing	1 x 1E4 2 x 1E5	1.0 0.1	1.0 0.1	- -	25 25	- -	- -	L. monocytogenes in 25 g are not allowed; Proteus in 0.1 g are not allowed
1.3.4.4. Sturgeon caviar: - granular caviar packed in tins, pressed caviar - pasteurized granular  - lightly-salted, salted roe caviar	1 x 1E4 1 x 1E3 5 x 1E4	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	25 25 25	50 0.1 <*> 50	50 0.1 <*> 100	<*> mass (g), in which the indicator is not allowed
1.3.4.5. Salted granular salmon caviar: - packed in tins, kegs - from frozen roes	1 x 1E5 5 x 1E4	1.0 1.0	1.0 1.0	1.0 1.0	25 25	50 50	300 200	
1.3.4.6. Caviar of other kinds of fish: - screened salted; roe lightly-salted, smoked, cured - pasteurized	1 x 1E5 5 x 1E3	0.1 1.0	1.0 1.0	1.0 1.0	25 25	50 0.1 <*>	300 0.1 <*>	<*> mass (g), in which the indicator is not allowed
1.3.4.7. Caviar analogues, including protein	1 x 1E4	0.1	1.0	0.1	25	50	50	

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.3.5. Fish liver and its products	<p>Toxic elements:</p> <p>lead 1.0</p> <p>cadmium 0.7</p> <p>mercury 0.5</p> <p>stannum 200.0</p> <p>chrome 0.5</p> <p>Pesticides &lt;*&gt;:</p> <p>Hexachlorocyclohexane (alpha-, beta-, gamma-isomers) 1.0</p> <p>DDT and its - metabolites 3.0</p> <p>Polychlorinated biphenyls 5.0</p> <p>Radionuclides according to Clause 1.3.1</p> <p>Antibiotics (for pond fish and fish of cage culture fishery) &lt;*&gt;:</p> <p>tetracycline group 0.01</p>		<p>for canned food in assembled tin containers for canned food in chromed containers</p>
(as amended by Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			
Microbiological indicators:			
1.3.5.1. Canned food from fish liver	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules		
1.3.5.2. Frozen fish liver, heads	<p>Microbiological indicators:</p> <p>QMAFAnM 1 x 1E5</p> <p>Coliform bacteria - (coliforms) 0.001</p> <p>S. aureus 0.01</p> <p>V. parahaemolyticus 100</p> <p>Pathogenic microorganisms, including salmonella and L. monocytogenes 25</p>		<p>CFU/g, not more than, mass of the product (g), in which the indicator is not allowed the same</p> <p>CFU/g, not more than, for sea fish the same</p>
Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.3.6. Fish oil	<p>See Section "Oily Raw Material and Fat Products", Clause 1.7.8</p> <p>Dioxins &lt;*&gt;: 0.000002</p>		<p>(in terms of fat)</p>
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			
1.3.7. Non-fish products (molluscs,			

crustaceans and other invertebrates; algae and sea grass) and their derived products, amphibians, reptiles: - molluscs, crustaceans and other invertebrates, amphibians, reptiles  - algae and sea grass	Toxic elements: lead arsenic cadmium mercury Phycotoxins:	10.0 5.0 2.0 0.2	
	paralytic toxin of molluscs (saxitoxin)	0.8	molluscs
	amnesic toxin of molluscs (domoic acid)	20	molluscs
	amnesic toxin of molluscs (domoic acid)	30	internal organs of crabs
	diarrheal toxin of molluscs (okadaic acid)	0.16	molluscs
	Toxic elements lead arsenic cadmium mercury	0.5 5.0 1.0 0.1	
	Antibiotics (for pond fish and fish of cage culture fishery) <*>:		
	tetracycline group	0.01	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010, No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria - (coliforms)	S. aureus	Sulfite-reducing clostridia	Pathogenic, including salmonella and L. monocytogenes	
1	2	3	4	5	6	7
1.3.7.1. Non-fish products - crustaceans and other invertebrates (squid and gastropod molluscs, echinoderm and etc.):						
- live	5 x 1E4	0.01	0.01		25	V. parahaemoliticus - not more than 100 CFU/g, for sea

ConsultantPlus: note:

The indicator QMAFAnM for the following group of products is specified in accordance with the official text of the document, received from the Ministry of Justice of the RF. In the text of Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, published in "Rossiyskaya Gazeta" No. 119/1 dated 20.06.2003, the specified indicator equals to 1 x 1E3.

- chilled, frozen	1 x 1E5	0.001	0.01		25	the same
Non-fish products - clams (mussels, oysters, scallop, etc.):						
- live	5 x 1E3	1.0	0.1	0.1	25	E. coli in 1.0 g are not allowed, Enterococcus in 0.1 g are not allowed V. parahaemoliticus - in 25 g are not allowed, for sea
- chilled, frozen	5 x 1E4	0.1	0.1		25	V. parahaemoliticus - not more than 100 CFU/g, for sea
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.3.7.2. Semi-preserved food from invertebrates and algae with	2 x 1E5	0.01	1.0	0.01	25 <*>	<*> only salmonella; moulds - not more than 10 CFU/g, yeast -

addition of vegetable oils, dressings, sauces with and without garnish						not more than 100 CFU/g
1.3.7.3. Semi-preserved food from meat of clams	5 x 1E4	0.1	0.1		25 <*>	<*> only salmonella; moulds - not more than 10 CFU/g, yeast - not more than 100 CFU/g
1.3.7.4. Canned food from invertebrates and algae	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules					
1.3.7.5. Cured and dried products from marine invertebrates	2 x 1E4	1.0		0.1	25 <*>	<*> only salmonella; moulds and yeast not more than 100 CFU/g
1.3.7.6. Cooked and frozen products from invertebrates and algae:						
- crustaceans	2 x 1E4	0.1	0.1	1.0 <*>	25	<*> vacuum-packaged; Enterococcus, CFU/g, not more than: 1 x 1E3 - in sliced products, 2 x 1E3 - in minced meat products
- meat of molluscs, meals from meat of clams	2 x 1E4	0.1	1.0	1.0 <*>	25	<*> vacuum-packaged; Enterococcus, CFU/g, not more than:
- from the meat of shrimps, crabs, krill	2 x 1E4	0.1	1.0	1.0 <*>	25	1 x 1E3 - in sliced products, 2 x 1E3 - in forced meat products <*> the same; Enterococcus, CFU/g, not more than: 1 x 1E3 - in sliced products, 2 x 1E3 - in minced meat products
1.3.7.7. Dried and protein invertebrates and algae:						
- dry mussel broth, bouillon cubes and pastes, isolated protein	5 x 1E4	0.1	-	0.01	25 <*>	<*> only salmonella
- hydrolysate from mussels (mussels)	5 x 1E3	1.0	1.0	-	25 <*>	<*> the same



hydrolyzer K) - protein and carbohydrate concentrate from mussels		1.0	1.0	1.0	25 <*>	<*> the same
1.3.7.8. Algae, sea grass and their products:						
- algae and sea grass	5 x 1E4	0.1			25 <*>	<*> the same
- raw fish, including frozen						
- dried algae and sea grass	5 x 1E4	1.0			25 <*>	<*> only sal- monella; moulds not more than 100 CFU/g
- jams from laminaria	5 x 1E3	1.0	-	-	25 <*>	<*> only sal- monella
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
- alimentary agar, agaroid, furcellarine and food sodium alginate	See Section "Other Products", Clause 1.9.6.2.					

<\*> It is also required to control residual quantities of the pesticides and antibiotics used for production of food raw material (see Clauses 3.12, 3.13, 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

Note:

<\*\*\*> the maximum level shall not be applied to products containing less than 1% of fat;

- hereinafter dioxins shall be understood to represent the sum of polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF), expressed as a sum of toxic equivalency factors (TEF) according to the WHO scale (WHO-TEFs):

TOXIC EQUIVALENCY FACTORS (according to WHO scale) <\*>

Congener	TEF value
Dibenzo-p-dioxin (PCDD)	
2,3,7,8-Tetrachlorodibenzodioxin	1
1,2,3,7,8-Pentachlorodibenzodioxin	1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,7,8,9-Hexachlorodibenzodioxin	0.1
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	0.01
Octachlorodibenzodioxin	0.0001
Dibenzofurans (PCDF)	
2,3,7,8-Tetrachlorodibenzofuran	0.1
1,2,3,7,8-Pentachlorodibenzofuran	0.05
2,3,4,7,8-Pentachlorodibenzofuran	0.5
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1
1,2,3,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01
Oktachlorodibenzofuran	0.0001

(the note was introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

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<\*> 1 pg TEF means that this is a mixture of PCDD and PCDF which corresponds to 1 pg of 2,3,7,8-Tetrachlorodibenzodioxin (TCDD).

#### 1.4. Grain (Seeds), Flour-Cereal and Bakery Products.

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.4.1. Food grain including wheat, rye, triticale, oat, barley, millet, buckwheat, rice, maize, sorghum	Toxic elements: lead	0.5	
	arsenic	0.2	
	cadmium	0.1	
	mercury	0.03	
	Mycotoxins: aflatoxin B1	0.005	
	desoxynivalenol	0.7	wheat
		1.0	barley
	T-2 toxin	0.1	
	zearalenone	1.0	wheat, barley, maize
	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.015	brewer's malt
	Benz(a)pyrene	0.001	
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers), DDT and its metabolites	0.02	
	hexachlorobenzene	0.01	wheat
	mercuric organic pesticides 2, 4-D acid, its salts and esters	not allowed	
	Radionuclides: caesium - 137	60	Bq/kg
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
	Harmful contaminants: ergot	0.05	
	Russian knapweed, Sophora alopecuroides, Thermopsis lanceolata (on an aggregate basis)	0.1	rye, wheat
	crown vetch	0.1	rye, wheat
	heliotropium	0.1	rye, wheat
	dasycarpum		
	trichodesma	not allowed	rye
	incanum		
	golovnenye (maranye, sineguzochnye)	10.0	wheat
	grain fusarium		
	grain	1.0	rye, wheat, barley
	grain with pink colouring	3.0	rye
	presence of grain with bright yellow-green fluorescence (YGF)	0.1	maize
	Pest infestation	not allowed	

	of grain (insects, mites)		
	Pest contamination of grain (insects, mites)	15.0	total contamination density, spc/kg, not more
	ochratoxin A	0.005	wheat, barley, rye, oat, rice
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			
1.4.2. Seeds of grain legumes, including pea, bean, golden gram, chipa, lentil, chickpea	Toxic elements: lead arsenic cadmium mercury	0.5 0.3 0.1 0.02	
	Mycotoxins: aflatoxin B1	0.005	
	Pesticides <*>: Hexachlorocyclohe xane (alpha-, beta-, gamma-isomers) DDT and its metabolites Organomercuric pesticides 2, 4-D acid, its salts and esters	0.5  0.05 not allowed not allowed	
	Harmful contaminants: Pest contamination and infestation of grain (insects, mites)	not allowed	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
1.4.3. Cereal, oatmeal, flakes	Toxic elements: lead arsenic cadmium mercury	0.5 0.2 0.1 0.03	
	Mycotoxins: Aflatoxin B1 Desoxynivalenol	0.005 0.7 1.0	wheat barley
	T-2 toxin Zearalenone	0.1 0.2	wheat, maize, barley
	Pesticides:	according to Clause 1.4.1	
	Radionuclides: caesium - 137	60	Bq/kg
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
	Harmful contaminants: Pest contamination and infestation of grain (insects, mites)	not allowed	
	ochratoxin A	0.005	wheat, barley rye, oat, rice
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g not more - than	Mass of products (g) in which the indicator is not allowed			Moulds, CFU/g not more - than	Notes
		Coliform bacteria - (coliforms)	Pathogenic, including salmonella	B.cereus		
1	2	3	4	5	6	7
1.4.3.1. Cereal not requiring cooking (food concentrate of heat dehydration)	5 x 1E3	0.01	25	0.1	50	
1.4.3.2. Cereal sticks of all types (food concentrate of extrusion technology)	1 x 1E4	1.0	25	0.1	50	

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.4.4. Wheatflour, including for pasta, rye, triticale, maize, barley, millet (panicum), rice, buckwheat, sorghum flour	Toxic elements: lead	0.5	
	arsenic	0.2	
	cadmium	0.1	
	mercury	0.03	
	Mycotoxins: aflatoxin B1	0.005	wheat barley
	Desoxynivalenol	0.7	
	T-2 toxin	1.0	
	zearalenone	0.1	wheat, maize, barley
		0.2	
	Pesticides <*>: Hexachlorocyclohexane (alpha-, beta-, gamma-isomers), DDT and its metabolites	0.5	
	hexachlorobenzene	0.02	from grain
	organomercuric pesticides	0.05	from grain
	2, 4-D acid, its salts and esters	0.01	legumes
		not allowed	wheat
		not allowed	
	Radionuclides: caesium - 137	60	Bq/kg
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
	Harmful contaminants: Pest contamination and infestation of grain (insects, mites)	not allowed	

	infestation by the causative agent of "potato disease" of grain	not allowed	for wheatflour, used for bread making of wheat types; after 36 hours after test laboratory baking
	ochratoxin A	0.005	wheat, barley, rye, oat, rice
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			
1.4.5. Pasta	Toxic elements: lead	0.5	
	arsenic	0.2	
	cadmium	0.1	
	mercury	0.02	
	Mycotoxins, pesticides	according to Clause 1.4.4	
	Radionuclides: caesium - 137	60	Bq/kg
	Strontium-90	30	the same

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g not more - than	Mass of products (g) in which the indicator is not allowed Coliform bacteria - (coliforms)	S. aureus	Pathogenic, including salmonella	Yeast and moulds (total amount), CFU/g not more than	Notes
1	2	3	4	5	6	7
1.4.5.1. Pasta containing eggs	-	-	-	25	-	
1.4.5.2. Instant noodles with milk based additives (with dry skimmed milk, dry whole cow milk, with curds)	5 x 1E4	0.01	0.1	25		
1.4.5.3. Instant noodles with plant based additives (with food boltings, with wheat germ flakes, with dry vegetable powder, with laminaria)	5 x 1E4	0.1		25	100	
1.4.5.4. Protein-free pasta	1 x 1E5	0.01		25	200 <*>	<*> Yeast, 100 CFU/g not more than

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.4.6. Food boltings (wheat, rye)	See Section "Other Products", Clause 1.9.4.		
1.4.7. Bread, bakery and fancy bakery products	Toxic elements: lead	0.35	
	arsenic	0.15	
	cadmium	0.07	
	mercury	0.015	
	Mycotoxins, pesticides	according to Clause 1.1.4	
	Radionuclides: caesium - 137	40	Bq/kg
	strontium-90	20	the same

Microbiological indicators:							
Index, group of products	QMAFAnM, CFU/g not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria (coliforms)	S. aureus	Bacteria of the genus Proteus	Pathogenic, including salmonella	Notes
1	2	3	4	5	6	7	8
1.4.7.1. Bakery products (including pies, pancakes) with fruit and vegetable stuffings	1 x 1E3	1.0	1.0	-	25	50	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)							
1.4.7.2. Bakery products with curds, cheese: khachapuri, pancakes (including frozen), etc.	1 x 1E3	1.0	1.0	0.1	25	50	
1.4.7.3. Bakery products with scalded cream	5 x 1E3	0.01	1.0	-	25	50	
1.4.7.4. Bakery products with meat products, fish and seafood	1 x 1E3	1.0	1.0	0.1	25	50	





Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.4.8. Bread-rings, crackers, bread sticks, solomka, etc.	Toxic elements: lead  arsenic cadmium mercury  Mycotoxins, pesticides  Radionuclides: caesium - 137 strontium-90	  0.5 0.2 0.1 0.02  according to Clause 1.4.4  50 30	       Bq/kg the same
1.4.9. Flour confectionery	See Section "Sugar and Confectionery", Clause 1.5.5		

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

### 1.5. Sugar and Confectionery

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.5.1. Sugar	Toxic elements: lead  arsenic cadmium mercury  Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its metabolites	  0.5 1.0 0.05 0.01  0.005  0.005	         
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
1.5.2. Sugar products, confectionery, east sweeties, chewing gum	Toxic elements: lead  arsenic cadmium mercury  Mycotoxins: aflatoxin B1 Pesticides <*>, <***>	  1.0 1.0 0.1 0.01  0.005   	       for products containing nuts
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed Coliform bacteria (coliforms)	Pathogenic, including salmonella	Yeast CFU/g, not more than	Moulds, CFU/g, not more than	Note
1	2	3	4	5	6	7
1.5.2.1. Non-glazed candies and sweets: - fondant, milk  - praline-based, with pastry fat	5 x 1E3  1 x 1E4	1.0  0.01	25  25	10  50	50  100	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
1.5.2.2. Glazed candies and sweets with bodies:						
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
- fondant, fruit, marzipan, candied roasted nuts  - milk, whipped  - from dried fruit - from candied fruit, exploded cereals, liqueur, jelly	1 x 1E4  5 x 1E4  5 x 1E4  1 x 1E4	1.0  0.1  0.1  0.1	25  25  25  25	50  50  200  50	50  50  100  50	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						
- cream, praline-based	5 x 1E4	0.01	25	50	100	
1.5.2.3. Diabetic sweets	5 x 1E3	1.0	25	50	50	
1.5.2.4.						

Dragee (all names)	1 x 1E4	0.1	25	50	50	
1.5.2.5. Caramel non-glazed:						
- boiled sweets, with fondant, liqueur, fruit-and-berry, whipped fillings	5 x 1E2	1.0	25	50	50	
- with nut, chocolate-nut, chocolate, cream and other fillings	5 x 1E3	0.1	25	50	50	
1.5.2.6. Glazed caramel with fillings						
- fondant, fruit	1 x 1E4	0.1	25	50	50	
- milk, whipped, nut	5 x 1E4	0.1	25	50	50	
1.5.2.7. Diabetic hard candy	5 x 1E2	1.0	25	50	50	
1.5.2.8. Toffee (all names)	1 x 1E3	1.0	25	10	10	
1.5.2.9. Chewing gum	5 x 1E2	1.0	25	50	50	
1.5.2.10. Halvah:						
- glazed	1 x 1E4	0.01	25	50	50	
- non-glazed	5 x 1E4	0.01	25	50	50	
1.5.2.11. Pastilas and fruit jelly:						
- non-glazed pastila, marsh-mallow, jelly sweets	1 x 1E3	0.1	25	50	100	
- glazed pastila, marsh-mallow, jelly sweets	5 x 1E3	0.1	25	50	100	
- diabetic pastilas and fruit jelly	1 x 1E3	1.0	25	50	50	
1.5.2.12.						

East sweeties:						
- soft sweet type, koskhalva, oila	5 x 1E3	0.1	25	100	100	
- soft sweet type	1 x 1E4	0.1	25	100	100	
glazed - sherbets	5 x 1E3	0.1	25	200	100	
- rahat lakoum	1 x 1E4	0.01	25		100	
1.5.2.13. Caramel-type East candies						
- toasted nuts	1 x 1E3	1.0	25	50	50	
- kozinak	5 x 1E3	0.1	25	50	50	
- caramel-type glazed	1 x 1E4	0.1	25	50	50	
1.5.2.14. Sugar decoration semi-finished products, vermicelli-type	1 x 1E3	1.0	25	50	50	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.5.3. Sacchariferous confectionary: chocolate and chocolate products	Toxic elements:  lead arsenic cadmium mercury	  1.0 1.0 0.5 0.1	
	Mycotoxins: aflatoxin B1	0.005	
	Pesticides <*>,		

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria (coliforms)	Pathogenic, including salmonella	Yeast CFU/g, not more than	Moulds, CFU/g, not more than
1	2	3	4	5	6	7
1.5.3.1. Chocolate: - plain and fondant chocolate without additives - plain and fondant chocolate with additives - chocolate with fillings, and Assorts-type sweets, confectionary bars	1 x 1E4 5 x 1E4 5 x 1E4	0.1 0.1 0.1	25 25 25	50 50 50	50 100 100	
1.5.3.2. Diabetic chocolate	5 x 1E3	0.1	25	50	50	
1.5.3.3. Pastes, creams: - milky, chocolate - nut	5 x 1E3 5 x 1E4	0.1 0.01	25 25	50 50	50 100	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.5.4. Cacao beans and cacao products	Toxic elements: lead arsenic cadmium mercury	1.0 1.0 0.5 0.1	
	Mycotoxins: aflatoxin B1	0.005	
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its metabolites	0.5 0.15	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria (coliforms)	Pathogenicity, including salmonella	Yeast CFU/g, not more than	Moulds, CFU/g, not more than
1.5.4.1. Cocoa powder: - marketable for commercial processing	1 x 1E5  1 x 1E4	0.01  0.01	25  25	100  100	100  100	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.5.5. Flour confectionery	Toxic elements:  lead arsenic cadmium mercury	  0.5 0.3 0.1 0.02	
	Mycotoxins: aflatoxin B1  deoxynivalenol	 0.005  0.7	
	Pesticides <*>:  hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its metabolites	  0.2  0.02	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:

Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Coliforms (coliforms)	S. aureus, pathogenic, including salmonella	Yeast CFU/g, not more than	Moulds, CFU/g, not more than	Note
1	2	3	4	5	6	7	8
1.5.5.1.  Pies and pastry sponge cakes, puff, short pastry, meringues, scalded, crumbs, with decorations, including frozen							



- creamy	5 x 1E4	0.01 <*>	0.01 <*>	25	100	50	<*> not allowed in 0.1 g for the products with shelf life of 5 days or more
- whipped egg-whites, soufflé-type	1 x 1E4	0.01 <*>	0.01 <*>	25	50	100	<*> the same
- fruit, fondant, made of chocolate glaze	1 x 1E4	0.01 <*>	0.1 <*>	25	50	100	<*> the same
- fatty	5 x 1E4	0.01 <*>	0.1 <*>	25	50	100	<*> the same
- cottage-cheese-creamy	5 x 1E4	0.01 <*>	0.1 <*>	25	- <*>	- <*>	<*> the same <*> yeast - 5 0, mould - 100CFU/g max, for the products with shelf life of 5 days or more
- "potato"-type	5 x 1E4	0.01 <*>	0.1 <*>	25	50	100	<*> the same
- with scalded cream	1 x 1E4	0.01 <*>	1.0 <*>	25	50	100	<*> the same
1.5.5.2. Pies and pastry without decoration, with decoration based on margarine, vegetable cream and fat	1 x 1E4	1.0 <*>	0.1	25	50	50	
1.5.5.3. Diabetic pies, pastry, and rolls	5 x 1E3	0.1	1.0	50	50	50	
1.5.5.4. Wafer cake with fillings:							
- fatty	5 x 1E3	0.1	-	25	50	50	
- praline, chocolate-nut	5 x 1E4	0.01		25	50	50	
1.5.5.5. Sponge rolls with fillings:							
- creamy, fatty	5 x 1E4	0.01	0.1	25	50	100	
- fruit, candied fruit, poppy seed, nuts	1 x 1E4	1.0	1.0	25	50	100	

1.5.5.6. Cakes: - with sugar powder	5 x 1E3	0.1		25	50	50	
- glazed, with nuts, candied fruit, with fruity or rum impregnation	5 x 1E3	0.1		25	50	100	
1.5.5.7. Cakes and rolls in airproof package	5 x 1E3	0.1	0.1	25	50	50	
1.5.5.8. Wafers: - without filling, with fruit, fondant, fatty fillings	5 x 1E3	0.1		25	50	100	
- with nut-praline filling, in chocolate glaze	5 x 1E4	0.01		25	50	100	
1.5.5.9. Gingerbread, honey-cakes: - without filling	2.5 x 1E3	1.0		25	50	50	
- with filling	5 x 1E3	0.1	-	25	50	50	
1.5.5.10. Cookies: - fancy sugar cookies with chocolate glaze	1 x 1E4	0.1		25	50	100	
- with creamy layer, filling	1 x 1E4	0.1	0.1	25	50	100	
- hard tacks, crackers	1 x 1E3	1.0		25		100	
1.5.5.11. Flour East sweeties: - sponge cakes with cinnamon, kurabie, shaker-lucum, shaker-churek	5 x 1E2	1.0		25	50	50	
- zemelakh	5 x 1E3	1.0		25	50	50	
- rolls and tubes with nuts	1 x 1E3	1.0		25	50	50	
- glazed	1 x 1E4	0.1		25	50	100	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1.5.6. Honey	Toxic elements:		
	lead	1.0	
	arsenic	0.5	
	cadmium	0.05	
	Oxymethylfurfural	25	
	Pesticides: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)  DDT and its metabolites	0.005   0.005	
	Antibiotics <*> (in imported products based on the information provided by the supplier):		
	tetracycline group	0.01	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010, No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			

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<\*> It is also required to control residual quantities of the pesticides and antibiotics used for production of food raw material (see Clauses 3.12, 3.13, 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> Allowable levels of hexachlorocyclohexane ( $\alpha, \beta, \gamma$ -isomers) and DDT and its metabolites are calculated based on the main kind(s) of raw material, both on the mass fraction basis, and for allowable levels of rated pesticides.

1.6. Fruit and Vegetable Products

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.6.1. Fresh and quick-frozen vegetables, potato, water-melons, gourds, fruit, berries, mushrooms	Toxic elements:  lead  arsenic  cadmium  mercury	  0.5 0.4 0.2 0.5 0.03 0.1 0.02 0.05	  Fruit, berries  Mushrooms  Mushrooms  Mushrooms

Clause 1.6.1. in the Amendments and Additions No. 18 to the Sanitary and Epidemiological Rules and Regulations SanPiN 2.3.2.1078-01 in the part of amendment of the indicator "Nitrates" with the lines "fresh lettuce" and "iceberg lettuce" shall enter into force after the mentioned norm has been included in the Uniform Sanitary Requirements of the Customs Union.

	Nitrates:		
	Potato	250	
	early green head	900	
	cabbage (before September 1)		
	late green head	500	
	cabbage		
	early carrot (before September 1)	400	
	late carrot	250	
	tomatoes	150,300	Protected ground
	cucumbers	150,400	Protected ground
	table beet	1400	
	bulb onion	80	
	green onion	600,800	Protected ground
	leaf vegetables (salads, spinach, salad, cabbage, parsley, celery, coriander, fennel, etc.)	2000	

	sweet pepper	200 400	Protected ground
	Marrow squashes	400	grown in protected ground from October 1 till March 31
	Watermelons	60	
	Melons	90	
	fresh lettuce	4500	
		4000	grown in unprotected ground from October 1 till March 31
		3500	grown in protected ground from April 1 till September 30
		2500	grown in unprotected ground from April 1 till September 30
	iceberg lettuce	2500	grown in protected ground
		2000	grown in unprotected ground
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.1	Potato, green pea,  sugar beet
		0.5	Vegetables, gourds, mushrooms
		0.05	Fruit, berries grapes,
	DDT and its metabolites	0.1	
	Radionuclides:		
Potato	caesium - 137	80	Bq/kg
	strontium-90	40	same
vegetables, gourds	caesium - 137	80	same

	strontium-90	40	same
berries in wild nature	caesium - 137	160	same
	strontium-90	-	the norms are not established
mushrooms	caesium-137	500	Bq/kg
	strontium-90	-	the norms are not established
fruit, berries, grapes	caesium -137 and strontium-90	-	the norms are not established

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g, cm3) in which the indicator is not allowed Coliform bacteria (coliforms)	Pathogenic, including salmonella	Yeast, CFU/g, not more than	Moulds, CFU/g, not more than	Note
1	2	3	4	5	6	7
1.6.1.1. Vegetables and potatoes, fresh, fresh-frozen and processed:						
- whole fresh vegetables	1 x 1E4	1.0	25	1 x 1E2	1 x 1E2	L. monocytogenes in 25 g are not admitted
blanched, fresh-frozen						
- fresh whole vegetables, non-blanched, fresh-frozen	1 x 1E5 <*>	0.01	25	5 x 1E2	5 x 1E2	<*> for cut vegetables, including mixtures - 5 x 1E5
- green and leaf vegetables, fresh-frozen	5 x 1E5	0.01	25	5 x 1E2	5 x 1E2	in blanched L. monocytogenes in 25 g are not admitted
- fresh-frozen blanched mushrooms	1 x 1E4	1.0	25	1 x 1E2	1 x 1E2	
- potato semi-finished products, fresh-frozen (garnish potato, potato chops, meatballs, etc.)	5 x 1E4	0.01	25	1 x 1E3		
- salads and	5 x 1E4	0.1	25	1 x 1E2	1 x 1E2	L.



Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.6.2. Dried vegetables, potato, fruit, berries, mushrooms	Toxic elements, nitrates, pesticides	according to Clause 1.6.1	in terms of original product subject to the content of dry substances in the raw and final product
Potato	Radionuclides: caesium - 137	600	Bq/kg
vegetables, gourds	strontium-90	200	the same
berries	caesium - 137	600	the same
wild-growing mushrooms	strontium-90	200	the same
	caesium - 137	800	the same
	caesium-137	2500	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:

Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g, cm <sup>3</sup> ) in which the indicator is not allowed	Coliform bacteria (coliforms)	Pathogenic, including salmonella	Note
1	2	3	4	5	6
1.6.2.1. Dried vegetables and potato:					
- dried vegetables non-blanching before drying	5 x 1E5	0.01	25	5 x 1E2	B. cereus 1 x 1E3 CFU/g, not more than
- dry potato mash	5 x 1E4	0.1	25	5 x 1E2	
- dried potato and other root crops blanching before drying	2 x 1E4	0.01	25	5 x 1E2	
- potato chips	1 x 1E3	0.1	25	-	



- chips and extruded products with flavour additives	1 x 1E4	0.1	25	2 x 1E2	
1.6.2.2. Dried fruit and berries:					
- fruit and berries (dried fruit)	5 x 1E4	0.1	25	5 x 1E2	yeast 5 x 1E2 CFU/g, not more than
- fruit and berries, fruit-and-berry purée of sublimation drying	5 x 1E4	0.1	25	1 x 1E2	
- candied fruit	1 x 1E3	1.0	25	50	yeast 5 0 CFU/g, not more than
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					
1.6.2.3. Dried mushrooms	5 x 1E5	0.001	25	5 x 1E2	
1.6.2.4. Edible concentrates:					
- vegetable and fruit desserts (heat-dried)	5 x 1E3	1.0	25	1 x 1E2	S.aureus in 1 g and B. cereus in 0.1 r are not allowed
- vegetable powders (of sublimation drying)	5 x 1E4	0.01	25	1 x 1E2	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.6.3. Canned vegetables, fruit, berries	Toxic elements:		
	lead	0.5 0.4 1.0	Fruit, berries in assembled tin containers
	arsenic	0.2	
	cadmium	0.03	in assembled tin containers
	mercury	0.05	
	stannum	0.02	in assembled tin containers
	chrome	200.0	in chromium-plated package
		0.5	
	Mycotoxins:		
	Patuline	0.05	apple, tomato, sea-buckthorn
	Nitrates, pesticides, radionuclides	according to Clause 1.6.1	

Microbiological indicators:

Index, group of products	Requirements
1.6.3.1. Canned vegetables with pH of not less than 4.2, canned apricots, peaches and pears with pH of not less than 3.8 produced without addition of acid	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules
1.6.3.2. Non-concentrated whole canned tomatoes with dry matter content of less than 12%	Shall satisfy requirements for industrial sterility for canned food of group "B" in accordance with Annex 8 to these Sanitary Rules.
1.6.3.3. Canned vegetables with pH of 3.7 - 4.2	Shall satisfy requirements for industrial sterility for canned food of group "C" in accordance with Annex 8 to these Sanitary Rules
7.6.3.4. Canned vegetables (with pH of less than 3.7), fruit and fruit-and-berry pasteurized, canned foods for public catering with sorbic acid and pH of less than 4.0; canned apricots, peaches and pears with pH of less than 3.8	Shall satisfy requirements for industrial sterility for canned food of group "D" in accordance with Annex 8 to these Sanitary Rules

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.6.4. Canned mushrooms	Toxic elements:  lead  arsenic cadmium mercury stannum  chrome	0.5 1.0  0.5 0.1 0.05 200.0  0.5	in assembled tin containers      in assembled tin containers in chromium-plated package
	Pesticides, radionuclides:	according to Clause 1.6.1	
Microbiological indicators:			
Shall satisfy requirements for industrial sterility for canned food of group "A" (natural mushrooms) or canned food of group "B" (pickled mushrooms) in accordance with Annex 8 to these Sanitary Rules			

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.6.5. Vegetable, fruit, berry juices, nectars, fruit waters, concentrates, semi-finished products (canned); fruit and fruit-and-berry, flavoured ice-cream and food service ice - juices, nectars, semi-finished products, ice-cream	Toxic elements        lead   arsenic cadmium   mercury stannum	        0.5 0.4 1.0  0.2 0.03 0.05  0.02 200	        vegetable, fruit, berry in assembled tin containers      in assembled tin containers   in assembled tin containers

	chrome	0.5	in chromium-plated package
- beverages, food service ice	lead	0.3	
	arsenic	0.1	
	cadmium	0.03	
- concentrates	mercury	0.005	
		according to Clause 1.6.1	in terms of original product subject to content of dry substances in the raw material and the final product
	Mycotoxins:		
- vegetable, fruit juices, beverages, concentrates, semi-finished products	patuline	0.05	apple, tomato, sea-buckthorn
	patuline	0.05	tomato pulp, apple pulp
- juices, beverages, concentrates,	Nitrates, pesticides	according to Clause 1.6.1	for beverages and concentrates in terms of original product subject to content of dry substances in the raw material and the final product
	Radionuclides:		
- juices, beverages	caesium-137	according to Clause 1.6.1	
	strontium-90		
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:	
Index, group of products	Requirements
1.6.5.1. Preserved vegetable juices with pH 4.2 or more	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules
1.6.5.2. Preserved tomato beverages with dry substance content of less than 12%	Shall satisfy requirements for industrial sterility for canned food of group "B" in accordance with Annex 8 to these Sanitary Rules

1.6.5.3. Concentrated tomato products with dry substance content of more than 12% (tomato pastes, tomato sauces)	Shall satisfy requirements for industrial sterility for canned food of group "B" in accordance with Annex 8 to these Sanitary Rules. Mould content by Howard in tomato paste should not exceed 40% of visual field.
1.6.5.4. Sterilized tomato ketchups with dry substance content 12% and more	Shall satisfy requirements for industrial sterility for canned food of group "B" in accordance with Annex 8 to these Sanitary Rules.
1.6.5.5. Vegetable juices with pH 3.7-4.2 (with acid addition)	Shall satisfy requirements for industrial sterility for canned food of group "C" in accordance with Annex 8 to these Sanitary Rules
1.6.5.6. Vegetable juices with pH below 3.7; fruit (made of citrus), fruit and berry including those with sugar, natural with pulp, concentrated, pasteurized; preserved apricot, peach and pear juices with pH 3.8 and less	Shall satisfy requirements for industrial sterility for canned food of group "D" in accordance with Annex 8 to these Sanitary Rules

Index, group of products	QMAFAnM, CFU/cm <sup>3</sup> , not more than	Mass of products (g, cm <sup>3</sup> ) in which the indicator is not allowed	Coliform bacteria (coliforms)	Pathogenic, including salmonella	Yeast, CFU/cm <sup>3</sup> , not more than	Mould, CFU/cm <sup>3</sup> , not more than	Note
1	2	3	4	5	6	7	
1.6.5.7. Fruit and berry juices and beverages, pasteurized, carbonated with pH 3.7 or less	50	1000			1.0 <*>	5.0	lactic acid microorganisms in 1cm <sup>3</sup> are not admitted; <*> weight of cm <sup>3</sup> , in which the indicator is not allowed

1.6.5.8. Concentrates of fruit, fruit and berry and berry juices for industrial processing and: pasteurized	Shall satisfy requirements for industrial sterility for canned food of group "D" in accordance with Annex 8 to these Sanitary Rules					
non-pasteurized including quick-frozen	5 x 1E3	1.0	25	2 x 1E3	5 x 1E2	
1.6.5.9. Non-sterilized tomato sauces and ketchups, including those with preservative addition	5 x 1E3	1.0	25	50	50	sulphite-reducing clostridia in 0.1 cm3 are not allowed
1.6.5.10. Fruit and berry ice-cream and fruit ice based on sugar syrup, including flavoured	1 x 1E5	0.01	25	100	100	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.6.5.11. Mixtures for fruit and berry ice cream and fruit ice	5 x 1E4	0.01	25	100	100	Dry mixtures are controlled after reconstitution with water
1.6.5.12. Vegetable and fruit juices, which are fresh-squeezed and sold without storage	according to Clause 1.9.15.16					

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.6.6. Jams, marmalade, fruit pastes, confitures, fruit and berries crushed with sugar and	Toxic elements:  lead  arsenic cadmium	  0.5 1.0  1.0 0.05	    in assembled tin containers



Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.6.7.Vegetables and fruits, mushrooms brined, pickled, sour, soaked	Toxic elements, nitrates, pesticides, radionuclides	according to Clause 1.6.1	

Microbiological indicators:			
Index, group of products	Mass of products (g, cm3) in which the indicator is not allowed		
	Mesophilic sulphite-reducing clostridia	Pathogenic including salmonella	
1.6.7.1. Ready to use sour and brined vegetables (cabbage, cucumbers, tomatoes etc.);  soaked and brined fruits, including cucurbits crop (packaged and non-packaged)		25	
1.6.7.2. Mushrooms preserved: brined and pickled in barrels, cooked in barrels	0.1	25	



Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1.6.8. Spices and dried spice plants	Toxic elements: lead arsenic cadmium	5.0 3.0 0.2	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g, cm3) in which the indicator is not allowed	Coliform bacteria (coliforms)	Sulphite-reducing clostridia	Pathogenic, including salmonella	Note
1	2	3	4	5	6	7
1.6.8.1. Spices and spice plants: - ready for use  - spices and spice plants, raw materials: whole black pepper, bayberry, red pepper, coriander, cinnamon, nutmeg, etc.	5 x 1E5  2 x 1E6	0.01  0.001	0.01	25  25	1 x 1E3  1 x 1E4	
1.6.8.2. Complex food additives with spices and spice plants	5 x 1E5	0.01	0.01	25	2 x 1E2	
1.6.8.3. Flavourings - table mustard and horse reddish	5 x 1E4	0.01	0.01	25	2 x 1E2	

1.6.8.4. Garlic powder (freeze-dried)	5 x 1E3	1.0		25	1 x 1E2	B.cereus 1 x 1E2 CFU/g max
Index, group of products	Indicators		Permissible levels, mg/kg, not more		Note	
1	2		3		4	
1.6.9. Nuts	Toxic elements:					
	lead		0.5			
	arsenic		0.3			
	cadmium		0.1			
	mercury		0.05			
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)		0.5			
	DDT and its metabolites		0.15			
	Mycotoxins: aflatoxin B1		0.005			
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)						

Microbiological indicators:				
Index, group of products	Mass of products (g, cm3) in which the indicator is not allowed		Moulds, CFU/g not more than	Note
	Coliform bacteria (coliforms)	Pathogenic, including salmonella		
1	2	3	4	5
1.6.9.1. Natural nuts (almond, walnut, peanut, pistachio, butternut, hickory, coconut) peeled, non-roasted	0.01	25	1 x 1E3	
1.6.9.2. Roasted nuts	0.1	25	5 x 1E2	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
1.6.9.3. Chopped dried coconuts	0.01	25	1 x 1E2	

1.6.9.4. Chopped coconuts	0.01	25	1 x 1E2	
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Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1.6.10. Tea (black, green, brick)	Toxic elements:		
	lead	10.0	
	arsenic	1.0	
	cadmium	1.0	
	mercury	0.1	
	Mycotoxins:	0.005	
	aflatoxin B1		
	Microbiological indicators:		
	Moulds,	1 x 1E3	CFU/g, not more than
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
1.6.11. Coffee (in beans, ground, instant)	Toxic elements:		
	lead	1.0	
	arsenic	1.0	
	cadmium	0.05	
	mercury	0.02	
	Mycotoxins:	0.005	
	aflatoxin B1		
	Microbiological indicators:		
	Moulds	5 x 1E2	CFU/g max, green coffee beans
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

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<\*> It is also required to control residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

<\*> Nitrates and pesticides shall be calculated for the main type(s) of raw material, both for the mass fraction, and for allowable levels of such contaminants.

### 1.7. Oily Raw Materials and Fat Products

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.7.1. Oil crops seeds (sunflower, soy bean, cotton plant, maize, flax, mustard, rape, peanut, poppy seed)	Toxic elements: lead	1.0	
	arsenic	0.3	
	cadmium	0.1	
		0.5	for poppy seeds
	mercuric	0.05	
	Mycotoxins: aflatoxin B1	0.005	
	Pesticides <*>: hexachlorocyclohexane	0.2	soy bean, cotton plant;
	(alpha-, beta-, gamma-isomers)	0.4	flax, mustard, rape;
		0.5	sunflower, peanut, maize
	DDT and its metabolites	0.05	soy bean, cotton plant, maize
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
1.7.2. Vegetable oil (all types)	Indications of oxidative deterioration: acid value	4.0	mg potassium hydroxide /g
		0.6	the same for refined oils
	peroxide value	10.0	mmol of active oxygen / kg
	Toxic elements: lead	0.1	
		0.2	peanut
	arsenic	0.1	
	cadmium	0.05	
	mercury	0.03	
	Mycotoxins: aflatoxin B1	0.005	for unrefined oils
	Pesticides <*>: hexachlorocyclohexane	0.2	
		0.05	refined, deodorized
	(alpha-, beta-, gamma-isomers)		
	DDT and its metabolites	0.2	
		0.1	refined, deodorized
	Radionuclides: caesium - 137	60	Bq/kg
	strontium-90	80	the same
	Dioxins <***>:	0.00000075	(in terms of

				(fat)	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)					
1.7.3. Products of processing of vegetable oils and animal fats,including fish fat, (margarine, cooking fats, confectionery fats, mayonnaise, phosphatide concentrates)	Indications of oxidative deterioration:				
	peroxide value	10		mmol active oxygen / kg	
	Toxic elements:				
	lead	0.1		mayonnaise  for margarines, cooking and confectionery fats	
	arsenic	0.3			
cadmium	0.1				
mercury	0.05				
nickel	0.05				
		0.7			
	Mycotoxins:				
	aflatoxin B1	0.005 according to Clause 1.7.2			
	Pesticides, radionuclides				
	Polychlorinated biphenyls	3.0		for products, containing fish fats	
	Dioxins <***>:	according to Clause 1.7.2 - based on vegetable oils, according to Clause 1.7.4 - based on animal fats, according to Clause 1.3.6 - based on fish fat		(in terms of fat)	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)					
Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g), in which the indicator is not allowed	Yeast, CFU/g, not more than	Moulds, CFU/g, not more than	Notes
		Coliform bacteria, including salmonella (coliforms)			
1	2	3	4	5	6
1.7.3.1. Mayonnaise - in consumer containers - for industrial processing	-	0.1	25	5 x 1E2	50
		0.01	25	1 x 1E3	50
1.7.3.2. Cooking and confectionery fats		0.001	25	1 x 1E3	1 x 1E2
1.7.3.3. Table, sandwich		0.01	25	5 x 1E2	50

margarines						
1.7.3.4. Vegetable oil- based creams	1 x 1E4	0.01	25	50	50	

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Notes
1	2	3	4
1.7.4. Beef, pork, mutton and other raw tallow of slaughter cattle (chilled, frozen) Chilled, frozen, salted, smoked pork fat	Toxic elements:		
	lead	0.1	
	arsenic	0.1	
	cadmium	0.03	
	mercury	0.03	
	Antibiotics <*>:		
	laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
		0.0003	Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	

(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)

	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.002 0.004	smoked pork fat
	Benz(a)pyrene	0.001	smoked pork fat
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.2	
	DDT and its metabolites	1.0	
	Dioxins <***>:	0,000003 - beef fat, 0,000001 - pork fat, 0,000002 - poultry fat, 0,000002 - animal fats mixed together	(in terms of fat)

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g), in which the indicator is not allowed			Notes
		Coliform bacteria (coliforms)	Sulphite-reducing clostridia	Pathogenic, including salmonella	
1.7.4.1. Pork fat, chilled, frozen, unsalted	5 x 1E4	0.001		25	L. monocytogenes in 25 g are not allowed
1.7.4.2. Pork fat and pork brisket products, salted, smoked, smoked - roasted	5 x 1E3	1.0	0.1	25	the same for salted and smoked products



Index, group of products	Indicators	Permissible levels, mg/kg, not more	Notes
1	2	3	4
1.7.5. Rendered animal fats	Indications of oxidative deterioration:		
	acid value	4.0	Mg potassium hydroxide/g
	peroxide value	10.0	mmol active oxygen / kg
	Toxic elements:		
	lead	0.1	
	arsenic	0.1	
	cadmium	0.03	
	mercury	0.03	
	copper	0.4	for storage delivered
	iron	1.5	the same
	Antibiotics, nitrosamines, pesticides	according to Clause 1.7.4	
	Dioxins <***>:	according to Clause 1.7.4	(in terms of fat)
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
1.7.6. Cow butter	Indications of oxidative deterioration:		
	fat phase acidity	2.5	0 Kettstofer
	Toxic elements:		
	lead	0.1	chocolate butter
		0.3	
	arsenic	0.1	
	cadmium	0.03	
		0.2	chocolate butter
	mercury	0.03	
	copper	0.4	for storage delivered
	iron	1.5	for storage delivered

Mycotoxins:	0.0005	
aflatoxin M1		
Antibiotics <*>:		

laevomycetin (chloramphenicol )	0.01  0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
tetracycline group	0.01	
penicillins	0.004	
streptomycin	0.2	

(as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)

Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	1.25	in terms of fat
DDT and its metabolites	1.0	the same
Radionuclides:		
caesium-137	200	Bq/kg
strontium-90	60	the same
Dioxins <***>:	0.000003	(in terms of fat)

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

Microbiological indicators:							
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	Moulds, CFU/g not more than	Yeast, CFU/g not more than	Notes
1	2	3	4	5	6	7	8
1.7.6.1. Vologda butter and branded sorts butter	1 x 1E4	0.1	1.0	25	5 0 in total		L. monocytogenes in 25 g are not allowed
1.7.6.2. Sweet and acid cream cow butter, including salted, with the mass fraction of fat 60% and more	1 x 1E5 <*>	0.01	0.1	25	10 0 in total		The same<*> in acid cream cow butter norms are not established
1.7.6.3. Chocolate butter	1 x 1E5	0.01	0.1	25	100	100	L. monocytogenes in 25 g are not allowed
1.7.6.4. Cow milk butter (for sandwiches) with the mass fraction of fat from 30 to 59%	2 x 1E5	0.001	0.01	25	100	100	L. monocytogenes in 25 g are not allowed
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)							
1.7.6.5. Melted cow butter	1 x 1E3	1.0	-	25	200	-	

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Notes
1	2	3	4
1.7.7. Fatty materials based on combination of animal fats, including milk fat, and vegetable fats	Indications of oxidative deterioration: fat phase acidity peroxide value	2.5 10	0 Kettstofer mmol of active oxygen / kg in a fat phase
	Toxic elements: lead  arsenic cadmium  mercury copper  iron nickel	0.1 0.3 0.1 0.03 0.2 0.03 0.4 1.5 0.7	with a chocolate component  with a chocolate component  for storage delivered the same combined oils with hydrogenated fat
	Mycotoxins: aflatoxin M1	0.0005	
	Antibiotics <*>:		
	laevomycesin (chloramphenicol)	0.01 0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	
	(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its metabolites	1.25 1.0	in terms of fat  the same
	Radionuclides: caesium-137 strontium-90	100 80	Bq/kg the same

Dioxins <***>:	0.000002	Compound animal fats (in terms of fat)
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(as amended by Amendments and Additions No. 2, approved by Resolution No. 41, of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

Microbiological indicators:

Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	Moulds, CFU/g not more than	Yeast, CFU/g not more than	Notes
1	2	3	4	5	6	7	8	
1.7.7.1. Fatty products based on combination of animal fats, including milk fat, and vegetable fats with the mass fraction of fat 60% and more	1 x 1E5	0.01	0.1	25	100	100		L. monocytogenes in 25 g are not allowed
1.7.7.2. Fatty products based on combination of animal fats, including milk fat, and vegetable fats with the mass fraction of fat 30-59%		0.01	0.01	25	200 in total			the same

Index, group of products	Indicators	Permissible levels, mg/kg, not more	Notes
1	2	3	4
1.7.8. Edible tallow of fish and marine mammals; fat of marine mammals and fish fat as dietary (curative and prophylactic) food products	Indications of oxidative deterioration:		
	acid value	4.0	mg potassium hydroxide/g mmol of active oxygen/kg
	peroxide value	10.0	
	Toxic elements:		
	lead	1.0	
	arsenic	1.0	
	cadmium	0.2	
	mercury	0.3	
	Pesticides <*>:	0.1	
	hexachlorocyclohexane (alpha-, beta-, gamma-isomers)		
DDT and its metabolites	0.2		
Polychlorinated biphenyls	3.0		
Radionuclides:		Bq/kg	
caesium-137	60		
Strontium-90	80	the same	
Dioxins <***>:	according to Clause 1.3.6	(in terms of fat)	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

<\*> It is also required to control residual quantities of the antibiotics used for production of food raw material (see Clause 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

Note:

<\*\*\*> the maximum permissible level shall not be applied to products containing less than 1% of fat;

- hereinafter dioxins shall be understood to represent the sum of polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzofurans (PCDF), expressed as a sum of toxic equivalency factors (TEF) according to the WHO scale (WHO-TEFs):

**TOXIC EQUIVALENCY FACTORS (according to WHO scale) <\*>**

Congener	TEF Value
Dibenzo-p-dioxin (PCDD)	
2,3,7,8-Tetrachlorodibenzodioxin	1
1,2,3,7,8-Pentachlorodibenzodioxin	1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,7,8,9-Hexachlorodibenzodioxin	0.1
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	0.01
Octachlorodibenzodioxin	0.0001
Dibenzofurans (PCDF)	
2,3,7,8-Tetrachlorodibenzofuran	0.1
1,2,3,7,8-Pentachlorodibenzofuran	0.05
2,3,4,7,8-Pentachlorodibenzofuran	0.5
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1
1,2,3,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01
Oktachlorodibenzofuran	0.0001

(the note was introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

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<\*> 1 pg TEF means that this is a mixture of PCDD and PCDF which corresponds to 1 pg of 2,3,7,8-Tetrachlorodibenzodioxin (TCDD).



### 1.8. Beverages

1.8. Beverages			
Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.8.1. Bottled water (carbonated and noncarbonated) <*>	Requirements for bottled waters are established in accordance with SanPiN "Drinking Water. Hygienic Requirements for Quality of Packaged Water. Quality Control" (registered with the Ministry of Justice on 26.04.2002 Russia, registration number 3415)		
(Sub-clause 1.8.1 as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)			
1.8.2. Mineral natural table, curative-table, curative drinking waters <*>	Toxic elements:		
	lead	0.1	
	cadmium	0.01	
	mercury	0.005	
	Radionuclides <*>		
	Specific total alpha activity	0.2	Bq/kg
	Specific total beta activity	1.0	Bq/kg
	Microbiological indicators:		
	QMAFAnM,	100	CFU/cm3, not more than volume (cm3), in which the indicator is not allowed; a three-fold research per 100 cm3 shall be conducted the same
	Coliform bacteria (coliforms)	100	
	Coliform bacteria (coliforms)	100	
	fecal Pseudomonas aeruginosa	100	
(as amended by Amendment No. 16, approved by Resolution No. 6 of Chief State Sanitary Inspector of the RF dated 27.01.2010)			
1.8.2.1.	Microbiological indicators:		

Artificially mineralized drinking waters	Coliform bacteria (coliforms)	in 100 g are not allowed	
	pathogenic micro-organisms, including salmonella	in 100 g are not allowed	

	Pseudomonas aeruginosa	in 100 g are not allowed	
	yeast, CFU/cm3	not more than 10	
	mould, CFU/cm3	not more than 10	
(Clause 1.8.2.1 was introduced by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
1.8.3. Juices, beverages, vegetable, fruit, berry and and grain preserved concentrates	See Section "Fruit and Vegetable Products", Clause 1.6.5		
1.8.4. Milk-containing drinks	See Section "Milk and Milk Products", Clause 1.2.1 and 1.2.4		
1.8.5. Alcoholic free beverages, including juice containing and artificially mineralized drinks	lead	0.3	
	arsenic	0.1	
	cadmium	0.03	
	mercury	0.005	
	Mycotoxins:		
	Patuline	0.05	juice containing: apple, tomato, sea-buckthorn
	Caffeine	150	for caffeine containing drinks
		400	for caffeine containing specialized drinks
	Quinine	85	for quinine containing drinks
	General mineralization	2.0	g/l, not more than - artificially mineralized drinks
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/cm3, not more than	Mass of products (cm3, g) in which the indicator is not allowed	Yeast and moulds (in total), CFU/cm3 (g), not more than	Notes	
		Coliform bacteria (coliforms)	Pathogenic, including salmonella		
1	2	3	4	5	6
1.8.5.1. Beverages, alcoholic free unpasteurized and without preservative with keeping time less than 30 days	30	333	25	100	
1.8.5.2. Beverages, alcoholic free unpasteurized and without preservative with keeping time 30 days and more:					
- based on sugars		100	100	15 <*>	<*> CFU/100 cm3, not more than <*> number of mesophilic aerobic microorganisms, CFU/100 cm3, no more than <*> volume (cm3), in which the indicator is not allowed
- based on sweeteners	100 <*>	100	100		
- juice containing:		100	100	40 <*>	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					

1.8.5.3. Concentrates (liquid, paste- like), mixtures (powder-like, tableted, granulated and other) for alcoholic free  drinks in a consumer packaging	5 x 1E4 <*>	1.0	25	10 <*>	<*> except concentrate s, containing sodium bicarbonate <*> volume (cm3), mass (g), in which the indicator is not allowed
1.8.5.4. Mixtures of dry vegetable raw materials for making of hot alcoholic free drinks	5 x 1E5	1.0	25	100 - yeast 100 - moulds	
1.8.5.5. Non-pasteurized syrops	-	1.0	25	50 <*>	<*> CFU/10 cm3, not more than
1.8.5.6. Pasteurized syrops, hot filling	-	1.0	25	40 <*>	<*> volume (cm3), in which the indicator is not allowed
1.8.5.7. Aseptically packaged concentrates	Shall satisfy requirements for industrial sterility for canned food of group "D" in accordance with Annex 8 to these Sanitary Rules See Section "Fruit and Vegetable Products", Clause 1.6.5.8.				

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.8.6. Fermented beverages	Toxic elements:  lead arsenic cadmium mercury	  0.3 0.1 0.03 0.005	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					
Index, group of products	QMAFAnM , CFU/cm3 , not more than	Mass of products (cm3, g) in which the indicator is not allowed			Notes
		Colifor m bacteri a (colifo rms)	Pathoge nic, includi ng salmone lla	Yeast and moulds	
1	2	3	4	5	6
1.8.6.1. Unfiltered kvases					
- in kegs	-	3.0	25	-	
- draught	-	1.0	25	-	
Kvases filtered unpasteurized:					
- in polimer bottles (PET)	-	10.0	25	-	
- in kegs	-	3.0	25	-	
- draught	-	1.0	25	-	
Kvasses filtered pasteurized	10	10.0	25	100	
1.8.6.2. Fermented beverages low-alcohol unfiltered:					
- in kegs	-	3.0	25	-	
- draught	-	1.0	25	-	
1.8.6.3. Low-alcohol filtered unpasteurized fermented beverages:					
- in polymer bottles (PET and others)		10.0	25		
- in kegs	-	3.0	25	-	
- draught	-	1.0	25	-	

1.8.6.4. Low-alcohol filtered pasteurized fermented beverages	10	10	25	100	
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Index, group of products	Indicators	Permissible levels, mg/kg, not more	Note
1	2	3	4
1.8.7. Beer, wine, vodka, low-alcohol and other alcoholic beverages	Toxic elements:  lead arsenic cadmium mercury	  0.3 0.2 0.03 0.005	
	Methanol	0.05       1.0	%, not more than (volume fraction in terms of anhydrous alcohol) - vodkas, food ethyl alcohols g/dm <sup>3</sup> , not more than  (cognac, cognac alcohols)
	Quinine	300	cinchona containing alcohol drinks
	Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.003	beer

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)



Microbiological indicators: (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)					
Index, group of products	QMAFAnM , CFU/cm3 , not more than	The volume or mass of products (cm3, g) in which the indicator is not allowed Coliform bacteria (coliforms) Pathogenic, including salmonella Yeast and moulds			Notes
1.8.7.1. Draught beer	-	1.0	25	-	
1.8.7.2. Unpasteurized beer:					
- in kegs		3.0	25	-	
- in bottles		10.0	25	-	
Pasteurized and sterilized beer	500	10	25	40	

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<\*> Bottled water shall be manufactured from water complying with the hygienic safety requirements for centralized drinking water supply systems.

<\*> Analysis of radionuclides content shall be carried out in case of exceeding the total activity parameters in accordance with Radiation Safety Standards-99/2009.

(the note was amended by Amendment No. 16, approved by Resolution No. 6 of Chief State Sanitary Inspector of the RF dated 27.01.2010)

### 1.9. Other Products

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.9.1. Isolates, concentrates, hydrolysates and textured plant proteins; food oil meal and flour with different fat content from legume seeds, oilseeds and seeds of non-conventional crops	Toxic elements:		
	lead	1.0	
	arsenic	1.0	
	cadmium	0.2	
	mercury	0.03	
	Mycotoxins:	0.005	
	aflatoxin B1		
	deoxynivalenol	0.7 1.0	from wheat from barley
	zearalenone	1.0	from wheat, barley, maize
	Pesticides <*>:		
	hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.5  0.4  0.2	from cereals, maize, legumes (except for soybean), sunflower and peanut
	DDT and its metabolites	0.15  0.1  0.05  0.02	from flax, mustard, rapeseed from soybean, cotton plant form sunflower, peanut
	Oligosaccharides	2.0	%, not more for soy, protein, baby food and dietary products
	Trypsin inhibitor	0.5	the same
	Melamine	not allowed	< 1 mg/kg

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008, Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:

Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	Sulphite-reducing clostridia	
1	2	3	4	5	6	7
1.9.1.1. Isolates, plant protein concentrates, soybean flour	5.0 x 1E4 <*>	0.1	0.1	25	0.1	yeast and moulds - 100 CFU/g, not more than; <*> 5 x 1E3 - for baby food
1.9.1.2. Protein enzymatic hydrolysate from soybean raw material	1 x 1E3	1.0	-	25	-	yeast and moulds in 1 g are not allowed
1.9.1.3. Protein sunflower food concentrate	5 x 1E4	0.1	-	25	-	moulds - 10 CFU/g, not more than
1.9.1.4. Soybean protein concentrate, textured soy flour	2.5 x 1E4	0.1	0.1	25	0.1	yeast and moulds - 100 CFU/g, not more than

(introduced by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1.9.2. Milk whey protein concentrates, casein, caseinates, milk protein hydrolysates	Toxic elements: lead	0.3	
	arsenic	1.0	
	cadmium	0.2	
	mercury	0.03	
	Mycotoxins: aflatoxin M1	0.0005	
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	1.25	in terms of fat
	DDT and its metabolites	1.0	the same
	Melamine	not allowed	< 1 mg/kg
	Antibiotics <*>:		
	laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	penicillins	0.004	
	streptomycin	0.2	
(as amended by Amendments No.11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010, No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			

Microbiological indicators:				
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed Coliform bacteria (coliforms)	Pathogenic, including salmonella	Note
1	2	3	4	5
1.9.2.1. Food caseinates	5 x 1E4	0.1	25	sulfite-reducing clostridia in 0.01 g are not allowed
1.9.2.3. Whey protein concentrate	5 x 1E4	1.0	25	S. aureus in 0.1 g are not allowed
1.9.2.4. Albumin-casein concentrate	2.5 x 1E3	1.0	25	S. aureus in 1.0 g are not allowed

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1.9.3. Blood protein concentrates (dry blood plasma concentrate, whey protein, food albumin)	Toxic elements:		
	lead	1.0	
	arsenic	1.0	
	cadmium	0.1	
	mercury	0.03	
	Antibiotics <*>:		
	laevomycetin (chloramphenicol)	0.01 0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010, No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)			
Microbiological indicators:			

See Section "Meat and Meat Products", Clauses 1.1.2.2 and 1.1.2.3			
Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.9.4. Germs of seeds of cereals, grain legumes and other crops, flakes and oil meal from them, bran	Toxic elements: lead	1.0	
	arsenic	0.2	
	cadmium	0.1	
	mercury	0.03	
	Mycotoxins: aflatoxin B1	0.005	
	deoxynivalenol	0.7 1.0	from wheat from barley
	zearalenone	1.0	from wheat, barley, maize
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers) DDT and its metabolites	0.5 0.02	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
	Oligosaccharides	according to Clause 1.9.1	
	Trypsin inhibitor	the same	
	Harmful contaminants: Pest contamination and infestation of grain (insects, mites)	not allowed	

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed		Moulds, CFU in 1 g	Note
		Coliform bacteria (coliforms)	Pathogenic, including salmonella		
1.9.4.1. Food cereal bran	5 x 1E4	0.1	25	100	heat-treated
1.9.4.2. Bran dietary fibers; oil meal from vegetables, fruit residues	5 x 1E4	0.1	25	50	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.9.5. Protein products from seeds of cereals, grain legumes and other crops: - beverages, including fermented beverages; tofu and okara	Toxic elements:		
	lead	0.2	in terms of dry substance
	cadmium	0.1	
	arsenic	0.2	
	mercury	0.03	
	Mycotoxins: aflatoxin B1	0.005	
	deoxynivalenol	0.7 1.0	from wheat from barley
	zearalenone	1.0	from wheat, barley, maize
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.1	in terms of dry substance
	DDT and its metabolites	0.01 are not allowed	
	mercury organic pesticides		
	Oligosaccharides	according to Clause 5.9.1	
	Trypsin inhibitor	according to Clause 5.9.1	

- concentrated, condensed and powder beverages, tofu and okara powder	Toxic elements:		in terms of dry substance
	lead	0.2	
	cadmium	0.1	
	arsenic	0.2	
	mercury	0.03	
	Mycotoxins: aflatoxin B1	0.005	
	deoxynivalenol	0.7	from wheat
		1.0	from barley
	zearalenone	1.0	from wheat, barley, maize
	Pesticides <*>:		in terms of dry substance
	hexachlorocyclohexane	0.1	
	(alpha-, beta-, gamma-isomers)	0.01	
	DDT and its - metabolites.	not allowed	
	mercury organic pesticides		
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			



Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed				Note
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	B. cereus	
1	2	3	4	5	6	7
1.9.5.1. Beverages from soybean						
- soybean beverages of aseptic bottling	Shall satisfy requirements for industrial sterility for cans of group "A" in accordance with Annex 8 to these Sanitary Rules					
- soybean beverages, cocktails, chilled and frozen desserts	5 x 1E4	0.1 <*>	1.0	25	0.1	<*> 1.0 - with the shelf life of more than 72 hours; moulds - 10, CFU/g, not more than
- fermented soybean beverages		0.1 <*>	1.0	25	0.1	<*> the same; moulds - 10, yeast - 10, CFU/g, not more than
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1.9.5.2. Protein soybean products (tofu)	5 x 1E4 <*>	0.1 <*>	1.0	25	0.1	<*> the same; <*> with the use of starter cultures - norms are not established; moulds - 10 and yeast - 50, CFU/g, not more than
- okara	5 x 1E4	0.01	1.0	25	0.1	moulds - 10 CFU/g, not more than

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.9.6. Thickeners, stabilizers, gelling agents (pectin, agar, alginate, carrageenan, gums, etc.)	Toxic elements:		
	lead	2.0	carrageenan, gum arabic, gums: carob gum, guar gum, xanthan gum, gellan gum, konjak flour
		5.0	agar, alginates
		10.0	pectin, gums: gum ghatti, tara gum, karaya gum
	arsenic	3.0	pectin, agar, alginates, carrageenan, gums: gum ghatti, tara gum, karaya gum, gellan gum, konjak flour
	cadmium	1.0	carrageenan, the same
	mercury	1.0	
	copper	50	pectin
	zinc	25	pectin
	Pentachlorophenol:	are not allowed (less than 0.001 mg/kg)	guar gum, carob gum, tragacanth gum, karaya gum, tara gum, gum ghatti

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Moulds, CFU in 1 g		Note
		Coliform bacteria (coliforms)			
1	2	3	4	5	6
1.9.6.1. Pectin:  - for baby food and dietary products  - for mass-consumption products	5 x 1E2  5 x 1E4	1.0  0.1	25  25	50  100	yeast - 50 CFU/g, not more than;  yeast - 100 CFU/g, not more than
1.9.6.2. Edible agar, agaroid, furcellarine, food sodium alginate	5 x 1E4	1.0	25	100	
1.9.6.3. Carrageenan	5 x 1E3	1.0	25	100	
1.9.6.4. Thickeners and stabilizers based on gums (guar and xanthan gums, etc.)	5 x 1E3	1.0	25	500 <*>	total amount of yeast and mould

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.9.7. Gelatin, connective tissue protein- concentrates	Toxic elements:  lead arsenic cadmium mercury	  2.0 1.0 0.1 0.05	
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)  DDT and its metabolites	0.1   0.1	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:				
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Note	
		Coliform bacteria (coliforms)	Pathogenic, including salmonella	
1.9.7.1. Edible gelatin:				
- for baby food and dietary products	1 x 1E4	1.0	25	
- for mass-consumption products	1 x 1E5	0.01	25	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.9.8. Starches, treacle and their derived products	Toxic elements:  lead arsenic cadmium mercury	  0.5 0.5 0.1 0.02	
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)  DDT and its - metabolites.	0.5  0.1  0.05 0.1	maize  potato  maize potato
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed		Yeast, CFU/g not more than	Moulds, CFU/g, not more than	Note
		Coliforms (coliforms)	Pathogenic, including salmonella			
1	2	3	4	5	6	7
1.9.8.1. Dry starch (potato, maize, pea)	1 x 1E5	0.01	25	500	500	
1.9.8.2. Amylopectin swelling starch, extrusion starch	1 x 1E4	0.1	25	250	250	
1.9.8.3. Low-sugar treacle	1 x 1E4	1.0	25	50	100	
1.9.8.4. Maltitol, maltodextrins	5 x 1E4	1.0	25	50	100	

1.9.8.5. Lactulose concentrate	5 x 1E3	1.0	50	50	100	S. aureus in 1.0 g are not allowed
1.9.8.6. Glucose-fructose syrup	1 x 1E5	1.0	25	50	100	
1.9.8.7. Glucose granules with juice additives	1 x 1E4	1.0	25	50	100	

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1.9.9. Food yeast, protophyte biomass, starter bacteria cultures	Toxic elements:  lead arsenic cadmium mercury	  1.0 0.2 0.2 0.03	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:				
Index, group of products	Mass of products (g), in which the indicator is not allowed			Note
	Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	
1	2	3	4	5
1.9.9.1. Bakery yeast powder	0.01	0.1	25	
1.9.9.2. Compressed bakery yeast	0.001	0.1	25	moulds - 100 CFU/g, not more than
1.9.9.3. Lyophilized starter cultures (for production of fermented meat)	1.0	1.0	10	sulfite-reducing clostridia in 1 g are not allowed; quantity of microorganisms of technological microflora - not less than 1E9 - for cultures, 1E10 CFU/ cm <sup>3</sup> - for concentrates; yeast - 10 and moulds - 10 CFU/g, not more than
1.9.9.5. Protophyte biomass, yeast biomass for industrial processing	1.0	1.0	25	QMAFAnM - 1 x 1E4 CFU/g, not more than; yeast - 50 and moulds - 50 CFU/g, not more than; presence of living cells of producers in 1 g is not allowed

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.9.10. Dry food broth	Toxic elements:		
	lead	1.0	
	arsenic	1.0	
	cadmium	0.2	
	mercury	0.1	
	Pesticides:	0.1	in terms of original product
	hexachlorocyclohexane (alpha-, beta-, gamma-isomers)		
	DDT and its metabolites	0.1	
	Microbiological indicators	according to Clause 1.9.14.7	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			
1.9.11. Xylitol, sorbitol, mannitol, etc. sugar alcohols	Toxic elements:		
	lead	1.0	
	arsenic	2.0	
	cadmium	0.05	
	mercury	0.01	
	nickel	2.0	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)			

Microbiological indicators:					
Index, group of products	QMAFANM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria (coliforms)	Pathogenic, including salmonella	Note
1.9.11.1. Xylitol, sorbitol, mannitol, etc. sugar alcohols	1 x 1E4	1.0	25	1 x 1E2	



Index, group of products	Indicators	Permissible levels, mg/kg, not more than		Note
1	2	3		4
1.9.12. Cooking and medicated salt	Toxic elements:			
	lead arsenic cadmium mercury	2.0 1.0 0.1 0.1 0.01		"Extra", medicated
	iodine	0.04		mg/g, iodine-treated; when establishing the permissible level - 0.04 +/- 0.015
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
1.9.13. Crystallized aminoacids and their mixtures;	Toxic elements:			
	lead arsenic cadmium mercury	1.0 1.0 0.1 0.03		
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Microbiological indicators:				
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Moulds, CFU/g not more than	Note
		Coliform bacteria (coliforms)	Pathogenic, including salmonella	
1.9.13.1. Crystallized aminoacids and their mixtures;	1 x 1E3	1.0	25	1 10

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1.9.14. Food concentrates	Toxic elements <*>	in terms of original product	
	Radionuclides <*>		
	Dioxins <*>:	in terms of original product (in terms of fat)	

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

Microbiological indicators:							
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed	Coliform bacteria (coliforms)	Sulphite-reducing clostridia	S. aureus	Pathogenic, including salmonella	Note
1	2	3	4	5	6	7	8
1.9.14.1. Powder cooking sauces (of heat dehydration)	1 x 1E4	0.01	1.0	1.0	25	100	
1.9.14.2. Powder seasonings with vegetable additives, spices and herbs (of heat dehydration)	1 x 1E4	0.01	1.0		25	100	B. cereus - 100 CFU/g, not more than
1.9.14.4. Concentrated dinner dishes not requiring cooking (instant soups)	5 x 1E4	0.1	-	0.1	25	100	
1.9.14.5. Starters and main courses of extrusion technology, not requiring cooking	5 x 1E4	1.0	-	1.0	25	100	B. cereus - 100 CFU/g, not more than

1.9.14.6. Multicomponent dry soups, requiring cooking (vegetable soups with smoked products, meat and chicken soups with pasta, meat and chicken -mash, -vegetable mash)	5 x 1E4	0.01	0.01		25	500	
1.9.14.8. Dry mushroom soups, requiring cooking	5 x 1E4	0.001	0.01	-	25	500	

ConsultantPlus: note:

The numbering of items is given in accordance with the official text of the document.

1.9.14.7. Broths - powder concentrates with spices, requiring cooking	5 x 1E4	1.0	0.01		25	200	
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ConsultantPlus: note:

The numbering of items is given in accordance with the official text of the document.

1.9.14.9. Dry instant porridge concentrates	1 x 1E4	0.01	-	-	25	100	B. cereus - 100 and yeast - CFU/g, not more than
1.9.14.10. Dry fruit kissels	1 x 1E5	0.01	-	-	25	500	yeast - 500 CFU/g, not more than
1.9.14.11. Dry prophylactic food products - cereal, milk, meat mixtures (of extrusion technology)	5 x 1E3	0.1		1.0	25	100	B. cereus - 10 and yeast - 10, CFU/g, not more than

Microbiological indicators:							
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed					Notes
		Coliform bacteria (coliforms)	E. coli	S. aureus	Proteus	Pathogenic, including salmonella	
1	2	3	4	5	6	7	8
1.9.15. Ready-to-eat culinary products, including products for public catering							
1.9.15.1. Raw vegetable and fruit salads: - without dressing	1 x 1E4	0.1	1.0	1.0		25	L. monocytogenes in 25 g are not allowed the same; yeast - 500, with preserving agents - 200 CFU/g, not more than; moulds - 50 CFU/g, not more than
- with dressing (mayonnaise, sauces, etc.)	5 x 1E4	0.1	1.0	1.0		25	
1.9.15.2. Raw vegetable salads with eggs, canned vegetables, fruit, etc.:							
- without dressing and pickled vegetables	1 x 1E5	0.01	0.1	0.1	0.1	25	L. monocytogenes in 25 g are not allowed

- with dressing (mayonnaise, sauces, etc.)	1 x 1E5	0.01	0.1	0.1	0.1	25	the same; yeast - 500, with preserving agents - 200 CFU/g, not more than; moulds - 50 CFU/g, not more than
1.9.15.3. Salads with pickled, fermented, brined vegetables	-	0.1	0.1	0.1	0.1	25	
1.9.15.4. Salads and vinaigrette with boiled vegetables and dishes with boiled, fried, stewed vegetables: - without brined vegetables and dressing - with dressing (mayonnaise, sauces, etc.)	5 x 1E3 5 x 1E4	0.1 0.1		1.0 1.0	0.1 0.1	25 25	yeast - 500, with preserving agents - 2 00 CFU/g, not more than; moulds - 50 CFU/g, not more than
1.9.15.5. Salads with meat, poultry, fish, smoked products, etc.:  - without dressing - with dressing (mayonnaise, sauces, etc.)	1 x 1E4 5 x 1E4	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	25 25	yeast - 500, with preserving agents - 2 00 CFU/g, not more than; moulds - 50 CFU/g, not more than
1.9.15.6. Jellied fish (aspic)	1 x 1E3	1.0	-	1.0	0.1	25	

Jellied beef, pork, poultry (aspic)	1 x 1E4	0.1	1.0	0.1	0.1	25	
Meat and liver pate	1 x 1E4	0.1	1.0	0.1	0.1	25	
Boiled beef, poultry, rabbit, pork, etc. (without dressing and sauce)	1 x 1E4	1.0		1.0	0.1	25	without dressing and sauce

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Boiled and fried fish with marinade	1 x 1E4	1.0		1.0	0.1	25	
1.9.15.7. Cold soups:							
- meat and vegetable soups with kvass, kefir; beet-root soup, botvinia		0.01	0.1	0.1	0.1	25	
- beet-root and cabbage soup with meat, fish, egg (without a sour cream dressing)	1 x 1E4	0.01	0.1	0.1	0.1	25	without a sour cream dressing
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)							
- sweet soups and cream soups with canned and desiccated fruits and berries	1 x 1E3	1.0		1.0		25	
1.9.15.8. Hot soups and other hot dishes:							
- beet-root soup, cabbage soup, pickled cucumber soup, spicy soup, saltwort, vegetable soup, broth	5 x 1E2	1.0				25	
- soups with pasta and potato, vegetables, legumes, cereals; milk soups with the same ingredients	5 x 1E2	1.0		1.0		25	
- cream soups	5 x 1E2	1.0	1.0	1.0		25	
1.9.15.9. Eggs dishes:							
- boiled eggs	1 x 1E3	1.0	-	1.0		25	
- omelettes with eggs (egg melange, egg powder) with and without vegetables, meat products, etc., egg fillings	1 x 1E3	1.0		1.0	0.1	25	

1.9.15.10. Curd dishes:							
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- dumplings,	5 x 1E2	1.0	-	1.0	-	25	
steamed pudding							
- cheese cakes,	1 x 1E3	1.0		1.0	0.1	25	
baked pudding, curd fillings, pies							
1.9.15.11. Fish dishes:							
- boiled, stewed, fried, baked fish	1 x 1E3	1.0		1.0	0.1	25	
- fish cutlets (stuffed cutlets, schnitzel, meatballs with tomato sauce); baked dishes, pies	2.5 x 1E3	1.0		1.0	0.1	25	
1.9.15.12. Meat and meat product dishes: boiled, fried, stewed meat, pilaf, ravioli, meat pies, pancakes, chopped meat dishes, including baked dishes, etc.	1 x 1E3	1.0		1.0	0.1	25	
1.9.15.13. Poultry and rabbit boiled, fried, stewed, baked dishes, chopped poultry dishes, ravioli, pies, etc.	1 x 1E3	1.0		1.0	0.1	25	
1.9.15.14. Garnish: - boiled rice, boiled pasta, mashed potatoes (without dressing), etc.	1 x 1E3	1.0	1.0	1.0	0.1	25	without dressing

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

- boiled, fried potato (without dressing)	1 x 1E3	1.0	-	1.0	0.1	25	
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(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

- stewed vegetables (without dressing)	5 x 1E2	1.0	-	1.0	0.1	25	
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(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

1.9.15.15. Sauces and dressings for main courses	5 x 1E3	1.0	-	1.0	0.1	25	
1.9.15.16. Sweet dishes and beverages:							
- kompots with fresh and canned fruit and berries	5 x 1E2	1.0		1.0		25	
- kompots with dried fruit and berries	5 x 1E2	1.0		1.0		50	
- kissels with fresh and dried fruit and berries, juices, syrups, fruit and berry mash	5 x 1E2	1.0		1.0		50	
- freshly-squeezed fruit and vegetable juices	1 x 1E3	1.0	1.0	1.0		25	in vegetable juices: L. monocytogenes in 25 g are not allowed
- jelly, mousses	1 x 1E3	1.0	-	1.0	-	25	
- creams (citrus, vanilla, chocolate, etc.)	1 x 1E5	0.1		0.1		25	
- apple charlotte	1 x 1E3	1.0	-	1.0	-	25	
- milkshakes	1 x 1E5	0.1	-	1.0	-	25	
- whipped cream	1 x 1E5	0.1		0.1		25	
1.9.15.17.							

Ready-to-eat poultry and fish dishes in consumer packaging, including vacuum- packaged	1 x 1E3	1.0		1.0	0.1	25	sulfite- reducing clostridia in 0.1 g in vacuum- packaged products are not
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							allowed
1.9.15.18. Pizza frozen semi-product	5 x 1E4	0.01	0.1	0.1	-	25	
1.9.15.19. Ready-to-eat pizza	1 x 1E3	1.0	-	1.0	0.1	25	
1.9.15.20. Candy floss	1 x 1E3	1.0	-	-	-	25	
1.9.15.21. Ready-to-eat hamburgers, cheeseburgers, sandwiches	2 x 1E4	0.1	1.0	1.0		25	
1.9.15.21. Flour confectionery products with decoration produced by public catering enterprises	according to Clause 1.5.5						E. coli in 0.1 g are not allowed

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 <\*> It is also required to control residual quantities of the pesticides and the antibiotics used for production of food raw material (see Clauses 3.12, 3.13, 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> Content of toxic elements and radionuclides in food (combined) concentrates must be calculated on the basis of main component(s) both in terms of mass fraction and permissible levels of such contaminants.

Note:

<\*\*\*> the maximum permissible level shall not be applied to products containing less than 1% of fat;

- hereinafter dioxins shall be understood to represent the sum of polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzofurans (PCDF), expressed as a sum of toxic equivalency factors (TEF) according to the WHO scale (WHO-TEFs):

**TOXIC EQUIVALENCY FACTORS (according to WHO scale) <\*>**

Congener	TEF Value
Dibenzo-p-dioxin (PCDD)	
2,3,7,8-Tetrachlorodibenzodioxin	1
1,2,3,7,8-Pentachlorodibenzodioxin	1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,7,8,9-Hexachlorodibenzodioxin	0.1
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	0.01
Octachlorodibenzodioxin	0.0001
Dibenzofurans (PCDF)	
2,3,7,8-Tetrachlorodibenzofuran	0.1
1,2,3,7,8-Pentachlorodibenzofuran	0.05
2,3,4,7,8-Pentachlorodibenzofuran	0.5
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1
1,2,3,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01
Oktachlorodibenzofuran	0.0001

(the note was introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

<\*> 1 pg TEF means that this is a mixture of PCDD and PCDF which corresponds to 1 pg of 2,3,7,8-Tetrachlorodibenzodioxin (TCDD).

### 1.10. Biologically Active Food Additives

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.10.1. BAA primarily based on proteins, aminoacids and their complexes	Safety indicators are regulated subject to Clauses 1.1.16, 1.2.4, 1.9.1, 1.9.2, 1.9.3, 1.9.4, 1.9.13		
1.10.2. BAA primarily based on lipids of animal and vegetable origin:  - BAA based on vegetable oils  - BAA based on fish fat  - BAA based on animal fats  - BAA based on mixed fats	Safety indicators are regulated subject to Sections:  Clauses 1.7.2, 1.7.3  Clause 1.7.8  Clauses 1.7.4, 1.7.5, 1.7.6  by prevailing components		
	Dioxins <***>:	according to Clauses 1.7.2, 1.7.3	BAA based on vegetable oils (in terms of fat)
		according to Clause 1.7.8	BAA based on fish fat (in terms of fat)
		according to Clause 1.7.4	BAA based on animal fats (in terms of fat)
		according to Clauses 1.7.3, 1.7.7	BAA based on mixed fats (in terms of fat)
(as amended by Amendments and Additions No. 10, dated 16.07.2008) approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF			

1.10.3. BAA based on predominantly digestible carbohydrates, including honey with biologically active components added, syrups, etc.	Safety indicators are regulated subject to Clauses 1.5.1, 1.6.2, 1.9.8, 1.5.6. Safety indicators for syrups are estimated by dry substance (Clause 1.5.1)		
1.10.4. BAA based on predominantly dietary fibers (cellulose, gums, pectin, gum resin, microcrystal cellulose, bran, fructooligosaccharides, chitosan and other polysaccharides)	Toxic elements:		
	lead	1.0	
	arsenic	0.2	
	cadmium	0.1	
	mercury	0.03	
	Mycotoxins:		are regulated for raw material
	Pesticides <*>:		
	Hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.5	
	DDT and its metabolites	0.02	
	Heptachlor	not allowed	< 0.002
	Aldrin	not allowed	< 0.002
	Radionuclides:		
	caesium-137	200	Bq/kg
	Strontium-90	100	the same

Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed			Note
		Coliform bacteria (coliforms)	E. coli	Pathogenic, including salmonella	
1.10.4.1.  BAA based on predominantly dietary fibers (cellulose, gums, pectin, gum resin, microcrystal cellulose, bran, fructooligosaccharides, chitosan and other polysaccharides), including fibers with prebiotic effect	5 x 1E4	0.1	1.0	25	yeast and moulds - 100 CFU/g, not more than
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 Chief State Sanitary Inspector of the RF dated 15.04.2003)					

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.10.5.  BAA based on pure substances (vitamins, mineral substances, organic acids, etc.) and their concentrates (vegetable extracts, etc.) with the use of different filling agents, including dry concentrates for beverages	Toxic elements:		
	lead	5.0	
	arsenic	3.0	
	cadmium	1.0	
	mercury	1.0	
	Pesticides <*>:		
	hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.1	for composites with included vegetable components
	DDT and its metabolites	0.1	
	Heptachlor	not allowed	< 0.002
	Aldrin	not allowed	< 0.002
	Radionuclides:		for composites with included vegetable components
	caesium-137	200	Bq/kg
	Strontium-90	100	the same



Microbiological indicators:					
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed			Note
		Coliform bacteria (coliforms)	E. coli	Pathogenic, including salmonella	
1.10.5.1.  BAA based on pure substances (vitamins, mineral substances, organic acids, etc.) or their concentrates (vegetable extracts, etc.) with the use of different filling agents, including dry concentrates for beverages	5 x 1E4	0.1	1.0	10.0	yeast and moulds - 100 CFU/g, not more than

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1.10.6.  BAA based on natural minerals (zeolites, etc.), including Shilajit	Toxic elements:		
	lead	6.0	
	arsenic	3.0	
		12.0	Shilajit
	cadmium	1.0	
	mercury	1.0	
	Radionuclides:		
	caesium-137	200	Bq/kg
	Strontium-90	100	the same

Microbiological indicators:						
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed			B. cereus, CFU/g, not more than	Note
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella		
1.10.6.1. BAA based on natural minerals (zeolites, etc.), including Shilajit	1 x 1E4	0.1	1.0	10.0	200	yeast and moulds - 100 CFU/g, not more than

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.10.7. BAA on vegetative basis, including farina - dry (tea)	Toxic elements:		
	lead	6.0	
	arsenic	0.5	
	cadmium	1.0	
	mercury	0.1	
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.1	
- liquid (elixirs, balms, tinctures, etc.)	DDT and its metabolites	0.1	
	heptachlor	not allowed	< 0.002
	aldrin	not allowed	< 0.002
	Toxic elements:		
	lead	0.5	
	arsenic	0.05	
	cadmium	0.03	
	mercury	0.01	
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.1	
	DDT and its metabolites	0.1	
	heptachlor	not allowed	< 0.002
	aldrin	not allowed	< 0.002

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

Microbiological indicators:								
Index, group of products	QMAFAnM, CFU/g, not more than	Mass of products (g) in which the indicator is not allowed Coliform bacteria (coliforms)	E. coli	S. aureus	Pathogenic, including salmonella	Yeast, CFU/g, not more than	Moulds, CFU/g, not more than	Note
1	2	3	4	5	6	7	8	9
1.10.7.1.  BAA on the vegetative basis, including farina: - tableted, capsular, powder  - tableted, capsular, powder with probiotic microorganisms added	1 x 1E4	0.1	1.0	1.0	10	100	100	B. cereus 200 CFU/g, not more than Probiotic microorganisms: 1 x 1E5 CFU/g not less than
- liquid of aseptic bottling	Shall satisfy requirements for industrial sterility for canned food of the corresponding groups in accordance with Annex 8 to these Sanitary Rules							
- liquid in the form of syrups, elixirs, tinctures, balms, etc.	5 x 1E3	1.0			10	50	50	B. cereus 200 CFU/g, not more than
- dry medicinal plant mixtures (tea)	5 x 1E5	0.01	0.1		10	100	1E3	
- BAA - tea (for children dry)	5 x 1E3	0.1	1.0	1.0	25	50	50	B. cereus 200 CFU/g, not more than

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.10.8. Meat and milk stock derived BAA, including offal, poultry; arthropods, amphibians, beekeeping products (royal jelly, propolis, etc.) - dry	Toxic elements:		
	lead	1.0	
	arsenic	1.5	
	cadmium	1.0	
	mercury	0.2	
	Mycotoxins: aflatoxin M1	0.0005	for milk stock derived BAA
- meat stock derived BAA, including poultry offal	Antibiotics <*>:		
	laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
		0.0003	Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	
	(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
- milk stock derived BAA	laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
		0.0003	Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	streptomycin	0.2	
	penicillins	0.004	
	(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.1	

	DDT and its metabolites	0.1	
	Heptachlor	not allowed	< 0.002
	aldrin	not allowed	< 0.002
	Microbiological indicators: QMAFAnM 1 x 1E4		CFU/g, not more than
	Coliform bacteria (coliforms)	0.1	mass (g) in which the indicator is not allowed
	E. coli	1.0	the same
	S. aureus	1.0	the same
	Pathogenic, including salmonella	10.0	the same
	Yeast and moulds	200	CFU/g, not more than, for beekeeping products
	Dioxins <***>:	according to Clauses 1.1.1, 1.1.2, 1.1.9, 1.1.10	meat stock derived BAA, including poultry offal (in terms of fat)
		according to Clause 1.2.1	milk stock derived BAA (in terms of fat)
Melamine not allowed < 1 mg/kg (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)			
1.10.9.			
BAA based on fish, marine invertebrates, crustaceans, molluscs, and other seafood, plant marine organisms (algae, etc.) - dry	Toxic elements:		
	lead	10.0	
	arsenic	12.0	
	cadmium	2.0	
	mercury	0.5	
	Pesticides <*>:		
	hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.2	
	DDT and its metabolites	0.2	
	Heptachlor	not allowed	< 0.002
	Aldrin	not allowed	< 0.002
	Radionuclides:		
	caesium-137	200	Bq/kg
	Strontium-90	100	the same
	Microbiological indicators:		

QMAFAnM,	1 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	0.1	Mass (g) in which the indicator is not allowed
E. coli	1.0	the same
S. aureus	1.0	the same
Pathogenic, including salmonella	10.0	the same
Yeast and moulds	200	CFU/g, not more than <*> for BAA based on plant marine organisms
Dioxins <***>:	according to Clause 1.3.1	BAA based on fish
	according to Clause 1.3.6	BAA based on fish fat

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

Index, group of products	Indicators				Permissible levels, mg/kg, not more than		Note
1.10.10. BAA - based on probiotic microorganisms	Toxic elements lead arsenic cadmium mercury				0.1 0.05 0.03 0.005		
	Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma-isomers), DDT and its metabolites Heptachlor Aldrin				0.05    0.05		< 0.002   < 0.002
	Microbiological indicators:						
Index, group of products	Mass of products (g), in which the indicator is not allowed				Yeast, CFU/g not more than	Moulds, CFU/g, not more than	Note
	Coliform bacteria (coliforms)	E. coli	S. aureus	Pathogenic, including salmonella			
1	2	3	4	5	6	7	8
1.10.10.1. BAA - based on probiotic microorganisms:							
- BAA - dry based on pure microorganism cultures	2.0		2.0	10.0	10	10	probiotic microorganisms not less than 1 x 1E9 CFU/g
- BAA - dry based on pure microorganism cultures with addition of aminoacids, microelements, mono-, di- and oligosaccharides, etc.)	1.0	5.0	1.0	10.0	50	50	Probiotic microorganisms not less than 1 x 1E8 CFU/g



- BAA – liquid based on pure microorganism cultures concentrated	10.0		10.0	50.0	10 <*>	probiotic microorganisms not less than 1 x 1E10 CFU/g <*> yeast and moulds in total
- BAA – liquid based on pure microorganism cultures non-concentrated	10.0		10.0	50.0	10 <*>	Probiotic microorganisms not less than 1 x 1E7 CFU/g; <*> the same

Index, group of products	Indicators	Permissible levels, mg/kg, not more than	Note
1	2	3	4
1.10.11. BAA based on unicellular algae (spirulina, chlorella, etc.), yeast and their lysates	Toxic elements:		
	lead	2.0	
	arsenic	1.0	
	cadmium	1.0	
	mercury	0.1	
	Nitrates	1000	for BAA based on algae
	Pesticides <*>:		
	Hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.1	
	DDT and its metabolites	0.1	
	heptachlor	not allowed	< 0.002
	aldrin	not allowed	< 0.002
	Radionuclides:		
	caesium-137	200	Bq/kg
Strontium- 90	100	the same	
Microbiological indicators:			
QMAFAnM,	1 x 1E4	CFU/g, not more than	
Coliform bacteria (coliforms)	0.1	Mass (g) in which the indicator is not allowed	
E. coli	1.0	the same	
Pathogenic, including salmonella	10.0	the same	
Yeast	10 100	CFU/g, not more than, for yeast and their lysates, the same for algae	
Moulds	50 100	CFU/g, not more than, for yeast and their lysates, the same for algae	
	Living cells of producers	for yeast and their lysates in 1.0 g are not allowed	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)			

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<\*> It is also required to control residual quantities of the pesticides and the antibiotics used for production of food raw material (see Clauses 3.12, 3.13, 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> If grizin, bacitracin, antibiotics of tetracycline group are determined with the use of chemical methods of determination, re-calculation of their actual content in unit/g shall be carried out according to the standard activity.

Note:

<\*\*\*> the maximum permissible level shall not be applied to products containing less than 1% of fat;

- hereinafter dioxins shall be understood to represent the sum of polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzofurans (PCDF), expressed as a sum of toxic equivalency factors (TEF)

TOXIC EQUIVALENCY FACTORS (according to WHO scale) <*>	
Congener	TEF value
Dibenzo-p-dioxin (PCDD)	
2,3,7,8-Tetrachlorodibenzodioxin	1
1,2,3,7,8-Pentachlorodibenzodioxin	1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.1
1,2,3,7,8,9-Hexachlorodibenzodioxin	0.1
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	0.01
Octachlorodibenzodioxin	0.0001
Dibenzofurans (PCDF)	
2,3,7,8-Tetrachlorodibenzofuran	0.1
1,2,3,7,8-Pentachlorodibenzofuran	0.05
2,3,4,7,8-Pentachlorodibenzofuran	0.5
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1
1,2,3,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01
Oktachlorodibenzofuran	0.0001

(the note was introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

<\*> 1 pg TEF means that this is a mixture of PCDD and PCDF which corresponds to 1 pg of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD).

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

## 2.1. HYGIENIC REQUIREMENTS FOR NUTRITION VALUE OF SPECIFIC FOOD PRODUCTS

Excluded. - Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003

## 2.2. CRITERIA FOR NUTRITION VALUE OF FRUIT AND VEGETABLE JUICES

Organic acids, hydrocarbons, 5-oxymethylfurfural, Na and K  
cations

Type of juice	BRIX	Ascorbic acid mg/l	Lemon acid g/l	Malic acid g/l	Oxymethylfurfural, g/l	Fructose, g/l	Glucose, g/l	Glucose / Fructose	Sucrose, g/l	Sorbitol, g/l	Na, mg/l	K, mg/l
Orange	10.0	>= 200	6.3 - 17.0	0.8 - 3.0	<= 10	20 - 50	20 - 50	1	10 - 50	-	<= 30	1300 - 2500
Grapefruit	9.5	>= 200	8.0 - 20.0	0.2 - 12.0	<= 10	20 - 50	20 - 50	0.9 - 1.02	5 - 40	-	<= 30	900 - 2000
Apple	10.0	-	0.05 - 0.2	> 3.0	<= 20	45 - 85	15 - 35	0.3 - 0.5	5 - 30	2.5 - 7.0	<= 30	900 - 1500
Grape <*>	13.5	-	0 - 0.5	2.5 - 7.0	<= 20	60 - 110	60 - 110	1.0	no		<= 30	900 - 2000
Pineapple	11.2	>= 50	3.0 - 11.0	1.0 - 4.0	<= 20	15 - 40	15 - 40	0.8 - 1.1	25 - 80	-	<= 30	900 - 2000
Apricot (mash)	10.2 (11.2)	-	1.5 - 16.0	5 - 20	<= 20	10 - 45	15 - 50	1.0 - 2.5	< 55	1.5 - 10	<= 35	2000 - 4000
Tomato	5.0	-	2.0 - 5.0	0.1 - 0.6	<= 20	12 - 18	10 - 16	0.8 - 1.0	< 1	-	<= 100	1500 - 3500

Black currant (mash)	11.6	>= 750	26.0 - 42.0	1 - 4	<= 20	30 - 65	23 - 50	0.6 - 0.9	0 - 5	-	<= 30	2300 - 4100
Cherry	13.5	-	0.0 - 0.4	15.5 - 27.0	<= 20	32 - 60	35 - 70	1.0 - 1.35	no	10 - 35	<= 30	1600 - 3500
Peach	10.0	-	1.5 - 5.0	2.0 - 6.0	<= 20	10 - 32	7.5 - 25	0.8 - 1.0	12 - 60	1 - 5	<= 35	1400 - 3300
Strawberry	7.0	-	5 - 11	0.6 - 5.0	<= 20	18 - 40	15 - 35	0.75 - 1.0	< 10	< 0.25	<= 40	1300 - 2800
Pear	11.9	-	< 4.0	0.8 - 5.0	<= 20	50 - 90	10 - 35	< 0.4	0 - 15	-	<= 30	1000 - 2000
Lemon	8.0	>= 150	45 - 63	1.0 - 7.5	<= 20	3 - 12	3 - 11	0.9 - 1.3	< 7.0	-	<= 30	1100 - 2000

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<\*> Tartaric acid 2.0 - 7.0 g/l.

Annex 3  
to SanPin 2.3.2.1078-01, approved by Resolution  
No. 36 of Chief State Sanitary Inspector of the RF  
as of November 14, 2001

### 3. HYGIENIC REQUIREMENTS FOR SAFETY AND NUTRITION VALUE OF BABY FOOD

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008, Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010, Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010, Amendment No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)

#### 3.1. Infant Food Products

##### 3.1.1. Milk-based products

##### 3.1.1.1. Adapted infant formula (powder, liquid, flavourless and fermented)

##### 1) Nutritional value (in a ready-to-use product)

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

Criteria and indices	Measurement Units	Permissible levels		Note
		standard	marked	
1	2	3	4	5
For 0-5 month-old children				
Protein <1>	g/l	12 - 17	+	
Milk whey proteins	% of total protein quantity, not less than	50	+	
Taurine	mg/l	40 - 60	+	
Fat <2>	g/l	30 - 40	+	
Linoleic acid	% of the sum of fatty acids	14 - 20	+	
Linoleic acid	mg/l	4000 - 8000	-	

Alpha - tocopherol /polyunsaturated fatty acids ratio		1 - 2		
Hydrocarbons <3>	g/l	65 - 80	+	
Lactose	% of total hydrocarbon quantity, not less than	65	+	
Energy value	kcal/l	640 - 700	+	
Mineral substances:				
calcium	mg/l	330 - 700	+	
phosphorus	mg/l	150 - 400	+	
calcium/phosphorus ratio	-	1.2 - 2.0	-	
potassium	mg/l	400 - 800	+	
sodium	mg/l	150 - 300	+	
potassium/sodium ratio	-	2.5 - 3	-	
magnesium	mg/l	30 - 90	+	
copper	mkg/l	300 - 600	+	
manganese	mkg/l	10 - 300	+	
iron	mg/l	3 - 9	+	
zinc	mg/l	3 - 10	+	
chlorides	mg/l	300 - 800	-	
iodine	mkg/l	50 - 150	+	
selenium	mkg/l	10 - 40	+	
ash	g/l	2.5 - 4.0	+	
Vitamins:				
retinol (A)	mkg-eq/l	400 - 1000	+	
tocopherol (E)	mg/l	4 - 12	+	
calciferol (D)	mkg/l	7.5 - 12.5	+	
vitamin K	mkg/l	25 - 60	+	
thiamine (B1)	mg/l	0.4 - 2.1	+	
riboflavin (B2)	mg/l	0.5 - 2.8	+	
pantothenic acid	mg/l	2.7 - 14.0	+	
pyridoxine (B6)	mg/l	0.3 - 1.0	+	

niacin (PP)	mg/l	2.0 - 10.0	+	
folic acid (Bc)	mkg/l	60 - 350	+	
cyanocobalamin (B12)	mkg/l	1 - 3	+	
ascorbic acid (C)	mg/l	55 - 150	+	
inosite	mg/l	20 - 280	+	
choline	mg/l	50 - 350	+	
biotin	mkg/l	10 - 40	+	
L-carnitine	mg/l	10 - 20	+	
Nucleotides (sum of cytidine-, uridine-, adenosine-, guanosine- and inosine-5 monophosphates)	mg/l, not more than	35	+	
Acidophilic microorganisms <4>	CFU/cm <sup>3</sup> , not less than	7 1 x 10	+	In fermented milk products (in production with the use of them)
Bifidobacterium <4>	the same	6 1 x 10	+	the same
Lactic acid microorganisms <4>	the same	7 1 x 10	+	the same
Osmolality	mOsm/l	290 - 320	+	
Acidity	0 Turner, not more than	90	-	for liquid fermented milk products
For 5-12 month-old children				
Protein <1>	g/l	12 - 21	+	
Milk whey proteins	% of total protein quantity, not less than	not less than 35	+	
Fat <2>	g/l	25 - 40	+	
Linoleic acid	% of the sum of fatty acids	14 - 20	+	



Linoleic acid	mg/l	4000 - 8000	-	
Hydrocarbons <3>	g/l	70 - 90	+	
Lactose	% of total hydrocarbon quantity, not less than	65	+	
Energy value	kcal/l	640 - 750	+	
Mineral substances:				
calcium	mg/l	400 - 900	+	
phosphorus	mg/l	200 - 600	+	
calcium/phosphorus ratio	-	1.2 - 2.0	-	
potassium	mg/l	500 - 900	+	
sodium	the same	150 - 300	+	
potassium/sodium ratio	-	2 - 3	-	
magnesium	mg/l	50 - 100	+	
copper	mkg/l	400 - 1000	+	
manganese	mkg/l	10 - 300	+	
iron	mg/l	7 - 14	+	
zinc	mg/l	4 - 10	+	
chlorides	mg/l	300 - 800	-	
iodine	mkg/l	50 - 350	+	
selenium	mkg/l	10 - 40	+	
ash	g/l	2.5 - 6.0	+	
Vitamins:				
retinol (A)	mkg-eq/l	400 - 800	+	
tocopherol (E)	mg/l	4 - 12	+	
calciferol (D)	mkg/l	8 - 21	+	
vitamin K	mkg/l	25 - 170	+	
thiamine (B1)	mg/l	0.4 - 2.1	+	
riboflavin (B2)	mg/l	0.5 - 2.8	+	
panthotenic acid	mg/l	3.0 - 14.0	+	
pyridoxine (B6)	mg/l	0.4 - 1.2	+	

niacin (PP)	mg/l	3.0 - 10.0	+	
folic acid (Bc)	mkg/l	60 - 350	+	
cyanocobalamin (B12)	mkg/l	1.5 - 3.0	+	
ascorbic acid (C)	mg/l	55 - 150	+	
choline	mg/l	50 - 350	+	
biotin	mkg/l	10 - 40	+	
inosite	mg/l	20 - 280	+	
L-carnitine	mg/l	5 - 20	-	
Nucleotides (sum of cytidine-, uridine-, adenosine-, guanosine- and inosine-5 monophosphates)	mg/l, not more than	35	+	
Acidophilic microorganisms <4>	CFU/cm3, not less than	7 1 x 10	+	in fermented milk products (in production with the use of them)
Bifidobacterium <4>	the same	6 1 x 10	+	the same
Lactic acid microorganisms <4>	the same	7 1 x 10	+	the same
Osmolality	mOsm/l	290 - 320	+	
Acidity	0 Turner, not more than	90	-	for liquid fermented milk products
For 0-12 month-old children				
Protein <1>	g/l	12 - 21	+	
Milk whey proteins	% of total protein quantity, not less than	50	+	
Taurine	mg/l	40 - 60	+	
Fat <2>	g/l	30 - 40	+	
Linoleic acid	% of the sum of fatty acids	14 - 20	+	

Linoleic acid	mg/l	4000 - 8000	-	
Alpha - tocopherol /polyunsaturated fatty acids ratio	-	1 - 2	-	
Hydrocarbons <3>	g/l	65 - 80	+	
Lactose	% of total hydrocarbon quantity, not less than	65	+	
Energy value	kcal/l	640 - 720	+	
Mineral substances:				
calcium	mg/l	400 - 900	+	
phosphorus	mg/l	200 - 600	+	
calcium/phosphorus ratio	-	1.2 - 2.0	-	
potassium	mg/l	400 - 800	+	
sodium	mg/l	150 - 300	+	
potassium/sodium ratio	-	2.5 - 3	-	
magnesium	mg/l	40 - 100	+	
copper	mkg/l	300 - 1000	+	
manganese	mkg/l	10 - 300	+	
iron	mg/l	6 - 10	+	
zinc	mg/l	3 - 10	+	
chlorides	mg/l	300 - 800	-	
iodine	mkg/l	50 - 350	+	
selenium	mkg/l	10 - 40	+	
ash	g/l	2.5 - 6.0	+	
Vitamins:				
retinol (A)	mkg-eq/l	500 - 800	+	
tocopherol (E)	mg/l	4 - 12	+	
calciferol (D)	mkg/l	8 - 21	+	
vitamin K	mkg/l	25 - 170	+	
thiamine (B1)	mg/l	0.4 - 2.1	+	
riboflavin (B2)	mg/l	0.5 - 2.8	+	
panthotenic acid	mg/l	2.7 - 14.0	+	

pyridoxine (B6)	mg/l	0.3 - 1.2	+	
niacin (PP)	mg/l	3.0 - 10.0	+	
folic acid (Bc)	mg/l	60 - 350	+	
cyanocobalamin (B12)	mg/l	1.5 - 3.0	+	
ascorbic acid (C)	mg/l	55 - 150	+	
inosite	mg/l	20 - 280	+	
choline	mg/l	50 - 350	+	
biotin	mg/l	10 - 40	+	
L-carnitine	mg/l	5 - 20	+	
Nucleotides (sum of cytidine-, uridine-, adenosine-, guanosine- and inosine-5 monophosphates)	mg/l, not more than	35	+	
Acidophilic microorganisms <4>	CFU/cm <sup>3</sup> , not less than	7 1 x 10	+	in fermented milk products (in production with the use of them)
Bifidobacterium <4>	the same	6 1 x 10	+	the same
Lactic acid microorganisms <4>	the same	7 1 x 10	+	the same
Osmolality	mOsm/l	290 - 320	+	
Acidity	0 Turner, not more than	90	-	for liquid fermented milk products

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Note:

<1> - provided that the protein content in the formula is approximated to the maximum to the protein content in the breast milk;

<2> - the use of sesame and cottonseed oil is prohibited;

the content of trans-isomers must not exceed 3% of the content of common fats;

the total content of myristic and lauric acids must not exceed 20% of the content of common fats;

the ratio of linoleic acid to alpha-linolenic acid must not be less than 5 and more than 15;

when enriching the formulas with long chain fatty acids their content must not exceed 1% of the total fat content for w-3 long chain polyunsaturated fatty acids and 2% for w-6 long chain polyunsaturated fatty acids;

the content of eicosapentaenoic acid must not exceed the content of docosahexaenoic acid;

<3> - along with lactose maltodextrin and maltose may be used; the content of sucrose and (or) fructose or their sum must not exceed 20% of the total hydrocarbon content; the hydrocarbon component may include prebiotics - galactooligosaccharides and fructooligosaccharides (in total not more than 0.8% of the product mass) and lactulose;

<4> - for dry and liquid fermented milk formulas.

## 2) Safety indices (in a ready-to-eat product)

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration:  Peroxide value	4.0	mmol of active oxygen/kg fat
Toxic elements:  lead arsenic cadmium mercury  (as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)	0.02 0.05 0.02 0.005	
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
tetracycline group	0.01	
penicillins	0.004	
streptomycin  (as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)	0.2	
Mycotoxins: Aflatoxin M1	not allowed	< 0.00002
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma-isomers)	0.02	
DDT and its metabolites	0.01	
Radionuclides:  caesium-137 Strontium-90	40 25	Bq/l the same
Dioxins  (introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)	not allowed	

Melamine not allowed < 1 mg/kg (introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		
Microbiological indicators:		
DRY MILK INSTANT INFANT FORMULAS (FLAVOURLESS AND FERMENTED)		
QMAFAnM,	2 x 1E3	CFU/g, not more than, for formulas reconstituted at 37 - 50 degrees C; for fermented milk formulas the norms are not established
	3 x 1E3	CFU/g, not more than, for formulas reconstituted at 70 - 85 degrees C; for fermented milk formulas the norms are not established
Coliform bacteria (coliforms)	1.0	Mass (g) in which the indicator is not allowed
E. coli	10	the same
S. aureus	10	the same
B. cereus	100	CFU/g, not more than
Pathogenic, including salmonella and L. monocytogenes	100	Mass of products (g) in which the indicator is not allowed
Moulds	50	CFU/g, not more than
Yeast	10	the same
Acidophilic microorganisms	1 x 1E7	CFU/g, not less than, in fermented milk products (in production with the use of them)
Bifidobacteria	1 x 1E6	the same
Lactic acid	1 x 1E7	CFU/g, not less than, in fermented milk products
microorganisms (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
STERILIZED FLAVOURLESS LIQUID INFANT FORMULAS		
Produced in industrial environment with UHT treatment and aseptic bottling	Shall satisfy requirements for industrial sterilized milk in accordance with Annex 10	

LIQUID FERMENTED MILK FORMULAS		
Coliform bacteria (coliforms)	3	volume (cm3), in which the indicator is not allowed
E. coli	10	the same
S. aureus	10	the same
Pathogenic, including salmonella	50	the same
Acidophilic microorganisms	1 x 1E7	CFU/cm3, not less than (in production with the use of them)
Bifidobacteria	1 x 1E6	the same
Lactic acid microorganisms	1 x 1E7	CFU/cm3, not less than, in fermented milk products
Moulds	10	CFU/cm3, not more than
Yeast	10	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		

3.1.1.2. Partially adapted infant formulas, including other formulas (powder, liquid, flavourless and fermented)

1) Nutritional value (in a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g/l	18 - 22	+	
Milk whey proteins	% of total protein quantity	20 - 50		
Casein	the same	50 - 80	-	
Fat	g/l	25 - 38	+	
Linoleic acid	% of the sum of fatty acids, not less than	14	+	
the same	mg/l, not less than	5 x 1E3 - 6 x 1E3	-	
Hydrocarbons	g/l	70 - 90	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Energy value	kcal/l	640 - 800	+	
Mineral substances:				
calcium	mg/l	600 - 900	+	
phosphorus	the same	300 - 500	+	
potassium	mg/l	600 - 900	+	
sodium	the same	250 - 350	+	
magnesium	mg/l	50 - 100	+	
copper	mkcg/l	400 - 1000	+	
manganese	the same	30 - 80	+	
iron	mg/l	5 - 14	+	

zinc	the same	4 - 10	+	
ash	g/l	4 - 5	+	
Vitamins:				
retinol (A)	mkg-eq/l	600 - 800	+	
tocopherol (E)	mg/l	5 - 12	+	
calciferol (D)	mkg/l	10 - 12	+	
thiamine (B1)	the same	400 - 800	+	
riboflavin (B2)	the same	600 - 1000	+	
panthotenic acid	the same	2500 - 3500	+	
pyridoxine (B6)	the same	500 - 700	+	
niacin (PP)	the same	4000 - 8000	+	
folic acid (Bc)	the same	50 - 150	+	
cyanocobalamin (B12)	the same	1.5 - 3.0	+	
ascorbic acid (C)	mg/l	50 - 100	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Osmolality	mOsm/kg	320 - 360	+	

## 2) Safety indices (in a ready-to-eat product)

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration: Peroxide value	4.0	mmol of active oxygen/kg fat
Toxic elements, antibiotics, mycotoxins, pesticides and radionuclides	according to Clause 3.1.1.1	
Dioxins are not allowed (introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine is not allowed < 1 mg/kg (introduced by Amendments No. 11, Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008,		
Microbiological indicators:		
INSTANT FORMULAS		
QMAFAnM,	2 x 1E3	CFU/g, not more than, for formulas reconstituted at 37 - 50 degrees C
	3 x 1E3	CFU/g, not more than, for formulas reconstituted at 70 - 85 degrees C



Coliform bacteria (coliforms)	1.0	Mass (g) in which the indicator is not allowed
E. coli	10	the same
S. aureus	10	the same
B. cereus	100	CFU/g, not more than
Pathogenic, including salmonella and L. monocytogenes	100	Mass (g) in which the indicator is not allowed
Moulds	50	CFU/g, not more than
Yeast	10	the same
FORMULAS REQUIRING HEAT TREATMENT		
QMAFAnM,	2.5 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	Mass (g) in which the indicator is not allowed
S. aureus	1.0	the same
B. cereus	200	CFU/g, not more than
Pathogenic, including salmonella and L. monocytogenes	50	Mass (g) in which the indicator is not allowed
Moulds	100	CFU/g, not more than
Yeast	50	the same

### 3.1.1.3. Sterilized milk (including vitaminized milk)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g	2.8 - 3.2	+	prophylactic food products
Fat	the same g, not less than	3.2 - 3.5	+	
		2.0		
Energy value	kcal	55 - 65	+	
Ash	g	0.6 - 0.8	-	
Mineral substances:				
Calcium	mg	115 - 140	+	
phosphorus	the same	90 - 120	+	
Potassium	the same	140 - 180	-	
Sodium	mg, not more than	60		
Vitamins:				
Retinol (A)	mkg-eq	100 - 200	-	for vitaminized products
Beta-carotene	the same	0.05 - 0.1		the same
Thiamine (B1)	the same	0.1 - 0.2	-	the same
Riboflavin (B2)	the same	0.1 - 0.2	-	the same
Ascorbic acid (C)	the same	2 - 8	+	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				

2) Safety indices (in a ready-to-eat product)  
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Indicators	Permissible levels, mg/kg, not more than	Notes
Indications of oxidative deterioration, toxic elements, antibiotics, mycotoxins, pesticides and radionuclides	according to Clause 3.1.1.1	
Microbiological indicators	Shall satisfy requirements for industrial sterility for sterilized milk in accordance with Annex 8 to these Sanitary Rules	
Dioxins are not allowed < 1 mg/kg (introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine is not allowed < 1 mg/kg (introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

### 3.1.1.4. Liquid fermented milk products (including products with vegetable and fruit fillings)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g	2.0 - 3.2	+	For prophylactic food products
	g, not more than	4.0	+	
Fat	g	2.5 - 7.0	+	For prophylactic food products
	g, not less than	1.5	+	
Hydrocarbons	the same	4 - 12	-	
Energy value	kcal	40 - 125	+	
Ash	g	0.5 - 0.8	-	
Mineral substances:				
calcium	mg	60 - 140	+	
phosphorus	the same	30 - 120	-	
potassium	the same	140 - 180	-	
sodium	mg, not more than	60		
Vitamins:				
thiamine (B1)	the same	0.05 - 0.1	+	for vitaminized products
riboflavin (B2)	the same	0.1 - 0.2	+	the same
ascorbic acid (C)	the same	2 - 8	+	the same
Acidity	0	100	-	
	T, not more than			

## 2) Safety indices

Indicators	Permissible levels, mg/kg, not more than	Notes
Toxic elements, antibiotics, mycotoxins, pesticides and radionuclides	according to Clause 3.1.1.1	
Microbiological indicators:		
Coliform bacteria (coliforms)	3.0	volume (cm3), in which the indicator is not allowed
E. coli	10.0	the same, for products with the shelf life of more than 72 hours
S. aureus	10.0	volume (cm3), in which the indicator is not allowed
Pathogenic, including salmonella	50	the same
Yeast	10	CFU/cm3, not more than, for products with the shelf life of more than 72 hours
	1E4	for kefir
Moulds	10	CFU/cm3, not more than, for products with the shelf life of more than 72 hours
Lactic acid microorganisms	1 x 1E7	CFU/cm3, not less than
Bifidobacteria	1 x 1E6	CFU/cm3, not less than; in production with the use of them)
Acidophilic microorganisms	1 x 1E7	the same
Microscopic slide	Microflora characteristic of starters for this type of product; absence of cells of external microflora	
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg
(introduced by Amendments No. 11, Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

### 3.1.1.5. Curds and curd products (including products with vegetable and fruit fillings)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g	7 - 17	+	
Fat	the same	3.5 - 15	+	
Hydrocarbons	g, not more than	12	-	
Energy value	kcal	105 - 250	+	
Ash	g	3 - 4	-	
Mineral substances:				
Calcium	mg	150 - 200	+	
Sodium	mg, not more than	50	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Acidity	0	150	+	
	T, not more than			

#### 2) Safety indices

Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration: peroxide value	4.0	mmol of active oxygen/kg of fat, for products with fat content of more than 5 g/100 g and products enriched with vegetable oils
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
Toxic elements:		
Lead	0.06	
Arsenic	0.15	
Cadmium	0.06	
Mercury	0.015	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Antibiotics, mycotoxins and radionuclides	according to Clause 3.1.1.1	

Pesticides	<*>:	0.55	
hexachlorocyclohexane (alpha-, beta-, gamma-isomers)			
DDT and its metabolites		0.33	
Microbiological indicators:			
Coliform bacteria (coliforms)		0.3	Mass (g) in which the indicator is not allowed
E. coli		1.0	The same, for products with the shelf life of more than 72 hours
S. aureus		1.0	Mass (g) in which the indicator is not allowed
Pathogenic, including salmonella		50	The same
Yeast, CFU/g not more than		10	The same, for products with the shelf life of more than 72 hours
Moulds, CFU/g not more than		10	The same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 Chief State Sanitary Inspector of the RF dated 15.04.2003) 1			
Microscopic slide	Microflora characteristic of starters for this type of product; absence of cells of external microflora		
Dioxins	not allowed		
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)			

### 3.1.1.6. Dry milk used for children nutrition

#### 1) Nutritional value (in 100 g of a ready-to-eat product)

Criteria and indices	Measureme nt Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g	2.8 - 3.2	+	
Fat	the same	3.2 - 3.5	+	
Energy value	kcal	56 - 65	+	
Mineral substances:				
Calcium	mg	115 - 140	-	
phosphorus	the same	90 - 120	-	
Potassium	the same	140 - 180	-	
Sodium	mg, not more than	60	-	

## 2) Safety indices

Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration, toxic elements, antibiotics, mycotoxins, pesticides and radionuclides	according to Clause 3.1.1.1	
Microbiological indicators:  - for instant milk  - for milk that requires boiling after reconstitution:	according to Clause 3.1.1.2	
QMAFAnM, Coliform bacteria (coliforms)  S. aureus Pathogenic, including salmonella and L. monocytogenes Moulds Yeast	2.5 x 1E4 1.0  1.0 25  100 50	CFU/g, not more than, mass (g), in which the indicator is not allowed the same the same  CFU/g, not more than the same
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg
(introduced by Amendments No. 11, Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

### 3.1.1.7. Dry and liquid milk beverages (for children aged from 6 months to 3 years)

#### 1) Nutritional value (in 100 g of a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g	2.0 - 5.0	+	
Fat	the same	1.0 - 4.0	+	
Hydrocarbons	the same	7.0 - 12.0	+	
Energy value	kcal	45 - 105		
Mineral substances:				
calcium	mg	105 - 240	+	
phosphorus	the same	65 - 180	+	
potassium	the same	105 - 180	-	
iron	the same	1 - 2	-	for enriched products



(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Vitamins:				
retinol (A)	mkg-eq	80 - 120	+	for vitaminized products
tocopherol (E)	mg	0.7 - 1.2	+	the same
ascorbic acid (C)	the same	5 - 15	+	the same
thiamine (B1)	the same	0.2 - 0.5	+	the same
riboflavin (B2)	the same	0.2 - 0.5	+	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				

## 2) Safety indices

Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration, toxic elements, antibiotics, mycotoxins, pesticides and radionuclides	according to Clause 3.1.1.1	for dry beverages - in terms of reconstituted product
Microbiological indicators:		
LIQUID BEVERAGES		
QMAFAnM,	1.5 x 1E4	CFU/cm3, not more than
Coliform bacteria (coliforms)	0.1	volume (cm3), in which the indicator is not allowed
E. coli	1.0	the same, for products with the shelf life of more than 72 hours
S. aureus	1.0	volume (cm3), in which the indicator is not allowed
Pathogenic, including salmonella and L. monocytogenes	50	the same
Yeast	50	CFU/cm3, not more than, for products with the shelf life of more than 72 hours
Moulds	50	the same
DRY DRINKS REQUIRING HEAT TREATMENT AFTER RECONSTITUTION (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
QMAFAnM,	2.5 x 1E4	CFU/cm3, not more than

Coliform bacteria (coliforms)	1.0	Mass (g) in which the indicator is not allowed
S. aureus	1.0	the same
Pathogenic, including salmonella	25	the same
Moulds	100	CFU/g, not more than
Yeast	50	the same
- DRY INSTANT BEVERAGES	according to Clause 3.1.1.2	Instant formulas
(introduced by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg
(introduced by Amendments No. 11, Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

### 3.1.2. Cereal-Based Complementary Feeding Products

#### 3.1.2.1. Flour and grain requiring cooking

##### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Moisture	g, not more than	9	-	
Protein	g	7 - 14	+	
Fat	the same	0.5 - 7.0	+	
Hydrocarbons	the same	70 - 85	+	
Energy value	kcal	310 - 460	+	
Ash	g	0.5 - 2.5	-	
Mineral substances:				
sodium	mg, not more than	25	-	
iron	mg	1 - 8	-	

## 2) Safety indices

Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3
<b>Toxic elements:</b> lead arsenic cadmium mercury	0.3 0.2 0.06 0.02	
<b>Mycotoxins:</b> aflatoxin B1 deoxynivalenol  zearalenone  T-2 toxin	not allowed not allowed  not allowed  not allowed	< 0.00015 < 0.05 for wheat, barley flour  < 0.05 for maize, wheat, barley flour  < 0.05
<b>Pesticides:</b> hexachlorocyclohexane (alpha-, beta-, gamma-isomers)  DDT and its metabolites hexachlorobenzene mercury organic pesticides 2, 4-D acid, its salts and esters	0.01  0.01 0.01 not allowed not allowed	
Benz(a)pyrene	not allowed	< 0.2 mkg/kg
<b>Radionuclides (in a ready-to-  eat product):</b> caesium-137 Strontium-90	40 25	Bq/kg the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
<b>Harmful contaminants:</b> Pest contamination and infestation of grain (insects, mites) Metallic impurities	not allowed  3 x 1E4	%; size of separate particles shall not exceed 0.3 mm in the largest linear measurement
<b>Microbiological indicators:</b>  QMAFAnM, Coliform bacteria (coliforms)  Pathogenic, including salmonella Moulds Yeast	5 x 1E4  0.1  25 200 100	CFU/g, not more than Mass (g) in which the indicator is not allowed the same  CFU/g, not more than the same

ochratoxin A	not allowed	< 0.0005 for all types
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008 as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
fumonisin B1 and B2	0.2	for maize flour
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.1.2.2. Dry milk free instant porridges (kashas) (of instant cooking)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Moisture	g	4 - 6	-	
Protein	g, not less than	4.0	+	
Fat	(g), not more than	12.0	+	
Hydrocarbons	the same	70 - 85	+	
Energy value	kcal	315 - 480	+	
Ash	g	0.5 - 3.5	-	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Mineral substances:				
sodium	mg, not more than	30	+	
calcium	mg	300 - 600	+	for enriched products
iron	the same	5 - 12	+	the same
iodine	mkg	40 - 80	+	for enriched products
(introduced by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Vitamins: thiamine (B1)	mg	0.2 - 0.6	+	for vitaminized products
Riboflavin (B2)	the same	0.3 - 0.8	+	the same
niacin (PP)	the same	3 - 8	+	the same
ascorbic acid (C)	the same	30 - 100	+	the same
retinol (A)	mkg-eq	300 - 500	+	the same
tocopherol (E)	mg	5 - 10	+	the same

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
Toxic elements, mycotoxins, pesticides, benz(a)pyrene, radionuclides and pest infestation and contamination of grain (insects, mites) and metallic impurities	according to Clause 3.1.2.1	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Microbiological indicators:		
QMAFAnM,	1 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
Pathogenic, including salmonella	50	the same
B. cereus	200	CFU/g, not more than
Moulds,	100	the same
Yeast	50	the same

### 3.1.2.3. Dry milk instant porridges (kashas) requiring cooking

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Moisture	g, not more than	8	+	
Protein	g	12 - 20	+	
Fat	the same	10 - 18	+	
Hydrocarbons	the same	60 - 70	+	
Energy value	kcal	380 - 520	+	
Ash	g	2.5 - 3.5	-	
Mineral substances:				
sodium	mg, not more than	500	+	
calcium	mg	400 - 600	+	for enriched products
iron	the same	6 - 10	+	the same
Vitamins:				
thiamine (B1)	mg	0.2 - 0.6	+	for vitaminized products
Riboflavin (B2)	the same	0.4 - 0.8	+	the same
niacin (PP)	the same	4 - 8	+	the same
retinol (A)	mkg-eq	300 - 500	+	the same
tocopherol (E)	mg	5 - 10	+	the same
ascorbic acid (C)	the same	30 - 100	+	the same

## 2) Safety indices

(part 2 as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Indices	Permissible levels, mg/kg, not more than	Note
Toxic elements:		
lead	0.3	
arsenic	0.2	
cadmium	0.06	
mercury	0.03	
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
tetracycline group	0.01	
penicillins	0.004	
streptomycin  (as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)	0.2	
Mycotoxins:		
aflatoxin B1	not allowed	< 0,00015
aflatoxin M1	not allowed	< 0,00002
deoxynivalenol	not allowed	< 0,05 for wheat, barley porridges
zearalenone	not allowed	< 0,0 05 for maize, wheat, barley porridges
T-2 toxin	not allowed	< 0,05
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.01	
DDT and its metabolites	0.01	
Benz(a)pyrene	not allowed	< 0,2 mkg/kg



Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg
(introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		
Radionuclides (in terms of ready-to-eat product):		
caesium-137	40	Bq/l
Strontium-90	25	the same
Pest contamination and infestation of grain (insects, mites) and metallic impurities	according to Clause 3.1.2.1	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

#### 3.1.2.4. Dry milk instant porridges (kashas) (of instant cooking)

##### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g  g, not less than	12 - 20  7	+  +	in porridges requiring reconstitution with whole or partially diluted cows milk
Fat	g  g, not less than	10 - 18  5.0	+	in porridges on the whole milk, the mass fraction of which is less than 25% if butter or oil is added in reconstituted porridge

	the same	0.5		in porridges on skimmed milk if reconstituted with whole milk or if butter or oil is added into reconstituted porridge
Hydrocarbons	the same	60 - 70	+	
Energy value	kcal	380 - 520	+	
Mineral substances:	according to Clause 3.1.2.3			
Vitamins:	the same			

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
Toxic elements, mycotoxins, antibiotics, pesticides, benz(a)pyrene	according to Clause 3.1.2.3	
Radionuclides and pest contamination and infestation of grain (insects, mites) and metallic impurities (as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)	according to Clause 3.1.2.1	
Microbiological indicators:		
QMAFAnM,	1 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
S. aureus	1.0	the same
B. cereus	2 x 1E2	CFU/g, not more than
Pathogenic, including salmonella and L.	50	the same

monocytogenes Moulds, Yeast	100 50	CFU/g, not more than
Dioxins are not allowed (introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine is not allowed < 1 mg/kg (introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

### 3.1.2.5. Soluble biscuits

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g	5 - 11	+	
Fat	the same	6 - 12	+	
Hydrocarbons	the same	65 - 80	+	
Energy value	kcal	330 - 440	+	
Mineral substances:				
Sodium	mg	300 - 500	+	for enriched products
Calcium	the same	300 - 600	+	
Iron	the same	10 - 18	+	the same
Vitamins:				
Thiamine (B1)	mg	0.3 - 0.6	+	for vitaminized products
Riboflavin (B2)	the same	0.3 - 0.8	+	the same
Niacin (PP)	the same	4 - 9	+	the same
Ascorbic acid (C)	the same	20 - 50	+	the same

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
Toxic elements, mycotoxins, pesticides, benz(a)pyrene	according to Clause 3.1.2.3	
Radionuclides	according to Clause 3.1.2.1	
Microbiological indicators:		
QMAFAnM,	1 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed the same
Pathogenic, including salmonella	50	
Moulds,	100	CFU/g, not more than
Yeast	50	the same
Pest contamination and infestation of grain (insects, mites) and metallic impurities	according to Clause 3.1.2.1	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

**3.1.3. Fruit-and-Vegetable-Based Products, Fruit-and-Vegetable  
Canned Foods (Fruit, Vegetable  
and Fruit and Vegetable Juices, Nectars and Drinks; Fruit Waters;  
Puree;**

**Fruit and Milk, and Fruit and Grain Puree)  
(as amended by Amendments and Additions No. 18, approved by  
Resolution No. 71**

**of Chief State Sanitary Inspector of the RF**

## 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Mass fraction of soluble dry substances	%	4 - 16	-	for juice products from fruit, fruit with addition of vegetables, vegetables, vegetables with addition of fruit
	%	4 - 10	-	for juice

				products from vegetables and with addition of fruit
	°°	4 - 11		for juice products from carrot and pumpkin
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Mass fraction of dry substances	°°	4 - 25	-	for puree
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Mass fraction of titratable acids	°g not more than	1.2		for juice products from citruses (in terms of water-free citric acid)
	the same	0.8	-	for juice products from other fruit and (or) vegetables (in terms of apple acid)
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Total acidity	°g not more than	0.8	-	
Hydrocarbons, including added sugar	g	3 - 25	+	added sugar is not allowed for juices
	g, not more than	10	-	for nectars and juice containing drinks

	g, not more than	12	-	for fruit water
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Sodium chloride	° not more than	0.4		save tomato juice
Proteins	° not more than	0.6	-	for tomato juice
	g, not less than	0.5		for fruit and milk, and fruit and cereal puree
Mass fraction of ethanol	° not more than	0.2		for fruit juices and puree
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Mineral substances:				
potassium	Mg	70 - 300, 200	+	for enriched products
sodium	mg, not more than		-	
iron	mg, not more than	3.0	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Vitamins:				
ascorbic acid (C)	mg, not more than	75.0	+	for enriched products
	mg, not less than	25.0		at the end of the shelf life
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
beta-carotene	the same	1 - 4	+	the same

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
<p>Toxic elements:</p> <p>Lead</p> <p>Arsenic</p> <p>(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)</p> <p>Cadmium</p> <p>Mercury</p>	<p>0.3</p> <p>0.1</p> <p>0.02</p> <p>0.01</p>	
<p>Mycotoxins:</p> <p>Patuline</p> <p>Deoxynivalenol</p> <p>Zearalenone</p> <p>Aflatoxin M1</p> <p>ochratoxin A</p> <p>(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)</p>	<p>not allowed</p> <p>not allowed</p> <p>not allowed</p> <p>not allowed</p> <p>not allowed</p> <p>not allowed</p>	<p>&lt; 0,02, for products containing apples, tomatoes, sea-buckthorn</p> <p>&lt; 0,05 for fruit and cereal puree, containing wheat, barley flour</p> <p>&lt; 0,005 for fruit and cereal puree containing wheat, maize, barley flour</p> <p>&lt; 0,00002 for fruit and milk puree</p> <p>&lt; 0,0005 for products containing wheat, rye, barley, oat, rice flour</p>
Aflatoxin B1	not allowed	< 0,00015 for fruit and cereal puree
<p>Pesticides &lt;*&gt;:</p> <p>hexachlorocyclohexane (alpha-, beta-, gamma isomers)</p> <p>DDT and its metabolites</p>	<p>0.01</p> <p>0.005</p>	
<p>Nitrates:</p> <p>(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)</p>	<p>50</p> <p>200</p>	<p>on fruit basis (save containing bananas and strawberry) on vegetable, and fruit and vegetable basis, also for containing bananas</p>

5-Oxymethylfurfurol	20.0	for juice products
(introduced by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
5-Oxymethylfurfurol	according to Clause 2.2	for fruit juices and nectars
Radionuclides:		
caesium-137	40	Bq/kg
Strontium-90	25	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Microbiological indicators	Shall satisfy requirements for industrial sterility for canned food of corresponding groups in accordance with Annex 8	



### 3.1.4. Meat-Based Complementary Feeding Products

#### 3.1.4.1. Canned food from meat (beef, pork, mutton, poultry, etc.), including with addition of by-products

##### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Mass fraction of dry substances	g, not less than the same	20	-	canned food from poultry
Protein	g, not less than the same	17	-	
Fat	g, not less than the same	8.5 - 15	+	
Energy value	g, not less than the same	7	+	
Sodium chloride	kcal	3 - 12	+	
Iron	mg	80 - 180	+	
	g, not more than	0.4	+	in iron-enriched canned food
	mg	1 - 5	+	
Vitamins:		according to Clause 3.1.4.3		
Starch	g, not more than	3	-	as a thickening agent
Rice and wheat flour	g, not more than	5		the same

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
lead	0.2	
arsenic	0.1	
cadmium	0.03	
mercury	0.02	
stannum	100	for canned food in assembled tin containers
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
	0.0003	Shall become effective since 01.01.2012.
tetracycline group	0.01	
bacitracin	0.02	
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02 0.01	
DDT and its metabolites		
Nitrates:	not allowed	< 0,5
Nitrosamines:	not allowed	< 0,001
sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine		
(introduced by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		

Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010 in Clause 3.1.4. in section "2) Safety indices" the standards of permissible levels of radionuclides in the line "strontium-90" have been changed from 40 to 25.

Radionuclides:		
caesium-137	40	Bq/kg
Strontium-90	25	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Microbiological indicators	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules	
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.1.4.2. Meat-Based Pasteurized Sausages (for Children of 1.5 Year Old and Older)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Protein	g, not less than	12	+	
Fat	g	16 - 20	+	
Sodium chloride	g, not more than	1.5	+	
Energy value	kcal	180 - 240	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				

#### 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
Toxic elements, antibiotics, pesticides, nitrites, nitrosamines:	according to Clause 3.1.4.1	
Radionuclides:	according to Clause 3.1.4.1	
Microbiological indicators:		
QMAFAnM, Coliform bacteria (coliforms)	2 x 1E2 1.0	CFU/g, not more than, mass of product (g), in which the indicator is not allowed
Pathogenic, including salmonella	50	the same
Sulfite-reducing clostridia	0.1	the same
B. cereus	1.0	the same
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.1.4.3. Meat and Vegetable Canned Food (Vegetable and Meat Canned Food)

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Mass fraction of dry substances (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	g	5 - 26	-	
Protein (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	g	1.5 - 8.0	+	
Fat	the same	1 - 6	+	
Hydrocarbons	the same	5 - 15	+	
Energy value	kcal	40 - 140	+	
Sodium chloride	g, not more than	0.4	+	
Iron	mg	0.5 - 3.0	+	for enriched products
Vitamins:				
beta-carotene	mg	1 - 3		for vitaminized products
Thiamine (B1)	mg	0.1 - 0.2	-	the same
Riboflavin (B2)	the same	0.1 - 0.3	-	the same
Niacin (PP)	the same	1 - 4	-	the same
Starch	g, not more than	3		added as a thickening agent
Rice and wheat flour	g, not more than	5		the same

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
<b>Toxic elements:</b>  lead arsenic cadmium mercury stannum	0.3 0.2 0.03 0.02 100	for canned food in assembled tin containers
<b>Antibiotics &lt;*&gt;:</b>		
laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
	0.0003	Shall become effective since 01.01.2012.
tetracycline group	0.01	
bacitracin	0.02	
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
<b>Mycotoxins:</b>  Patuline  Aflatoxin B1  Dezoxynivalenol  ochratoxin A	not allowed  not allowed  not allowed  not allowed	< 0.02, for products containing tomatoes < 0.00015, for products containing cereal < 0.05 for canned food containing wheat, barley flour < 0.0005 for all types
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008, as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Zearalenone	not allowed	< 0.0 05 for products containing wheat, barley, maize flour
T-2 toxin	not allowed	< 0.05, for products containing cereal
<b>Pesticides &lt;*&gt;:</b> hexachlorocyclohexane (alpha-, beta-, gamma isomers) DDT and its metabolites	0.02 0.01	
Nitrates	150	for canned food containing vegetables

Nitrites	not allowed	< 0,5
Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	not allowed	< 0.001

Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010 in Clause 3.1.4. in section "2) Safety indices" the standards of permissible levels of radionuclides in the line "strontium-90" have been changed from 40 to 25.

Radionuclides:		
caesium-137	40	Bq/kg
Strontium-90	30	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Microbiological indicators	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8	
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.1.5. Fish-Based Complementary Feeding

#### 3.1.5.1. Fish Canned Food Products

##### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Mass fraction of dry substances	g	15 - 25	-	
Protein	g	8 - 15	+	
Fat	the same	5 - 11	+	
Energy value	kcal	100 - 155	+	
Sodium chloride	g, not more than	0.4	+	
Mineral substances: iron	the same	0.4 - 3.0	+	for enriched products
Vitamins: thiamine (B1)	mg	0.1 - 0.2	+	for enriched products
riboflavin (B2)	the same	0.1 - 0.3	+	the same
niacin (PP)	the same	1 - 4	+	the same
starch	g, not more than	3	-	added as a thickening agent
rice and wheat flour	g, not more than	5	-	the same

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
Toxic elements:  Lead Arsenic Cadmium Mercury Stannum	0.5 0.5 0.1 0.15 100	for canned food in assembled tin containers
Pesticides <*>:  hexachlorocyclohexane (alpha-, beta-, gamma isomers)  DDT and its metabolites	0.02  0.01	
Polychlorinated biphenyls	0.5	
Histamine	100	tuna, mackerel, salmon, herring
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
Nitrosamines	not allowed	< 0.001
Radionuclides:		
caesium-137	100	Bq/kg
Strontium-90	60	the same
Microbiological indicators	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8	
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		



### 3.1.5.2. Fish and Vegetable Canned Food

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Mass fraction of dry substances	g, not less than	17	-	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Protein	g	1.5 - 6	+	
Fat	the same	1 - 6	+	
Energy value	kcal	35 - 120	+	
Sodium chloride	g, not more than	0.4	+	
Mineral substances:				
Iron	the same	according to Clause 3.1.5.1	-	
Vitamins:		according to Clause 3.1.5.1		
Starch	g, not more than	3	-	added as a thickening agent
Rice and wheat flour	g, not more than	5	-	the same

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
<p>Toxic elements:</p> <p>Lead</p> <p>Arsenic</p> <p>Cadmium</p> <p>Mercury</p> <p>stannum</p>	<p>0.4</p> <p>0.2</p> <p>0.04</p> <p>0.05</p> <p>100</p>	for canned food in assembled tin containers
Mycotoxins	according to Clause 3.1.4.3	
<p>Pesticides &lt;*&gt;:</p> <p>hexachlorocyclohexane (alpha-, beta-, gamma isomers)</p> <p>DDT and its metabolites</p>	<p>0.02</p> <p>0.01</p>	
Polychlorinated biphenyls	0.2	
Histamine	40	tuna, mackerel, salmon, herring
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
Nitrates	150	for canned food containing vegetables
Nitrosamines	not allowed	< 0.001
<p>Radionuclides:</p> <p>caesium-137</p> <p>Strontium-90</p>	<p>100</p> <p>60</p>	<p>Bq/kg</p> <p>the same</p>
Microbiological indicators	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules	
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Antibiotics <*> (for pond fish and fish of cage culture fishery):		
tetracycline group	0.01	
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		

### 3.1.6. Children Herbal Instant Tea

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Hydrocarbons	g	85 - 96	+	
Energy value	kcal	340 - 385	+	

#### 2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements: lead (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010) arsenic cadmium mercury	0.02  0.05 0.02 0.005	
Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma isomers) DDT and its metabolites	0.02  0.01	
Radionuclides: caesium-137 Strontium-90	40 25	Bq/l the same
Microbiological indicators: QMAFAnM, Coliform bacteria (coliforms) B. cereus Pathogenic, including salmonella Moulds, Yeast	5 x 1E3 1.0 100 25 50 50	CFU/g, not more than mass (g) in which the indicator is not allowed CFU/g, not more than the same CFU/g, not more than the same

<\*> It is also required to control residual quantities of the antibiotics used for production of food raw material (see Clause 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> It is also required to control the residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

### 3.2. Food Products for Children of Pre-School and School Age

#### 3.2.1. Meat-Based Products

### 3.2.1.1. Meat Canned Food (including from Poultry)

#### 1) Nutritional value (in 100 g of the product)

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

Criteria and indices	Measurement Units	Permissible levels	Note
Protein	g, not less than	12	
Fat	g, not more than	18	
Sodium chloride	g, not more than	1.2	
Starch or rice and (or) wheat flour	g, not more than	3.0	
	g, not more than	5.0	

#### 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements: lead arsenic cadmium mercury stannum	0.3 0.1 0.03 0.02 100	for canned food in assembled tin containers
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
tetracycline group	0.01	
bacitracin	0.02	
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
Pesticides <*>:  hexachlorocyclohexane (alpha-, beta-, gamma isomers)  DDT and its metabolites	0.02   0.01	
Nitrites	not allowed	< 0,5

Nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	not allowed	0.001
Radionuclides: caesium-137 Strontium-90 (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	40 25	Bq/kg the same
Microbiological indicators	Shall satisfy requirements for industrial sterility for canned food of group "A" in accordance with Annex 8 to these Sanitary Rules	
Dioxins (introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)	not allowed	

### 3.2.1.2. Sausage products

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Protein	g, not less than	12	+	
Fat	g, not more than	22	+	
Energy value	kcal	230 - 250	+	
Sodium chloride	g, not more than	1.8	+	
Starch	g, not more than	5	-	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
Lead	0.3	
Arsenic	0.1	
Cadmium	0.03	
Mercury	0.02	
Antibiotics <*>	according to Clause 3.2.1.1	
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
Nitrites	30	
Nitrosamines:		
Sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	0.002	
Radionuclides	according to Clause 3.2.1.1	
Microbiological indicators:		
QMAFAnM,	1 x 1E3	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
E. coli	1.0	the same for products with the shelf life of more than 5 days
S. aureus	1.0	mass (g) in which the indicator is not allowed
Sulfite-reducing clostridia	0.1	the same
Pathogenic, including salmonella <*>	25	the same <*> for sausage rolls and frankfurters additionally L. monocytogenes
Yeast	100	CFU/g, not more than, for products with the shelf life of more than 5 days
Moulds	100	the same
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.2.1.3. Meat Semi-Manufactured Products

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Protein	g, not less than	10	+	
Fat	g, not more than	20	+	
Energy value	kcal	165 - 220	+	
Sodium chloride	g, not more than	0.9	+	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)				

#### 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements, antibiotics, pesticides, radionuclides, nitrites, nitrosamines	according to Clause 3.2.1.1	
Microbiological indicators:		
QMAFAnM,	5 x 1E5	CFU/g, not more than, raw chopped
	1 x 1E5	CFU/g, not more than, natural raw
Coliform bacteria (coliforms)	0.001	mass (g) in which the indicator is not allowed
S. aureus	0.1	the same
Pathogenic, including salmonella and L. monocytogenes	25	the same
Moulds	250	CFU/g not more than, for semi-manufactured products with coating
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.2.1.4. Pates and Culinary Products

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Protein	g, not less than	8	+	
Fat	g, not more than	16	+	
Energy value	kcal	140 - 180	+	
Sodium chloride	g, not more than	1.2	+	

#### 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
Toxic elements, antibiotics, pesticides, nitrosamines, nitrites, radionuclides	according to Clause 3.2.1.1	
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Microbiological indicators:		
QMAFAnM,	1 x 1E3	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
E. coli	1.0	the same for products with the shelf life of more than 72 hours
S. aureus	1.0	mass (g) in which the indicator is not allowed
Sulfite-reducing clostridia	0.1	the same
Pathogenic, including salmonella and L. monocytogenes	25	the same
Yeast	100	CFU/g, not more than, for products with the shelf life of more than 72 hours
Moulds	100	the same
Dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		



**3.2.2. Bakery, Flour Confectionery  
and Flour-Cereal Products**

(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief  
State Sanitary Inspector of the RF dated 16.07.2008)

**1) Nutritional value (in 100 g of the product)**

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
PASTA				
Proteins	g	10 - 13	+	for enriched products
Fats	the same	1 - 3	+	
Hydrocarbons	the same	60 - 70	+	
Energy value	kcal	300 - 360	+	
Iron	mg	1.0 - 2.0	+	
Vitamins:				
thiamine (B1)	mg	0.15 - 0.25	+	for vitaminized products
riboflavin (B2)	the same	0.1 - 0.15	+	the same
niacin (PP)	the same	1.0 - 3.0	+	the same
BAKERY PRODUCTS				
Proteins	g	8.0 - 13.0	+	for enriched products
Fats	the same	1.0 - 8.0	+	
Hydrocarbons	the same	45 - 55	+	
Energy value	kcal	210 - 340	+	
Iron	mg	1.8 - 3.0	+	
Vitamins:				
thiamine (B1)	mg	0.15 - 0.40	+	for vitaminized products
riboflavin (B2)	the same	0.1 - 0.5	+	the same
niacin (PP)	the same	1.5 - 3.0	+	the same
FLOUR CONFECTIONERY PRODUCTS				
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)				
Fats	g, not more than	25	+	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)				

Trans-isomers	% from the total fat, not more than	7		
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)				
Added sugar	g, not more than	25	+	for biscuits
		38	+	for products from biscuitine semi-manufactured products
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)				
Safety indices				

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
lead	0.5	flour - cereal products
	0.35	bakery and flour confectionery products
arsenic	0.2	flour - cereal products
	0.15	bakery and flour confectionery products
cadmium	0.1	flour - cereal products
	0.07	bakery and flour confectionery products
mercury	0.03	flour - cereal products
	0.015	bakery and flour confectionery products
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Mycotoxins:		
Aflatoxin B1	not allowed	< 0,00015
Deoxynivalenol	not allowed	< 0,05 from wheat, barley
Zearalenone	not allowed	< 0,005 from wheat, barley, maize
T-2 toxin	not allowed	< 0,05
ochratoxin A	not allowed	< 0.0005 for all types
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Pesticides <*>:		
Hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.01	
DDT and its metabolites	0.01	
Benz(a)pyrene	not allowed	< 0,0002
Radionuclides:		
caesium-137	40	Bq/kg
Strontium-90	25	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Harmful contaminants:	not allowed	
Pest contamination and infestation of grain (insects, mites)		
Microbiological indicators:	according to Clause 1.4.5	flour and cereal products
	according to Clause 1.4.7	bakery products
	according to Clause 1.5.5	flour confectionery products
(as amended by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

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<\*> If grizin, bacitracin, antibiotics of tetracycline group, penicillin, streptomycin are determined with the use of chemical methods of determination, re-calculation of their actual content in unit/g shall be carried out according to the standard activity.

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

### 3.2.3. Products from Fish, Invertebrates and Algae

(introduced by Amendments and Additions No. 10,  
approved by Resolution No. 43 of Chief State Sanitary Inspector of the  
RF dated 16.07.2008)

#### 3.2.3.1. Semi-manufactured Products from Fish, Invertebrates and Algae<sup>1</sup>) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels	
		standard	marked
Protein	g, not less than	16	+
Fat	g	1 - 11	+
Energy value	kcal	70 - 160	+

#### 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Note
Toxic elements:		
lead	0.5	
arsenic	0.5	
cadmium	0.1	
mercury	0.15	
Phycotoxins:		
paralytic toxin of molluscs (saxitoxin)	not allowed	molluscs
amnesic toxin of molluscs (domoic acid)	not allowed	molluscs
amnesic toxin of molluscs (domoic acid)	not allowed	internal organs of crabs
diarrheal toxin of molluscs (okadaic acid)	not allowed	molluscs
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
Nitrosamines:		
sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	not allowed	
histamine	100	tuna, mackerel, salmon, herring
Polychlorinated biphenyls	0.5	

Dioxins	not allowed	fish semi-manufactured products
Radionuclides:		
caesium-137	100	Bq/kg
Strontium-90	60	the same
Microbiological indicators:		
QMAFAnM,	4 5 x 10	CFU/g, not more than
Coliform bacteria (coliforms)	0.01	mass of the product (g) in which the indicator is not allowed
S.aureus	0.01	the same
Pathogenic, including salmonella and L.monocytogenes	25	the same
Sulfite-reducing clostridia	0.01	mass of the product (g), in which the indicator is not allowed (for vacuum-packed products)
V.parahaemolyticus	100	CFU/g, not more than, (for sea fish)
Antibiotics <*>: for pond fish and fish of cage culture fishery		
tetracycline group	0.01	
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
1 1		

### 3.2.3.2. Culinary Products from Fish, Invertebrates and Algae<sup>1</sup>) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels
Protein	g, not less than	13
Fat	g, not more than	8
Energy value	kcal	90 - 130
Sodium chloride	%, not more than	0.8
Starch	g, not more than	5

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Note
Toxic elements:		
lead	0.5	
arsenic	0.5	
cadmium	0.1	
mercury	0.15	
Phycotoxins:		
paralytic toxin of molluscs (saxitoxin)	raw material control	molluscs
amnesic toxin of molluscs (domoic acid)	raw material control	molluscs
amnesic toxin of molluscs (domoic acid)	raw material control	internal organs of crabs
diarrheal toxin of molluscs (okadaic acid)	raw material control	molluscs
Mycotoxins: raw material control		
aflatoxin B1	not allowed	for cereal, flour
aflatoxin M1	not allowed	for products with milk component
deoxynivalenol	not allowed	for cereal, flour
zearalenone	not allowed	for cereal, flour
T-2 toxin	not allowed	for cereal, flour
ochratoxin A	not allowed	< 0.0005 for wheat, rye, barley, oat and rice flour
Antibiotics <*>:		
Laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012 (for products with milk component).  Shall become effective since 01.01.2012 (for products with milk component).
of tetracycline group	0.01	(for pond fish and fish of cage culture fishery, for products with milk, egg component)
penicillins	0.004	(for products with milk component)
streptomycin	0.2	(for products with milk component)
bacitracin	0.02	(for products with egg component)

(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)

Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
hexachlorobenzene	0.01	raw material control for cereal, flour
mercury organic pesticides	not allowed	raw material control for cereal, flour
2, 4-D acid, its salts and esters	not allowed	raw material control for cereal, flour
Benz(a)pyrene	not allowed	
Histamine	100	tuna, mackerel, salmon, herring
Nitrates	150	for products containing vegetables
N-nitrosamines: sum of N-Nitrosodimethylamine and N-Nitrosodiethylamine	not allowed	
Polychlorinated biphenyls	0.5	
Radionuclides:		
caesium-137	100	
strontium-90	60	
Dioxins	not allowed	fish culinary products
Microbiological indicators:	according to Clauses 1.3.3.9, 1.3.3.10, 1.3.3.11	

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Note:

<\*> It is also required to control residual quantities of the antibiotics used for production of food raw material (see Clause 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material.

### 3.2.4. Milk and Milk Products

(introduced by Amendments and Additions No. 10,  
approved by Resolution No. 43 of Chief State Sanitary Inspector of the  
RF dated 16.07.2008)

#### 3.2.4.1. Milk; Cream; Fermented Milk Products, including Yoghurts, Milk-Based Drinks

##### 1) Nutritional value (in 100 g of a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels	Note
Protein			
	g	2.0 - 5.0	- milk, fermented milk products
	g, not less than	2.7	- cream
Fat			
	g	1.5 - 4.0	- milk, fermented milk products
	the same	10 - 20	- cream
Hydrocarbons,	g	16.0	
including sugar	g, not more than	10	



2) Safety indices (in ready  
-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Note
1	2	3
Indications of oxidative deterioration:		
peroxide value	4.0	mmol of active oxygen/kg of fat
Toxic elements:		
lead	0.02	
arsenic	0.05	
cadmium	0.02	
mercury	0.005	
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
	0.0003	Shall become effective since 01.01.2012.
tetracycline group	0.01	
penicillins	0.004	
Streptomycin	0.2	
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
Dioxins	not allowed	
Radionuclides:		
caesium-137	40	Bq/l
strontium-90	25	the same
Melamine	not allowed	< 1 mg/kg
(introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

Microbiological indicators:				
Index, group of products	QMAFAnM, CFU/cm3 (g), not more than	Mass of products (g, cm3) in which the indicator is not allowed		Note
		Coliform bacteria (coliforms)	pathogenic including salmonella	
1	2	3	4	5
Pasteurized milk				
in consumer packaging	5 1 x 10	0.01	25	S. aureus in 1 cm3 are not allowed L. monocytogenes in 25 cm3 are not allowed
Pasteurized cream:				
- in consumer packaging	5 1 x 10	0.01	25	S. aureus in 1 cm3 are not allowed L. monocytogenes in 25 cm3 are not allowed
Baked milk	3 2.5 x 10	1.0	25	
Sterilized milk and cream	Shall satisfy requirements for industrial sterility for sterilized milk and cream in a consumer packaging in accordance with Annex 8 to SanPin 2.3.2.1078-01			

Microbiological indicators:						
Index, group of products	Quantity of lactic acid microorganisms, CFU/cm3 (g)	Mass of products (g, cm3) in which the indicator is not allowed			Yeast and moulds, CFU/cm3 (g), not more than	Note
		Coliform bacteria (coliforms)	S. aureus	pathogenic including salmonella		
1	2	3	4	5	6	7
Liquid fermented milk products, including yoghurt, with the shelf life of not more than 72 hours	-	0.01	1.0	25	-	
Liquid fermented milk products, including yoghurt, with the shelf life of more than 72 hours	not less than 7 1 x 10 <*>	0.1	1.0	25	yeast - 50 <*> moulds - 50	<*> except for drinks produced with the use of starters containing yeast; <*> the norms are not established for heat-treated products
Liquid fermented milk products, enriched with bifidobacteria, with the shelf life of more than 72 hours	not less than 7 1 x 10 ; bifidobacteria - not less than 6 1 x 10	0.1	1.0	25	yeast - 50 <*> moulds - 50	<*> except for drinks produced with the use of starters containing yeast
Boiled fermented milk (ryazhenka)	-	1.0	1.0	25	-	
Sour cream and products on its basis		0.001 <*>	1.0	25	yeast - 50 <*> moulds - 50 <*>	<*> for heat-treated products - 0.01; <*> for products with the shelf life of more than 72 hours

### 3.2.4.2. Curds and Curd Products (including with Fruit or Vegetable Fillings).

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels	Note
1	2	3	4
Protein	g	7 - 17	
Fat	the same	3.5 - 15	
Hydrocarbons, including sugar	g, not more than g, not more than	12  10	
Energy value	kcal	105 - 250	
Acidity	0 T, not more than	150	

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Note
1	2	3
Indications of oxidative deterioration:		
peroxide value	4.0	mmol of active oxygen/kg of fat, for products with fat content of more than 5 g/100 g and products enriched with vegetable oils
Toxic elements:		
lead	0.06	
arsenic	0.15	
cadmium	0.06	
mercury	0.015	
Antibiotics, mycotoxins and radionuclides, dioxins	according to Clause 3.2.4.1	
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.55	in terms of fat
DDT and its metabolites	0.33	the same

Microbiological indicators:					
Index, group of products	Mass of products (g), in which the indicator is not allowed			Yeast and moulds, CFU/g, not more than	Note
	Coliform bacteria (coli forms)	S. aureus	pathogenic including salmonella		
1	2	3	4	5	6
Curds and curd products with the shelf life of not more than 72 hours	0.001	0.1	25		
Curds and curd products with the shelf life of not more than 72 hours	0.01	0.1	25	yeast - 100, moulds - 50	
Heat treated curd products	0.01	1.0	25	yeast and moulds - 50	

### 3.2.4.3. Cheese (Hard, Semi-Hard, Soft, Brine, Cheese Spread)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels	Note
1	2	3	4
Mass fraction of moisture	%, not more than	60	
Mass fraction of fat in dry substance	the same	50	
Sodium chloride	g, not more than	2	

## 2) Safety Indices

Indices	Permissible levels, mg/kg (l), not more than	Note
Toxic elements:		
lead	0.2	
arsenic	0.15	
cadmium	0.1	
mercury	0.03	
Mycotoxins:		
aflatoxin M1	not allowed	< 0.0005
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012. Shall become effective since 01.01.2012
tetracycline group	0.01	
penicillins	0.004	
Streptomycin (as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)	0.2	
		I
Pesticides <*>:		
hexachlorocyclohexane (alpha- , beta-, gamma isomers)	0.6	in terms of fat
DDT and its metabolites	0.2	the same
Dioxins	not allowed	
Radionuclides:		
caesium-137	40	Bq/kg
strontium-90	25	the same

### Microbiological Indicators:

Index, group of products	QMAFAnM, CFU/g, not more than	Mass of product (g) in which the indicator is not allowed		Note
		Coliform bacteria (coliforms)	pathogenic including salmonella	
1	2	3	4	5
Cheese (hard, semi-hard, brine, soft)		0.001	25	S. aureus not more than 500 CFU/g L. monocytogenes in 25 g are not allowed
Cheese spread				
- without filling agents	3 5 x 10	0.1	25	moulds not more than 50 CFU/g, yeast not more than 50 CFU/g
- with filling agents	4 1 x 10	0.1	25	moulds not more than 100 CFU/g, yeast not more than 100 CFU/g

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#### Note:

<\*> It is also required to control residual quantities of the antibiotics used for production of food raw material (see Clause 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material.



3.2.5. Canned Fruit and Vegetables (Juices, Nectars, Drinks, Fruit Waters, Puree: Fruit and Milk, and Fruit and Cereal Puree; Combined Products)

(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)

1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels	Note
1	2	3	4
Mass fraction of dry substances	g	5 - 20	with no consideration of included chlorides and sugar for vegetable juices
	g, not less than	4	for tomato juice
Total acidity	%, not more than	1.3	
Hydrocarbons	g	4 - 25	
including added sugars	g, not more than	10	for nectars and drinks
	g, not more than	12	for fruit waters
Mass fraction of ethanol	%, not more than	0.2	for fruit juices
Sodium chloride	g, not more than	0.6	for vegetable juices
Vitamins:			
ascorbic acid (C)	mg, not more than	75.0	
	mg, not less than	25	at the end of the shelf life

## 2) Safety Indices

Indices	Permissible levels, mg/kg, not more than	Note
Toxic elements:		
lead	0.3	
arsenic	0.2	
cadmium	0.02	
mercury	0.01	
Mycotoxins:		
patuline	not allowed	< 0.02, for products containing apples, tomatoes, sea-buckthorn
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.01	
DDT and its metabolites	0.005	
Nitrates	50	on fruit basis
	200	on vegetable, and fruit and vegetable basis, also for products containing bananas
5-Oxymethylfurfural	20	for fruit juices and nectars
	10	for orange and grapefruit juices and nectars
Radionuclides:		
caesium-137	60	Bq/kg
strontium-90	25	the same
Microbiological indicators	Shall satisfy requirements for industrial sterility for canned food of corresponding groups (Annex 8 to SanPin 2.3.2.1078-01)	

Note:

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material.

### 3.3. Specialized Therapeutic Children Products

#### 3.3.1 Low-Lactose and Non-Lactose Products

##### 1) Nutritional value (in a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
LOW-LACTOSE AND NON-LACTOSE PRODUCTS FOR CHILDREN OF 1 YEAR OLD				
Protein	g/l	14 - 20	+	in low-lactose products in non-lactose products
Taurin	mg/l	40 - 55	+	
L-carnitine	the same	10 - 15		
Fat	g/l	30 - 38	+	
Linoleic acid	% from the sum of fatty acids, not less than	14	+	
the same	mg/l, not less than	4000	+	
Hydrocarbons	g/l	65 - 80	+	
Dextrin - maltose	the same	50 - 60	+	
Lactose	g/l, not more than	10	+	
Energy value	the same kcal/l	0.1 570 - 720	+	
Mineral substances:				
calcium	mg/l	300 - 700	+	
phosphorus	the same	300 - 500	+	
potassium	the same	500 - 800	+	
sodium	the same	150 - 300	+	
magnesium	the same	40 - 60	+	
copper	the same	0.3 - 1.0	+	
manganese	the same	20 - 100	+	
iron	mg/l	3 - 14	+	
zinc	the same	4 - 10	+	
chlorides	the same	400 - 800	+	
iodine	mkg/l	50 - 100		
ash	g/l	3 - 5	+	
Vitamins:				
retinol (A)	mkg-eq/l	500 - 800	+	
tocopherol (E)	mg/l	4 - 12	+	
calciferol (D)	mkg/l	8 - 12	+	
vitamin K	the same	25 - 50	-	
thiamine (B1)	the same	350 - 700	+	
riboflavin (B2)	the same	500 - 1000	+	

pyridoxin (B6)	the same	300 - 700	+	
panthotenic acid	the same	2500 - 3500	+	
folic acid (Bc)	the same	50 - 100	+	
cyanocobalamin (B12)	mkg/l	1.5 - 3.0	+	
niacin (PP)	mg/l	3 - 8	+	
ascorbic acid (C)	mg/l	40 - 100	+	
biotin	mkg/l	10 - 20	-	
carnitine	mg/l	10 - 20	-	
inosite	mg/l	20 - 30	-	
choline	the same	50 - 100	-	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Osmolality	mOcm/kg, not more than	300	+	
LOW-LACTOSE MILK				
Protein	g/l	40 - 47	+	
Casein/ whey proteins	-	80 : 20	-	
Fat	g/l	20 - 38	+	
Linoleic acid	% from the sum of fatty acids	15	+	
the same	mg/l	5000 - 6000	-	
Hydrocarbons	g/l	60 - 65	+	
Glucose	the same	25 - 28	+	
Galactose	the same	6 - 7	+	
Lactose	g/l, not more than	16	+	
Energy value	kcal/l	600 - 680	+	

2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration: peroxide value	4.0	mmol of active oxygen/kg of fat
Toxic elements: Lead Arsenic Cadmium mercury	0.05 0.05 0.02 0.005	
Mycotoxins: aflatoxin M1	not allowed	< 0.00002
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.

tetracycline group	0.01	
penicillins	0.004	
Streptomycin	0.2	
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma isomers) DDT and its metabolites	0.02 0.01	the same
Radionuclides: cesium-137 strontium-90	40 25	Bq/l the same
Microbiological indicators: QMAFAnM,	2.5 x 1E4	for dry products CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
S.aureus	1.0	the same
B.cereus	200	CFU/g, not more than
Pathogenic, including salmonella and L. monocytogenes	100	mass (g) in which the indicator is not allowed
Moulds	100	CFU/g, not more than
Yeast	50	the same
dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg
(introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		



### 3.3.2. Products Based on the Soya Protein Isolate

#### 1) Nutritional value (in a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g/l	15 - 20	+	
Methionine	the same	0.25 - 0.35	+	
Fat	g/l	30 - 38	+	
Linoleic acid	% from the sum of fatty acids, not less than	14	+	
the same	mg/l, not less than	4000		
Hydrocarbons (dextrin - maltose)	g/l	65 - 80	+	
Energy value	kcal/l	650 - 720	+	
Mineral substances:				
calcium	mg/l	450 - 750	+	
phosphorus	the same	250 - 500	+	
potassium	mg/l	500 - 800	+	
sodium	the same	200 - 320	+	
magnesium	the same	40 - 80	+	
copper	the same	0.4 - 1.0	+	
iron	mg/l	6 - 14	+	
zinc	the same	4 - 10	+	
ash	g/l	3 - 5	+	
Vitamins:				
retinol (A)	mkg-eq/l	500 - 800	+	
tocopherol (E)	mg/l	5 - 15	+	
calciferol (D)	mkg/l	8 - 12	+	
vitamin K	the same	25 - 100	-	
thiamine (B1)	the same	300 - 600	+	
riboflavin (B2)	the same	600 - 1000	+	
pyridoxin (B6)	the same	300 - 700	+	
folic acid (Bc)	mkg/l	60 - 150	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
cyanocobalamin (B12)	mkg/l	1.5 - 3	+	
niacin (PP)	mg/l	4 - 8	+	
ascorbic acid	mg/l	60 - 150	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010) (C)				
taurin	mg/l	45 - 55	+	
L-carnitine	the same	10 - 20	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Osmolality	mOsm/kg, not more than	300	+	



(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

## 2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration:  peroxide value	  4.0	  mmol of active oxygen/kg of fat
Toxic elements: lead (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	0.02	
arsenic	0.05	
cadmium	0.02	
mercury	0.005	
Mycotoxins: aflatoxin B1	not allowed	< 0.00015
Pesticides <*>: hexachlorocyclohexane (alpha- , beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
Radionuclides: Caesium - 137 Strontium-90 (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	40 25	Bq/l the same
Microbiological indicators: QMAFAnM,  Coliform bacteria (coliforms)  S. aureus  B. cereus  Pathogenic, including salmonella  Moulds  Yeast (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)	2 x 1E3  1.0  1.0  100  100  50  10	for dry products CFU/g, not more than mass (g) in which the indicator is not allowed mass (g) in which the indicator is not allowed CFU/g, not more than mass (g) in which the indicator is not allowed CFU/g, not more than the same
Melamine (introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)	not allowed	< 1 mg/kg

### 3.3.3. Dry Milk High-Protein Products

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

#### 1) Nutritional value (in 1000 g of a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein g 40- 90 + (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Mineral substances:				
calcium	mg	1130	+	
potassium	the same	1450	+	
sodium	the same	900	+	
magnesium	the same	210	+	
iron	the same	11	+	
ash	g	4 - 5	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Vitamins:				
Retinol (A)	mg-eq	0.18	+	
Tocopherol (E)	mg	3.3	+	
Calciferol (D)	mg	12	+	
Thiamine (B1)	the same	1.6	+	
Riboflavin (B2)	the same	3.6	+	
Pyridoxin (B6)	the same	1.6	+	
Niacin (PP)	the same	14	+	
Ascorbic acid (C)	the same	66	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				

#### 2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration: Peroxide value	4.0	mmol of active oxygen/kg of fat
Toxic elements:		
Lead	0.02	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Arsenic	0.05	
Cadmium	0.02	
Mercuric	0.005	
Mycotoxins:		
Aflatoxin M1	not allowed	< 0.00002

Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012.  Shall become effective since 01.01.2012.
tetracycline group	0.01	
penicillins	0.004	
Streptomycin  (as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)	0.2	
Pesticides <*>: hexachlorocyclohexane (alpha- , beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
Radionuclides: subject to Clause 3.3.1 (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
Microbiological indicators:		for dry product
QMAFAnM,	2.5 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	0.3	mass (g) in which the indicator is not allowed
S. aureus	1.0	the same
Pathogenic, including salmonella and L. monocytogenes	50	the same
Moulds	100	CFU/g, not more than
Yeast	50	the same
dioxins not allowed (introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine not allowed < 1 mg/kg (introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

### 3.3.4. Low-Protein Products

(Starch, Cereal and Pasta)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
STARCH				
Protein	g,	1.0	+	
	not more than			
Hydrocarbons	g	75 - 85	+	
Energy value	kcal	300 - 350	+	
CEREAL				
Protein	g,	1.0	+	
	not more than			
Fat	g	0.5 - 1.0	+	
Hydrocarbons	the same	80 - 90	+	
Energy value	kcal	350 - 400	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
PASTA				
Protein	g,	1.0	+	
	not more than			
Fat	the same	1.0	+	
Hydrocarbons	g	80 - 90	+	
Energy value	kcal	330 - 380	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Mineral substances: sodium	mg,	50	+	
	not more than			

## 2) Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
<p>Toxic elements:</p> <p>lead 0.3</p> <p>arsenic 0.2</p> <p>cadmium 0.03</p> <p>mercury 0.03</p>		
<p>Mycotoxins:</p> <p>aflatoxin B1 not allowed</p> <p>zearalenone not allowed</p> <p>T-2 toxin not allowed</p> <p>deoxynivalenol not allowed</p> <p>ochratoxin A not allowed</p>		<p>&lt; 0.00015</p> <p>&lt; 0.005 from wheat, maize, barley</p> <p>&lt; 0.05</p> <p>&lt; 0.05 from wheat, barley</p> <p>&lt; 0.0005 from wheat, rye, barley, oat, rice</p>
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
<p>Pesticides &lt;*&gt;:</p> <p>hexachlorocyclohexane (alpha-, beta-, gamma isomers) 0.01</p> <p>DDT and its metabolites 0.01</p>		
Benz(a)pyrene	not allowed	< 0.2 mkg/kg
<p>Radionuclides:</p> <p>caesium-137 40</p> <p>strontium-90 25</p>		<p>in a ready-to-eat product</p> <p>Bq/kg</p> <p>the same</p>
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
<p>Harmful contaminants:</p> <p>pest contamination and infestation of grain (insects, mites) and metallic impurities</p>	<p>not allowed</p> <p>3 x 1E4</p>	<p>%, size of separate particles shall not exceed 0.3 mm in the largest linear measurement</p>
<p>Microbiological indicators:</p> <p>QMAFAnM, 3 x 1E3</p> <p>Coliform bacteria (coliforms) 1.0</p> <p>S. aureus 1.0</p> <p>B. cereus 100</p> <p>Pathogenic, including salmonella 50</p> <p>Moulds 50</p>		<p>CFU/g, not more than</p> <p>mass (g) in which the indicator is not allowed the same</p> <p>CFU/g, not more than</p> <p>mass (g) in which the indicator is not allowed</p> <p>CFU/g, not more than</p>



### 3.3.5. Products Based on Full or Partial Protein Hydrolysate

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein (eq)	g/l	12 - 22	+	(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)
Taurin	mg/l	40 - 55	+	
L-carnitine	the same	10 - 25	+	
Fat	g/l	25 - 35	+	
Linoleic acid	% from the sum of fatty acids, not less than	14	+	
the same	mg/l, not less than	4000	-	
Hydrocarbons	g/l	70 - 95	+	
Energy value	kcal/l	650 - 720	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Mineral substances:	mg/l	330 - 980	+	
calcium				
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
phosphorus	mg/l	150 - 600	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
potassium	mg/l	400 - 1000	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
sodium	mg/l	150 - 350	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
magnesium	the same	50 - 100	+	
copper	the same	0.3 - 1.0	+	
iron	mg/l	6 - 14	+	
zinc	the same	3 - 10	+	
ash	g/l	4 - 5	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Vitamins:				
retinol (A)	mkg-eq/l	500 - 800	+	
tocopherol (E)	mg/l	6 - 14	+	
calciferol (D)	mkg/l	5 - 15	+	
thiamine (B1)	the same	400 - 600	+	
riboflavin (B2)	the same	600 - 1000	+	
pyridoxin (B6)	the same	500 - 700	+	
folic acid (Bc)	the same	50 - 100	+	
cyanocobalamin (B12)	mkg/l	1.5 - 3.0	+	
niacin (PP)	mg/l	3 - 8	+	
ascorbic acid (C)	mg/l	50 - 150	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Osmolality	mOsm/kg, not more than	320	+	



1) (as amended by Amendments and Additions No. 18, approved by  
Resolution No. 71 of Chief State Sanitary Inspector of the RF dated  
28.06.2010)

Nutritional value (in a ready-to-eat product)

## 2) Safety Indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration: peroxide value	4.0	mmol of active oxygen/kg of fat
Toxic elements: lead	0.02	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
arsenic	0.05	
cadmium	0.02	
mercury	0.005	
Mycotoxins: aflatoxin M1	not allowed	< 0.00002
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
Pesticides <*>: hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	the same
Radionuclides: caesium-137	40	Bq/l
strontium-90	25	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Microbiological indicators:		for dry product
QMAFAnM,	2 x 1E3	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
S. aureus	1.0	the same
B. cereus	100	CFU/g, not more than
Pathogenic, including salmonella	100	mass (g) in which the indicator is not allowed
Moulds	50	CFU/g, not more than
Yeast	10	the same

3.3.5.1. Products without Phenylalanyl or with Low-Phenylalanyl Content for Children up to 1 Year Old  
<\*\*\*>

Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010 the line "Energy value" of part "1) Nutritional value (in a ready-to-eat product) of Clause 3.3.5.1 has been revised and amended.

1) Nutritional value (in a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein (eq)	g/l	16 - 20	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Phenylalanyl	mg/l, not more than	500	+	in products based on aminoacids mixture absence
Taurin	mg/l	40 - 55	+	
L-carnitine	the same	10 - 25	+	
Fat	g/l	30 - 38	+	
Linoleic acid	% from the sum of fatty acids, not less than	14	+	
the same	mg/l, not less than	5000	-	
Hydrocarbons	g/l	65 - 80	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Mineral substances:				
calcium	mg/l	300 - 700	+	
phosphorus	the same	300 - 500	+	
potassium	mg/l	500 - 800	+	
sodium	the same	150 - 300	+	
magnesium	the same	40 - 60	+	
copper	the same	0.3 - 1.0	+	
iron	mg/l	3 - 14	+	
zinc	the same	4 - 10	+	
Iodine	mkp/l	50 - 120	+	
(introduced by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
ash	g/l	4 - 5	+	
Vitamins:				
retinol (A)	mkp-eq/l	500 - 800	+	
pyridoxin (B6)	the same	300 - 700	+	
folic acid (Bc)	the same	50 - 100	+	
cyanocobalamin (B12)	mkp/l	1.5 - 3.0	+	
niacin (PP)	mg/l	3 - 8	+	
Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				

ascorbic acid (C)	mg/l	20 - 100	+	
Osmolality	mOsm/kg, not more than	320	+	

(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)

## 2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
lead	0.02	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
arsenic	0.05	
cadmium	0.02	
mercury	0.005	
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
Radionuclides:	according to Clause 3.3.1	
Microbiological indicators:		for dry products
QMAFAnM Coliform bacteria (coliforms)	2 x 1E2 1.0	CFU/g, not more than, mass of product (g), in which the indicator is not allowed
S. aureus	1.0	the same
B. cereus	100	CFU/g, not more than
Pathogenic, including salmonella	100	mass (g) in which the indicator is not allowed
Moulds	50	CFU/g, not more than
Yeast	10	the same
Indications of oxidative deterioration:		
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
peroxide value	4.0	mmol of active oxygen/kg of fat
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.3.6. Freeze-Dried Products

#### 3.3.6.1. Milk Based Freeze-Dried Products (Curds, etc.)

##### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Protein	g	60 - 65	+	
Fat	the same	20 - 25	+	
Hydrocarbons	the same	9 - 11	+	
Energy value	kcal	330 - 380	+	
Vitamins:				
retinol (A)	mkg-eq	100	+	
riboflavin (B2)	the same	0.3	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
Acidity of reconstituted products	0 T, not more than	150	+	

## 2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
lead	0.15	
arsenic	0.15	
cadmium	0.06	
mercury	0.015	
Mycotoxins:		
aflatoxin M1	not allowed	< 0.00002
Antibiotics <*>:	according to Clause 3.3.3	
Pesticides <*>:		
hexachlorocyclohexane (alpha- , beta-, gamma isomers)	0.05	
DDT and its metabolites	0.03	
Radionuclides:		
caesium-137	40	Bq/kg Specific activity for freeze-dried products shall be determined in a reconstituted product
Strontium-90	25	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Microbiological indicators:		for dry products
Coliform bacteria (coliforms)	0.3	mass (g), in

S.aureus	1.0	which the indicator is not allowed
Pathogenic, including salmonella	50	the same
Moulds	100	the same
Yeast	50	CFU/g, not more than
Indications of oxidative deterioration:		the same
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
peroxide value	4.0	mmol of active oxygen/kg of fat
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.3.6.2. Meat Based Freeze-Dried Products

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Protein	g	35 - 50	+	
Fat	the same	15 - 30	+	
Energy value	kcal	280 - 500	+	
Ash	g	3.5 - 4.5	+	

#### 2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
Lead	0.2	
Arsenic	0.1	
Cadmium	0.03	
Mercury	0.02	
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
	0.0003	Shall become effective since 01.01.2012.
tetracycline group	0.01	



bacitracin 0.02 (as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)		
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.02	
DDT and its metabolites	0.01	
Radionuclides:		
caesium-137	40	Bq/kg Specific activity for freeze-dried products shall be determined in a reconstituted product
Strontium-90	25	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Microbiological indicators:		for dry products
FOR CHILDREN of UP TO 2 YEARS OLD		
QMAFAnM,	1 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
S. aureus	1.0	the same
Sulfite-reducing clostridia	0.1	the same
B. cereus	100	CFU/g, not more than
Pathogenic, including salmonella	50	mass (g) in which the indicator is not allowed
Moulds	50	CFU/g, not more than
Yeast	50	the same
FOR CHILDREN OLDER THAN 2 YEARS OLD		
QMAFAnM,	1.5 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
S. aureus	1.0	the same
Sulfite-reducing clostridia	0.1	the same
B. cereus	200	CFU/g, not more than
Pathogenic, including salmonella	50	mass (g) in which the indicator is not allowed
Moulds	100	CFU/g, not more than
Yeast	50	the same

dioxins	not allowed	
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		

### 3.3.6.3. Freeze-Dried Products on Vegetable Basis

#### Safety indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
lead	1.0	
arsenic	0.2	
cadmium	0.1	
mercury	0.03	
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.1	
DDT and its metabolites	0.1	
Heptachlor	not allowed	< 0.002
Aldrin	not allowed	< 0.002
Mycotoxins:		
patuline	not allowed	< 0.02, for products containing apples, tomatoes, sea-buckthorn
Radionuclides:		
caesium-137	40	Bq/kg Specific activity for freeze-dried products shall be determined in a reconstituted product
Strontium-90	25	the same
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		

### 3.3.7. Products for Premature Infants

#### 1) Nutritional value (in a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Protein	g/l	18 - 24	+	
Milk whey proteins	% of total protein quantity	60	-	
Casein	the same	40	-	
Taurine	mg/l	45 - 60	+	

Fat	g/l	34 - 45	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Linoleic acid	% of the sum of fatty acids	14 - 20	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Hydrocarbons, including	mg/l	65 - 90	+	
lactose	the same	35 - 50	+	
Energy value	kcal/l	700 - 800	+	
Mineral substances:	mg/l	600 - 1200	+	
calcium				
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
phosphorus	the same	400 - 700	+	
potassium	the same	650 - 1000	+	
sodium	the same	260 - 350	+	
magnesium	the same	70 - 100	+	
copper	the same	0.4 - 1.4	+	
iron	mg/l	4.0 - 11.0	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
zinc	the same	5 - 12	+	
chlorides	the same	450 - 700	+	
manganese	mg/l	30 - 300	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
iodine	the same	70 - 220	+	
Vitamins:				
retinol (A)	mg-eq/l	600 - 1200	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				
tocopherol (E)	mg/l	4 - 16	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
calciferol (D)	mg/l	10 - 30	+	
vitamin K	the same	30 - 100	+	
thiamine (B1)	the same	400 - 2000	+	
riboflavin (B2)	the same	600 - 2000	+	
panthotenic acid	mg/l	2 - 5	+	
pyridoxin (B6)	mg/l	400 - 2000	+	
folic acid (Bc)	the same	400 - 500	+	
cyanocobalamin (B12)	the same	1.5 - 3	+	
niacin (PP)	mg/l	4 - 10	+	
ascorbic acid (C)	the same	50 - 300	+	
inosite	the same	30 - 50	+	
biotin	mg/l	15 - 50	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
choline	mg/l	50 - 150	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
L-carnitine	mg/l	10 - 20	+	

(introduced by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Osmolality	mOsm/kg, not more than	310	+	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				

## 2) Safety indices (in a ready-to-eat product)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements: lead (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	0.02	
arsenic	0.05	
cadmium	0.02	
mercury	0.005	
Mycotoxins: aflatoxin M1	not allowed	< 0.00002
Antibiotics <*>:		
laevomycetin (chloramphenicol)	0.01  0.0003	Expiring on 01.01.2012. Shall become effective since 01.01.2012.
tetracycline group	0.01	
penicillins	0.004	
Streptomycin (as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)	0.2	
Pesticides <*>:		
hexachlorocyclohexane (alpha-, beta-, gamma isomers)	0.005	
DDT and its metabolites	0.005	
Radionuclides:		
caesium-137	40	Bq/kg Specific activity for freeze-dried products shall be determined in a reconstituted product
Strontium-90 (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	25	the same
Microbiological indicators: QMAFAnM,	2 x 1E3   3 x 1E3	for dry products CFU/g, not more than; infant formulas reconstituted at 37 - 50 degrees C CFU/g, not more than; infant formulas reconstituted at 70 - 85 degrees C

Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
E. coli	10	the same
S. aureus	10	the same
B. cereus	100	CFU/g, not more than
Pathogenic, including salmonella	100	mass (g) in which the indicator is not allowed
Listeria monocytogenes	100	the same
Moulds	50	CFU/g, not more than
Yeast	10	the same
Indications of oxidative deterioration: (introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
peroxide value	4.0	mmol of active oxygen/kg of fat
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
dioxins	not allowed	on the milk and meat basis
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg (for milk based products)
(introduced by Amendments No.11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		

<\*> It is also required to control residual quantities of the antibiotics used for production of food raw material (see Clause 3.15).

(the note was amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)

<\*> It is also required to control residual quantities of the pesticides used for production of food raw material (see Clauses 3.12, 3.13).

<\*\*\*> Products without phenylalanyl or with low-phenylalanyl content designed for children older than 1 year shall contain protein (eq) not less than 20 g/l, and safety indices shall satisfy requirements of Clause 3.3.5.1. Fat and hydrocarbon content in such products is not regulated, vitamin, mineral salts and microelements content shall satisfy physiological needs of human beings of appropriate age.

(the note was amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

### 3.4. Microbiological Safety Indices for Milk Products of Infant Food Produced at Milk Kitchens of Healthcare System

Index, group of products	QMAFAnM, CFU/cm3 (g), not more than	Mass of products (cm3, g) in which the indicator is not allowed				Notes
		Coliform bacteria (coliforms)	E. coli	S. aureus	Pathogenic, including salmonella and L.monocytogenes	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
1	2	3	4	5	6	7
3.4.1. Sterilized products (adapted infant formulas, sterilized milk, sterilized milk cream, etc.) of non-aseptic bottling	100	10.0	10.0	10.0	100 <*>	<*> only salmonella
3.4.2. Reconstituted infant formulas pasteurized	500	10.0	10.0	10.0	100	B. cereus 20 CFU/g, not more than
3.4.3. Fermented milk products: - all products except for bifilin	-	3.0	10.0	10.0	50 <*>	<*> only salmonella ; bifidobacteria 1 x 1E6 CFU/g, not less than, if produced with the use thereof; acidophilic bacteria 1 x 1E7 CFU/g, not less than,



- bifilin	-	10.0	10.0	10.0	50	if produced with the use thereof; microscopical slide according to Clause 3.1.1.4 Bifidobacteria 1 x 1E7 CFU/g, not less than Microscopical slide according to Clause 3.1.1.4
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
3.4.4. Curd products:						
- children curds, acidophilic paste, low-lactose protein paste, etc.	-	1.0	-	1.0	50 <*>	<*> only salmonella; microscopic slide according to Clause 3.1.1.4
- calcinated curds	100	1.0	-	1.0	50	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)						
3.4.5. Ready-made milk porridges (kashas) (from flour and grits of all types)	1 x 1E3	1.0	-	1.0	50	
3.4.6. Tinctures (from rose hip, black currant, etc.)	5 x 1E3	1.0	10.0	-	50 <*>	<*> only salmonella

3.4.7. Starters (liquid)	-	10.0	-	10.0	100	Starter population microorgan- isms 1 x 1E8 CFU/g, not less than; microscopi- c slide according to Clause 3.1.1.4
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### 3.5. Products for Pregnant and Nursing Women

### 3.5.1. Milk and Soya Protein Isolate Based Products

#### 1) Nutritional value (in a ready-to-eat product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
Protein	g/l	30 - 100	+	
Fat	the same	8 - 35	+	
Hydrocarbons	the same	100 - 140	+	
Energy value	kcal/l	610 - 1300	+	
Mineral substances:				
calcium	mg/l	1200 - 2000	+	
phosphorus	the same	900 - 1400	+	
calcium/phosphorus	-	1.1 - 2.0	-	
potassium	mg/l	1400 - 2500	+	
sodium	the same	450 - 750	+	
potassium/ sodium	-	2 - 3	-	
magnesium	the same	150 - 250	+	
copper	mkg/l	600 - 1000	+	
manganese	the same	200 - 250	+	
iron	mg/l	30 - 50	+	
zinc	the same	10 - 40	+	
chlorides	the same	1000 - 1600	-	
iodine	mkg/l	100 - 250	+	
ash	g/l	9 - 12	+	
Vitamins:				
retinol (A)	mkg-eq/l	500 - 1500	+	
tocopherol (E)	the same	10 - 40	+	
calciferol (D)	mkg/l	10 - 15	+	
vitamin K	the same	50 - 120	+	
thiamine (B1)	mg/l	0.8 - 1.5	+	
riboflavin (B2)	mg/l	0.8 - 1.5	+	
panthotenic acid	the same	8 - 12	+	
pyridoxin (B6)	the same	1.5 - 3.0	+	
niacin (PP)	the same	10 - 25	+	
folic acid (Bc)	the same	0.8 - 2.0	+	
cyanocobalamin (B12)	mkg/l	3.0 - 8.0	+	
ascorbic acid (C)	mg/l	100 - 300	+	
inosite	the same	80 - 120	+	
choline	the same	80 - 120	+	
biotin	mkg/l	80 - 200	+	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of				
Chief State Sanitary Inspector of the RF dated 15.04.2003)				

## 2) Safety indices (in a ready-to-eat product)

(as amended by Amendments and Additions No. 2, Approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Indications of oxidative deterioration: Peroxide value	4.0	mmol of active oxygen/kg of fat
Toxic elements: lead arsenic cadmium mercury	0.05 0.05 0.02 0.005	
Antibiotics <*>:		In milk based products
laevomycetin (chloramphenicol)	0.01 0.0003	Expiring on 01.01.2012. Shall become effective since 01.01.2012.
tetracycline group	0.01	
penicillins	0.004	
Streptomycin (as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)	0.2	
Mycotoxins: aflatoxin M1	not allowed	< 0.00002, for milk based products
aflatoxin B1	not allowed	< 0.00015, for soya based products
Pesticides: hexachlorocyclohexane (alpha-, beta-, gamma isomers) DDT and its metabolites (as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)	0.02 0.01	
Radionuclides: caesium-137 strontium-90 (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	40 25	Bq/l the same
dioxins	not allowed	for milk based products

(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg (for milk based products)
(introduced by Amendments No. 11, approved by Resolution No. 56 of Chief State Sanitary Inspector of the RF dated 01.10.2008)		
Microbiological indicators:		
3.5.1.1. Dry Instant Products		
QMAFAnM,	2.5 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	1.0	mass (g) in which the indicator is not allowed
E. coli	10	the same
S. aureus	1.0	the same
B. cereus	200	CFU/g, not more than
Pathogenic, including salmonella and L. monocytogenes	50	mass (g) in which the indicator is not allowed
Moulds	100	CFU/g, not more than
Yeast	50	the same
(Clause 3.5.1.1 as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
I		
3.5.1.2. Sterilized Flavourless Liquid Products		
Shall satisfy requirements for industrial sterility for sterilized milk in accordance with Annex 8 to these Sanitary Rules (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
3.5.1.3. Liquid Fermented Milk Products and Fermented Soybean Products		
Coliform bacteria (coliforms)	3	volume (cm3), in which the indicator is not allowed
S. aureus	10	the same
B. cereus	1.0	volume (cm3)
Pathogenic, including salmonella and L. monocytogenes	50	the same
Bifidobacteria	1 x 1E6	CFU/cm3, not less than, if produced with the use thereof
Lactic acid microorganisms	1 x 1E7	CFU/cm3, not less than
Moulds	10	CFU/cm3, not more than
Yeast	10	CFU/cm3, not more than

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

### 3.5.2. Milk and Grain Based Porridges (Kashas) (instant)

#### 1) Nutritional value (in 100 g of the product)

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Moisture	g	4 - 6	-	
Protein	g	10 - 14	+	
Fat	g	2 - 10	+	
Hydrocarbons	the same	70 - 80	+	
Energy value	kcal	340 - 460	+	
Ash	g	0.5 - 3.5	-	
Mineral substances:				
sodium	mg, not more than	250	+	
calcium	mg	200 - 500	+	for enriched products
iron	the same	20 - 50	+	the same
Vitamins:				
retinol (A)	mkg-eq	300 - 400	+	for vitaminized products
vitamin E	mg	5 - 12	+	the same
vitamin D	mkg	5 - 10	+	the same
vitamin C	mg	30 - 120	+	the same
thiamine (B1)	mg	0.2 - 0.7	+	the same
riboflavin (B2)	the same	0.3 - 0.8	+	the same
niacin (PP)	mg	5 - 12	+	the same
folic acid (Bc)	mkg	600 - 1200	+	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)				

#### 2) Safety Indices

Indices	Permissible levels, mg/kg, not more than	Notes
1	2	3
Toxic elements:		
lead	0.3	
arsenic	0.2	
cadmium	0.06	
mercury	0.03	
Mycotoxins:		
aflatoxin M1	not allowed	< 0.00002
aflatoxin B1	not allowed	< 0.00015
deoxynivalenol	not allowed	< 0.05 for wheat, barley
zearalenone	not allowed	< 0.05 for

|maize,|



T-2 toxin	not allowed	wheat, barley < 0.05
ochratoxin A	not allowed	< 0.0005 from wheat, rye, barley, oat, rice
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Antibiotics <*>:	according to Clause 3.5.1	
(as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)		
Pesticides <*>: (as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)		
Pesticides <*>:	according to Clause 3.1.2.1	
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
Benz(a)pyrene	not allowed	< 0,2 mkg/kg
Radionuclides (in a ready-to-eat product):		
caesium-137	40	Bq/kg
strontium-90	25	the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003, No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Harmful contaminants:		
Pest contamination and infestation of grain (insects, mites)	not allowed	
Metallic impurities	3 x 1E4	%, size of separate particles shall not exceed 0.3 mm in the largest linear measurement
Microbiological indicators:		
QMAFAnM,	5 x 1E4	CFU/g, not more than
Coliform bacteria (coliforms)	0.1	mass (g) in which the indicator is not allowed
Pathogenic, including salmonella and L. monocytogenes	25	the same
Moulds	200	CFU/g, not more than
Yeast	100	the same
dioxins	not allowed	for milk based products
(introduced by Amendments and Additions No. 10, approved by Resolution No. 43 of Chief State Sanitary Inspector of the RF dated 16.07.2008)		
Melamine	not allowed	< 1 mg/kg (for milk based products)
(introduced by Amendments No. 11, approved by Resolution No. 56 of		

Chief State Sanitary Inspector of the RF dated 01.10.2008)

**3.5.3. Fruit and Vegetables Based Products (Fruit, Vegetables Juices, Nectars and Drinks, Fruit Waters)**  
**(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF Dated 28.06.2010)**

**1) Nutritional value (in 100 g of the product)**

Criteria and indices	Measurement Units	Permissible levels		Notes
		standard	marked	
1	2	3	4	5
Mass fraction of, not soluble dry substances (juices)	g, not less than	5		
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Hydrocarbons	g	4 - 20		
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)				
Mineral substances:				
iron	mg	2 - 4		for enriched products
Vitamins:				
ascorbic acid (C)	mg	15 - 30		for vitaminized products
beta-carotene	the same	1 - 2		the same
folic acid (Bc)	mkg	100 - 400		the same
retinol (A)	mkg-eq	100 - 300		the same
(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 Chief State Sanitary Inspector of the RF dated 15.04.2003)				

**2) Safety Indices**

Indices	Permissible levels, mg/kg, not more than	Notes
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1	2	3
Toxic elements:		
Lead	0.3	
arsenic	0.1	
(as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)		
Cadmium	0.02	
Mercury	0.01	

Mycotoxins: Patuline	not allowed	< 0.02, for products containing apples, tomatoes, sea-buckthorn
Pesticides: hexachlorocyclohexane (alpha-, beta-, gamma isomers) DDT and its metabolites (as amended by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010)	0.01 0.005	
Nitrates      (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	200	vegetable, and fruit and vegetable based products
	50	fruit based products
Radionuclides: caesium-137 strontium-90 (as amended by Amendments and Additions No. 18, approved by Resolution No. 71 of Chief State Sanitary Inspector of the RF dated 28.06.2010)	40 25	Bq/kg the same
5-Oxymethylfurfurol (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)	according to Clause 2.2	for fruit juices and nectars
Microbiological indicators:	Shall satisfy requirements for industrial sterility for canned food of the corresponding groups in accordance with Annex 8 to these Sanitary Rules	

### 3.5.4. Herbal Instant Teas

(on vegetable basis)

Safety indicators (in ready-to-use product)

Indicators	Permissible levels, mg/kg, not more than	Notes
Toxic elements: lead (as amended by Amendments and Additions No. 18 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 28.06.2010 No. 71)	0.02	
arsenic	0.05	
cadmium	0.02	
mercury	0.005	
Pesticides: hexachlorocyclohexane (alpha-, beta-, gamma - isomers)	0.02	
DDT and its metabolites (as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)	0.01	
Microbiological indicators: QMAFAnM	5 x 1E3	CFU/g, not more than
Coliform bacteria(coliforms)	1.0	weight (g), in which the indicator is not allowed
B. cereus	100	CFU/g, not more than
Pathogenic, including salmonella	25	weight (g), in which the indicator is not allowed
Mould	50	CFU/g, not more than
Yeast (as amended by Amendments and Additions No. 18 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 28.06.2010 No. 71)	50	the same

<\*> It is also required to control residual quantities of the pesticides and the antibiotics used for production of food raw material (see Clauses 3.12, 3.13, 3.15).

(the note was amended by Amendments and Additions No. 22 approved by Resolution No. 177 of the Chief State Sanitary Inspector of the RF dated 27.12.2010)

### 3.6. Main Raw Materials and Components Used during Production of Children Food Products

Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3	4
3.6.1. Raw, heat treated, dry milk, cream and milk components,	Toxic elements, antibiotics, mycotoxins, pesticides, radionuclides	under Item 3.1.1.1	For dry components in reduced product
	Inhibitory	not allowed	raw milk and

	substances		cream
	Dioxins:	not allowed	
	Melamine	not allowed	< 1 mg/kg
(as amended by Amendments and Additions No. 10 approved by Resolution No. 43 of the Chief State Sanitary Inspector of the RF dated 16.07.2008, Addition No. 11 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 01.10.2008 No. 56)			

Microbiological indicators:

Index, products group	QMAFAnM, CFU/g, not more than	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed			Mould, yeast, CFU/g, not more than	Notes
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including		

		)		salmon ella		
1	2	3	4	5	6	7
3.6.1.1. Raw cow milk:						somatic cells, not more than 5 x 1E5 in 1 cm <sup>3</sup>
- top-grade	3 x 1E5	-	-	25		
- 1 <sup>st</sup> grade	5 x 1E5	-	-	25		
3.6.1.2. Dry milk with weight fraction of fat 2.5%, dry fatless	2.5 x 1E4	1.0	1.0	25.0	Mould - 100; yeast - 50	
3.6.1.3. Concentrate of milk serum protein, produced by electrodialysi s, ultrafiltratio n and electrodialysi s	1 x 1E4	1.0	1.0	25	Mould - 50; yeast - 10	
3.6.1.4. Carbohydrate- protein concentrate	1 x 1E4	1.0	1.0	50	Mould - 50; yeast - 10	
3.6.1.5. Milk-protein concentrate	1 x 1E4	1.0	1.0	50	Mould - 50; yeast - 10	
3.6.1.6. Dry carbohydrate- protein mould made from cheese whey	2.5 x 1E4	1.0	1.0	25	Mould - 50; yeast - 10	
3.6.1.7. Dry carbohydrate- protein moulds made from curd whey	2.5 x 1E4	1.0	1.0	25	Mould - 50; yeast - 10	
3.6.1.8. Liquid paracasein concentrate		3.0	1.0	25	Mould - 50; yeast - 50	microscope slide



3.6.1.9. Dry paracasein concentrate		1.0	1.0	25	Mould - 50; yeast - 50	the same
3.6.1.10. Dry kazetsit	1 x 1E4	1.0	1.0	25	Mould - 50; yeast - 10	
3.6.1.11. Nonfat dry milk component for dry children food products	1.5 x 1E4	0.3	1.0	25	Mould - 50; yeast - 10	
3.6.1.12. Dry milk component with malt extract (for liquid children food products); nonfat dry milk component (for production of biologically active substances)	1.5 x 1E4	1.0	1.0	25	Mould - 50; yeast - 10	
3.6.1.13. Dry milk component with carbohydrate- protein concentrate for liquid children food products	2.5 x 1E4	1.0	1.0	25	Mould - 50; yeast - 50	
3.6.1.14. Dry nonfat milk component without chemical treatment for dry children food products	2.5 x 1E4	1.0	1.0	25	Mould - 50; yeast - 50	

Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3	4
3.6.2. Grain and grain products (flour, cereals)	Toxic elements, mycotoxins, pesticides, injurious additives, benz(a)pyrene	under Item 3.1.2.1	
	Radionuclides: cesium-137 strontium-90	40 25	Bq/kg the same

(as amended by Amendments and Additions No. 18 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 28.06.2010 No. 71)

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Microbiological indicators:

Index, products group	QMAFAnM, CFU/g, not more than	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed			Mould, CFU/g, not more than	Yeast, CFU/g, not more than
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella		
1	2	3	4	5	6	7
3.6.2.1. Not treated rice, buckwheat, oat, wheat, barley cereals	2.5 x 1E4	1.0	-	25	100	100
3.6.2.2. Not treated rice, buckwheat, oat, rye flour	5 x 1E4	0.1	-	25	200	100
3.6.2.3. Treated rice, buckwheat, oat, rye flour	1 x 1E4	1.0	1.0	25	50	10
3.6.2.4. Semolina	1 x 1E4	1.0	1.0	25	50	50
3.6.2.5 Oatmeal	1 x 1E4	1.0	1.0	25	50	10

(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41)

Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3	4
3.6.3. Fresh fruit, vegetables	Toxic elements:  lead arsenic cadmium mercury	  0.3 0.2 0.02 0.01	
	Pesticides:  hexachlorocyclohexane (alpha-, beta-, gamma - isomers) DDT and its metabolites	  0.01  0.005	
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			
	Nitrates:	600 400 200 50	beet-root cabbage vegetables, bananas, fruit
	Radionuclides:		
	cesium-137	60	Bq/kg
	strontium-90	25	the same
(as amended by Amendments and Additions No. 10 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 16.07.2008 No. 43)			
3.6.3.1. Concentrated fruit juices of aseptic canning or fast-frozen	Toxic elements	under Item 3.1.3	in terms of initial product (juices) subject to dry substances content in it and in the end product (concentrated juices)
	Mycotoxins: penicidin	not allowed	< 0.02 for apple, sea-buckthorn
	Pesticides:  hexachlorocyclohexane hexane(alpha-, beta-, gamma - isomers) DDT and its metabolites	  0.1  0.05	
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			

	Nitrates	100	fruits
(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41)			
3.6.4. Meat of the livestock for slaughter (beef, pork, horse meat etc.)	Toxic elements:		
	Lead	0.1	for children under 3 years
		0.2	for children older than 3 years
	Arsenic	0.1	
	Cadmium	0.03	
	Mercury	0.01	for children under 3 years
		0.02	for children older than 3 years
	Antibiotics <*>:		
	laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
		0.0003	Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	Bacitracin	0.02	
(as amended by Amendments No. 24 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 01.06.2011 No. 79)			
	Pesticides:		
	hexachlorocyclohexane (alpha-, beta-, gamma - isomers)	0.01	for children under 3 years
		0.015	for children older than 3 years
	DDT and its metabolites	0.01	for children under 3 years
		0.015	for children older than 3 years
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			
	Dioxins:	not allowed	
	Radionuclides:		
	cesium-137	70	Bq/kg
	strontium-90	30	the same
(as amended by Amendments and Additions No. 10 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 16.07.2008 No. 43)			

3.6.4.1. By-products of the livestock for slaughter (liver, heart, tongue)	Toxic elements:		
	lead	0.5	
	arsenic	1.0	
	cadmium	0.3	
	mercury	0.1	
Antibiotics			
	laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
		0.0003	Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	
(as amended by Amendments No. 24 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 01.06.2011 No. 79)			
	Pesticides:	0.015	
	hexachlorocyclohexane (alpha-, beta-, gamma - isomers)		
	DDT and its metabolites	0.015	
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			
	Dioxins:	not allowed	
	Radionuclides:		
	cesium-137	70	Bq/kg
	strontium-90	30	the same
(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41, No. 10, approved by Resolution of the Chief State Sanitary Inspector of the RF dated 16.07.2008 No. 43)			

Microbiological indicators:

Index, products group	QMAFAnM, CFU/g, not more than	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed		
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella and L. monocytogenes
3.6.4. Meat of the livestock for slaughter (in bulk and cut):		1.0		25
- new-slaughtered	10	1.0	-	25
- chilled	1 x 1E3	0.1	-	25
- frozen	1 x 1E4	0.01	-	25

- frozen in blocks and pieces	1 x 1E5	0.001	-	25
- by-products	-	-	-	25
- dry food blood	2.5 x 1E4	1.0	1.0	25

by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41)

Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3	4
3.6.5. Poultry meat	Toxic elements:		
	lead	0.2	
	arsenic	0.1	
	cadmium	0.03	
	mercury	0.02	
	Antibiotics <*>		
	laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
		0.0003	Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	bacitracin	0.02	
(as amended by Amendments No. 24 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 01.06.2011 No. 79)			
	Pesticides: hexachlorocyclohexane (alpha-, beta-, gamma - isomers)	0.02	
	DDT and its metabolites	0.01	
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			
	Dioxins:	not allowed	
	Radionuclides:		
	cesium-137	70	Bq/kg
	strontium-90	30	the same
(as amended by Amendments and Additions No. 10 approved by Resolution of the Chief State Sanitary Inspector of the Russian Federation dated 16.07.2008 No. 43)			

Microbiological indicators:

Index, products QMAFAnM, group	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed
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	CFU/g, not more than	Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella and L. monocytogenes
1	2	3	4	5
3.6.5.1. Carcasses and meat of poultry (taking of samples from deep layers): - chilled, frozen poultry	1 x 1E5			25
- chilled, frozen meat of chicken, broiler chicken	1 x 1E5			25
- lump meat without bones;	2 x 1E5			25
lump meat with bones, including chicken legs and breasts - mechanically deboned meat	1 x 1E6			25
3.6.5.2. Chilled poultry by- products	2 x 1E5	-	-	25



Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3	4
3.6.6. Fish	Toxic elements:		
	lead	0.5	
	arsenic	0.5	
	cadmium	0.1	
	mercury	0.15	
Antibiotics <*>: in fish of pond and cage culture fishery			
tetracycline group		0.01	
(as amended by Amendments and Additions No. 24 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 01.06.2011 No. 79)			
Pesticides: hexachlorocyclohexane (alpha-, beta-, gamma -		0.02	

	isomers) DDT and its metabolites	0.01	
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			
	Nitrosamines: sum of nitrosomethylamine and nitrosodiethylamine	not allowed	< 0.001
	histamine	100	tunny, mackerel, salmon, herring
	polychlorinated biphenyls	2.0	
	Dioxins:	not allowed	
	Radionuclides:		
	cesium-137	100	Bq/kg
	strontium-90	60	the same
(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41, No. 10, approved by Resolution of the Chief State Sanitary Inspector of the RF dated 16.07.2008 No. 43)			

Microbiological indicators:				
Index, products group	QMAFAnM, CFU/g, not more than	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed		
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella and L. monocytogenes
3.6.6. Chilled, subfrozen, frozen raw fish	5 x 1E4	0.01	0.01	25
(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41, No. 10 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 16.07.2008 No. 43)				

Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
3.6.7. Refined and deodorized vegetable oil	Toxic elements:  lead arsenic cadmium mercury	  0.1 0.1 0.05 0.03	

	Pesticides:		
	Hexachlorocyclohexane	0.01	
	DDT and its	0.1	
	metabolites		
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			
	Indicators of oxidative spoilage: peroxide value	2	active oxygen mmole/kg mg KOH/g unit/g
	acid-degree value	0.6	
	anisidine index	3.0	
	Dioxins:	not allowed	
	Radionuclides:		
	cesium-137	60	Bq/kg
	strontium-90	80	the same
(as amended by Amendments and Additions No. 10 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 16.07.2008 No. 43)			

Microbiological indicators:

Index, products group	QMAFAnM, CFU/g, not more than	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed				
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	Mould	Yeast
1	2	3	4	5	6	7
3.6.7.1. Refined deodorized maize oil	100	1.0	1.0	25	20	1.0
3.6.7.2. Refined deodorized sunflower oil	500	1.0	1.0	25	100	1.0
3.6.7.3. Soya-bean oil	100	1.0	-	25	20	1.0

Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
3.6.8. Top-grade butter Rendered poultry fat	Toxic elements: lead	0.1	
	arsenic	0.1	
	cadmium	0.03	
	mercury	0.03	
	Antibiotics <*>: including in rendered poultry fat		
	laevomycetin (chloramphenicol)	0.01	Expiring on 01.01.2012.
		0.0003	Shall become effective since 01.01.2012.
	tetracycline group	0.01	
	penicillins	0.004	
	streptomycin	0.2	
(as amended by Amendments No. 24 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 01.06.2011 No. 79)			
	Mycotoxins: aflatoxin M1	not allowed	< 0.00002
	Pesticides: Hexachlorocyclohexane (alpha-, beta-, gamma - isomers) DDT and its metabolites	0.2  0.2	
(as amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			
	Dioxins:	not allowed	
	Radionuclides:		
	cesium-137	40	Bq/kg
	strontium-90	25	the same
(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41, No. 10, approved by Resolution of the Chief State Sanitary Inspector of the RF dated 16.07.2008 No. 43)			

Microbiological indicators:

Index, products group	QMAFAM, CFU/g, not more than CFU/g,	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed			Mould, CFU/g, not more than	Notes
		Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella		
3.6.8.1. Top-grade butter	1 x 1E4	0.1	1.0	25 <*>	100	<*> additionally L. monocytogenes
3.6.8.2. Rendered poultry fat	1 x 1E2	1.0	1.0	25	-	

Index, products group	Indicators	Permissible levels, mg/kg, not more than	Notes
1	2	3	4
3.6.9. Sugar sand	Toxic elements:		
	lead	0.5	
	arsenic	1.0	
	cadmium	0.05	
	mercury	0.01	
	Pesticides:	not allowed	< 0.005
	Hexachlorocyclohexane (alpha-, beta-, gamma - isomers)		
	DDT and its metabolites	not allowed	< 0.005
(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41, No. 22, approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)			

Microbiological indicators:

Index, products group	QMAFAnM, CFU/g, not more than	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed			Mould, CFU/g, not more than	Yeast, CFU/g, not more than
1	2	Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	6	7
3.6.9.1. Sugar sand, refined milk sugar	1 x 1E3	1.0		25	10	10

3.6.9.2. Maize molasses	5 x 1E3	1.0	1.0	100	50	10
3.6.9.3. Malt extract for children food	1 x 1E4	1.0	-	25	50	50
3.6.9.4. Maize starch of top grade	1 x 1E4	1.0	-	25	50	10
3.6.9.5. Aspartame	2.5 x 1E2	1.0	-	10	-	-
3.6.9.6. Dry maize imported molasses	5 x 1E3	1.0	1.0	100	50	10
3.6.9.7. Powdered low-conversion glucose syrup	1 x 1E4	1.0	1.0	25	100	50
3.6.9.8. Carbohydrate component produced by enzymic cleavage of starch	1 x 1E4	1.0	-	25	100	50
3.6.9.9. Potato starch of top grade	1 x 1E4	1.0	-	25	50	10
3.6.9.10. Refined milk sugar	1 x 1E3	1.0	-	25	10	10
3.6.9.11. Food lactose of spray dehydration	1 x 1E4	1.0	1.0	25	100	50
(as amended by Amendments and Additions No. 2 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 15.04.2003 No. 41)						
3.6.9.12. Lactose concentrate	5 x 1E3	1.0	-	50	100	50

Index, products group	Indicators	Permissible levels, mg/kg, not more than			Notes	
3.6.10. Other components						
Microbiological indicators:						
Index, products group	QMAFAnM, CFU/g, not more than	Product weight (cm <sup>3</sup> , g), in which the indicator is not allowed	Coliform bacteria (coliforms)	S. aureus	Pathogenic, including salmonella	Mould, CFU/g, not more than
						Yeast, CFU/g, not more than
1	2	3	4	5	6	7
3.6.10.1. Vitamin premix	100	1.0	1.0	25	20	not allowed
3.6.10.2. Mineral premix	1 x 1E4	1.0	1.0	25	50	50
3.6.10.3. Isolated soya protein	5 x 1E3	0.1	1.0	25	-	-
3.6.10.4. Pectin	1 x 1E4	0.1	-	25	100	100

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<\*> It is also required to control residual quantities of the pesticides and antibiotics used for production of food raw material (see Clauses 3.12, 3.13, 3.15).

(the note was amended by Amendments and Additions No. 22 approved by Resolution of the Chief State Sanitary Inspector of the RF dated 27.12.2010 No. 177)

Annex 4 to SanPiN  
2.3.2.1078-01, approved by  
Resolution No. 36 of the  
Chief State Sanitary  
Inspector of the RF dated  
November 14, 2001

## FOOD PRODUCTS PRODUCED FROM GENETICALLY MODIFIED SOURCES

Expelled from September 1, 2007. — Amendments No. 5 approved by Resolution No. 42. of the Chief State Sanitary Inspector of the RF dated 25.06.2007

Annex 5a to SanPiN  
2.3.2.1078-01, approved by  
Resolution No. 36 of the  
Chief State Sanitary  
Inspector of the RF dated  
November 14, 2001

## BIOLOGICALLY ACTIVE SUBSTANCES, COMPONENTS OF FOOD AND PRODUCTS BEING THEIR SOURCES AND NOT HAVING ADVERSE EFFECTS TO HUMAN HEALTH WHEN USED FOR PRODUCTION OF BIOLOGICALLY ACTIVE ADDITIVES TO FOOD

### 1. Food substances:

1.1. Proteins, protein derivatives (of animal, vegetable, microbial and other origin): protein isolates, protein concentrates, protein hydrolyzates, aminoacids and derivatives thereof.

1.2. Fats, lipoids and derivatives thereof:

1.2.1. vegetable oils – the sources of essential polyunsaturated fatty acids, phytosterols, phospholipids, fat-soluble vitamins;

1.2.2. Fats of fish and marine animals - the sources of polyunsaturated fatty acids, phospholipids, fat-soluble vitamins;

1.2.3. individual polyunsaturated fatty acids, extracted from food sources: linoleic, linolenic, arachidonic, eicosapentaenoic, docosahexaenoic acids etc.;

1.2.4. sterines extracted from food raw materials;

1.2.5. medium-chain triglycerides;

1.2.6. phospholipids and their precursor substances, including lecithin, kephalin, choline, ethanolamine.

1.3. Carbohydrates and their derived products:

1.3.1. food fibers (cellulose pulp, hemicelluloses, pectin, lignin, gum etc.);

1.3.2. polyglycoosamines (chitosan, chondroitin sulfate, glycosaminoglycans, glucosamine etc.);

1.3.3. starch and products of its hydrolysis;

1.3.4. inulin and other polyfructosans;

1.3.5. glucose, fructose, lactose, lactulose, ribose, xylose, arabinose.

1.4. Vitamins, pseudo-vitamins and coenzymes: vitamin C (ascorbic acid, its salts and ethers), vitamin B<sub>1</sub> (thiamine), vitamin B<sub>2</sub> (riboflavin, flavin mononucleotide), vitamin B<sub>6</sub> (pyridoxine, pyridoxal, pyridoxamine and their phosphates), vitamin PP (nicotinamide, nicotinic acid, salts of nicotinic acid), folic acid, vitamin B<sub>12</sub> (cyanocobalamin, methylcobalamin), pantothenic acid (salts of pantothenic acid), biotin, vitamin A (retinol and its ethers), carotenoids (beta-carotene, lycopin, lutein etc.), vitamin E (tocopherols, tocotrienols and their ethers), vitamin D and its active forms, vitamin K, para-aminobenzoic acid, lipoic acid, orotic acid, inosite, methylmethionine-sulfonium, carnitine, pangamic acid.

1.5. Mineral substances (macro- and microelements): calcium, phosphorus, magnesium, potassium, sodium, iron, iodine, zinc, boron, chrome, copper, sulfur, manganese, molybdenum, selenium, silicon, vanadium, fluorine, germanium, cobalt.

### 2. Minor food components:

2.1. enzymes (of vegetable origin or obtained by biotechnological methods on the basis of microbial synthesis);

2.2. polyphenolic compounds including ones with an expressed antioxidant effect - bioflavonoids, anthocyanidins, catechins and others);



2.3. natural metabolites: succinic acid, alpha-keto acids, ubiquinone, citric acid, fumaric acid, tartaric acid, ornithine, tsitrulin, creatine, betaine, glutathione, taurine, malic acid, indoles, isothiocyanates, octacosanol, chlorophyll, terpenoids, iridoids, resveratrol, steviosides.

3. Probiotics (in monocultures and in associations) and prebiotics:

3.1. Bifidobacteria, including the species of infantis, bifidum, longum, breve, adolescentis; Lactobacillus, including the species of acidophilus, fermentii, casei, plantarum, bulgaricus etc.; Lactococcus; Streptococcus thermophilus; Propionibacterium etc.;

3.2. various classes of oligo- and polysaccharides (fructo-oligosaccharides, galacto-oligosaccharides of natural origin, of microbial synthesis, etc.);

3.3. biologically active substances - immune proteins and enzymes, glycopeptides, lysozyme, lactoferrin, lactoperoxidase, bacteriocins of lactic-acid microorganisms, except for preparations from tissues and fluids of man.

4. Plants (food and drug ones), products of the sea, rivers, lakes, reptiles, arthropods, mineral-organic or natural mineral substances (in a dry, powder, tablet, encapsulated form, in the form of aqueous, alcoholic, fat dry and liquid extracts, tinctures, syrups, concentrates, balsams): amaranth, Spirulina, Chlorella, inactivated yeast and their hydrolysates, zeolites etc.

5. Bee products: royal jelly, propolis, beeswax, pollen, ambrosia.

BIOLOGICALLY ACTIVE SUBSTANCES,  
FOOD COMPONENTS AND PRODUCTS BEING THEIR SOURCES  
WHICH MIGHT NEGATIVELY AFFECT HUMAN HEALTH WHEN USED FOR PRODUCTION OF  
BIOLOGICALLY ACTIVE FOOD ADDITIVES

(as amended by Amendments No.1, approved by Resolution No.  
27 of Chief State Sanitary Inspector of the RF dated 20.08.2002  
Amendments and Additions No. 7, approved by Resolution No. 17  
of Chief State Sanitary Inspector of the RF dated 05.03.2008  
Amendments and Additions No. 15, approved by Resolution No.  
73 of Chief State Sanitary Inspector of the RF dated 08.12.2009  
Amendments No.19, approved by Resolution No. 102 of Chief  
State Sanitary Inspector of the RF dated 10.08.2010  
Amendments No.23, approved by Resolution No. 30 of Chief State  
Sanitary Inspector of the RF dated 11.04.2011

1. Plants Containing Strong, Narcotic, or Toxic Substances:

No.	Name of Plants in English	Name of Plants in Latin	Parts of Plants
1	2	3	4
1.	Rosary pea (Indian liquorice, Precatory bean, Jequirity)	<i>Abrus precatorius</i> L.	Seeds
2.	Common Hedgehyssop (Herb of grace)	<i>Gratiola officinalis</i> L.	Aerial part
3.	Climbing fumitory	<i>Adlumia fugosa</i> Greene	All parts
4.	Neem tree (Margosa, Neem)	<i>Azadirachta indica</i> A. Juss.	All parts
5.	<i>Asiasarum heterotropoides</i>	<i>Asiasarum heterotropoides</i> F. Maek.	Roots
6.	Acacia	<i>Acacia</i> L.	All species, aerial part
7.	Aconite (Monkshood)	<i>Aconitum</i> L.	All species, all parts
8.	Toothpickweed (Bisnaga)	<i>Ammi visnaga</i> (L.) Lam. ( <i>Visnaga daucoides</i> Gaertn.)	All parts
9.	Devil's tongue	<i>Amorphophallus rivieri</i> Durieu	All parts
10.	Anabasis	<i>Anabasis</i> L.	All species, shoots
11.	Adenanthera	<i>Adenanthera</i> L.	All species, all parts
12.	Anamirta cocculus (Indian cocculus, Cocculus)	<i>Anamirta cocculus</i> (L.) Wight et Arn.	All parts
13.	<i>Anhalonium lewinii</i>	<i>Anhalonium lewinii</i> Jennings	All parts
14.	Rayless goldenrod	<i>Aplopappus heterophyllus</i>	All parts
15.	Prickly poppy	<i>Argemone</i> L.	All species, all parts
16.	Betel palm (Areca palm, Areca nut, Betel palm)	<i>Areca catechu</i> L.	All parts

17.	Arisarum	Arisarum L.	All species, all parts
18.	Dutchman's pipe	Aristolochia L.	All species, all parts
19.	Arnica	Arnica L.	All species, flowers
20.	Arum	Arum L.	All species, all parts
21.	Arthrocnemum glaucum	Arthrocnemum glaucum Delile	Aerial part
22.	Blackheart Sassafras	Atherosperma moschatum Labill.	All parts
23.	Labrador tea (Rosemary)	Ledum L.	All species, aerial part, shoots
24.	Roughbark Lignum-vitae (Guaiacum)	Guaiacum officinale L.	All parts
25.	Bocconia	Bocconia L.	All species, all parts
26.	Fir clubmoss (Fir moss)	Huperzia selago L.	All parts
27.	Barberry	Berberis L.	All species, roots, bark
28.	Periwinkle (Madagascar Periwinkle)	Vinca L.	All species, all parts
29.	Slipper orchid	Cypripedium sp.	All species, all parts
30.	Colchicum	Colchicum sp.	All species, all parts
31.	Beilschmiedia Nees	Beilschmiedia Nees	All parts
32.	Henbanes	Hyoscyamus sp.	All species, all parts
33.	Grass of Parnassus (Marsh Grass-of-Parnassus, Northern Grass-of-Parnassus)	Parnassia palustris L.	All parts
34.	Summer snowflake	Leucojum aestivum L.	All parts
35.	European spindle (Spindle)	Euonymus europaea L.	Seeds
36.	Biota	Biota orientalis L.	All parts
37.	Common privet	Ligustrum vulgare L.	Leaves, fruits
38.	Blepharis edulis	Blepharis edulis Pers.	All parts
39.	Fleabane	Pulicaria uliginosa Stev. ex DC.	All parts
40.	Golden chain (Golden shower)	Laburnum anagyroides (= Cytisus laburnum L.)	All parts
41.	Hemlock	Conium L.	All species, all parts
42.	Boronia	Boronia Sm.	Essential oils from leaves and shoots of all species
43.	Java brucea	Brucea javanica Merr.	All parts
44.	Dwarf elder	Sambucus edulus L.	- " -
45.	Summer ragwort	Ligularia dentata Hara	All parts
46.	Burasaia madagascariensis	Burasaia madagascariensis DS	All parts
47.	Meadow rue	Thalictrum L.	All species, aerial part
48.	Vexibia pachycarpa	Vexibia pachycarpa Yakovl	All parts
49.	Camelthorn	Alhagi pseudalhagi Fisch.	Shoots
50.	Anemone	Anemone L.	All species, all

			parts
51.	Cowbane (Cicuta)	Cicuta L.	All species, all parts
52.	Indian ginseng	Withania somnifera (L.) Dunal	All parts
53.	Voacanga africana	Voacanga africana	All parts
54.	Columbine	Aquilegia L.	All species, roots
55.	Common bugloss	Anchusa officinalis L.	All parts
56.	Daphne	Daphne sp.	All species, all parts
57.	Baneberry	Actaea L.	All species, all parts
58.	Paris herb	Paris L.	All species, all parts
59.	Crown vetch, Coronilla (Crown vetch)	Coronilla L.	All species, roots, seeds
60.	Peganum (Syrian Rue)	Peganum L.	All species, aerial part
61.	Gelsemium	Gelsemium L.	All species, all parts
62.	Hydnocarpus (Chaulmoogra)	Hydnocarpus Gaertn.	All species, seeds
63.	Hydrastis (Orangeroot, Goldenseal)	Hydrastis L.	All species, all parts
64.	Hemlock parsley	Conioselinum jeholense M.Pimem	All parts
65.	Glaucium (Horned Poppy)	Glaucium L.	All species, aerial part
66.	Honey locust (Three-thorned acacia)	Gleditsia triacanthos L.	All parts
67.	Gomphocarpus (Swan Plant)	Gomphocarpus L.	All species, all parts
68.	Spring pheasant's eye (Adonis)	Adonis L.	All species, aerial part
69.	Common vetch (Narrow-leaved vetch)	Vicia Angustifolia, V. sativa	All parts
70.	Wild mustard	Sinapis arvensis L.	All parts of the plant in the fruiting season
71.	Chinese bellflower (Sida)	Cida L.	All species, all parts
72.	Northern firmoss	Huperzia selago Bernh. ex Schrank et Mart. (Lycopodium selago L.)	All parts
73.	Water willow	Decodon verticillatus Ell.	Aerial part
74.	Delphinium (Larkspur)	Delphinium L.	All species, all parts
75.	Dehaasia squarrosa	Dehaasia squarrosa Hassk.	All parts
76.	Jeffersonia dubia	Jeffersonia dubia Benth. et Hook. F. ex Baker et Moore	All parts
77.	Jute	Corchorus L.	All species, seeds
78.	Dioscorea hispida	Dioscorea hispida Dennst.	All parts
79.	Common melilot	Melilotus officinalis.	All parts
80.	Doryphora sassafras	Doryphora sassafras Endl.	Essential oils from all parts
81.	Dyer's greenweed	Genista tinctoria L.	All parts
82.	Stramony	Datura L.	All species, all parts
83.	Cocklebur (Jerusalem)	Xanthium L.	All species, all

	Sage, Spiny cocklebur)		parts
84.	Fumitory	Fumaria L.	All species, all parts
85.	Duboisia	Duboisia L.	All species, all parts
86.	Wallflowers	Erysimum L.	All species, all parts
87.	Lonicera chamisso	Lonicera. chamissoi	All parts
88.	Lonicera tatarica	Lonicera. tatarica	Fruits
89.	Lonicera xylosteum	Lonicera xylosteum	Fruits
90.	Zigadenus sibiricus	Zigadenus sibiricus (L.) A.Gray	All parts
91.	Bitter candytuft	Iberis amara L.	All parts
92.	Ignatia amara	Ignatia amara L.	All parts
93.	Ipecacuanha	Cephaelis L.	All species, all parts
94.	Beach Moonflower	Ipomea violacea	Seeds
95.	Cabi paraensis	Cabi paraensis Ducke	All parts
96.	Peyote	Lophophora williamsii	Aerial part
97.	San Pedro Cactus	Echinopsis pachanoi	Aerial part
98.	Caladium	Caladium L.	All species, all parts, apart from edible Caladium - C.esculentum (rootstock)
99.	Silver maple	Acer saccharium	Leaves
100.	Calea zacatechichi	Calea zacatechichi	Aerial part
101.	Caltha	Caltha sp.	All species, aerial part
102.	Cananga odorata (Ylang-ylang)	Cananga odorata Hook. f. et Thoms.	All parts
103.	Hoary pepperwort	Cardaria draba (L.) Desv.	All parts
104.	Kat (cat, khat, Abyssinian tea, Arabian tea)	Catha edulis Forsk.	Aerial part
105.	Baby's-breath (Gypsophila, Tumbleweed)	Gypsophila L.	All species, all parts
106.	Soapbark tree soap	Quillaja saponaria Molina	All parts
107.	Kendyr	Apocynum L.	All species, all parts
108.	Common wood sorrel	Oxalis acetosella L.	- " -
109.	Castor bean	Ricinus communis L.	All parts
110.	Clasping pepperweed	Lepidium perfoliatum L.	All parts
111.	Atragene sibirica	Atragene sibirica L.	All parts
112.	Coca bush (Coca)	Erythroxylum coca Lam.	All species, all parts
113.	Cicely (Dog-parsley)	Aethusa Cynapium L.	All parts
114.	Collinsonia anisata	Collinsonia anisata Sims.	Aerial part
115.	Elephant-ear	Colocasia L.	All species, all parts
116.	Cannabis	Cannabis sp.	All species, all parts
117.	Forking Larkspur	Consolida regalis S.F. Gray	Fruits, seeds
118.	Coptis (Goldthread, Picrorhiza kurroa)	Coptis L.	All species, all parts
119.	Wild ginger	Asarum L.	All species, all parts, essential oils from roots and rootstock
120.	Coriaria	Coriaria	All species, aerial part

121.	Karaka	Corynocarpus Laevigata Forst.	Core, fruit
122.	Cornulaca leucantha	Cornulaca leucantha Charif et Allen	Aerial part
123.	Coscinium fenestratum	Coscinium fenestratum Colebr.	All parts
124.	Belladonna	Atropa belladonna L.	All parts
125.	Groundsel	Senecio L.	All species, aerial part
126.	Crossopteryx kotschyana (Thymus kotschyanus)	Crossopteryx kotschyana Fenzl.	Bark
127.	Crotalaria	Crotalaria L.	All species, all parts
128.	Purging croton	Croton tiglium L.	All parts
129.	Marsh parsley	Cyclospermum leptophyllum Sprague	Fruits
130.	Yellowroot	Xanthorhiza simplicissima Marsh. (Zanthorhiza)	All parts
131.	Water-lily	Nuphar L.	All species, all parts
132.	Common corncockle	Agrostemma githago L.	All parts
133.	Solomon's seal	Polygonatum L.	All species, all parts
134.	Burr chervil	Anthriscus caucalis Bieb.	All parts
135.	Sassafras	Sassafras officinale albiun	All parts
136.	Pokeweed (American pokeweed)	Phytolacca L.	All species, all parts
137.	Lily-of-the-valley	Convallaria L.	All species, all parts
138.	Vincetoxicum	Vincetoxicum sp.	All species, all parts
139.	Latua venenosa	Latua venenosa Phil.	All parts
140.	Caucasian lily	Lilium monadelphum Bieb.	All parts
141.	Lindera oldhamii	Lindera oldhamii Hemsl.	Stem, leaves
142.	Lobelia	Lobelia L.	All species, all parts
143.	Virgin's-bower (Clematis)	Clematis sp.	All species, all parts
144.	Blue Egyptian water lily	Nymphaea Caerulea	Leaves, petals
145.	Lophophora (Peyote)	Lophophora L.	All species, all parts
146.	Menispermum dauricum	Menispermum dauricum L.	All parts
147.	Common toadflax	Linaria vulgaris Mill.	All parts
148.	Buttercups	Ranunculus L.	All species, aerial part
149.	Magnolia	Magnolia L.	All species, all parts
150.	Mahonia (Oregon graperoot)	Mahonia Nutt.	All species, all parts
151.	Poppy (Armenian, Bracteatum, Long-headed, Icelandic, Opium)	Papaver L. (P. Armenacum, P. Bracteatum, P. Dubium, P. Nudicaule, P. somniferum)	All parts, apart from seeds
152.	Macleaya	Macleaya	All species, aerial part
153.	Macrozamia spiralis	Macrozamia spiralis Miq.	All parts
154.	Medicinal mandrake	Mandragora officinarum L.	All parts
155.	Goosefoot	Chenopodium L.	All species, All parts, essential oils from all parts,

			oil from seeds
156.	Cowheat	Melampyrum sp.	All species, all parts
157.	Chamaecytisus ruthenicus (Broom)	Chamaecytisus ruthenicus, Ch. borysthenticus	All parts
158.	Chinaberry	Melia azedarach L.	All parts
159.	Myricaria	Myricaria L.	All species, all parts
160.	Mitragyna	Mitragyna L.	All species, all parts
161.	Savin juniper	Janiperus sabina L.	All parts
162.	Spurge	Euphorbia sp.	All species, all parts
163.	Globe thistle	Echinops L.	All species, fruits
164.	Hellebore	Helleborus L.	All species, all parts
165.	Male fern	Dryopteris filix mas Schott.	Rootstock
166.	Nutmeg	Myristica fragrans Hjuft	Fruit (nut)
167.	Common Soapwort (Bouncing Bet, Soaproot)	Saponaria officinalis L.	All parts
168.	Lousewort	Pedicularis sp.	All species, all parts
169.	Nandina	Nandina domestica Thunb.	Bark, root bark
170.	Foxglove	Digitalis sp.	All species, all parts
171.	Beak-leaved nauclea	Nauclea rhynchophylla Miq.	All parts
172.	Nectandra puchury-major	Nectandra puchury-major Nees et Mart.	Fruits
173.	Nemuaron humboldtii	Nemuaron humboldtii Bail.	Essential oil
174.	Figwort	Scrophularia sp.	All species, all parts
175.	Periploca	Periploca L.	All species, bark
176.	Odostemon aquifolium	Odostemon aquifolium Rydb.	Roots
177.	Comfrey	Symphytum L.	All species, roots
178.	Oleander	Nerium L.	All species, all parts
179.	Water dropwort	Oenanthe sp.	All species, all parts
180.	Mistletoe (Dwarf lilyturf, White mistletoe)	Viscum L.	All species, all parts
181.	Orixa japonica	Orixa japonica Thunb.	All parts
182.	Short-stemmed sedge	Carex brevicollis DC.	Aerial part
183.	Locoweed	Oxytropis L.	All species, all parts
184.	Ocimum sanctum	Ocimum sanctum L.	All parts
185.	Crassula (Rupturewort, Stonecrop)	Sedum L.	All species, all parts
186.	Scarlet pimpernel	Anagallis arvensis L.	All parts
187.	Bean caper	Zygophyllum L.	All species, all parts
188.	Nightshade	Solatium sp.	All species, all parts
189.	Pelargonium (Geranium)	Pelargonium Willd.	All species, all parts

190.	Bryony	Bryonia L.	All species, roots
191.	Piper betel	Piper betle L.	All parts
192.	Kava (Kava-kava)	Piper methysticum (kava-kava)	All parts
193.	Prammogeton canescens	Prammogeton canescens Vatke	Fruits
194.	Petalostylis labicheoides	Petalostylis labicheoides R. Br.	Aerial part
195.	Petrosimonia monandra	Petrosimonia monandra Bunge	Aerial part
196.	Hepatica	Anemone sp.	All species, all parts
197.	Hemp nettle	Galeopsis sp.	All species, all parts
198.	Ternate pinellia	Pinellia ternata Britenbach	Stem
199.	Paeonia anomalae	Paeonia anomalae L.	All parts
200.	Piptadenia peregrina	Piptadenia peregrina Benth.	Bark
201.	Florida fishpoison tree	Piscidia erythrina L.	All parts
202.	Poison darnel	Lolium temulentum L.	Fruits
203.	Dodder	Cuscuta L.	All species, all parts
204.	Rattlebox	Rhinanthus L.	All species, all parts
205.	May apple	Podophyllum L.	All species, root and rootstock
206.	Voronov's snowdrop	Galanthus woronowii Lozinsk.	All parts
207.	Wormwood	Artemisia taurica Willd.	Aerial part, essential oils from all parts
208.	Levant wormseed	Artemisia cina Berg. Ex Poljak.	Aerial part, essential oils from all parts
209.	Mercury	Mercurialis L.	All species, all parts
210.	Pasque flower	Pulsatilla sp.	All species, all parts
211.	Psilocaulon absimile	Psilocaulon absimile N.E.Br.	Aerial part
212.	Physochlaina	Physochlaina L.	All species, all parts
213.	Corn smut	Ustilago maydis DC.	All parts
214.	Floating bladderwort	Utricularia physalis	Aerial part
215.	Ramona stachyoides	Ramona stachyoides Briq.	All parts
216.	Rauvolfia heterophylla	Rauvolfia heterophylla Roem. et Schult.	All parts
217.	Roemeria refracta	Roemeria refracta DC.	All parts
218.	Bur buttercup	Ceratocephala L.	All species, all parts
219.	Rhododendron	Rhododendron sp.	All species, all parts
220.	Hawaiian Baby Woodrose	Argyreia nervosa; Hawaiian Baby Woodrose	All parts
221.	Ruta	Ruta L.	All species, all parts
222.	Fishberry	Ref. Anamirta cocculus	-
223.	Fritillaria ussuriensis	Fritillaria ussuriensis Maxim.	All parts



224.	False sago palm	<i>Cycas circinalis</i> L.	Seeds
225.	Fern palm	<i>Cycas revoluta</i> Thunb.	Seeds
226.	Saksaul	<i>Haloxylon</i> L.	All species, leaves, stem
227.	Bloodwort	<i>Sanguinaria canadensis</i> L.	Roots
228.	Sarcolobus	<i>Sarcolobus</i> R. Br.	All species, all parts
229.	Sarcocephalus	<i>Sarcocephalus</i> Afzel.	All species, all parts
230.	<i>Haloxylon articulatum</i>	<i>Haloxylon articulatum</i> Bunge	Leaves, stems
231.	Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees.	All parts, essential oils from roots and wood
232.	<i>Suaeda physophora</i>	<i>Suaeda physophora</i> L.	All parts
233.	Leadwort	<i>Plumbago europaea</i> L.	All parts
234.	<i>Seidlitzia rosmarinus</i>	<i>Seidlitzia rosmarinus</i> Bunge	Leaves, stem
235.	<i>Securinega</i>	<i>Securinega</i> L.	All species, shoots
236.	<i>Siegesbeckia orientalis</i>	<i>Siegesbeckia orientalis</i> L.	All parts
237.	<i>Simmondsia californica</i> (Jojoba)	<i>Simmondsia californica</i> Nutt.	Seeds
238.	Blueweed	<i>Echium vulgare</i> L.	All parts
239.	<i>Sceletium tortuosum</i>	<i>Sceletium tortuosum</i>	All parts
240.	<i>Scopolia</i>	<i>Scopolia</i> L.	All species, all parts
241.	<i>Smodingium argutum</i>	<i>Smodingium argutum</i> E. Mey	All parts
242.	Shrubby glasswort	<i>Salicornia fruticosa</i> L.	Leaves, stem
243.	Spineless saltwort (Russian thistle)	<i>Salsola australis</i> R. Br. (= <i>S. ruthenica</i> Ljlin)	All parts
244.	Aleppo sorgho (Aleppo grass, Johnson grass)	<i>Sorghum halepense</i> (L.) Pers.	All parts
245.	Ergot (ergot fungi)	<i>Claviceps</i> sp.	All species, all parts
246.	<i>Stellera chamaejasme</i>	<i>Stellera chamaejasme</i> L.	All parts
247.	<i>Stephania</i>	<i>Stephania</i> L.	All species, tubers and roots
248.	<i>Strictocardia tiliaefolia</i>	<i>Strictocardia tiliaefolia</i> Hall.	Seeds
249.	<i>Strophanthus kombe</i>	<i>Strophanthus kombe</i> Oliv.	All parts
250.	<i>Sphaerophysa salsula</i>	<i>Sphaerophysa salsula</i> (Pall.) DC.	All parts
251.	Tobacco	<i>Nicotiana</i> L.	All species, all parts
252.	<i>Tabernanthe iboga</i>	<i>Tabernanthe iboga</i> Baill	All parts
253.	Black bryony (Lady's seal)	<i>Tamus communis</i> L.	All parts
254.	<i>Tauschia</i>	<i>Tauschia</i> Schltdl.	All species, all parts
255.	<i>Thermopsis alpina</i> (Thermopsis, Heath stitchwort)	<i>Thermopsis alpina</i> L.	Aerial part
256.	Guduchi	<i>Tinospora cordifolia</i> Miers	All parts
257.	Yew	<i>Taxus</i> L.	All species, all parts
258.	Orange climber	<i>Toddalia asiatica</i> Lam.	All parts
259.	<i>Toxicodendron</i>	<i>Toxicodendron</i> L. (= <i>Rhus toxicodendron</i> var. <i>hispida</i> Engl.)	All species, all parts

260.	Turbina corymbosa (Ololiuqui, Ololiuhqui)	Turbina corymbosa	Seeds
261.	Turbina corymbosa	Turbina corymbosa Raf.	Seeds
262.	Cockle	Viccaria sp.	All species, all parts
263.	Ungernia victoris	Ungernia victoris Vved. ex Artjushenko	All parts
264.	Ungernia Sewertzowii	Ungernia. Sewertzowii (Regel) B.Fedtsch.	All parts
265.	Unona odoratissima	Unona odoratissima Blanco	Flowers
266.	Fibraurea tinctoria	Fibraurea tinctoria Lour.	All parts
267.	Physochlaina alica	Physochlaina alaica Korotk.	Roots
268.	Physochlaina orientalis	Physochlaina orientalis G. Don f.	Roots
269.	Willow-leaf Heimia	Heimia salicifolia	Aerial part
270.	Cinchona	Cinchona succirubra Pavon.	Bark
271.	Horseradish tree	Moringa oleifera Lam.	All parts
272.	Corydalis	Corydalis sp.	All species, all parts
273.	Hunnemannia fumariaefolia	Hunnemannia fumariaefolia Sweet	All parts
274.	Cephalanthus occidentalis	Cephalanthus occidentalis L.	Aerial part
275.	Cyclamen adsharicum	Cyclamen adsharicum Pobed.	All parts
276.	Cyclamen europaeum	Cyclamen europaeum L.	All parts
277.	Citronella Grass	Cymbopogon winterianus Jowitt.	Essential oils from all parts
278.	Sandfly Zieria	Zieria smithii Andr.	Aerial part, essential oils from all parts
279.	Hellebore	Veratrum sp.	All species, all parts
280.	Common houndsberry (Gypsy-flower)	Cynoglossum officinalis L.	All parts
281.	Strychnine tree (Poison nut)	Strychnos L.	All species, seeds
282.	Vetchling	Lathyrus sp.	All species, all parts
283.	Marsh woundwort	Stachys palustris L.	All parts
284.	Rough hedge woundwort	Stachys aspera Michx.	Aerial part
285.	Celandine	Chelidonium L.	All species, aerial part
286.	Fig-root buttercup (Buttercup ficaria)	Ficaria calthifolia Reichenb., F. verna Huds.	All parts
287.	Diviner's Sage	Salvia divinorum	Leaves
288.	Schanginia baccata	Schanginia baccata Moq.	Leaves, shoots
289.	Evodia meliefolia	Evodia meliefolia Benth.	All parts
290.	Evodia simplex	Evodia simplex Cordem.	All parts
291.	Encephalartos barkeri	Encephalartos barkeri Carruth. et Miq.	All parts
292.	Echinopsis	Echinopsis	All species, aerial part
(Clause 292 as amended by Amendments No.19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
293.	Ephedra	Ephedra sp.	All species, all parts
294.	Burnut	Tribulus L.	All species, all parts
295.	Vera Cruz Jalap	Ipomoea purga (Wend.) Hayne	All parts

296.	Jateorhiza palmata (Columba)	Jateorhiza palmata (Lam.) Miers. (Jatrorrhiza columba (Roxb.) Miers.)	All parts
297.	Ailanthus	Ailanthus altissima	Aerial part
(Clause 297 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
298.	Devil tree	Alstonia venenata R.Br.	Bark
(Clause 298 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
299.	Giant reed	Arundo donax L.	Flowers
(Clause 299 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
300.	Aphanamixis grandiflora	Aphanamixis grandiflora Blume	Seeds
(Clause 300 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
301.	Honeycomb-head	Balduina angustifolia	Aerial part
(Clause 301 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
302.	Wild croton	Baliospermum Montana Muell. Arg	Root, rootstock
(Clause 302 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
303.	Banisteriopsis	Banisteriopsis	All species, all parts
(Clause 303 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
304.	Velvet bean	Mucuna pruriens DC	Seeds
(Clause 304 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
305.	Baileya multiradiata	Baileya multiradiata Harv. et Gray	Aerial part
(Clause 305 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
306.	Virola	Virola	All species, aerial part
(Clause 306 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
307.	Indian blanket	Gaillardia pulchella Foug.	Leaves, flowers
(Clause 307 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
308.	British inula	Inula Britannica L.	Flowers, aerial part
(Clause 308 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
309.	Inula oculus-christi	Inula oculus-christi L.	Aerial part
(Clause 309 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
310.	Delosperma	Delosperma	All species, aerial part
(Clause 310 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
311.	Desmodium racemosum	Desmodium racemosum DC	Aerial part
(Clause 311 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
312.	Desmodium pulchellum	Desmodium pulchellum Benth.	Aerial part
(Clause 312 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
313.	Dicentra	Dicentra	All species, all parts
(Clause 313 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			

314.	Duboisia (Corkwood Tree)	Duboisia	All species, aerial part
(Clause 314 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
315.	Eubotryoides grayana	Eubotryoides grayana Hara	Leaves
(Clause 315 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
316.	Illiciaceae	Illiciaceae	All species, seeds, leaves
(Clause 316 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
317.	Bulbous canarygrass	Phalaris tuberosa L.	Aerial part
(Clause 317 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
318.	Pilulare nettle	Urtica pilulifera L.	Aerial part
(Clause 318 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
319.	Lespedeza bicolor	Lespedeza bicolor Turcz	Leaves, bark, rootstock
(Clause 319 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
320.	Silverberry	Elaeagnus	All species, aerial part
(Clause 320 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
321.	Mammillaria	Mammillaria	All species, aerial part
(Clause 321 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
322.	Mostuea stimulans	Mostuea stimulans A. Cheval	Aerial part
(Clause 322 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
323.	Peumus boldus	Peumus boldus Molina	Essential oil from leaves
(Clause 323 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
324.	Piptadenia	Piptadenia	All species, all parts
(Clause 324 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
325.	Roubieva multifida	Roubieva multifida Moq.	Essential oils from aerial parts
(Clause 325 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
326.	Common box tree	Buxus sempervirens L.	Stem, leaves
(Clause 326 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
327.	Schoenocaulon officinal	Schoenocaulon officinal Trichocereus A. Gray	Seeds
(Clause 327 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
328.	Trichocereus	Trichocereus	All species, aerial part
(Clause 328 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
329.	Common reed	Phragmites Australia Trin. ex Steud.	Rootstock
(Clause 329 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			

330.	<i>Ferula gummosa</i>	<i>Ferula gummosa</i> Boiss	Seeds
(Clause 330 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
331.	<i>Chamaedaphne calyculata</i> (Sweet gale)	<i>Chamaedaphne calyculata</i> Moench	Aerial part
(Clause 331 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
332.	<i>Haplophyllum</i>	<i>Haplophyllum</i>	All species, all parts
(Clause 332 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
333.	<i>Eriophyllum</i>	<i>Eriophyllum</i>	All species, bark
(Clause 333 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
334.	White Dittany	<i>Dictamnus albus</i> L.	Leaves, fruits
(Clause 334 was introduced by Amendments No. 19, approved by Resolution No. 102 of Chief State Sanitary Inspector of the RF dated 10.08.2010)			
335.	Calamus root	<i>Acorus calamus</i> L.	Rootstock, essential oil, leaves
(Clause 335 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
336.	Japanese sweet flag	<i>Acorus gramineus</i> Soland. (= <i>A. pusillus</i> Sieb.)	Rootstock, essential oil, leaves
(Clause 336 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
337.	<i>Bienertia cycloptera</i>	<i>Bienertia cycloptera</i> Bunge	Aerial part
(Clause 337 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
338.	<i>Bassia cycloptera</i>	<i>Bassia cycloptera</i> Bunge	Aerial part
(Clause 338 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
339.	Earth Chestnut	<i>Bunium persicum</i> B. Fedtsch.	All parts
(Clause 339 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
340.	<i>Bunium cylindricum</i>	<i>Bunium cylindricum</i> Drude	Aerial part and its essential oil
(Clause 340 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
341.	Chin cactus	<i>Gymnocalycium</i>	Aerial part
(Clause 341 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
342.	Ribbon grass	<i>Phalaris tuberosa</i> L.	Aerial part
(Clause 342 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
343.	Jointed anabis	<i>Anabasis articulata</i>	Aerial part
(Clause 343 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
344.	Tarhana herb	<i>Echinophoria sibthorpiana</i> Huss	Aerial part
(Clause 344 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
345.	Colocynth	<i>Citrullus colocynthis</i> Schrud.	Fruit (powder, extract)
(Clause 345 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
346.	Nipple Beehive Cactus	<i>Coryphantha micromeris</i> Lern.	The whole plant
(Clause 346 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			

347.	Saltbush	Artriplex nummularia Lindl.	Aerial part
(Clause 347 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
348.	Korean mint	Agastache rugosa O.Kuntze	Essential oil
(Clause 348 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
349.	Miniature beefsteakplant	Mosla dianthera L.	Essential oil
(Clause 349 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
350.	Flat-fruit orlaya	Orlaya daucoides	Fruit (essential oil)
(Clause 350 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
351.	Orthodon asaroniferum	Orthodon asaroniferum	Aerial part
(Clause 351 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			
352.	Garden Parsley	Petroselinum crispum A.W.Hill.	Fruit (essential oil)
(Clause 352 was introduced by Amendments No. 23, approved by Resolution No. 30 of Chief State Sanitary Inspector of the RF dated 11.04.2011)			

(Section 1 as amended by Amendments and Additions No. 15, approved by Resolution No. 73 of Chief State Sanitary Inspector of the RF dated 08.12.2009)

2. Substances uncharacteristic of food, edible and medical plants.
3. Unnatural synthetic substances - analogues of primary active elements of medical plants (not being the essential nutritive factors).
4. Antibiotics
5. Hormones.
6. Organs and tissues of animals, and their derived products which are specified risk materials for prion diseases (Transmissible Spongiform Encephalopathy):

Of bovine cattle:

- skull, apart from lower jaw bone, including brain, eyes and spinal cord of an animal of more than 12 months old;
- vertebral column, including tail part, spinous and transverse processes of cervical, thoracic and lumbar parts of the spinal column, median sacral crest and alas of the sacrum, including dorsal root ganglions of an animal of more than 30 months old;
- tonsils, intestine from duodenum through rectum and mesentery of animals of any age.

Of sheep (rams) and goats:

- skull, including brain, eyes, tonsils and spinal cord of an animal of more than 12 months old or having permanent incisors cut through gums;
- spleen and intestine of animals of any age

Products containing or consisting of materials from ruminant animals:

- mechanically deboned meat;
- gelatine (apart from gelatine produced from skin of ruminant animals);
- rendered fat from ruminant animals and derived products.

Objects of animal origin: Seven-spotted ladybird (*Coccinella septempunctata* L.), the whole body; Scorpion (*Scorpiones* L.), the whole body; Spanish fly (*Lytta* sp.), all species, the whole body.

When importing raw materials into the territory of the Russian Federation for production of food products and biologically active food additives produced with the use of raw materials of animal origin, it is necessary to take into consideration the epizootological situation with regard to Transmissible spongiform encephalopathy (including Bovine spongiform encephalopathy) in the country of the manufacturing company of such components.

(Section 6 as amended by Amendments and Additions No. 15, approved by Resolution No. 73 of Chief State Sanitary Inspector of the RF dated 08.12.2009)

7. Human tissues and organs.
8. Representatives of genera and species of bacteria containing strains which may cause human diseases and may be gene vectors of antibiotic resistance, including:

- sporogenous aerobic and anaerobic microorganisms - representatives of genera Bacillus (including B. polimyxa, B.cereus, B.megatherium, B.thuringiensis, B.coagulans (obsolete name - Lactobacillus coagulans), B.subtilis, B.licheniformis and other species) and Clostridium;
- microorganisms of genera Escherichia, Enterococcus, Corynebacterium spp.;
- microorganisms having hemolytic activity;
- viable yeast and yeastlike fungi, including representatives of genera Candida; actinomycetes, streptomycetes;
- all genera and species of microscopic mold fungi;
- sporeless microorganisms derived from animal and bird organisms and uncharacteristic of normal protective human microflora, including representatives of genera Lactobacillus.

(Section 8 as amended by Amendments and Additions No. 15, approved by Resolution No. 73 of Chief State Sanitary Inspector of the RF dated 08.12.2009)

9. Plants and Their Derived Products the Usage of Which is Prohibited in Production of Single-Component Biologically Active Food Additives:

No.	Name of Plants	Name of Plants in Latin	Parts of Plants
1	2	3	4
1	Japanese angelica tree, Manchurian aralia	Arali elata (Miq.) Seem. = Arali mandshurica Rupr. et Maxim.	All parts
2	African Plum	Pygeum africanum	Bark
3	Valerian	Valeriana L.	All species, root and rootstock
4	Maidenhair Tree	Ginkgo biloba L.	Aerial part
5	Gymnema sylvestre	Gymnema sylvestre	All parts
6	Wild yam, Dioscorea villosa	Dioscorea villosa	Rootstock
7	Ginseng	Ginseng	All species, all parts
8	Devil's-club, planch	Oplopanax elatus Nakai = Echinopanax elatus Nakai	All parts
9	St. John's wort	Hypericum L.	All species, all parts
10	Butcher's broom	Ruscus aculeatus (Butcher 's Broom)	All parts
11	Yohimbe (Pausinystalia yohimbe)	Pausinystalia yohimbe (K. Schum.) Pierre ex Beile	All parts
12	Five flavor berry	Schisandra chinensis (Turcz.) Baill.	All parts
13	Muira puama	Muira puama (Liriosma jvata)	All parts
14	Tabebuia heptaphylla, Pau d'arco	Tabebuia heptaphylla	Bark
15	Roseroot, Golden Root	Rhodiola rosea L.	All parts
16	Damiana	Turnera Diffusa	All parts
17	Spiny eleuterococcus	Eleutherococcus senticosus (Rupr. et Maxim.) Maxim = Aconthopanax senticosus (Rupr. et Maxim.) Harms	All parts
18	Adam's needle	Yucca filamentosa	Leaves

(Section 9 as amended by Amendments and Additions No. 15, approved by Resolution No. 73 of Chief State Sanitary Inspector of the RF dated 08.12.2009)

## PARASITOLOGIC SAFETY INDICES OF FISH, CRUSTACEANS, MOLLUSKS, AMPHIBIA, REPTILES AND THEIR DERIVED PRODUCTS <\*>

## Fresh-Water Fish and its Derived Products

[illegible]



14.	Fried, jellied, salted, marinated, smoked, dried fish of families stated in Items 1-11	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
15.	Caviar of fish families:															
15.1.	Pickrel, perch, Gadidae (burbot family), grayling										n/a					
15.2.	Salmon fishes										n/a	n/a	-	-	-	
15.3.	Cisco	-	-	-	-	-	-	-	-	-	n/a	-	-	-	-	
15.4.	Sturgeon (Amur basins, Volga lower course, Caspian sea)											n/a				

Notes: 1) n/a - not allowed (Larva on the claw); 2) parasite larva:

1	2	3
3 - Opisthorchis 4 - Clonorchis 5 - Pseudamphistomum 6 - Metagonimus 7 - Nanophyetus 8 - Echinochasmus 9 - Metorchis 10 - Rossicotrem 11 - Apophallus	12 - Diphyllbothrium	13 - Anisakidae 14 - Contracaecum 15 - Dioctophyma 16 - Gnathostoma

Table 2

## Migratory Fish and its Derived Products

Index	Products Group	Parasitologic Indices and Permissible Levels of Content					
		Larva on the claw					
1	2	3	4	5	6	7	8
1.	Salmons	-	n/a	n/a	-	-	-
2.	Far East salmon	n/a	n/a	n/a	n/a	n/a	n/a
3.	Minced fishes stated in Item 1, Item 2	n/a	n/a n/a	n/a n/a	n/a	n/a	n/a
4.	Canned foods and preserves from fish families stated in Item 1, Item 2	n/a	n/a n/a	n/a n/a	n/a	n/a	n/a
5.	Fried, jellied, salted, marinated, smoked, dried fish of families stated in Item, 1 Item 2	n/a	n/a n/a	n/a n/a	n/a	n/a	n/a
6.	Caviar (gonads) of fishes stated in Items 1-2	-	n/a	n/a	-	-	-

Notes: 1) n/a - not allowed (Larva on the claw); 2) parasite larva:

Trematode	Cestode	Nematode	Proboscis Worms
3 - Nanophyetus	4 - Diphyllbothrium	5 - Anisakidae	7 - Bolbosoma
		6 - Contracaecum	8 - Corynosoma

Index	Products Group	Parasitologic Indices and Permissible Levels of Content												
		Larva on the Claw												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Salt-water fish, including by game areas and families:													
1.	Barents Sea													
1.1.	Salmon fishes migratory						n/a			n/a				
1.2.	Eperlans						n/a			n/a				
1.3.	Herring	-	-	-	-	-	-	-	-	n/a	-	-	-	-
1.4.	Codfishes	-	-	n/a	-	-	n/a	-	n/a	n/a	n/a	n/a	n/a	-
1.5.	Scorpaenidae									n/a				
1.6.	Pleuronectidae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
2.	North Atlantic													
2.1.	Eperlans			n/a						n/a				
2.2.	Herring	-	-	n/a	-	-	-	-	-	n/a	-	n/a	-	-
2.3.	Codfishes	-	-	n/a	-	-	n/a	-	-	n/a	-	-	-	-
2.4.	Macrouridae									n/a				
2.5.	Merlucciidae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
2.6.	Scombridae	-	-	-	-	-	-	-	-	n/a	-	-	-	n/a
2.7.	Scorpaenidae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
2.8.	Pleuronectidae	-	-	n/a	-	-	-	-	-	n/a	-	-	-	-
3.	South Atlantic													
3.1.	Merlucciidae	-	-	-	-	-	-	-	-	n/a	-	-	-	n/a
3.2.	Carangidae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
3.3.	Ceruravina	-	-	-	-	-	-	-	-	n/a	-	-	-	n/a
4.	Baltic sea													
4.1.	Eperlans												n/a	
4.2.	Herring	-	-	-	-	-	-	-	-	n/a	-	-	n/a	-
4.3.	Codfishes	-	-	n/a	-	-	-	-	-	n/a	-	-	-	-
4.4.	Pleuronectidae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
5.	Black sea, Sea of Azov, Mediterranean Sea													
5.1.	Gobiidae	-	n/a	-	n/a	n/a								
5.2.	Mugilidae	-	n/a											
6.	Subantarctic, Antarctic													
6.1.	Codfishes									n/a	n/a	n/a	n/a	n/a
6.2.	Merlucciidae									n/a	n/a	n/a	n/a	n/a



6.3.	Ophidiidae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
6.4.	Nototheniidae						n/a			n/a	n/a	n/a	n/a	n/a
6.5.	Chaenichthyidae	-	-	-	-	-	n/a	-	-	n/a	n/a	n/a	n/a	n/a
7.	Indian Ocean													
7.1.	Carangidae									n/a				
7.2.	Scombridae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
7.3.	Nemipteridae	-	-	-		-	-	-	-	n/a	-	-	-	-
8.	Pacific Ocean													
8.1.	Salmon fishes	n/a	-	-	n/a	-	n/a	-	-	n/a	n/a	-	n/a	n/a
8.2.	Engraulidae	-	-	-	-	-	-	-	-	n/a	-	-	-	-
8.3.	Herring	-	-	-	-	-	-	-	-	n/a	-	-	-	-
8.4.	Carangidae						n/a			n/a	n/a			
8.5.	Hexagrammidae									n/a	n/a	-	n/a	-
6	Pleuronectidae	-	-	-	-	-	-	n/a	-	n/a	-	-	n/a	-
8	Scorpaenidae													n/a
8														n/a
8														n/a
8.9.	Berycidae													n/a
8.10.	Tunny (Scombridae)													n/a
8.11.	Gadidae								n/a	n/a	-	n/a	-	-
9.	Minced fishs stated in Items 1-8	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10.	Canned foods and preserves from fish families stated in Items 1-8	n/a	n/a	n/a			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
11.	Fried, jellied, salted, marinated, smoked, dried fish of families stated in Items 1-8	n/a	n/a	n/a			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
12.	Caviar of pollack, cod									n/a		n/a		
13.	Cod liver									n/a		n/a		

Notes: 1) n/a - not allowed (Larva on the claw);



## 2) parasite larva:

Trematode	Cestode	Nematode	Proboscis Worms
3- Nanophyetus	8- Diphyllbothrium	11- Anisakidae	14-Bolbosoma
4-Heterophyes	9-Diplogonoporus	12- Contracaecum	15- Corynosoma
5-Cryptocotyle	10- Pyramicocephalus	13- Pseudoterranova	
6- Rossicotrem			
7-Apophallus			

Table 4

Crustaceans, Sea Mollusks, Amphibians, Reptiles  
and their Derived Products

Index	Products Group	Parasitologic Indices and Permissible Levels of Content								
		Larva on the Claw								
1	2	3	4	5	6	7	8	9	10	11
1.	Crustaceans and their derived products									
1.1.	Lobsters from Far East basins (Russia, Korea peninsula, CPR etc.), USA	n/a								
1.2.	Freshwater shrimps from Far East basins (Russia, Korea peninsula)	n/a								
1.3.	Freshwater crabs (from basins of Far East, Russia, countries of South-East Asia, Sri Lanka, Central America, Peru, Liberia, Nigeria, Cameroon, Mexico, Philippines)	n/a								
1.4.	Freshwater crabs sauces (Item 1.3)	n/a								
2.	Sea mollusks and their derived products									
2.1.	Calamaries	-	-	n/a	n/a	n/a	-	-	-	-
2.2.	Octopus	-	-	n/a	-	n/a	-	-	-	-
2.3.	Scallops	-	-	-	-	-	-	-	n/a	-
2.4.	Maktra (Spisula)	-	-	-	-	-	-	-	n/a	-
2.5.	Oysters	-	-	-	-	-	-	-	-	n/a
3.	Amphibians (frogs)	-	n/a	-	-	-	n/a	n/a	-	-
4.	Reptiles									
4.1.	Snakes		n/a	-	-	-	-	-	-	-



4.2.	Tortoises									
4.2.1.	marine	-	-	-	-	-	-	-	n/a	-
4.2.2.	freshwater	-	-	-	-	-	-	n/a	-	-

Notes: 1) n/a - not allowed (Larva on the claw);

2) parasite larva:

trematode	cestode	Nematode
3-Paragonimus	4- Spirometra	5- Anisakidae
		6- Contracaecum
		7- Pseudoterranova
		8- Dioctophyme
		9-Gnathostoma
		10-Sulcascaris
		11- Echinocephalus

FOOD ADDITIVES,  
WHICH DO NOT NEGATIVELY AFFECT HUMAN HEALTH  
WHEN USED FOR PRODUCTION OF  
FOOD PRODUCTS

(as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)

Index	Name of Food Additives (including Latin Name)	Technological Functions
1	2	3
E100	Curcumins (CURCUMINS) (i) Curcumin (Curcumin) Natural colouring agent from Curcuma longa and other species (ii) Turmeric (Turmeric) Turmeric is powder of curcuma rootstock	colouring agent
E101	Riboflavins (RIBOFLAVINS) (i) Riboflavin (Riboflavin) (ii) Sodium salt riboflavin 5-phosphate (Riboflavin 5-phosphate sodium)	colouring agent
E102	Tartrazine (TARTRAZINE)	colouring agent
E103	Alkanet, Alkanin (ALKANET)	colouring agent
E104	Quinoline yellow (QUINOLINE YELLOW)	colouring agent
E107	Yellow 2G (YELLOW 2G)	colouring agent
E110	Sunset Yellow FCF (SUNSET YELLOW FCF)	colouring agent



E120	Carmines (CARMINES)	colouring agent
E122	Azorubine, carmoisine (AZORUBINE)	colouring agent
E124	Ponceau 4R, Brilliant Scarlet 4R (PONCEAU 4R)	colouring agent

Import of food products produced with the use of food additive E128 into the territory of the Russian Federation, as well as production and circulation thereof in the territory of the Russian Federation is prohibited by Resolution No. 68 of Chief State Sanitary Inspector of the RF dated 03.09.2007.

E128	Red 2G (RED 2G)	colouring agent
E129	Allura red AC (ALLURA RED AC)	colouring agent
E131	Patent blue V (PATENT BLUE V)	colouring agent
E132	Indigo carmine (INDIGOTINE)	colouring agent
E133	Brilliant Blue FCF (BRILLIANT BLUE FCF)	colouring agent
E140	Chlorophyll (CHLOROPHYLL)	colouring agent
E141	Copper complexes of chlorophylls (COPPER CHLOROPHYLLS) (i) Chlorophyll copper complex (Chlorophyll copper complex) (ii) Chlorophyllin copper complex, sodium and potassium salts (Chlorophyllin copper complex, sodium and potassium salts)	colouring agent
E142	Green S (GREEN S)	colouring agent
E143	Fast green FCF (FAST GREEN FCF)	colouring agent
E150a	Plain caramel (CAMEL I - Plain)	colouring agent
E150b	Caustic sulphite caramel, obtained through alkali- sulphite technology (CAMEL II - Caustic sulphite process)	colouring agent
E150c	Ammonia caramel, obtained through ammonia technology (CAMEL III - Ammonia process)	colouring agent
E150d	Sulphite ammonia caramel, obtained through ammonia - sulphite technology (CAMEL IV - Ammonia-sulphite process)	colouring agent
E151	Brilliant black PN (BRILLIANT BLACK PN)	colouring agent
E152	Carbon black (CARBON BLACK (hydrocarbon))	colouring agent
E153	Vegetable carbon (VEGETABLE CARBON)	colouring agent
E155	Brown HT (BROWN HT)	colouring agent



E160a	Carotenes (CAROTENES) (i) beta - Carotene synthetic (Beta - carotene synthetic) (ii) Natural carotenes extracts (NATURAL EXTRACTS)	colouring agent
E160b	Annato extracts (ANNATO EXTRACTS)	colouring agent
E160c	Paprika oleoresins (PAPRIKA OLEORESINS)	colouring agent
E160d	Lycopene (LYCOPENE)	colouring agent
E160e	beta - apo carotenal (BETA - APO - CAROTENAL)	colouring agent
E160f	beta-Apo-8-carotenoic acid methyl or ethyl ester (BETA-APO-8'-CAROTENOIC ACID, METHYL OR ETHYL ESTER)	colouring agent
E161a	Flavoxanthin (FLAVOXANTHIN)	colouring agent
E161b	Lutein(LUTEIN)	colouring agent
E161c	Kryptoxanthin (KRYPTOXANTHIN)	colouring agent
E161d	Rubixanthin(RUBIXANTHIN)	colouring agent
E161e	Violoxanthin(VIOLOXANTHIN)	colouring agent
E161f	Rhodoxanthin (RHODOXANTHIN)	colouring agent
E161g	Canthaxanthin (CANTHAXANTHIN)	colouring agent
E162	Beetroot red (BEET RED)	colouring agent
E163	Anthocyanins (ANTHOCYANIN) (i) Anthocyanins (Anthocyanins) (ii) Grape skin extract (Grape skin extract) (iii) Blackcurrant extract (Blackcurrant extract)	colouring agent
E170	Calcium carbonates (CALCIUM CARBONATES) (i) Calcium carbonate (Calcium carbonate) (ii) Calcium hydrogen carbonate (Calcium hydrogen carbonate)	surface colouring agent, anti-caking and anti-clumping additive, stabilizer
E171	Titanium dioxide (TITANIUM DIOXIDE)	colouring agent
E172	Iron oxides (IRON OXIDES) (i) iron oxide (+2, +3), black (Iron oxide, black) (ii) iron oxide (+3), red (Iron oxide, red) (iii) Iron oxide (+3), yellow (Iron oxide, yellow)	colouring agents
E174	Silver (SILVER)	colouring agent

E175	Gold (GOLD)	colouring agent
E181	Tannins, food grade (TANNINS, FOOD GRADE)	colouring agent, emulsifier, stabilizer
E182	Orcein, Orchil (ORCHIL)	colouring agent
E200	Sorbic acid (SORBIC ACID)	preservative
E201	Sodium sorbate (SODIUM SORBATE)	preservative
E202	Potassium sorbate (POTASSIUM SORBATE)	preservative
E203	Calcium sorbate (CALCIUM SORBATE)	preservative
E209	Heptyl p-hydroxybenzoate (HEPTYL p-HYDROXYBENZOATE)	preservative
E210	Benzoic acid (BENZOIC ACID)	preservative
E211	Sodium benzoate (SODIUM BENZOATE)	preservative
E212	Potassium benzoate (POTASSIUM BENZOATE)	preservative
E213	Calcium benzoate (CALCIUM BENZOATE)	preservative
E214	Ethylparaben (ETHYL p-HYDROXYBENZOATE)	preservative
E215	Sodium ethyl p-hydroxybenzoate (SODIUM ETHYL p-HYDROXYBENZOATE)	preservative

Import of food products produced with the use of food additive E 216 (Propyl p-hydroxybenzoate) into the territory of the Russian Federation is prohibited. Moreover, the use of this additive in production of food products is prohibited from March 1, 2005 (Resolution No.1 of Chief State Sanitary Inspector of the RF dated 18.01.2005).

E216	Propylparaben (PROPYL p-HYDROXYBENZOATE)	preservative
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Import of food products produced with the use of food additive E 217 (Propyl p-hydroxybenzoate, sodium salt) into the territory of the Russian Federation is prohibited. Moreover, the use of this additive in production of food products is prohibited from March 1, 2005. (Resolution No.1 of Chief State Sanitary Inspector of the RF dated 18.01.2005).

E217	Sodium propyl p-hydroxybenzoate (SODIUM PROPYL p-HYDROXYBENZOATE)	preservative
E218	Methylparaben (METHYL p-HYDROXYBENZOATE)	preservative
E219	Sodium methyl p-hydroxybenzoate (SODIUM METHYL p-HYDROXYBENZOATE)	preservative
E220	Sulphur dioxide (SULPHUR DIOXIDE)	preservative, antioxidant





E221	Sodium sulphite (SODIUM SULPHITE)	preservative, antioxidant
E222	Sodium bisulphite (SODIUM HYDROGEN SULPHITE)	preservative, antioxidant
E223	Sodium metabisulphite (SODIUM METABISULPHITE)	preservative, antioxidant, bleaching agent
E224	Potassium metabisulphite (POTASSIUM METABISULPHITE)	preservative, antioxidant
E225	Potassium sulphite (POTASSIUM SULPHITE)	preservative, antioxidant
E226	Calcium sulphite (CALCIUM SULPHITE)	preservative, antioxidant
E227	Calcium hydrogen sulphite (CALCIUM HYDROGEN SULPHITE)	preservative, antioxidant
E228	Potassium hydrogen (bisulphite)sulphite (POTASSIUM BISULPHITE)	preservative, antioxidant
E230	Diphenyl (DIPHENYL)	preservative
E231	ortho-phenylphenol (ORTHO-PHENYLPHENOL)	preservative
E232	Sodium o-phenylphenol (SODIUM O-PHENYLPHENOL)	preservative
E234	Nisin (NISIN)	preservative
E235	Pimaricin, Natamycin (PIMARICIN, NATAMYCIN)	preservative
E236	Formic acid (FORMIC ACID)	preservative
E237	Sodium formate (SODIUM FORMATE)	preservative
E238	Calcium formate (CALCIUM FORMATE)	preservative
E239	Hexamine (HEXAMETHYLENE TETRAMINE)	preservative
E241	Gum guaiacum (GUM GUAICUM)	preservative
E242	Dimethyl dicarbonate (DIMETHYL DICARBONATE)	preservative
E249	Potassium nitrite (POTASSIUM NITRITE)	preservative, colour retention agent
E250	Sodium nitrite (SODIUM NITRITE)	preservative, colour retention agent
E251	Sodium nitrate (SODIUM NITRATE)	preservative, colour retention agent
E252	Potassium nitrate (POTASSIUM NITRATE)	preservative, colour retention agent
E260	Acetic acid glacial (ACETIC ACID GLACIAL)	preservative, acidity regulator



E261	Potassium acetates (POTASSIUM ACETATES) (i) Potassium acetate (POTASSIUM ACETATE) (ii) Potassium diacetate (Potassium diacetate)	preservative, acidity regulator
E262	Sodium acetates (SODIUM ACETATES) (i) Sodium acetate (Sodium acetate) (ii) Sodium diacetate (Sodium diacetate)	preservative, acidity regulator
E263	Calcium acetate (CALCIUM ACETATES)	preservative, stabilizer, acidity regulator
E264	Ammonium acetate (AMMONIUM ACETATE)	acidity regulator
E265	Dehydroacetic acid (DEHYDROACETIC ACID)	preservative
E266	Sodium dehydroacetate (SODIUM DEHYDROACETATE)	preservative
E270	Lactic acid, L-, D и DL- (LACTIC ACID, L-, D- and DL-)	acidity regulator
E280	Propionic acid (PROPIONIC ACID)	preservative
E281	Sodium propionate (SODIUM PROPIONATE)	preservative
E282	Calcium propionate (CALCIUM PROPIONATE)	preservative
E283	Potassium propionate (POTASSIUM PROPIONATE)	preservative
E290	Carbon dioxide (CARBON DIOXIDE)	drinks saturating gas
E296	Malic acid (MALIC ACID, DL-)	acidity regulator
E297	Fumaric acid (FUMARIC ACID)	acidity regulator
E300	Ascorbic acid, L- (ASCORBIC ASID, L-)	antioxidant
E301	Sodium ascorbate (SODIUM ASCORBATE)	antioxidant
E302	Calcium ascorbate (CALCIUM ASCORBATE)	antioxidant
E303	Potassium ascorbate (POTASSIUM ASCORBATE)	antioxidant
E304	Ascorbyl palmitate (ASCORBYL PALMITATE)	antioxidant



E305	Ascorbyl stearate (ASCORBYL STEARATE)	antioxidant
E306	Mixed tocopherols concentrate (MIXED TOCOPHEROLS CONCENTRATE)	antioxidant
E307	Alpha tocopherol (ALPHA - TOCOPHEROL)	antioxidant
E308	Synthetic gamma-tocopherol (SYNTHETIC GAMMA - TOCOPHEROL)	antioxidant
E309	Synthetic delta-tocopherol (SYNTHETIC DELTA - TOCOPHEROL)	antioxidant
E310	Propyl gallate (PROPYL GALLATE)	antioxidant
E311	Octyl gallate (OCTYL GALLATE)	antioxidant
E312	Dodecyl gallate (DODECYL GALLATE)	antioxidant
E314	Guaiac resin (GUAIAIC RESIN)	antioxidant
E315	Isoascorbic (erythorbic) acid (ISOASCORBIC ACID, ERYTHORBIC ACID)	antioxidant
E316	Sodium isoascorbate (SODIUM ISOASORBATE)	antioxidant
E317	Potassium isoascorbate (POTASSIUM ISOASORBATE)	antioxidant
E318	Calcium isoascorbate (CALCIUM ISOASORBATE)	antioxidant
E319	tertiary Butylhydroquinone (TERTIARY BUTYLHYDROQUINONE)	antioxidant
E320	Butylated hydroxyanisole (BUTYLATED HYDROXYANISOLE)	antioxidant
E321	Butylated hydroxytoluene, Ionol (BUTYLATED HYDROXYTOLUENE)	antioxidant
E322	Lecithins, phosphatides (LECITHINS)	antioxidant, emulsifier
E323	Anoxomer (ANOXOMER)	antioxidant
E325	Sodium lactate (SODIUM LACTATE)	antioxidant synergist, humectant, filling agent
E326	Potassium lactate (POTASSIUM LACTATE)	antioxidant synergist, acidity regulator
E327	Calcium lactate (CALCIUM LACTATE)	acidity regulator, flour and bread improving agent
E328	Ammonium lactate (AMMONIUM LACTATE)	acidity regulator,



		flour and bread improving agent
E329	Magnesium lactate, DL- (MAGNESIUM LACTATE, DL-)	acidity regulator, flour and bread improving agent
E330	Citric acid (CITRIC ACID)	acidity regulator, antioxidant, sequestrant
E331	Sodium citrates (SODIUM CITRATES) (i) Disodium monohydrogen citrate (Disodium monohydrogen citrate) (ii) Sodium dihydrogen citrate (Sodium dihydrogen citrate) (iii) Trisodium citrate (Trisodium citrate)	acidity regulator, emulsifier, stabilizer, sequestrant
E332	Potassium citrates (POTASSIUM CITRATES) (i) Potassium dihydrogen citrate (Potassium dihydrogen citrate) (ii) Tripotassium citrate (Tripotassium citrate)	acidity regulator, stabilizer, sequestrant
E333	Calcium citrates (CALCIUM CITRATES)	acidity regulator, firming agent, sequestrant
E334	Tartaric acid, L(+)- (TARTARIC ACID, L(+)-)	acidity regulator, antioxidant synergist, sequestrant
E335	Sodium tartrates (SODIUM TARTRATES) (i) Monosodium tartrate (Monosodium tartrate) (ii) Disodium tartrate (Disodium tartrate)	stabilizer, sequestrant
E336	Potassium tartrates (POTASSIUM TARTRATES) (i) Monopotassium tartrate (Monopotassium tartrate) (ii) Dipotassium tartrate (Dipotassium tartrate)	stabilizer, sequestrant
E337	Potassium sodium tartrate (POTASSIUM SODIUM TARTRATE)	stabilizer, sequestrant
E338	Orthophosphoric acid (ORTHOPHOSPHORIC ACID)	acidity regulator, antioxidant synergist
E339	Sodium phosphates (SODIUM PHOSPHATES)	acidity regulator, emulsifier, texturizer, humectant, stabilizer, sequestrant







	(i) monosodium orthophosphate (Monosodium orthophosphate) (ii) disodium orthophosphate (Disodium orthophosphate) (iii) trisodium orthophosphate (Trisodium orthophosphate)	
E340	Potassium phosphates (POTASSIUM PHOSPHATES) (i) monopotassium orthophosphate (Monopotassium orthophosphate) (ii) dipotassium orthophosphate (Dipotassium orthophosphate) (iii) tripotassium orthophosphate (Tripotassium orthophosphate)	acidity regulator, emulsifier, humectant, stabilizer, sequestrant
E341	Calcium phosphates (CALCIUM PHOSPHATES) (i) monocalcium orthophosphate (Monocalcium orthophosphate) (ii) dicalcium orthophosphate (Dicalcium orthophosphate) (iii) tricalcium orthophosphate (Tricalcium orthophosphate)	acidity regulator, flour and bread improving agent, stabilizer, firming agent, texturator, leavening agent, anti-caking and anti-clumping additive humectant
E342	Ammonium phosphates (AMMONIUM PHOSPHATES) (i) monoammonium orthophosphate (Monoammonium orthophosphate) (ii) diammonium orthophosphate (Diammonium orthophosphate)	acidity regulator, flour and bread improving agent
E343	Magnesium phosphates (MAGNESIUM PHOSPHATES) (i) monomagnesium orthophosphate (Monomagnesium orthophosphate) (ii) dimagnesium orthophosphate (Dimagnesium orthophosphate) (iii) trimagnesium orthophosphate (Trimagnesium orthophosphate)	acidity regulator, anti-caking and anti-clumping additive
E345	Magnesium citrate (MAGNESIUM CITRATE)	acidity regulator
E349	Ammonium malate (AMMONIUM MALATE)	acidity regulator
E350	Sodium malates (SODIUM MALATES) (i) Sodium hydrogen malate (Sodium hydrogen malate) (ii) Sodium malate (Sodium malate)	acidity regulator, humectant
E351	Potassium malates (POTASSIUM MALATES) (i) Potassium hydrogen malate (Sodium hydrogen malate) (ii) Potassium malate (POTASSIUM MALATE)	acidity regulator



E352	Calcium malates (CALCIUM MALATES) (i) Calcium hydrogen malate (Calcium hydrogen malate) (ii) Calcium malate (Calcium malate)	acidity regulator
E353	Metatartaric acid (METATARTARIC ACID)	acidity regulator
E354	Calcium tartrate (CALCIUM TARTRATE)	acidity regulator
E355	Adipic acid (ADIPIC ACID)	acidity regulator
E356	Sodium adipates (SODIUM ADIPATES)	acidity regulator
E357	Potassium adipates (POTASSIUM ADIPATES)	acidity regulator
E359	Ammonium adipates (AMMONIUM ADIPATES)	acidity regulator
E363	Succinic acid (SUCCINIC ACID)	acidity regulator
E365	Sodium fumarates (SODIUM FUMARATES)	acidity regulator
E366	Potassium fumarates (POTASSIUM FUMARATES)	acidity regulator
E367	Calcium fumarates (CALCIUM FUMARATES)	acidity regulator
E368	Ammonium fumarates (AMMONIUM FUMARATES)	acidity regulator
E375	Nicotinic acid (NICOTINIC ACID)	colour stabilizer
E380	Ammonium citrates (AMMONIUM CITRATES)	acidity regulator
E381	Ferric ammonium citrates (FERRIC AMMONIUM CITRATES)	acidity regulator
E383	Calcium glycerophosphate (CALCIUM GLYCEROPHOSPHATE)	thickening agent, stabilizer
E384	Isopropyl citrates (ISOPROPYL CITRATES)	anti-caking and anti-clumping additive
E385	Calcium disodium ethylene diamine-tetraacetate (CALCIUM DISODIUM ETHYLENE DIAMINE-TETRA-ACETATE)	antioxidant, preservative, sequestrant
E386	Disodium ethylene diamine-tetraacetate (DISODIUM ETHYLENE DIAMINE-TETRA-ACETATE)	antioxidant synergist, preservative, sequestrant



E387	Oxystearin (OXYSTEARIN)	antioxidant, sequestrant
E391	Phytic acid (PHYTIC ACID)	antioxidant
E400	Alginic acid (ALGINIC ACID)	thickening agent, stabilizer
E401	Sodium alginate (SODIUM ALGINATE)	thickening agent, stabilizer
E402	Potassium alginate (POTASSIUM ALGINATE)	thickening agent, stabilizer
E403	Ammonium alginate (AMMONIUM ALGINATE)	thickening agent, stabilizer
E404	Calcium alginate (CALCIUM ALGINATE)	thickening agent, stabilizer, anti-foaming agent
E405	Propylene glycol alginate (PROPYLENE GLYCOL ALGINATE)	thickening agent, emulsifier
E406	Agar (AGAR)	thickening agent, gelling agent, stabilizer
E407	Carrageenan and its Na, K, NH <sub>4</sub> salts (includes furcellaran) (CARRAGEENAN AND ITS Na, K, NH <sub>4</sub> SALTS (INCLUDES FURCELLARAN))	thickening agent, gelling agents, stabilizer
E407a	Carrageenan pes - processed eucheama seaweed (CARRAGEENAN PES- PROCESSED EUCHEMA SEAWEED)	thickening agent, gelling agents, stabilizer
E409	Arabinogalactan (ARABINO GALACTAN)	thickening agent, gelling agents, stabilizer
E410	Carob bean gum (CAROB BEAN GUM)	thickening agent, stabilizer
E411	Oat gum (OAT GUM)	thickening agent, stabilizer
E412	Guar gum (GUAR GUM)	thickening agent, stabilizer
E413	Tragacanth gum (TRAGACANTH GUM)	thickening agent, stabilizer, emulsifier
E414	Gum arabic (GUM ARABIC (ACACIA GUM))	thickening agent, stabilizer
E415	Xantan gum (XANTAN GUM)	thickening agent, stabilizer
E416	Karaya gum (KARAYA GUM)	thickening agent, stabilizer
E417	Tara gum (TARA GUM)	thickening agent, stabilizer







E418	Gellan gum (GELLAN GUM)	thickening agent, stabilizer, gelling agent
E419	Gum ghatti (GUM GHATTI)	thickening agent, stabilizer, gelling agent
E420	Sorbitol and sorbitol syrup (SORBITOL AND SORBITOL SYRUP)	sweetener, humectant, sequestrant, texturator, emulsifier
E421	Mannitol (MANNITOL)	sweetener, anti-caking and anti-clumping additive
E422	Glycerol (GLYCEROL)	humectant,  thickening agent
E425	Konjac (Konjac flour) (KONJAC (KONJAC FLOUR)) (i) Konjac gum (KONJAC GUM) (II) Konjac glucomannane (KONJAC GLUCOMANNANE)	thickening agent
(introduced by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
E430	Polyoxyethylene (8) stearate (POLYOXYETHYLENE (8) STEARATE)	emulsifier
E431	Polyoxyethylene (40) stearate (POLYOXYETHYLENE (40) STEARATE)	emulsifier
E432	Polyoxyethylene (20) sorbitan monolaurate, Tween 20 (POLYOXYETHYLENE (20) SORBITAN MONOLAURATE)	emulsifier
E433	Polyoxyethylene (20) sorbitan monooleate, Tween 80 (POLYOXYETHYLENE (20) SORBITAN MONOOLEATE)	emulsifier
E434	Polyoxyethylene (20) sorbitan monopalmitate, Tween 40 (POLYOXYETHYLENE (20) SORBITAN MONOPALMITATE)	emulsifier
E435	Polyoxyethylene (20) sorbitan monostearate, Tween 60 (POLYOXYETHYLENE (20) SORBITAN MONOSTEARATE)	emulsifier
E436	Polyoxyethylene (20) sorbitan tristearate (POLYOXYETHYLENE (20) SORBITAN TRISTEARATE)	emulsifier





E440	Pectins (PECTINS)	thickening agent, stabilizer, gelling agent
E442	Ammonium salts of phosphatidic acid (AMMONIUM SALTS OF PHOSPHATIDIC ACID)	emulsifier
E444	Sucrose acetate isobutirate (SUCROSE ACETATE ISOBUTIRAT)	emulsifier, stabilizer
E445	Glycerol esters of wood resin (GLYCEROL ESTERS OF WOOD RESIN)	emulsifier, stabilizer
E446	Succistearin (SUCCISTEARIN)	emulsifier
E450	Diphosphates (DIPHOSPHATES) (i) Disodium diphosphate (Disodium diphosphate) (ii) Trisodium diphosphate (Trisodium diphosphate) (iii) Tetrasodium diphosphate (Tetrasodium diphosphate) (iv) Dipotassium diphosphate (Dipotassium diphosphate) (v) Tetrapotassium diphosphate (Tetrapotassium diphosphate) (vi) Dicalcium diphosphate (Dicalcium diphosphate) (vii) Calcium dihydrogen diphosphate (Calcium dihydrogen diphosphate) (viii) Dimagnesium diphosphate (Dimagnesium diphosphate)	emulsifier, stabilizer, acidity regulator, leavening agent, sequestrant, humectant
E451	Triphosphates (TRIPHOSPHATES) (i) Pentasodium triphosphate (Pentasodium triphosphate) (ii) Pentapotassium triphosphate (Pentapotassium triphosphate)	sequestrant, acidity regulator, texturator
E452	Polyphosphates (POLYPHOSPHATES) (i) Sodium polyphosphate (Sodium polyphosphate) (ii) Potassium polyphosphate (Potassium polyphosphate) (iii) Sodium calcium polyphosphate (Sodium calcium polyphosphate) (iv) Calcium polyphosphates (Calcium polyphosphates) (v) Ammonium polyphosphates (Ammonium polyphosphates)	emulsifier, stabilizer, sequestrant, texturator, humectant
E459	beta - Cyclodextrin (BETA - CYCLODEXTRIN)	stabilizer, binder
E460	Cellulose (CELLULOSE) (i) Microcrystalline cellulose (Microcrystalline cellulose) (ii) Powdered cellulose (Powdered cellulose)	emulsifier, anti-caking and anti-clumping additive  texturator
E461	Methyl cellulose (METHYL CELLULOSE)	thickening agent, emulsifier, stabilizer





E462	Ethyl cellulose (ETHYL CELLULOSE)	filling agent, binder
E463	Hydroxypropyl cellulose (HYDROXYPROPYL CELLULOSE)	thickening agent, emulsifier, stabilizer
E464	Hydroxypropyl methyl cellulose (HYDROXYPROPYL METHYL CELLULOSE)	thickening agent, emulsifier, stabilizer
E465	Methyl ethyl cellulose (METHYL ETHYL CELLULOSE)	thickening agent, emulsifier, stabilizer, foaming agent
E466	Sodium carboxymethyl cellulose (SODIUM CARBOXYMETHYL CELLULOSE)	thickening agent, stabilizer
E467	Ethyl hydroxyethyl cellulose (ETHYL HYDROXYETHYL CELLULOSE)	emulsifier, thickening agent, stabilizer
E468	Croscarmellose (CROSCARAMELLOSE)	stabilizer, binder
E469	Enzymically hydrolysed carboxymethylcellulose	thickening agent, stabilizer
E470	Salts of fatty acids, Al, Ca, Na, Mg, K and NH <sub>4</sub> salts (SALTS OF FATTY ACIDS (with base Al, Ca, Na, Mg, K and NH <sub>4</sub> ))	emulsifier, stabilizer, anti-caking and anti-clumping additive,
E471	Mono- and diglycerides of fatty acids (MONO- AND DIGLYCERIDES OF FATTY ACIDS)	emulsifier, stabilizer
E472a	Acetic and fatty acid esters of glycerol (ACETIC AND FATTY ACID ESTERS OF GLYCEROL)	emulsifier, stabilizer, sequestrant
E472b	Lactic and fatty acid esters of glycerol (LACTIC AND FATTY ACID ESTERS OF GLYCEROL)	emulsifier, stabilizer, sequestrant
E472c	Citric and fatty acid esters of glycerol (CITRIC AND FATTY ACID ESTERS OF GLYCEROL)	emulsifier, stabilizer, sequestrant
E472d	Tartaric acid esters of mono- and diglycerides of fatty acids (TARTARIC ACID ESTERS OF MONO- AND DIGLYCERIDES OF FATTY ACIDS)	emulsifier, stabilizer, sequestrant
E472e	Diacetyltartaric and fatty acid esters of glycerol (DIACETYLTARTARIC AND FATTY ACID ESTERS OF GLYCEROL)	emulsifier, stabilizer, sequestrant







E472f	Mixed tartaric, acetic and fatty acid esters of glycerol (MIXED TARTARIC, ACETIC AND FATTY ACID ESTERS OF GLYCEROL)	emulsifier, stabilizer, sequestrant
E472g	Succinylated monoglycerides (SUCCINYLATED MONOGLYCERIDES)	emulsifier, stabilizer, sequestrant
E473	Sucrose esters of fatty acids (SUCROSE ESTERS OF FATTY ACIDS)	emulsifier
E474	Sucroglycerides (SUCROGLYCERIDES)	emulsifier
E475	Polyglycerol esters of fatty acids (POLYGLYCEROL ESTERS OF FATTY ACIDS)	emulsifier
E476	Polyglycerol esters of interesterified ricinoleic acid (POLYGLYCEROL ESTERS OF INTERESTERIFIED RICINOLEIC ACID)	emulsifier
E477	Propylene glycol esters of fatty acids (PROPYLENE GLYCOL ESTERS OF FATTY ACIDS)	emulsifier
E478	Lactylated fatty acid esters of glycerol and propylene glycol (LACTYLATED FATTY ACID ESTERS OF GLYCEROL AND PROPYLENE GLYCOL)	emulsifier
E479	Thermally oxidized soya bean oil with mono- and di-glycerides of fatty acids (THERMALLY OXIDIZED SOYA BEAN OIL WITH MONO- AND DI-GLYCERIDES OF FATTY ACIDS)	emulsifier
E480	Diethyl sodium sulphosuccinate (DIOCTYL SODIUM SULPHOSUCCINATE)	emulsifier, wetting agent
E481	Sodium lactylates (SODIUM LACTYLATES) (i) Sodium stearoyl lactylate (SODIUM STEAROYL LACTYLATE) (ii) Sodium oleyl lactylate (SODIUM OLEYL LACTYLATE)	emulsifier, stabilizer
E482	Calcium lactylates (CALCIUM LACTYLATES)	emulsifier, stabilizer
E483	Stearyl tartrate (STEARYL TARTRATE)	flour and bread improving agent
E484	Stearyl citrate (STEARYL CITRATE)	emulsifier, sequestrant
E491	Sorbitan monostearate, SPAN 60 (SORBITAN MONOSTEARATE)	emulsifier
E492	Sorbitan tristearate (SORBITAN TRISTEARATE)	emulsifier
E493	Sorbitan monolaurate, SPAN 20 (SORBITAN MONOLAURATE)	emulsifier
E494	Sorbitan monooleate, SPAN 80 (SORBITAN MONOOLEATE)	emulsifier





E495	Sorbitan monopalmitate, SPAN 40 (SORBITAN MONOPALMITATE)	emulsifier
E496	Sorbitan trioleat, SPAN 85 (SORBITAN TRIOLEAT)	stabilizer, emulsifier
E500	Sodium carbonates (SODIUM CARBONATES) (i) Sodium carbonate (Sodium carbonate) (ii) Sodium hydrogen carbonate (Sodium hydrogen carbonate) (iii) Sodium sesquicarbonate (Sodium sesquicarbonate)	acidity regulator, leavening agent, anti-caking and anti-clumping additive
E501	Potassium carbonates (POTASSIUM CARBONATES) (i) Potassium carbonate (Potassium carbonate) (ii) Potassium hydrogen carbonate (Potassium hydrogen carbonate)	acidity regulator, stabilizer
E503	Ammonium carbonates (AMMONIUM CARBONATES) (i) Ammonium carbonate (Ammonium carbonate) (ii) Ammonium hydrogen carbonate (Ammonium hydrogen carbonate)	acidity regulator, leavening agent
E504	Magnesium carbonates (MAGNESIUM CARBONATES) (i) Magnesium carbonate (Magnesium carbonate) (ii) Magnesium hydrogen carbonate (Magnesium hydrogen carbonate)	acidity regulator, anti-caking and anti-clumping additive, colour stabilizer
E505	Ferrous carbonate (FERROUS CARBONATE)	acidity regulator
E507	Hydrochloric acid (HYDROCHLORIC ACID)	acidity regulator
E508	Potassium chloride (POTASSIUM CHLORIDE)	gelling agent
E509	Calcium chloride (CALCIUM CHLORIDE)	firming agent
E510	Ammonium chloride (AMMONIUM CHLORIDE)	flour and bread improving agent
E511	Magnesium chloride (MAGNESIUM CHLORIDE)	firming agent
E513	Sulphuric acid (SULPHURIC ACID)	acidity regulator
E514	Sodium sulphates (SODIUM SULPHATES)	acidity regulator
E515	Potassium sulphates (POTASSIUM SULPHATES)	acidity regulator
E516	Calcium sulphate (CALCIUM SULPHATES)	flour and bread improving agent, sequestrant, firming agent



E517	Ammonium sulphates (AMMONIUM SULPHATE)	flour and bread improving agent, stabilizer
E518	Magnesium sulphates (MAGNESIUM SULPHATES)	firming agent
E519	Cupric sulphate (CUPRIC SULPHATE)	colour retention agent, preservative
E520	Aluminium sulphate (ALUMINIUM SULPHATE)	firming agent
E521	Aluminium sodium sulphate, sodium alum (ALUMINIUM SODIUM SULPHATE)	firming agent
E522	Aluminium potassium sulphate, potassium alum (ALUMINIUM POTASSIUM SULPHATE)	acidity regulator, stabilizer
E523	Aluminium ammonium sulphate, ammonium alum (ALUMINIUM AMMONIUM SULPHATE)	stabilizer, firming agent
E524	Sodium hydroxide (SODIUM HYDROXIDE)	acidity regulator
E525	Potassium hydroxide (POTASSIUM HYDROXIDE)	acidity regulator
E526	Calcium hydroxide (CALCIUM HYDROXIDE)	acidity regulator, firming agent
E527	Ammonium hydroxide (AMMONIUM HYDROXIDE)	acidity regulator
E528	Magnesium hydroxide (MAGNESIUM HYDROXIDE)	acidity regulator, colour stabilizer
E529	Calcium oxide (CALCIUM OXIDE)	acidity regulator, flour and bread improving agent
E530	Magnesium oxide (MAGNESIUM OXIDE)	anti-caking and anti-clumping additive
E535	Sodium ferrocyanide (SODIUM FERROCYANIDE)	anti-caking and anti-clumping additive
E536	Potassium ferrocyanide (POTASSIUM FERROCYANIDE)	anti-caking and anti-clumping additive







E538	Calcium ferrocyanide (CALCIUM FERROCYANIDE)	anti-caking and anti-clumping additive
E539	Sodium thiosulphate (SODIUM THIOSULPHATE)	antioxidant, sequestrant
E541	Sodium aluminium phosphate (SODIUM ALUMINIUM PHOSPHATE) (i) Acidis (ACIDIS) (ii) Basic 8 (BASIC)	acidity regulator, emulsifier
E542	Bone phosphate (Calcium phosphate) (BONE PHOSPHATE (essentiale Calcium phosphate, tribasic))	emulsifier, anti-caking and anti-clumping additive, humectant
E550	Sodium silicates (SODIUM SILICATES) (i) Sodium silicate (Sodium silicate) (ii) Sodium metasilicate (Sodium metasilicate)	anti-caking and anti-clumping additive
E551	Silicon dioxide amorphous (SILICON DIOXIDE AMORPHOUS)	anti-caking and anti-clumping additive
E552	Calcium silicate (CALCIUM SILICATE)	anti-caking and anti-clumping additive
E553	Magnesium silicates (MAGNESIUM SILICATES) (i) Magnesium silicate (Magnesium silicate) (ii) Magnesium trisilicate (Magnesium trisilicate) (iii) Talc (Talc)	anti-caking and anti-clumping additive, powder - carrier
E554	Sodium aluminosilicate (SODIUM ALUMINOSILICATE)	anti-caking and anti-clumping additive
E555	Potassium aluminium silicate (POTASSIUM ALUMINIUM SILICATE)	anti-caking and anti-clumping additive
E556	Calcium aluminium silicate (CALCIUM ALUMINIUM SILICATE)	anti-caking and anti-clumping additive
E558	Bentonite (BENTONITE)	anti-caking and anti-clumping additive

E559	Aluminium silicate (ALUMINIUM SILICATE)	anti-caking and anti-clumping additive
E560	Potassium silicate (POTASSIUM SILICATE)	anti-caking and anti-clumping additive
E570	Fatty acids (FATTY ACIDS)	foam stabilizer, glazing agent, anti-foaming agent
E574	Gluconic acid (D-) (GLUCONIC ACID (D-))	acidity regulator, leavening agent
E575	Glucono delta-lactone (GLUCONO DELTA - LACTONE)	acidity regulator, leavening agent
E576	Sodium gluconate (SODIUM GLUCONATE)	sequestrant
E577	Potassium gluconate (POTASSIUM GLUCONATE)	sequestrant
E578	Calcium gluconate (CALCIUM GLUCONATE)	acidity regulator, firming agent
E579	Ferrous gluconate (FERROUS GLUCONATE)	colour stabilizer
E580	Magnesium gluconate	acidity regulator, firming agent
E585	Ferrous lactate (FERROUS LACTATE)	colour stabilizer
E620	Glutamic acid, L(+)- (GLUTAMIC ACID, L(+)-)	flavour enhancer
E621	Monosodium glutamate (MONOSODIUM GLUTAMATE)	flavour enhancer
E622	Monopotassium glutamate (MONOPOTASSIUM GLUTAMATE)	flavour enhancers
E623	Calcium glutamate (CALCIUM GLUTAMATE)	flavour enhancer
E624	Monoammonium glutamate (MONOAMMONIUM GLUTAMATE)	flavour enhancer
E625	Magnesium glutamate (MAGNESIUM GLUTAMATE)	flavour enhancer
E626	Guanylic acid (GUANYLIC ACID)	flavour enhancer

E627	Disodium 5'-guanylate (DISODIUM 5'-GUANYLATE)	flavour enhancer
E628	Dipotassium 5'-guanylate (DIPOTASSIUM 5'-GUANYLATE)	flavour enhancer
E629	Calcium 5'-guanylate (CALCIUM 5'-GUANYLATE)	flavour enhancer
E630	Inosinic acid (INOSINIC ACID)	flavour enhancer
E631	Disodium 5'-inosinate (DISODIUM 5'-INOSINATE)	flavour enhancer
E632	Potassium inosinate (POTASSIUM INOSINATE)	flavour enhancer
E633	Calcium 5'-inosinate (CALCIUM 5'-INOSINATE)	flavour enhancer
E634	Calcium 5'-ribonucleotides (CALCIUM 5'-RIBONUCLEOTIDES)	flavour enhancer
E635	Disodium 5'-ribonucleotides (DISODIUM 5'-RIBONUCLEOTIDES)	flavour enhancer
E636	Maltol (MALTOL)	flavour enhancer
E637	Ethyl maltol (ETHYL MALTOL)	flavour enhancer
E640	Glyvine (GLYCINE)	flavour modifier
E641	L-leucine (L-LEUCINE)	flavour modifier
E642	Lysin hydrochlorid (LYSIN HYDROCHLORID)	flavour enhancer
E900	Polydimethylsiloxane (POLYDIMETHYLSILOXANE)	anti-foaming agent, emulsifier, anti-caking and anti-clumping additive
E901	Beeswax, white and yellow (BEESWAX, WHITE AND YELLOW)	glazing agent, release agent
E902	Candelilla wax (CANDELILLA WAX)	glazing agent
E903	Carnauba wax (CARNAUBA WAX)	glazing agent
E904	Shellac (SHELLAC)	glazing agent
E905a	Mineral oil, food grade (MINERAL OIL, FOOD GRADE)	glazing agent, release agent, encapsulant
E905b	Petrolatum (petroleum jelly) (PETROLATUM (PETROLEUM JELLY))	glazing agent, release agent, encapsulant



E905c	Petroleum wax (PETROLEUM WAX)  (i) Microcrystalline wax (MICROCRYSTALLINE WAX)  (ii) Paraffin wax (PARAFFIN WAX)	glazing agent, release agent, encapsulant glazing agent glazing agent
E906	Benzoin gum (BENZOIN GUM)	glazing agent
E908	Rice bran wax (RICE BRAN WAX)	glazing agent
E909	Spermaceti wax (SPERMACETI WAX)	glazing agent
E910	Wax esters (WAX ESTERS)	glazing agent
E911	Methyl esters of fatty acids (METHYL ESTERS OF FATTY ACIDS)	glazing agent
E913	Lanolin (LANOLIN)	glazing agent
E920	Cysteine, L- and its hydrochlorides - sodium and potassium salts (CYSTEINE, L- AND ITS HYDROCHLORIDES - SODIUM AND POTASSIUM SALTS)	flour and bread improving agent
E921	Cystine, L- and its hydrochlorides - sodium and potassium salts (CYSTEINE, L- AND ITS HYDROCHLORIDES - SODIUM AND POTASSIUM SALTS)	flour and bread improving agent
E927a	Azodicarbonamide (AZODICARBONAMIDE)	flour and bread improving agent
E927b	Carbamide (urea) (CARBAMIDE (UREA))	texturator
E928	Benzoyl peroxide (BENZOYL PEROXIDE)	flour and bread improving agent, preservative
E930	Calcium peroxide (CALCIUM PEROXIDE)	flour and bread improving agent
E938	Argon (ARGON)	propellant, packaging gas
E939	Helium (HELIUM)	propellant, packaging gas
E940	Dichlorodifluoromethane (freon -12) (DICHLORODIFLUOROMETHANE)	propellant, cooling agent
E941	Nitrogen (NITROGEN)	gas environment used for packaging and storage, cooling agent
E942	Nitrous oxide (NITROUS OXIDE)	propellant, packaging gas
E943a	Butane (BUTANE)	propellant
E943b	Isobutane (ISOBUTANE)	propellant



E944	Propane (PROPANE)	propellant
E945	Chloropentafluoroethane (CHLOROPENTAFLUOROETHANE)	propellant
E946	Octafluorocyclobutane (OCTAFLUOROCYCLOBUTANE)	propellant
E948	Oxygen (OXYGEN)	propellant, packaging gas
E950	Acesulfame potassium (ACESULFAME POTASSIUM)	sweetener
E951	Aspartame (ASPARTAME)	sweetener, flavour enhancer
E952	Cyclamic acid and Na, K, Ca salts (CYCLAMIC ACID and Na, K, Ca salts)	sweetener
E953	Isomalt, somaltitol, (ISOMALT,SOMALTITOL)	sweetener, anti- caking and anti- clumping additive, filling agent, glazing agent
E954	Saccharin (Na, K, Ca salts) (SACCHARIN and Na, K, Ca salts)	sweetener
E955	Sucralose (trichlorogalactosucrose) (SUCRALOSE (TRICHLOROGALACTOSUCROSE))	sweetener
E957	Thaumatococin (THAUMATOCOCIN)	sweetener, flavour enhancer
E958	Glycyrrhizin (GLYCYRRHIZIN)	sweetener, flavour enhancer
E959	Neohesperidine dihydrochalcone (NEOHESPERIDINE DIHYDROCHALCONE)	sweetener
E960	Stevioside (STEVIOSIDE)	sweetener
(introduced by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
E962	Twinsweet (TWINSWEET) (introduced by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)	sweetener
E965	Maltitol and maltitol syrup (MALTITOL AND MALTITOL SYRUP)	sweetener, stabilizer, emulsifier
E966	Lactitol (LACTITOL)	sweetener, texturizer



E967	Xylitol (XYLITOL)	sweetener, humectant, stabilizer, emulsifier
E999	Quillaia extract (QUILLAIA EXTRACTS)	foaming agent
E1000	Cholic acid (CHOLIC ACID)	emulsifier
E1001	Choline, salts and esters (CHOLINE SALTS AND ESTERS)	emulsifier
E1100	Amylases (AMYLASES)	flour and bread improving agent
E1101	Proteases (PROTEASES) (i) Protease (PROTEASE) (ii) Papain (Papain) (iii) Bromelain (Bromelain) (iv) Ficin (Ficin)	flour and bread improving agent stabilizer, ripening agent for meat and fish, flavour enhancer
E1102	Glucose oxidase (GLUCOSE OXIDASE)	antioxidant
E1103	Invertases (INVERTASES)	stabilizer
E1104	Lipases (LIPASES)	flavour enhancer
E1105	Lysozyme (LYSOZYME)	preservative
E1200	Polydextroses A and N (POLYDEXTROSES A AND N)	filling agent, stabilizer, thickening agent, humectant, texturator
E1201	Polyvinylpyrrolidone (POLYVINYLPYRROLIDONE)	thickening agent, stabilizer, clearer, dispersant
E1202	Polyvinylpolypyrrolidone (POLYVINYLPOLYPYRROLIDONE)	colour stabilizer, colloidal stabilizer
E1400	Dexterins, roasted starch white and yellow (DEXTRINS, ROASTED STARCH WHITE AND YELLOW)	stabilizer, thickening agent, binder
E1401	Acid-treated starch (ACID-TREATED STARCH)	stabilizer, thickening agent, binder
E1402	Alkaline treated starch (ALKALINE TREATED STARCH)	stabilizer, thickening agent, binder



E1403	Bleached starch (BLEACHED STARCH)	stabilizer, thickening agent, binder
E1404	Oxidized starch (OXIDIZED STARCH)	emulsifier, thickening agent, binder
E1405	Starches enzyme-treated (STARCHES ENZYME-TREATED)	thickening agent
E1410	Monostarch phosphate (MONOSTARCH PHOSPHATE)	stabilizer, thickening agent, binder
E1411	Distarch glycerol, cross-linked (DISTARCH GLYCEROL)	stabilizer, thickening agent
E1412	Distarch phosphate esterified with sodium trimetaphosphate; esterified with phosphorus oxychloride (DISTARCH PHOSPHATE ESTERIFIED WITH SODIUM TRIMETAPHOSPHATE; ESTERIFIED WITH PHOSPHORUS OXYCHLORIDE)	stabilizer, thickening agent, binder
E1413	Phosphated distarch phosphate, cross- linked (PHOSPHATED DISTARCH PHOSPHATE)	stabilizer, thickening agent, binder
E1414	Acetylated distarch phosphate, cross- linked (ACETYLATED DISTARCH PHOSPHATE)	emulsifier, thickening agent
E1420	Starch acetate esterified with acetic anhydride (STARCH ACETATE ESTERIFIED WITH ACETIC ANHYDRIDE)	stabilizer, thickening agent
E1421	Starch acetate esterified with vinyl acetate (STARCH ACETATE ESTERIFIED WITH VINYL ACETATE)	stabilizer, thickening agent
E1422	Acetylated distarch adipate (ACETYLATED DISTARCH ADIPATE)	stabilizer, thickening agent, binder
E1423	Acetylated distarch glycerol (ACETYLATED DISTARCH GLYCEROL)	stabilizer, thickening agent, binder
E1440	Hydroxypropyl starch (HYDROXYPROPYL STARCH)	emulsifier, thickening agent, binder
E1442	Hydroxypropyl distarch phosphate, cross- linked (HYDROXYPROPYL DISTARCH PHOSPHATE)	stabilizer, thickening agent
E1443	Hydroxypropyl distarch glycerol (HYDROXYPROPYL DISTARCH GLYCEROL)	stabilizer, thickening agent
E1450	Starch sodium octenyl succinate	stabilizer, thickening agent,



	(STARCH SODIUM OCTENYL SUCCINATE)	binder, emulsifier
E1451	Acetilated oxydised starch (ACETILATED OXYDISSED STARCH)	emulsifier, thickening agent
E1503	Castor oil (CASTOR OIL)	release agent
E1505	Tiethyl citrate (TRIETHYL CITRATE)	foaming agent
E1518	Triacetin (TRIACETIN)	humectant
E1520	Propylene glycol (PROPYLENE GLYCOL)	humectant, softening agent and dispersant
E1521	Polyethylene glycol (POLYETHYLENE GLYCOL)	anti-foaming agent
-	allyl isothiocyanate	preservative
-	N-Lauroyl Glutamic acid	preservative, flour, bread improving agent
-	N-lauroyl asparaginic acid	preservative, flour, bread improving agent
-	N-Lauroyl Glycerol	preservative, flour, bread improving agent
-	Vanillin	flavour substance
-	Dihydroquercetin	antioxidant
-	Imbricin	preservative
-	Quercetin	antioxidant
-	Caramel No.1 (Red)	colouring agent
-	Caramel No.2 (Red)	colouring agent
-	Caramel No.3 (Red)	colouring agent
-	Red rice (RED RICE)	colouring agent
-	Soapwort decoction (Acantophyllum sp.), dencity 1.05	stabilizer
-	Oxyethyl succinate-21	emulsifier
-	Polyvinyl alcohol	humectant
-	Hydrogen Peroxide	preservative
-	Polyoxyethylene	clearer
-	Ethoxyquin	preservative
-	Stevia (Stevia rebaudiana Bertoni),	

powder from leaves and syrup thereof (as amended by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
-	Sodium, potassium and calcium succinates	acidity - regulators
-	Ultramarine	colouring agent
-	Potassium formate (POTASSIUM FORMATE)	preservative
-	Chitosan, chitosonium hydrochloride	filling agent, thickening agent, stabilizer
-	Ferrous chloride	flour and bread improving agent
- Erythritol (ERYTHRITOL) sweetener (introduced by Amendments and Additions No. 2, approved by Resolution No. 41 of Chief State Sanitary Inspector of the RF dated 15.04.2003)		
-	Juglone	preservative

## HYGIENIC REQUIREMENTS FOR SAFETY OF CANNED FOOD PRODUCTS

Depending on the composition of a canned food product (canned food), the value of the active acidity (pH) and a dry substances content the canned foods are divided into 5 groups: A, B, C, D, E, F. The canned products of groups A, B, C, D and F refer to the fully canned food and group E - to semicanned foods.

Drinking dairy products (milk, cream, desserts etc.), subjected to various ways of thermophysical treatment and aseptic filling, form a separate group of sterilized products.

The canned foods for children and dietic nourishment are divided into the same groups as stated above.

Food products sealed in airtight containers, subjected to heat treatment ensuring the microbiological stability and safety of the product during its storage and sale in standard conditions (not in the refrigerator) shall be referred to the fully canned foods.

Food products sealed in airtight containers subjected to heat treatment ensuring the death of not thermoresistant asporogenous microflora, reducing the number of spore-forming microorganisms and ensuring the microbiological stability and safety of the product within a limited shelf life at temperatures of 6 Celsius degrees and below shall be referred to the semicanned foods.

The canned foods are divided into the following groups:

- Group A - canned food products with pH of 4.2 and above, as well as vegetable, meat, meat and vegetable, fish and vegetable and fish canned products with not-limited acidity, prepared without addition of acid; fruit drinks, juices and puree from apricots, peaches and pears with pH 3.8 and above, condensed sterilized canned milk, canned foods with a complex composition of the raw materials (fruit and berry, fruit and vegetable and vegetable with milk component);
- Group B - canned tomato products:
  - a) unconcentrated tomato products (canned plain tomatoes, tomato drinks) with dry substances content of less than 12%;
  - b) concentrated tomato products with dry substances content 12% and more (tomato paste, tomato sauce, ketchup etc.);
- Group C - canned subacid vegetable marinades, juices, salads, vinaigrettes and other products with pH 3.7–4.2, including canned cucumbers, vegetable and other canned foods with adjusted acidity;
- Group D - canned vegetables with pH below 3.7; fruit and fruit and berry pasteurized canned foods; canned foods for public catering with sorbic acid and pH below 4.0; canned apricots, peaches and pears with pH below 3.8; vegetable juices with pH below 3.7; fruit (citrus) and fruit and berry juices, including juices with sugar, natural and pulpy, concentrated, pasteurized juices; canned juices from apricots, peaches and pears with pH 3.8 and below; beverages and concentrated beverages on the vegetable basis with pH 3.8 and below packaged by aseptic filling;
- Group E - pasteurized meat, meat and vegetable, fish and fish and vegetable canned products (bacon, salted and smoked bacon, sausages, ham etc.);
- Group F - pasteurized carbonated fruit juices and carbonated fruit drinks with pH 3.7 and below.

Taking of samples of canned foods and their preparation for laboratory research for compliance with the safety requirements according to the microbiological indicators shall be carried out after their inspection and sanitary processing, leakage check, thermostating of the canned foods and the evaluation of the canned foods external appearance after the thermostating.

Table 1

Microbiological Safety Indicators (Industrial Sterility) of Fully Canned Foods of Groups A and B <\*>

No.	Microorganisms Detected in Canned Food	General Purpose Canned Foods	Canned Foods for Children and Dietetic Nourishment
1	2	3	4
1.	Spore-forming mesophilic aerobic and facultative anaerobic microorganisms of Group B. subtilis	Meet the requirements of industrial sterility. In case of detection of such microorganisms their amount shall not be more than 11 cells in 1 g (cm <sup>3</sup> ) of the product.	
2.	Spore-forming mesophilic aerobic and facultative anaerobic microorganisms of Group B. cereus and (or) B. polymyxa	Do not meet the requirements of industrial sterility	
3.	Mesophilic clostridia	Meet the requirements of industrial sterility, if the detected Mesophilic clostridia are not referred to C. botulinum and (or) C. perfringens. In case of detection of Mesophilic clostridia their amount shall not be more than 1 cell in 1 g (cm <sup>3</sup> ) of product.	Do not meet the requirements of industrial sterility if detected in 10 g (cm <sup>3</sup> ) of the product
4.	Non-spore-forming microorganisms and (or) mold mushrooms and (or) yeast	Do not meet the requirements of industrial sterility	
5.	Mold mushrooms, yeast, lactic acid microorganisms (at seeding on these groups)		Do not meet the requirements of industrial sterility
6.	Spore-forming thermophilic anaerobic, aerobic and facultative anaerobic microorganisms	Meet the requirements of industrial sterility, but the storage temperature shall not be above 20 Celsius degree.	Do not meet the requirements of industrial sterility

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<\*> For condensed sterilized canned milk the assessment of the industrial sterility shall be carried out in accordance with the effective state standard.

Table 2

Microbiological Safety Indicators (Industrial Sterility) of Fully Canned Foods of Group C and D



No.	Microorganisms Detected in Canned Foods	Group C	Group D
1.	Gas-producing spore-forming mesophilic aerobic and facultative anaerobic microorganisms of Group B. polymyxa	Do not meet the requirements of industrial sterility	Not detected
2.	Nongas-producing spore-forming mesophilic aerobic and facultative anaerobic microorganisms	Meet the requirements of industrial sterility at detection of these microorganisms in the amount of not more than 90 CFU in 1g (cm <sup>3</sup> ) of product	Not detected
3.	Mesophilic clostridia	Meet the requirements of industrial sterility, if the detected mesophilic clostridia are not referred to C. botulinum and (or) C. perfringens. In case of detection of mesophilic clostridia their amount shall not be more than 1 cell in 1 g (cm <sup>3</sup> ) of product.	Not detected
4.	Non-spore-forming microorganisms and (or) mold mushrooms and (or) yeast	Do not meet the requirements of industrial sterility	

Table 3

Microbiological Safety Indicators (Industrial Sterility) of Canned Foods of Group F

No.	Indicators	Permissible Level Meeting the Industrial Sterility Requirements
1.	Quantity of mesophilic aerobic and facultative anaerobic microorganisms (QMAFAnM)	Not more than 50 CFU/g (cm <sup>3</sup> )
2.	Lactic acid microorganisms	Not allowed in 1 g (cm <sup>3</sup> ) of product
3.	Colibacillus group bacteria (CGB, coliforms)	Not allowed in 1000 g (cm <sup>3</sup> ) of product
4.	Yeast	Not allowed in 1 g (cm <sup>3</sup> ) of product
5.	Mould	Not more than 50 CFU/g (cm <sup>3</sup> )

Table 4

Microbiological Safety Indicators (Industrial Sterility) of Semicanned Foods of Group E

No.	Indicators	Permissible Level Meeting the Industrial Sterility Requirements
1.	Quantity of mesophilic aerobic and facultative anaerobic microorganisms (QMAFAnM)	Not more than 2 x 10 <sup>2</sup> CFU/g(cm <sup>3</sup> )
2.	Colibacillus group bacteria (CGB, coliforms)	Not allowed in 1 g (cm <sup>3</sup> ) of product
3.	B. cereus	Not allowed in 1 g (cm <sup>3</sup> ) of product
4.	Sulfite-reducing clostridia	Not allowed in 0.1 g (cm <sup>3</sup> ) of product <*>
5.	S. aureus	Not allowed in 1 g (cm <sup>3</sup> ) of product
6.	Pathogenic, including salmonella	Not allowed in 25 g (cm <sup>3</sup> ) of product

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<\*> For fish semicanned foods not allowed in 1.0 g (cm<sup>3</sup>) of product.

Table 5

Microbiological Safety Indicators (Industrial Sterility) of Drinking Sterilized Milk and Cream and other Milk-based Products of Aseptic Filling

No. п/п	Indicators	Conditions and Permissible Levels Meeting the Industrial Sterility Requirements
1.	Thermostatic holding at 37°C for 3-5 days	Absence of visible defects and signs of spoilage (package swelling, change in appearance etc.)
2.	Acidity, °T <*>	Change of titrated acidity of not more than by 2°T
3.	Quantity of mesophilic aerobic and facultative anaerobic microorganisms <*>	Not more than 10 CFU/g (cm <sup>3</sup> )
4.	Microscope slide	Absence of bacterium cells
5.	Organoleptic property	Absence of change in taste and consistence

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<\*> Shall be determined at sanitary and epidemiological expertise, at control of children and dietary food products and repeated researches.

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.

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Annex 9  
(Reference)  
to SanPiN 2.3.2.1078-01

## 9. GENERAL TERMS AND DEFINITIONS

For the purposes of these Sanitary Rules the following terms and definitions shall be used:

food products mean products in the natural or processed form, which are used for human food (including children food products, dietary products), bottled drinking water, alcoholic beverages (including beer), soft drinks, chewing gum and food staples, food additives and biologically active additives;

children food products mean food products designed for children under the age of 14 years and meeting the physiological needs of the child's organism;

dietary products mean food products designed for therapeutic and preventive nourishment;

food staples mean the raw materials of plant, animal, microbial, mineral and synthetic origin and water used for preparation of food products;

food additives mean natural or artificial substances and their compounds, specially introduced into food products during the manufacturing process in order to give the food products certain properties and (or) to preserve the quality of food products;

biologically active additives mean natural (identical to natural) biologically active substances, intended for use together with food or for introducing into the food products composition;

probiotic products mean food products manufactured with the addition of live cultures of probiotic microorganisms and prebiotics;

probiotic microorganisms mean living non-pathogenic and nontoxigenic microorganisms - the representatives of the protecting groups of the normal intestinal microbiocenosis of man and natural symbiotic associations, having positive influence on the human body by maintaining the normal composition and biological activity of the microflora in the digestive tract, mainly of the genera: Bifidobacterium, Lactobacillus, Lactococcus, Propionibacterium, etc;

prebiotics mean food substances that selectively stimulate the growth and (or) the biological activity of the representatives of the protective intestinal microflora, thereby contributing to the maintenance of its normal structure and biological activity;

genetically modified food sources mean food products (components) used for human food in the natural or processed form derived from genetically modified organisms;

genetically modified organisms mean an organism or a few organisms, any non-cellular, single-celled or multicellular organisms capable of reproduction or transmission of the inherent genetic material, different from natural organisms obtained by making use of genetic engineering and containing genetically engineered material, including genes, fragments thereof or a combination of genes;

quality of food products mean a set of characteristics of food products that can satisfy the human need for food under normal conditions of their use;

safety of food products mean the state of reasonable assurance that the food products are not harmful under normal conditions of their use and are not dangerous to the health of current and future generations;

nutritional value of food products means a set of food product properties which (if available) satisfy the human physiological needs for the required substances and energy;

quality and safety certificate of food products mean a document in which the manufacturer certifies that the quality and safety of each batch of food products comply with the requirements of the regulatory and technical documents;

regulations mean state standards, sanitary and veterinary rules and standards establishing the requirements for the quality and safety of food products, materials and goods, control of their quality and safety, conditions of their manufacture, storage, transportation, sale and use, disposal or destruction of low-quality, hazardous food products, materials and goods;

technical documents mean the documents under which the manufacture, storage, transportation and sale of food products, materials and goods are carried out (technical requirements, technological instructions, formulations, etc.);

turnover of food products means purchase and sale (including export and import) and other ways of food products transfer (hereinafter referred to as the sale), their storage and transportation;

food products disposal mean the use of low-quality and dangerous food products for the purposes other than the purpose for which the food products are intended and for which they are commonly used.

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.

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Annex 10 (Reference)  
to SanPiN 2.3.2.1078-  
01

## 10. NORMATIVE AND METHODICAL DOCUMENTS ON METHODS FOR DETECTION AND CONTROL OF SAFETY AND NUTRITIONAL VALUE OF FOOD PRODUCTS

- 10.1 GOST (State Standard) 30178-96 Food Raw Materials and Products. Atomic Absorption Method for Detection of Toxic Elements. International Standard.
- 10.2 GOST 8558.1-78 Meat Products. Nitrite Detection Methods.
- 10.3 GOST 26927-86 Food Raw Materials and Products. Mercury Detection Methods.
- 10.4 GOST 26928-86 Food Raw Materials and Products. Iron Detection Methods.
- 10.5 GOST 26930-86 Food Raw Materials and Products. Arsenic Detection Methods.
- 10.6 GOST 26931-86 Food Raw Materials and Products. Copper Detection Methods.
- 10.7 GOST 26932-86 Food Raw Materials and Products. Lead Detection Methods.
- 10.8 GOST 26933-86 Food Raw Materials and Products. Cadmium Detection Methods.
- 10.9 GOST 26934-86 Food Raw Materials and Products. Zinc Detection Methods.
- 10.10 GOST 26935-86 Food Raw Materials and Products. Tin Detection Methods.
- 10.11 MU (Methodological Instructive Regulations) 5178-90 Methodological Instructive Regulations for Detection of Mercury in Food Products.
- 10.12 MU 01-19/47-11-92 Methodological Instructive Regulations for the Atomic Absorption Method for Detection of Toxic Elements in Food Products.
- 10.13 GOST 28038-89 Processed Fruit and Vegetables. Penicidin Detection Method.

10.14 MU 4082-86 Methodological Instructive Regulations for Finding, Identification and Detection of Aflatoxins in Food Staples and Food Products by High Performance Liquid Chromatography.

10.15 MU 5177-90 Methodological Instructive Regulations for Identifying and Detecting the Content of Desoxynivalenol (Vomitoxin) and Zearalenone in Grain and Grain Products.

10.16 GOST R 51116-97 Feed-Stuff, Grain and its Derived Products. Methods for Detection of Desoxynivalenol (Vomitoxin) Content.

10.17 MU 3184-84 Methodological Instructive Regulations for Finding, Identification and Detection of T-2 Toxin in Food Products and Food Raw Materials.

10.18 MUK 4.4.1.011-93 Detection of Volatile N-Nitrosamines in Food Staples and Food Products.

10.19 SanPiN 42-123-4083-86 Temporary Hygienic Regulations and Method for Detecting the Content of Histamine in Fish Products.

10.20 MU 5048-89 Detection of Nitrates and Nitrites in Plant Products.

10.21 GOST 29270-95 Processed Fruit and Vegetables. Nitrates Detection Method.

10.22 MU 4721-88 Methodological Instructive Regulations for Finding, Identification and Quantitative Measurement of Saturated and Mono-, Bi-, Tri- and a Number of Polycyclic Aromatic Hydrocarbons in Food Products.

10.23 GOST R 51 650 Food Raw Materials and Products. Methods for Determining the Mass Fraction of Benz(a)pyrene.

10.24 Methodological Instructive Regulations for the Detection of the Carcinogenic Hydrocarbon Benzo(a)pyrene in some Food Products and Packaging Materials (No. 1426-76 of the Ministry of Health of the USSR).

10.25 MUK 4.1-1023-01 Isomer-Specific Detection of Polychlorinated Biphenyls (PCBs) in Food Products. Ministry of Health and Social Development of the Russian Federation, Moscow, 2001.

10.26 GOST R 30059-93, Soft Drinks. Aspartame, Saccharin, Caffeine and Sodium Benzoate Detection Methods.

10.27 GOST 26181-84 Processed Fruit and Vegetables. Sorbic Acid Detection Methods.

10.28 GOST R 50476-93 Processed Fruit and Vegetables. The Method for Determining the Content of Sorbic and Benzoic Acids at their Copresence.

10.29 GOST 8756.1-89 Processed Fruit and Vegetables. Benzoic Acid Detection Method.

10.30 GOST R 51182-98 Coffee Products. The Method of Measurement of Caffeine Mass Fraction.

10.31 GOST 14351-73 Wine and Brandy Spirits. Method for Detection of Free and Total Sulphurous Acid.

10.32 GOST 26811-86 Confectionery. The Method of Determining the Mass Fraction of Total Sulphurous Acid.

10.33 Methodological Instructive Regulations for the Detection of Antioxidants in Chewing Gum (No. 01-19/60-11 dated 04.04.93).

10.34 GOST R 51240-98, Fruit and Vegetable Juices. Method for Detection of D-Glucose and D-Fructose.

10.35 GOST 30089-93, Vegetable Oils. Erucic Acid Detection Method.

10.36 GOST 30627.1-98 Dairy Products for Children Food. Methods of Measuring the Mass Fraction of Vitamin A (Retinol).

10.37 GOST 30627.2-98 Dairy Products for Children Food. Methods of Measuring the Mass Fraction of Vitamin C (Ascorbic Acid).

10.38 GOST 30627.3-98 Dairy Products for Children Food. Methods of Measuring the Mass Fraction of Vitamin E (Tocopherol).

10.39 GOST 30627.4-98 Dairy Products for Children Food. Methods of Measuring the Mass Fraction of Vitamin PP (Niacin).

10.40 GOST 30627.5-98 Dairy Products for Children Food. Methods of Measuring the Mass Fraction of Vitamin B<sub>1</sub> (Thiamine).

10.41 GOST 30627.6-98 Dairy Products for Children Food. Methods of Measuring the Mass Fraction of Vitamin B<sub>2</sub> (Riboflavin).

10.42 MR (Methodological Recommendations) 01-19/137-17-95 Methodological Recommendations for the Stripping Voltammetry Detection of Toxic Elements and Vitamins in Food Products, Food Staples, Cosmetics and Toys.

10.43 GOST 30418-96, Vegetable oils. Method for Detection of Fatty Acid Composition.

10.44 GOST 51698-2000 Vodka and Ethyl Alcohol. Gas Chromatographic Method for the Detection of Toxic Trace.

10.45 Methodological Instructive Regulations for Finding, Identification and Detection of Residues of Laevomycetin in Food Products of Animal Origin. Minsk—Moscow, 1991.

10.46 MUK 4.2.026-95 Express Method of Detecting Antibiotics in Food Products.

10.47 MU 3049-84 Methodological Instructive Regulations for the Detection of Residues of Antibiotics in Animal Products.

10.48 GOST 23454-79 Milk. Inhibiting Substances Detection Methods.

10.49 GN (Hygienic Regulations) 1.1546-96 Hygienic Regulations for Pesticides Content in the Environment.

10.50 MU 5778-91 Strontium-90. Detection in Food Products. Moscow, 1991. Certificate MA MVI IBF No. 14/1-89.

10.51 MU 5779-91, Cesium-137. Detection in Food Products. Moscow, 1991. Certificate MA MVI IBF No. 15/1-89.

10.52 MUK 2.6.2717-98 Radiation Control. Sr90 and Cs137. Food Products. Taking of Samples, Analysis and Hygienic assessment. Methodological Instructive Regulations.

10.53 The Method of Measurement. Cesium-134, Cesium-137 and Potassium-40. Detection in Samples of Agricultural Products and Vegetation using a Scintillation Gamma-Ray Spectrometer. Moscow, 1991. Certificate MA MVI IBF No. 37/17-91.

10.54 Methodological Instructive Regulations. Specific Activity of Strontium-90. Beta-spectrometric Measurements in the Environment, Food Products and Bioassays. Approved by the Head of Center for Metrology of Ionizing Radiation of Scientific-Production Association National Research Institute for Physicotechnical and Radio Engineering Measurements named after V.P. Yaryna dated 23.06.93.

10.55 SanPiN 3.2.569-96 Prevention of Parasitic Diseases in the Territory of the Russian Federation.

10.56 MUK 4.2.964-00 Sanitary Parasitological Studies of Water of Economic and Drinking Use.

10.57 Prevention and Control of Communicable Diseases Common to Humans and Animals. Book of Sanitary and Veterinary Rules. Moscow, 1996.

10.58 Methods for the Laboratory Diagnosis of Trichinosis. Approved by the Main Administration for Veterinary of Gosagroprom of the USSR. (Veterinary Legislation. Moscow, 1988. V. 4. Pp. 250—251).

10.59 MUK 3.2.988-00 Methods of Sanitary Parasitological Examination of Fish, Mollusks, Crustaceans, Amphibians, Reptiles and their Derived Products.

10.60 Regulations for the Sanitary-Parasitological Evaluation of Sea Fish and Fish Products (Raw Fish, Chilled and Frozen Sea Fish Intended for Sale in Trade Network and Public Catering Enterprises). Agreed upon with Ministry of Health of the USSR on 22.12.89.

10.61 MUK 4.2.796-99 Methods for Sanitary Parasitological Studies.

10.62 Sanitary Regulations for Use of Food Additives (Ministry of Health of the USSR, No. 1923-78. Moscow, 1979) as amended.

10.63 SanPiN 2.1.4.1074-01 Drinking Water. Hygiene Requirements for the Water Quality of Centralized Drinking Water Supply Systems. Quality Control.

10.64 GOST 7698-93 Starch. Rules for Acceptance and Methods of Analysis.

10.65 GOST 51144-98 Wine Industry Products. Rules for Acceptance and Sampling Methods.

10.66 GOST 51135-98 Alcoholic Products. Rules for Acceptance and Methods of Analysis.

10.67 GOST 300004.2-93 Mayonnaise. Rules for Acceptance and Test Methods.

10.68 GOST 8756.18-70 Canned Food Products. Method for Evaluating the Appearance, Container Air-tightness and Condition of the Inner Surface of the Metal Containers.

10.69 Instruction on the Procedure and Frequency of Control over the Content of Microbiological and Chemical Contaminants in Milk and Dairy Products at the Dairy Industry Enterprises (Moscow, 1996).

10.70 Instruction on the Procedure and Frequency of Control over the Content of Microbiological and Chemical Contaminants in Meat, Poultry, Eggs and their Derived Products (Moscow, 2000).

10.71 GOST R 51301-99, Food Products and Food Staples. Stripping-Voltammetry Methods for the Detection of Toxic Elements Content (Cadmium, Lead, Copper and Zinc).

10.72 MUK 4.1.985-00 Detection of Toxic Elements Content in Food Products and Food Staples. Autoclave Sample Preparation Technique.

10.73 MUK 4.1.986-00 Method of Measurement of the Mass Fraction of Lead and Cadmium in Food Products and Food Staples by Electrothermal Atomic Absorption Spectrometry.

10.74 MUK 4.1.991-00 Method of Measurement of the Mass Fraction of Copper and Zinc in Food Products and Food Staples by Electrothermal Atomic Absorption Spectrometry.

10.75 MUK 4.1.003-95 Detection of Selenium in Food Products.

10.76 GOST R 51232-98 Drinking Water. General Requirements for the Arrangement and Methods of Quality Control.

10.77 GOST R 51762-2001 Vodka and Ethyl Alcohol made from Food Raw Materials. Gas Chromatographic Method for the Detection of Volatile Acids and Furfural Content.

10.78 GOST R 51786-2001 Vodka and Ethyl Alcohol Made from Food Raw Materials. Gas Chromatographic Method for Determining the Authenticity.

10.79 GOST 30711-2001 Food Products. Methods for Finding and Detection of Aflatoxins B1 and M1 Content.

10.80 GOST R 51181-98 Food Concentrates for Children and Dietary Nourishment. Method of Measurement of Mass Fraction of Carotenoids.

10.81 GOST R 50479-93 Processed Fruit and Vegetables. Method for Detection of Vitamin PP Content.

10.82 GOST R 51435-99 (ISO 8128-1-93) Apple Juice, Canned Apple Juice and Drinks Containing Apple Juice. Method for Patulin Content Detection by High Performance Liquid Chromatography.

10.83 GOST R 51440-99 (ISO 8128-2-93) Apple Juice, Canned Apple Juice and Drinks Containing Apple Juice. Method for Patulin Content Detection by Thin-Layer Chromatography.

10.84 Guidance on the Methods of Analysis of the Food Products Quality and Safety. /Under the editorship of I.M. Skurikhin, V.A. Tutelyan. Moscow, Brandes-Medicine, 1998.

10.85 GOST 30349-96, Fruits, Vegetables and their Derived Products. Methods for Detection of Organochlorine Pesticides Residues.

10.86 GOST 23452-79 Milk and Dairy Products. Methods for Detection of Organochlorine Pesticides Residues.

- 10.87 MU No. 2142-80 Methodological Instructive Regulations for the Detection of Organochlorine Pesticides in Water, Food Products, Feeding Stuffs and Tobacco Products by Thin-Layer Chromatography.
- 10.88 MU No. 1875-78 Methodological Instructive Regulations for the Detection of Organochlorine Pesticides in Vegetable Oils and Animal Fats, Phosphatide Concentrates, Husk, Bagasse and Extraction Cake by Liquid Chromatography.
- 10.89 Detection of Aldrin, Hexachlorane, Heptachlor, DDT, DDD, Dichlorodiphenylethylene in Water, Vegetables, Fruits and Biological Material by Gas-Liquid Chromatography. In the book Methods of Detection of Pesticides Trace in Food Products, Feeding Stuffs and the Environment. Moscow, Kolos, 1977. Pp. 17—20.
- 10.90 MU No. 1222-75 Detection of Organochlorine Pesticides in Meat, Products and Animal Fats by Thin-Layer Chromatography.
- 10.91 MU 1350-75 Methodological Instructive Regulations for the Detection of Organochlorine Pesticides in the Raw Materials for the Production of Infant Evaporated Milk Formula.
- 10.92 GOST 27669-88 Wheat Flour. Methods of Test Laboratory Bread Making.

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.

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## 11. NORMATIVE AND GUIDANCE DOCUMENTS FOR METHODS AND PROCEDURES OF MICROBIOLOGICAL CONTROL OF SAFETY AND NUTRITIONAL VALUE OF DIFFERENT FOOD PRODUCTS GROUPS

11.1. When taking samples of food products, preparing them for the analysis for microbiological research and cultivation of microorganisms the provisions of the following documents should be followed:

- 1 GOST 26668-85 Food Products and Flavors. Methods of Sampling for Microbiological Analysis.
- 2 GOST 26669-85 Food Products and Flavors. Preparation of Samples for Microbiological Analysis.
- 3 GOST 26670-85 Food Products and Flavors. Methods of Microorganisms Cultivation.
- 4 GOST 51446-99 (ISO 7218-96) Food Products. General Rules for Microbiological Studies.
- 5 GOST 10444.1-84 Canned Foods. Preparation of Solutions of Reagents, Dyes, Indicators and Growth Media Used in Microbiological Analysis.
- 6 GOST 8756.18-70 Canned Foods. Methods for Evaluating the Appearance, Air-tightness of the Container and Condition of the Inner Surface of Metal Containers.
- 7 MUK 4.2.590-96 Bacteriological Studies Using Rapid Response Analyzer Bak-Trak 4100.

11.2. Taking of samples of specific products, their preparation for analysis and microbiological studies shall be carried out in accordance with the effective documents.

Infant food products

- 8 MUK 4.2.577-96 Methods of Microbiological Control of Products for Children and Therapeutic Nourishment and their Components.
- 9 GOST 26972-86, Grains, Cereals, Flour, Oatmeal for Children Food. Methods of Microbiological Analysis.
- 10 GOST 30705-2000 Dairy Products for Children Food. Method for Detection of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 11 GOST 30706-2000 Dairy Products for Children Food. The Method of Determining the Amount of Yeast and Moulds.
- 12 SanPiN 42-123-4423-87 Normative Standards and Methods for Microbiological Control of Children Food Products Made by Milk Kitchens of the Health Care System.
- 13 MUK 4.2.1122-02 Organization of Control and Methods for Detection of *Listeria monocytogenes* Bacteria in Food Products.

Full (sterilized) canned foods of all kinds of general purpose and for children food.

- 14 Instructions on the Procedure of Sanitary and Technical Control of Canned Foods at the Production Plants, Wholesale Facilities, Retail and Public Catering Enterprises (Moscow, 1993; State Committee for Health and Epidemiological Supervision of the Russian Federation No. 01-19.9-11 of 21.07.92).
- 15 GOST 8756.18-70 Canned Foods. Methods for Evaluating the Appearance, Air-tightness of the Container and Condition of the Inner Surface of Metal Containers.
- 16 GOST 30425-97 Canned Foods. Industrial Sterility Detection Method.
- 17 GOST 10444.11-89 Food Products. Methods for Detection of Lactic Acid Microorganisms.
- 18 GOST 10444.12-88 Food Products. Methods for Detection of Yeast and Moulds.
- 19 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 20 GOST 10444.2-94 Food Products. Methods for Finding and Quantity Measurement of *Staphylococcus Aureus*.

Pasteurized canned meat, meat and vegetables and poultry.

- 21 Instructions on the Procedure of Sanitary and Technical Control of Canned Foods at the Production Plants, Wholesale Facilities, Retail and Public Catering Enterprises (Moscow, 1993; State Committee for Health and Epidemiological Supervision of the Russian Federation No. 01 -19.9-11 of 21.07.92).
- 22 Instruction on the Procedure of Microbiological Control of Pasteurized Canned Meat Production. Moscow, 1984.
- 23 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 24 GOST 30518-97 (GOST R 50474-93) Food Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria).
- 25 GOST 30519-97 (GOST R 50480-93) Food Products. Method of Identifying Bacteria of Genus *Salmonella*.
- 26 GOST 29185-91 Food Products. Methods for Finding and Quantity Measurement of Sulfite-Reducing Clostridia.

- 27 GOST 10444.2-94 Food Products. Method of Finding and Detection of *Staphylococcus aureus*.
- Meat of livestock for slaughter, poultry, eggs and their derived products
- 28 Instruction on the Procedure and Frequency of Control over the Content of Microbiological and Chemical Contaminants in Meat, Poultry, Eggs and their Derived Products. Moscow, 2000.
- 29 The Procedure of the Sanitary-Microbiological Control in the Production of Meat and Meat Products. Moscow, 1996 (Industry Regulatory Document).
- 30 GOST 9792-73 Sausage Goods and Products from Pork, Lamb, Beef and from Meat of other Types of Livestock and Poultry for Slaughter. Rules for Acceptance and Sampling Methods.
- 31 Instructions on Sanitary-Microbiological Control of Carcasses, Poultry Meat, Poultry Products, Eggs and Egg Products at Poultry Farms and Poultry Processing Plants. Moscow, 1990.
- 32 GOST 7702.2.0.-95 Poultry Meat, By-Products and Semi-finished Products. Methods of Sampling and Preparation for Microbiological Studies.
- 33 GOST 30519-97 (GOST R 50480-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 34 GOST 30518-97 (GOST R 50474-93) Food Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria).
- 35 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 36 GOST 7702.2.2.-93 Poultry Meat, By-Products and Semi-finished Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria of Genera *Escherichia*, *Citrobacter*, *Enterobacter*, *Klebsiella*, *Serratia*).
- 37 GOST 7702.2.3.-93 Poultry Meat, By-Products and Semi-finished Products. *Salmonella* Detection Method.
- 38 GOST 7702.2.4-93 Poultry Meat, By-Products and Semi-finished Products. Method for Finding and Quantity Measurement of *Staphylococcus aureus*.
- 39 GOST 7702.2.5.-93 Poultry Meat, By-Products and Semi-finished Products. Methods for Finding and Quantity Measurement of *Listeria*.
- 40 GOST 7702.2.6-93 Poultry Meat, By-Products and Semi-finished Products. Method for Finding and Quantity Measurement of Sulfite-reducing *Clostridia*.
- 41 GOST 7702.2.7.-95 Poultry Meat, By-Products and Semi-finished Products. Method of Identifying Bacteria of the Genus *Proteus*.
- 42 GOST 7702.2.1.-95 Poultry Meat, By-Products and Semi-finished Products. Method for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 43 GOST 28560-90 Food Products. Methods of Identifying Bacteria of the Genera *Proteus*, *Morganella*, *Providencia*.
- 44 GOST 29185-91 Food Products. Methods for Finding and Quantity Measurement of Sulfite-reducing *Clostridia*.
- 45 GOST 10444.9-88 Food Products. Method for Detection of *Clostridium perfringens*.
- 46 GOST 28566-90 Food Products. Method for Finding and Quantity Measurement of *Enterococci*.
- 47 GOST 21237-75 Meat. Methods of Bacteriological Analysis.
- 48 GOST 9958-81 Sausage Goods and Meat Products. Methods of Bacteriological Analysis.
- 49 GOST 30726-2001 Food Products. Methods for Finding and Quantity Measurement of Bacteria of the Species *Escherichia coli* (Reference Method).
- 50 GOST 50454-92 Meat and Meat Products. Identifying and Registering of the Alleged Coliform Bacteria and *Escherichia coli* (Reference Method).
- 51 GOST 50455-92 Meat and Meat Products. Identifying of *Salmonella* (Reference Method).
- 52 GOST 29184-91 Food Products. Methods for Finding and Quantity Measurement of Bacteria of the Family *Enterobacteriaceae*.
- 53 GOST 30364.2-96 Egg Products. Microbiological Methods Of Control.
- 54 MUK 4.2.1122-02 Arrangement of Control and Methods for Detection of *Listeria monocytogenes* Bacteria in Food Products.
- Milk and all kinds of dairy products (except for infant food products)
- 55 GOST 9225-84 Milk and Dairy Products. Methods of Microbiological Analysis.
- 56 Instruction on Microbiological Control of Production at Enterprises of Dairy Industry. Moscow, 1988.
- 57 Instruction on the Procedure and Frequency of Control over Microbiological and Chemical Contaminants at Enterprises of Dairy Industry. Moscow, 1995.
- 58 GOST 51331-99. Dairy Products. Yoghurt. General Specifications (as related to Detecting Lactic Acid Microorganisms; Detection of *Bifidobacteria* in Yogurt).
- 59 GOST 13264-88 Cow Milk. Requirements for the Procurement.
- 60 GOST 30519-97 (GOST 50480-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 61 GOST 10444.11-89 Food Products. Method of Detection of Lactic Acid Microorganisms.
- 62 GOST 30347-97 Milk. Method of Finding and Detection of *Staphylococcus aureus*.



- 63 MUK 4.2.1122-02 Arrangement of Control and Methods for Detection of *Listeria monocytogenes* Bacteria in Food Products.  
Fish, fish products and other sea foods
- 64 Instructions on Sanitary-Microbiological Control of Food Production from Fish and Marine Invertebrates. Leningrad, 1991
- 65 Methodological Instructive Regulations for the Control in Fish Products of *Vibrio parahaemolyticus* — Agents of Food Toxicoinfection. Leningrad, 1991
- 66 Instructions on Sanitary-Microbiological Control of Mussels in their Areas of Cultivation, at Processing Plants and on Cleansing Mussels from Bacterial Contamination. Kerch, 1987
- 67 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 68 GOST 30518-97 (GOST R 50474-93) Food Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria).
- 69 GOST 30519-97 (GOST R 50480-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 70 GOST 10444.12-88 Food Products. Yeast and Moulds Detection Methods.
- 71 GOST 10444.2-94 Food Products. Method of Finding and Detection of *Staphylococcus aureus*.
- 72 GOST 29185-91 Food Products. Methods for Finding and Quantity Measurement of Sulfite-reducing *Clostridia*.
- 73 GOST 28566-90 Food Products. Method for Finding and Quantity Measurement of *Enterococci*.
- 74 GOST 30726-2001 Food Products. Methods for Finding and Quantity Measurement of Bacteria of Species *Escherichia coli*.
- 75 MUK 4.2.1122-02 Arrangement of Control and Methods for Detection of *Listeria monocytogenes* Bacteria in Food Products.  
Bread, flour and cereal products and confectionery
- 76 75. GOST 27543-87 Confectionery, Equipment, Materials, Reagents and Culture Media for Microbiological Analysis.
- 77 GOST 26968-86 Refined Sugar Sand. Methods of Microbiological Analysis.
- 78 Methodological Instructive Regulations MUK 4.2.762-99 Methods for Microbiological Control of Finished Products with Cream.
- 79 GOST 26972-86, Grains, Cereals, Flour, Oatmeal for Children Food Products. Methods of Microbiological Analysis.
- 80 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 81 GOST R 50474-93 Food Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria).
- 82 GOST 30519-97 (GOST R 50474-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 83 GOST 30518-97 (GOST R 50474-93) Food Products. Yeast and Moulds Detection Methods.
- 84 GOST 10444.2-94 Food Products. Method of Finding and Detection of *Staphylococcus aureus*.  
Vegetables, fruits, berries, mushrooms, their derived products and spices
- 85 84. Instructions on Microbiological Control of Fast-frozen Fruits and Vegetables. Gosagroprom of the USSR, dated 29.09.89.
- 86 Instructions on Sanitary-Microbiological Control of Dry and Fast-frozen Potato Products. Gosagroprom of the USSR, dated 20.11.84.
- 87 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 88 GOST 30518-97 (GOST R 50474-93) Food Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria).
- 89 GOST 30519-97 (GOST R 50480-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 90 GOST 10444.12-88 Food Products. Yeast and Moulds Detection Methods.
- 91 GOST 10444.8-88 Food Products. *Bacillus cereus* Detection Methods.
- 92 Instruction on Epidemiology and Laboratory Diagnosis of Yersiniosis, Arrangement and Implementation of Prevention and Antiepidemic Measures. Ministry of Health of the USSR No. 15-6/042, 1990.  
Oil and fat products
- 93 Instruction on Sanitary-Bacteriological Control over Production of Margarine and Mayonnaise at Enterprises of Margarine Industry. Gosagroprom of the USSR dated 21.11.88.
- 94 GOST 50173-92 Mayonnaise. Rules for Acceptance and Test Methods.
- 95 GOST 10444.12-88 Food Products. Yeast and Moulds Detection Methods.
- 96 MUK 4.2.577-96 Methods of Microbiological Control of Products for Children and Therapeutic Nourishment and their Components — Oils for Children Food Products.

- 97 MUK 4.2.1122-02 Arrangement of Control and Methods for Detection of *Listeria monocytogenes* Bacteria in Food Products.  
Beverages and fermentation products
- 98 GOST 30712-2001 Products of Soft Drinks Industry. Methods of Microbiological Analysis. International Standard.
- 99 Instructions on Microbiological Control over Production of Highly Resistant Soft Drinks, Gosagroprom of the USSR, IK 10-5031536105-91.
- 100 Instructions on Sanitary-Microbiological Control over Brewing and Soft Drink Production, Gosagroprom of the USSR, IK 10-04-06-140-87.
- 101 GOST 18963-73, Drinking Water. Methods of Sanitary and Bacteriological Analysis.
- 102 GOST 30519-97 (GOST R 50474-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 103 Methodological Instructive Regulations on Detection and Identification of *Pseudomonas aeruginosa* in the Environment (Food Products, Water, Waste Liquids). Ministry of Health of the USSR, Moscow, 1984.
- 104 MUK 4.2.1018-01 Sanitary-Microbiological Analysis of Drinking Water. Moscow, 2001  
Ready meals made at catering facilities and enterprises of food concentrates industry.
- 105 Methodological Instructive Regulations on Sanitary and Bacteriological Control at Catering and Food Products Trade Facilities (Moscow, 1984).
- 106 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 107 GOST 30518-97 (GOST R 50474-93) Food Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria).
- 108 GOST 30519-97 (GOST R 50480-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 109 GOST 10444.12-88 Food Products. Yeast and Moulds Detection Methods.
- 110 GOST 10444.2-94 Food Products. Method of Finding and Detection of *Staphylococcus aureus*.
- 111 GOST 28560-90 Food Products. Methods of Identifying Bacteria of the Genera *Proteus*, *Morganella*, *Providencia*.
- 112 GOST 30726-2001 Food Products. Methods for Finding and Quantity Measurement of Bacteria of the Species *Escherichia coli*.
- 113 MUK 4.2.1122-02 Arrangement of Control and Methods for Detection of *Listeria monocytogenes* Bacteria in Food Products.  
Biologically active additives to food
- 114 MUK 4.2.577-96 Methods of Microbiological Control of Products for Children and Therapeutic Nourishment and their Components.
- 115 GOST 10444.15-94 Food Products. Methods for Quantity Measurement of Mesophilic Aerobic and Facultative Anaerobic Microorganisms.
- 116 GOST 30518-97 (GOST R 50474-93) Food Products. Methods for Finding and Quantity Measurement of *Escherichia coli* Bacteria (Coliform Bacteria).
- 117 GOST 30519-97 (GOST R 50480-93) Food Products. Method of Identifying Bacteria of the Genus *Salmonella*.
- 118 GOST 10444.2-94 Food Products. Method of Finding and Detection of *Staphylococcus aureus*.
- 119 GOST 10444.8-88 Food Products. *Bacillus cereus* Detection Methods.
- 120 GOST 10444.12-88 Food Products. Yeast and Moulds Detection Methods.
- 121 GOST 30726-2001 Food Products. Methods for Finding and Quantity Measurement of Bacteria of the Species *Escherichia coli*.

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.

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## 12. RECOMMENDED BY THE JOINT FAO/WHO EXPERT COMMITTEE ON FOOD ADDITIVES AND CONTAMINANTS

### MAXIMUM PERMISSIBLE LEVELS OF RESIDUES OF VETERINARY (ZOOTECNICAL) DRUGS IN FOOD PRODUCTS OF ANIMAL ORIGIN

Index	Drug Name	Type of Farm Animals	Product Name	Maximum Permissible Levels of Residues (mg/kg, (l))	ADI <4> (references)
1	2	3	4	5	6
1.	Growth-promoting substances				
1.1	Estradiol-17beta <1>	cattle, buck lambs, chickens	liver kidneys fat	-	0 - 0.05 (7)
1.2	Progesterone <1>	cattle, buck lambs, chickens	liver kidneys fat	-	0 - 30 (7)
1.3	Testosterone <1>	cattle	liver kidneys fat	-	0 - 2 (7)
1.4	Zeranol <3>	cattle	meat liver	0.002 0.01	0 - 0.5 (3)
1.5	Trenbolon acetate	cattle	meat liver kidneys	0.002 as beta-trenbolon 0.01 0.01 as alpha-trenbolon	0 - 0.01 (3)
1.6	Carbadox	pigs	meat liver	0.005 0.03 as quinoxaline-2 carboxylic acid	- (3)
1.7	Bovine somatotropins <2>	dairy cattle	milk meat liver kidneys fat	-	- (6)
1.8	Melengestrol Acetate <3>	cattle	liver fat	0.002 0.005	0 - 0,3 (8)

2.	Glucocorticoids				
2.1	Dexamethasone <3>	cattle, pigs	horses, meat kidneys	0.0005 0.0005	0 - 0.015 (6)

		cattle	liver milk	0.0025 0.0003	
3.	Tranquillizers				
3.1.	Azaperone	pigs	meat fat liver kidneys	0.06 0.06 0.1 0.1 as sum of azaperone and azaperol	0 - 6 (6)
4.	beta-Adrenoceptors-blockers				
4.1.	Carazolol <3>	pigs	meat, fat liver kidneys	0.005 0.025 0.025	0 - 0.1 (7)
5.	Antimicrobial agents				
5.1.	Spectinomycin <3>	cattle, pigs, sheep, chickens  chickens  cattle	meat liver kidneys fat  eggs  milk	0.5 2.0 5.0 2.0  2.0  0.2	0 - 40 (6)
5.2.	Neomycin <3>	cattle   pigs, sheep, goats, ducks, turkeys, chickens chickens	meat liver kidneys fat milk meat liver fat eggs	0.5 15.0 20.0 0.5 0.5 0.5 0.5 0.5 0.5	0 - 60 (7)
5.3.	Gentamycin <3>	cattle, pigs   cattle	meat fat liver kidneys milk	0.1 0.1 2.0 5.0 0.2	0 - 20 (6)
5.4.	Ceftiofur	cattle, pigs   cattle	meat liver kidneys fat milk	1.0 2.0 6.0 2.0 0.1 as desfuroil ceftiofur	0 - 50 (5)
5.5.	Sulphadimidine <3>	cattle, sheep, pigs, poultry	meat liver kidneys fat	0.1 0.1 0.1 0.1	0 - 50 (3)



		cattle	milk	0.025	
5.6.	Flumequine <3>	cattle, pigs, sheep, chickens	meat liver kidneys fat	0.5 0.5 3.0 1.0	0 - 30 (8)
5.7.	Lincomycin <3>	cattle, pigs, sheep, chickens  cattle	meat liver kidneys fat  milk	0.1 0.5 1.5 0.1  0.15	0 - 30 (8)
5.8.	Thiamphenicol	pigs	meat liver kidneys fat	0.05 0.1 0.5 0.05 as sum of thiamphenicol and thiamphenicol conjugates in terms of thiamphenicol	0 - 5 (7)
5.9.	Danofloxacin <3>	cattle, chickens  pigs	meat liver kidneys fat meat liver kidneys fat	0.2 0.4 0.4 0.1 0.1 0.05 0.2 0.1	0 - 20 (5)
5.10.	Spiramycin	cattle  chickens  pigs	meat liver kidneys fat milk meat liver kidneys fat  meat liver kidneys fat	0.2 0.6 0.3 0.3 0.2 0.2 0.6 0.8 0.3 as sum of spiramycin and neospiramycin  0.2 0.6 0.3 0.3 as spiramycin	0 - 50 (5)
5.11.	Sarafloxacin <3>	Turkeys, chickens	meat liver kidneys fat	0.01 0.08 0.08 0.02	0 - 0.3 (6)
6.	Anthelmintic agents				







6.1.	Closantel <3>	sheep	meat	1.5	0 - 30
			liver	1.5	(3)
			kidneys	5.0	
			fat	2.0	
		cattle	meat	1.0	
			liver	1.0	
			kidneys	3.0	
			fat	3.0	
6.2.	Ivermectin	cattle	liver	0.1	0 - 1
			fat	0.04	(8)
			milk	0.01	
				as 22, 23-dihydroivermectin B 1a (N B ) 2 1a	
6.3.	Flubendazole <3>	pigs	meat	0.01	0 - 12
			liver	0.01	(3)
		poultry	meat	0.2	
			liver	0.5	
			eggs	0.4	
6.4.	Tiabendazole	cattle, sheep,	meat	0.1	0 - 100
			liver	0.1	(5)
		goats, pigs	kidneys	0.1	
			fat	0.1	
		cattle, goats	milk	0.1 as sum of tiabendazole and 5-oxytiabendazole	
6.5.	Triclabendazole	cattle	meat	0.2	0 - 3
			liver	0.3	(1)
			kidneys	0.3	
			fat	0.1	
		sheep	meat	0.1	
			liver	0.1	
			kidneys	0.1	
			fat	0.1	
				as 5-chlorum-6- 1 1 (2 ,3 , - dichlorophenoxy)-benzimidazole-2-oh)	
6.6.	Levamisole <3>	cattle, sheep	meat	0.01	0 - 6
			kidneys	0.01	(2)
		pigs, poultry	fat	0.01	
			liver	0.1	
6.7.	Febantel, fenbendazole and oxfendazole	cattle, sheep	meat	0.1	0 - 7
			kidneys	0.1	(6)
		pigs, horses	fat	0.1	
		goats	liver	0.5	
		cattle	milk	0.1	
				as sum of fenbendazole, oxfendazole and oxfendazole sulphone in terms of oxfendazole-sulphone	



6.8.	Moxidectin <3>	cattle  deer sheep cattle, deer, sheep	meat  meat meat liver kidneys fat	0.02  0.02 0.05 0.1 0.05 0.5	0 - 2  (6)
6.9.	Doramectin <3>	cattle  pigs cattle, pigs	meat  meat liver kidneys fat	0.02  0.005 0.1 0.03 0.15	0 - 0.5  (7)
6.10.	Abamectin	cattle	liver kidneys fat  as avermectin B 1 alpha	0.1 0.05 0.1	0 - 1  (4)
6.11.	Eprinomectin	cattle	meat  liver kidneys fat milk	0.1  2.0 0.3 0.25 0.02 as eprinomectin B 1 alpha	0 - 10  (6)
7.	Antiprotozoal agents				
7.1.	Diclazuril <3>	sheep, rabbits, poultry	meat liver kidneys fat	0.5 3.0 2.0 1.0	0 - 30  (6)
7.2	Imidocarb <3>	cattle	meat liver kidneys fat milk	0.3 2.0 1.5 0.05 0.05	0 - 10  (6)
8.	Trypanocidal agents				
8.1.	Izometamidium <3>	cattle	meat fat milk liver kidneys	0.1 0.1 0.1 0.5 1.0	0 - 100  (3)

8.2.	Diminazene <3>	cattle	meat liver kidneys milk	0.5 12.0 6.0 0.15	0 - 100 (2)
9.	Insecticides				
9.1.	Cyhalothrin <3>	cattle, pigs, sheep  cattle	meat liver kidneys fat  milk	0.02 0.02 0.02 0.4  0.03	0 - 2 (8)
9.2.	Dicyclanil <3>	sheep	meat liver kidneys fat	0.2 0.4 0.4 0.15	0 - 7 (8)
9.3.	Trichlorfon <3>	cattle	meat liver kidneys milk	0.05 0.05 0.05 0.05	0 - 20 (8)
9.4.	Deltamethrin <3>	cattle, sheep, chickens  cattle chickens	meat liver kidneys fat milk eggs	0.03 0.05 0.05 0.5 0.03 0.03	0 - 10 (7)
9.5.	Phoxim <3>	cattle, pigs, sheep, goats  cattle	meat liver kidneys fat  milk	0.05 0.05 0.05 0.4  0.01	0 - 4 (7)

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**Note:**

<1> Joint FAO/WHO Expert Committee recommends to carry out an analysis of residual quantities of sex hormones and progesterone in liver, kidneys and fat, but maximum permissible levels of residues of these steroids are not given.

<2> Refers to complete analogues of bovine somatotropin (BST), obtained by genetic engineering, - agents of a very high purity degree (practically without impurities): somagrebove, sometribove, somavubove and somidobove. Due to considerable difference between bovine somatotropin and human somatotropin by chemical composition, physicochemical, immunological properties and specific peculiarity, and also on the basis of evaluation of single agents the Committee considers the presence of possible bovine somatotropin residues in food products to be harmless for human health, therefore there is no need to set maximum levels of residues of these agents. It is suggested to use additional evaluation methods of animal breeding products based on analysis of somatotropin-dependent somatomedins.

<3> Specified maximum levels of residues are given for original product.

<4> ADI - Acceptable daily intake in mg/kg of human body mass.

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the RF.

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### 13. BASIC PRINCIPLES USED IN THE DEVELOPMENT OF SPECIFIC ACTIVITY PERMITTED IN FOOD PRODUCTS AND HYGIENE ASSESSMENT OF COMPLIANCE WITH THE ESTABLISHED STANDARDS

- 13.1. The standards relate to 90Sr and 137Cs as leading radionuclides of technogenic origin determining the internal radiation dose for food route of entry. Contribution to the dose from entry of 90Sr and 137Cs with basic food products should not exceed 1 mSv/year.
- 13.2. A value of 1 mSv/year is the level of interference exception when trading in food products.
- 13.3. The actual average Russian diet dated 1996 was used in the calculations, the data for 1992—1996 were given for comparison. (Table 1).

Table 1

Per capita Consumption of Food Products, g per day					
PRODUCTS	1992	1993	1994	1995	1996
Bread and bread products (in terms of flour)	286.0	293.0	276.0	279.0	266.0
Milk and dairy products <*>	563.5	586.6	584.5	478.8	450.8
Potato	293.0	309.0	309.0	309.0	296.0
Vegetables and gourds	214.0	210.0	194.0	227.0	214.0
Meat and meat products	158.0	158.0	158.0	145.0	132.0
Fish and fish products	32.9	29.6	23.0	26.3	26.3
Fruit and berries	78.9	85.5	82.2	82.2	85.5
Total	1626.3	1671.7	1626.7	1547.3	1470.6

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<\*> Without butter.

13.4. For food products which are consumed in minor quantities (by weight) the following assumptions were made:

- The dose due to their consumption is outside the dose of 1 mSv/year;
- Limiting the dose due to the consumption of such individual product shall be up to 1% and a total dose quota for all the products consumed in minor quantities should not exceed 10% (0.1 mSv/year).

13.5. Due to the fact that these Sanitary Rules are intended to limit the radiation of the population in situations of long-term residual radioactive contamination, while calculating the dose coefficient per entry unit for 90Sr the population of Russia with account of its age structure was taken as the reference population for which the radiation doses are calculated. The effective dose coefficient (e) for the population of Russia is  $3.6 \times 10^{-8}$  Sv/Bq.

13.6. To determine the compliance of food products with radiation safety criteria the compliance indicator V was used, the value of which is calculated according to results of measuring the specific activity of 90Sr and 137Cs in the sample:

$$V = (A / N)_{90\text{Sr}} + (A / N)_{137\text{Cs}}, \text{ where}$$

A means the measured value of the specific activity of 90Sr and 137Cs in the food product, Bq/kg;

N means the permissible level of specific activity for 90Sr and 137Cs in the same product, Bq/kg.

13.7. Control over the specific activity of food products and the hygienic assessment are carried out in accordance with the effective methodological instructive regulations for taking of samples, analysis, and hygienic assessment for radiation control of strontium-90 and cesium-137 in food products.

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.

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### 14. BASIC REQUIREMENTS FOR LABELLING OF NUTRITIONAL VALUE OF FOOD PRODUCTS

14.1. Packaged food products must have a label (an insert), which are marked to specify the indicators of nutritional value, which is characterized by the energy value (calorific value) and mass fraction of nutrient materials in 100 g (or a single serving of a meal) of the product.

14.2. The nutritional value shall not be specified for flavoring food products (tea, coffee, vinegar, spices, salt, etc.), raw food products (meat, poultry, fish, vegetables, berries, fruit etc.), as well as for unpackaged ready-to-eat culinary products, baked products and products of public catering.

14.3. The data on the content of proteins, fats, carbohydrates and energy value shall be given in case if their quantity in single servings of a meal or in 100 g (ml) of the food product is not less than 2%, and for mineral and vitamins not less than 5% of the recommended daily intake.

14.4. The data required to calculate the food product contribution to the satisfaction of daily consumption of a hypothetical "average" adult person and to be specified in the label are shown in Table 1 compiled with account of the Standards of Physiological Requirements for Nutrient Materials and Energy (1991) and the recommendations of FAO/WHO.

Table 1

Estimated Physiological Requirement for Major Nutrient Materials and Energy to be Specified in the Label

Main Nutrient Materials	Daily Requirement
Energy value, kcal	2500
Proteins, g	75
Fats, g	83
including polyunsaturated fatty acids, g	11
Digestible carbohydrates, g	365
including sugar (saccharose)	65
Food fibers, g	30

Mineral substances, mg	
Iron	14
Iodine	0.15
Zinc	15
Selenium	0.07
Calcium	1000
Magnesium	400
Phosphorus	1000
Potassium	3500
Vitamins:	
A (in retinol equivalent), µg	1000
B <sub>1</sub> (thiamine), mg	1.5
B <sub>2</sub> (riboflavin), mg	1.8
B <sub>6</sub> , mg	2.0
B <sub>9</sub> (folic acid), µg	200
B <sub>12</sub> (cobalamin), µg	3
C (ascorbic acid), mg	70
D, µg	5 <1>
E (in tocopherol equivalent), mg	10
PP (на niacin equivalent), mg	20

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Note: <1> - 5 µg of cholecalciferol are 200 ME of vitamin D.

14.5. The content of cholesterol, saturated fatty acids and salt (in terms of sodium) shall be limited in accordance with the recommendations of FAO/WHO (Table 2), which shall also be specified in the label, including in % of the permissible daily intake.

Table 2

Permissible Intake of Some Nutrient Materials

Nutrient Material	Permissible Intake
Saturated fatty acids, not more than, g	25
Cholesterol, not more than, mg	300
Sodium, not more than, mg	2400 (not more than 6.15 g of edible salt)

14.6. In all cases of enrichment of food products in proteins, fats, carbohydrates, minerals, vitamins, pro- and prebiotics the information on their quantities shall be provided with account of their natural content in the product.



14.7. For products with a complex composition of raw materials of meat, fish or dairy origin with partial replacement or addition of protein or fat products of other origin the information on the composition of fat and protein components shall be specified in the label. In this case the name of the food product must not mislead consumers about the composition and nutritional value of the product.

14.8. In alcoholic beverages the alcohol content in % of volume shall be specified.

14.9. The indicators of nutritional value of food products shall be determined by the manufacturer (technical documentation writer). To determine the nutritional value the methods may be used which are presented in Guidance on the Methods of Analysis of the Food Products Quality and Safety under the editorship of I.M. Skurikhin, V.A. Tutelyan (Moscow, 1998) as recommended by the Ministry of Health and Social Development of the Russian Federation.

It is allowed to apply the calculation method with account of the formulation and data on the composition of raw materials from the effective official Reference Books (Tables of the Chemical Composition of Food Products).

14.10. To calculate the energy value of food products it is recommended to use the following coefficients:

Proteins - 4 kcal/g,  
Carbohydrates - 4 kcal/g,  
Fats - 9 kcal/g,  
organic acids - 3 kcal/g,  
alcohol (ethanol) - 7 kcal/g.

When the alcohol strength in % of volume generally accepted in the industry is recalculated to calorific value the following formula shall be used: calories (from ethanol) = product volume/100 x strength (% of vol.) X 0.8 x 7.

14.11. To calculate the protein content in food products the following formula shall be used: protein = total Kjeldahl nitrogen x K,

where K means the conversion factor corresponding to the food product (Guidance on the Methods of Analysis of the Food Products Quality and Safety under the editorship of I.M. Skurikhin, V.A. Tutelyan (Moscow, 1998)).

For food products with a complex composition of raw materials and for those food products the conversion factor of which is not determined it shall be accepted that K = 6.25.

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.

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Annex 15 (Reference) to  
SanPiN 2.3.2.1078-01

## 15. BRIEF DESCRIPTION OF MAIN TYPES OF CHILDREN FOOD

### 15.1. Products of children food on milk basis

These products include, first of all, breast milk substitutes intended for mixed and artificial feeding of children. Breast milk substitutes are high quality products manufactured primarily on the basis of cow milk, soy proteins and other products with the composition corresponding to that of breast milk to the maximum, and thus adapted to the peculiarities of metabolism, functional status and immunoreactivity of children of the first year of life.

To characterize the nutritional value of a breast milk substitute the special indicators are used reflecting the following:

- Bioavailability of the protein component of the product;
- The nutritional value of fats (linoleic acid content, the ratio of omega-3 and omega-6 fatty acids, the ratio of polyunsaturated fatty acids/vitamin E);
- The nutritional value of carbohydrates;
- Mineral and vitamin composition;
- The value of osmolality (osmolarity) and potential water-salt load on the kidneys.

Patterns of the child's development at the early stages of ontogeny and related changes in demand for nutrient materials and energy were the reason for the development of 2 variants of adapted infant formula:

- For children from 0 to 3 months;
- For children from 3 to 12 months.

However, in children nourishment one may use partly adapted formulas, including domestic and foreign formulas of previous generations, as well as formulas for children of the second half year of life (the so-called following formulas).

The recommended composition of these formulas is specified in the respective sections.

Dry and liquid, lentin and fermented milk formulas may be developed based on the recommended composition. Bifidus bacteria and lactic acid bacilli, acidophilous bacteria, etc. may be used as starter cultures for fermented milk formulas. The acidity of adapted fermented milk formulas does not exceed 70 degrees T.

It is advisable to further enrich the breast milk substitutes intended for feeding children during the first months of life in protective factors (lysozyme, bifidus bacteria, etc.), because children of this age are characterized by an immature immune response and their immunological status is largely determined by the factors of immunological resistance contained in breast milk.

Along with the indicators of nutritional value the safety indicators are of the utmost importance to breast milk substitutes.

To produce the adapted formulas the cow milk as well as other components specially designed for the production of children food should be used.

Another group of children food milk-based products is liquid and pasty dairy products made from whole cow milk: milk, fermented milk products, curds. These products are used in feeding of children of the first year of life as complementary food, as well as of children from one to three years. In describing the nutritional value of these products special attention shall be drawn to the standardization of their content of protein and fat. The acidity of liquid dairy products shall not exceed 70—100 degrees T and of pasty dairy products — 150 degrees T.

#### 15.2. Grain-based complementary foods

These products include flour (from different cereals) for children food, dry milk porridge, as well as special-purpose soluble cookies and pasta for children food.

The cereal component is included into the diet of children of the first year of life from 4.5—5 months as an additional source of energy and new carbohydrates (starch and food fibers), vegetable protein, certain vitamins and mineral salts. In accordance with the international guidelines grain complementary foods (flour and dry porridge) should be enriched in calcium, iron and essential vitamins.

The most modern form of manufacture of these products is instant flour and dry porridge, which do not require cooking to prepare from them ready-to-eat meals (milk porridge). This group of products represented in a separate section is characterized by much more stringent requirements for microbiological standards than porridges that require cooking.

The safety of complementary foods on grain and grain and milk basis is mainly determined by the safety of the main raw materials — cereals and flour as well as milk. The cereals and flour specially designed for feeding infants are used to manufacture the products of children food on the grain basis. Their composition may also include sugar, maltodextrine, honey, vegetable oils, natural flavors (vanillin, dry powders of fruits and vegetables).

#### 15.3. Complementary foods on the basis of fruits and vegetables

These products include canned fruit, berry, vegetable and mixed juices and purees. These products are used as complementary foods (usually the first ones) from 3—4 months of life. The nutritional value of these products is determined by the content of digestible carbohydrates, mineral salts (potassium, iron), vitamins (C, P, bioflavonoids, beta-carotene), food fibers. An important indicator is also the total acidity, which does not exceed 0.8%, and the refinement of the canned foods (homogenized, finely refined, largely refined canned foods).

Along with these products this group includes the canned foods with a complex composition of the raw materials - canned foods made from vegetables, grain and meat and vegetables, grain and fish. The nutritional value of these canned foods has been increased due to the combination of several food products groups — meat (fish), vegetables and grains that complement each other with a set of nutrients.

The safety of canned fruits and vegetables is determined mainly by the safety of the raw materials, first of all, fruits and vegetables, as well as additional components.

#### 15.4. Meat-based complementary foods

These include canned foods based on beef, pork and horse meat with the addition of by-products, and canned foods based on poultry. They are used for children nourishment at the age of 7—8 months, and in case of medical recommendations at an earlier age.

The nutritional value of canned foods is determined by their content of proteins with high biological value, fats, vitamins A, B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, B<sub>12</sub>, iron.

#### 15.5. Fish-based complementary foods

These include canned fish for children food. They are used at the age of 8—9 months of life 1—2 times a week. The nutritional value of canned fish is determined by the availability of proteins with high biological value, fats (containing deficient in the human diet omega-3 fatty acids), vitamins B<sub>1</sub>, B<sub>6</sub>, B<sub>12</sub>, iron and some minor nutrients.

#### 15.6. Products for children of preschool and school age

These products are intended mainly for the organized catering in the respective institutions. However, they may be used at home.

The advisability of using these special-purpose products with enhanced biological and nutritional value for children and adolescents depends on the necessity to improve the nourishment, to eliminate the deficiency of some nutrients, first of all, mineral salts, including minor nutrients, which occurs as a result of the current adverse socio-economic and environmental living conditions.

#### 15.7. The nutritional value of food products for therapeutic nourishment of children

The nutritional value of food products for therapeutic nourishment of children is determined by two criteria.

Firstly, by the most complete satisfaction of the basic physiological needs of children in nutrient materials and energy. These requirements are common to food products intended for healthy and sick children and have been discussed in detail in the section on food products for healthy children above.

Secondly, by the effectiveness of therapeutic action of food products, which is determined either by elimination or, vice versa, enrichment of the product in various nutrient materials according to their designated purpose and nature of the metabolic disorders for each particular disease or group of diseases.

In accordance with these criteria the content of macro-and micronutrients which must satisfy the child's needs to the maximum when the product is used as the main nourish source (such as products for premature babies, for children with food allergies) refers to the number of indicators of nutritional value of children food.

For products for therapeutic nourishment, which composition is modified in accordance with the pathogenetic principle of diet therapy, the criterion may be the degree of elimination of some components (e.g., removal of lactose from products for children with malabsorption syndrome, removal of allergens from products for children with food allergies, etc.).

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ConsultantPlus: note.

The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.

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Annex 16  
(Reference) to SanPiN  
2.3.2.1078-01

### 16. MAIN REGULATORY REFERENCE

16.1. Federal Law On the Quality and Safety of Food Products dated January 2, 2000, No. 29-FZ.

16.2. Federal Law On Sanitary and Epidemiological Welfare of the Population dated March 30, 1999 No. 52-FZ.

16.3. Fundamentals of the Legislation of the Russian Federation on the Citizens' Health Care dated July 22, 1993.

16.4. Federal Law On Radiation Safety of Population dated January 9, 1996.

16.5. Federal Law On Amendments to the Law of the Russian Federation On Protection of Consumers' Rights and the Code of Administrative Offences of the RSFSR dated January 9, 1996.

16.6. Resolution of the Government of the Russian Federation dated September 29, 1997 No. 1263 On Approval of the Regulations on Carrying out Expert Examination of Low-quality and Dangerous Food Staples and Food Products, their Use or Destruction.

16.7. Resolution of the Government of the Russian Federation dated July 24, 2000 No. 554 On the State Sanitary and Epidemiological Service of the Russian Federation.

16.8. Resolution of the Government of the Russian Federation dated December 21, 2000 No. 987 On State Supervision and Control over Assurance of Food Products Quality and Safety.

16.9. Resolution of the Government of the Russian Federation dated December 21, 2000 No. 988 On State Registration of New Food Products, Materials and Goods.

16.10. Order of the Ministry of Health and Social Development of the Russian Federation No. 89 dated March 26, 2001 On State Registration of New Food Products, Materials and Goods, Perfumes and Cosmetics, Oral Hygiene Preparations and Goods, Tobacco Products.

16.11. MUK 2.3.2.970-00 Medical-Biological Evaluation of Food Products Derived from Genetically Modified Sources.

16.12. MUK 2.3.2.721-98 Determination of Safety and Efficacy of Biologically Active Additives to Food.

16.13. Resolution of the Chief State Sanitary Inspector of the Russian Federation dated 08.11.2000 No. 14 On Procedure of the Sanitary-Epidemiological Expert Examination of Food Products Derived from Genetically Modified Sources.

16.14. Social Status and Standard of Living in Russia. Goskomstat of Russia. Moscow, 1997, Pp. 135, 147.

16.15. ICRP 82 Protection of the Public Situation of Prolonged Radiation Exposure, 1999, P. 41.

16.16. WHO Technical Report Series No. 832, 1993.

16.17. WHO Technical Report Series No. 851, 1995.

- 16.18. Codex Alimentarius, v. 3, Rome, 1996.
- 16.19. WHO Technical Report Series No. 876, 1998.
- 16.20. WHO Technical Report Series No. 879, 1998.
- 16.21. WHO Food Additives Series No. 41, Geneva, 1998.
- 16.22. WHO Food Additives Series No. 43, Geneva, 2000.
- 16.23. WHO Food Additives Series No. 45, Geneva, 2000.

Annex 17 (Reference) to  
SanPiN 2.3.2.1078-01,  
approved by Resolution No.  
36 of the Chief State  
Sanitary Inspector of the RF  
dated November 14, 2001

### THE RECOMMENDED CONTENT OF PROTEINS, FATS AND CARBOHYDRATES IN CERTAIN FOOD PRODUCTS

(introduced by Amendments and Additions No. 2 approved by Resolution No. 41 of the Chief State Sanitary Inspector of the RF dated 15.04.2003)

Index	Product Name	Protein	Fat	Carbohydrates	Notes
		g in 100 g of the product			
1	2	3	4	5	6
2.1.1. Meat and poultry derived products					
2.1.1.1.	Sausage products				
2.1.1.1.1.	Cooked sausages	Not less than 11	Not more than 30	Less than 2	
2.1.1.1.2.	Frankfurters and small sausages	Not less than 10	Not more than 30	Less than 1	
2.1.1.1.3.	Meat breads	Not less than 11	Not more than 30	Less than 2	
2.1.1.1.4.	Cooked and smoked sausages	Not less than 16	Not more than 38	Less than 1	
2.1.1.1.5.	Semismoked sausages	Not less than 16	Not more than 45	Less than 1	

2.1.1.1.6.	Uncooked smoked sausages	Not less than 20	Not more than 50	Less than 1	
2.1.1.1.7.	Pork products	Not less than 10	Not more than 50	Less than 1	
2.1.1.2.	Canned meat				
2.1.1.2.1.	Canned beef	Not less than 17	Not more than 17	Less than 1	
2.1.1.2.2.	Canned lamb	Not less than 16	Not more than 15	Less than 1	
2.1.1.2.3.	Canned pork	Not less than 15	Not more than 32	Less than 1	
2.1.1.2.4.	Canned poultry	Not less than 16	Not more than 18	Less than 1	
2.1.2.	Dairy products				
2.1.2.1.	Curds	Not less than 14	Not more than 18	-	
2.1.2.2.	Processed cheese	Not less than 15	Not more than 32	-	
2.1.3.	Fish products				
2.1.3.1.	Canned fish				
2.1.3.1.1.	Natural	Not less than 19	Not more than 8	Less than 1	
2.1.3.1.2.	In oil	Not less than 17	Not more than 23	Less than 1	
2.1.4.	Fat products				
2.1.4.1.	Butter (sweet butter)		Not less than 72		No vegetable or cooking fats

FORMS OF VITAMINS AND MINERAL SALTS PERMITTED TO BE USED IN PRODUCTION OF  
SPECIAL-PURPOSE FOOD PRODUCTS FOR SPORT NUTRITION

(introduced by Amendments No. 14 approved by Resolution No. 28 of the Chief State Sanitary Inspector of  
the RF dated 05.05.2009)

Name	Form
Vitamins	
Vitamin A	Retinol, retinyl acetate; retinyl palmitate; beta-carotene
Vitamin D	Ergocalciferol; cholecalciferol
Vitamin E	D-alpha-tocopherol; DL-alpha-tocopherol; D-alpha-tocopherol acetate; DL-alpha-tocopherol acetate, DL-alpha-tocopherol palmitate; D-alpha-tocopherol succinate; DL- alpha-tocopherol succinate; DL-gamma-tocopherol
Vitamin B <sub>1</sub>	Thiamine bromide; thiamine chloride; thiamine mononitrate
Vitamin B <sub>2</sub>	Riboflavin; sodium riboflavin 5'- phosphate
Vitamin PP (niacin)	Nicotinamide; nicotinic acid and its salts
Vitamin B <sub>6</sub>	Pyridoxine hydrochloride; pyridoxine-5- phosphate; pyridoxal, pyridoxamine and its phosphates, pyridoxine dipalmitate
Pantothenic acid	D-calcium pantothenate; D-sodium pantothenate; dexpantenol
Vitamin B <sub>12</sub>	Cyanocobalamin; methylcobalamin, hydroxocobalamin
Folic acid	Folic acid (pteroylmonoglutamic)
Vitamin C	L-ascorbic acid; L-sodium ascorbate; L-calcium ascorbate; 6- palmityl-L-ascorbic acid (ascorbyl-palmitate); potassium ascorbate
Vitamin K	phylloquinone
Biotin	D-biotin
Choline	Choline chloride, choline citrate; choline bitartrate
Inosite	Inosite
Carnitine	L-carnitine; L-carnitine hydrochloride; acetyl-L-carnitine; L-carnitine tartrate; L-carnitine chlorhydrate

Mineral salts

Calcium	Calcium carbonate; calcium chloride; calcium salts of citric acid; calcium gluconate, calcium glycerophosphate; calcium lactate; calcium salts of orthophosphoric acid; calcium sulphate; calcium oxide; calcium hydroxide
Sodium	Sodium salts of citric acid; sodium chloride; sodium carbonate; sodium bicarbonate; sodium gluconate; sodium lactate; sodium salts of orthophosphoric acid; sodium sulfate; sodium tartrate; sodium hydroxide
Magnesium	Magnesium acetate; magnesium carbonate; magnesium salts of citric acid; magnesium chloride; magnesium gluconate; magnesium salts of orthophosphoric acid; magnesium sulphate; magnesium lactate; magnesium glycerophosphate; magnesium amino-acid complexes; magnesium oxide; magnesium hydroxide
Potassium	Potassium salts of citric acid; potassium lactate; potassium salts of orthophosphoric acid; potassium gluconate; potassium glycerophosphate; potassium chloride; potassium citrate; potassium carbonate; potassium bicarbonate; potassium hydroxide
Iron	Iron gluconate; iron sulphate; iron lactate, iron fumarate; iron succinate; iron diphosphate (pyrophosphate); sodium-iron diphosphate; iron citrate; ammonium iron citrate; iron carbonate; iron orthophosphate; iron saccharate; iron amino-acid complexes; elemental iron
Copper	Copper carbonate, copper citrate, copper gluconate, copper sulphate; copper amino-acid complexes
Zinc	Zinc acetate; zinc carbonate; zinc sulphate; zinc chloride; zinc citrate; zinc lactate; zinc gluconate; zinc amino-acid complexes; zinc oxide
Manganese (MnI)	Manganese carbonate, manganese chloride, manganese citrate, manganese gluconate, manganese sulphate, manganese glycerophosphate, manganese amino-acid complexes
Phosphorus	phosphoric acid and sodium, potassium, calcium and magnesium salts of phosphoric acid
Iodine	Potassium iodide, sodium iodide, potassium iodate, sodium iodate, iodine casein
Selenium	Sodium selenate, sodium selenite; monosubstituted sodium selenite; selenium dioxide; selenium amino-acid complexes
Chrome (CrII)	Chrome (III) chloride; chrome (III) sulphate; chrome amino-acid complexes; chrome picolinate; chrome nicotinate
Molybdenum (Mo VI)	Ammonium molybdate; sodium molybdate; molybdenum amino-acid complexes

THE LIST OF FOOD PRODUCTS RECOMMENDED  
TO BE ENRICHED IN VITAMINS AND MINERAL SUBSTANCES

(Introduced by Amendments and Additions No. 22 approved by Resolution No. 177 of the Chief State  
Sanitary Inspector of the RF dated 27.12.2010)

Food products group	Micronutrient recommended for enrichment
1	2
1. Wheat flour of top and first grade	Vitamins: B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, folic acid, C (processing aid) Mineral substances: iron, calcium
2. Bread and bakery products	Vitamins: B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, folic acid, beta-carotene Mineral substances: iron, calcium, iodine
3. Dairy products (dairy products, dairy compound products, products containing milk, milk devired products)	Vitamins: C, A, E, D, K, beta-carotene, B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, B <sub>12</sub> , folic acid, pantothenic acid, biotin Mineral substances: iron, calcium, iodine
4. Soft drinks	Vitamins: C, A, E, D, K, beta-carotene and other carotenoids, B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, B <sub>12</sub> , folic acid, pantothenic acid, biotin Mineral substances: iodine, iron, calcium
5. Juice products from fruits (including berries) and vegetables(juices, fruit and (or) vegetable nectars, drinks containing fruit and (or) vegetable juice)	Vitamins: C, A, E, beta-carotene, B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, folic acid Mineral substances: iodine, iron, calcium
6. Grain products (breakfast cereals, ready-to-eat extruded products, instant pasta and cereals goods)	Vitamins: C, A, E, D, beta-carotene, B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, B <sub>12</sub> , folic acid, pantothenic acid, biotin Mineral substances: iron, calcium, iodine
7. Fat-and-oil products (vegetable oils, margarines, spreads, mayonnaise, sauces)	Vitamins: A, E, D, beta-carotene
8. Food concentrates(kissels, instant drinks, ready-to-eat meals)	Vitamins: C, A, E, D, K, beta-carotene, B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, B <sub>12</sub> , folic acid, pantothenic acid, biotin Mineral substances: iodine, iron, calcium, magnesium, potassium
9. Confectionary	Vitamins: C, A, E, beta-carotene, B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, folic acid Mineral substances: iodine, iron, calcium, magnesium





10. Fruit and berry concentrates with addition of sugar or other sweetening agents (confiture, jam, marmalade, jelly, fruit ice-cream etc.)	Vitamins: C, A, E, beta-carotene, B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> , PP, folic acid Mineral substances: iodine, iron, calcium
12. Edible salt	Mineral substances: iodine, fluorine <*>, potassium, magnesium

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<\*> For territories with deficiency of this element.

Annex No. 20  
to SanPiN 2.3.2.2804-10

CRITERIA FOR  
RANGING OF A FOOD PRODUCT IN THE CATEGORY OF FOOD PRODUCTS ENRICHED IN  
VITAMINS AND/OR MINERAL SUBSTANCES

(introduced by Amendments and Additions No. 22 approved by Resolution No. 177 of the Chief State Sanitary Inspector of the RF dated 27.12.2010)

Food Products Group	Weight (Volume) of Food Product which must Contain not less than 15% and not more than 50% of Standard Physiological Need in a Micronutrient.
Wheat flour of top and first grade	100 g
Bread and bakery products from wheat flour of top and first grade and rye and wheat flour	150 g
Liquid dairy products, liquid protein products from seed corn, pulse crops etc. (soymilk)	200 ml
Solid and pasty dairy products and protein products from seed corn, pulse crops etc. (tofu)	100 g
Juice products from fruits (including berries) and (or) vegetables, soft drinks, including ones prepared from food concentrates	300 ml
Dry grain products (breakfast cereals, ready-to-eat extruded products, instant pasta and cereals goods)	50 g
Fat-and-oil products, confectionary, hard rennet cheese, canned foods and vegetable, fruit, berry concentrates and food concentrates	in 100 kcal
Iodine-treated edible salt	1—2 g
Edible salt	5 g

MAXIMUM PERMISSIBLE LEVELS OF RESIDUES OF VETERINARY (ZOOTECNICAL) DRUGS IN FOOD PRODUCTS OF ANIMAL ORIGIN CONTROLLED  
ACCORDING TO INFORMATION ON THEIR USAGE IN FOOD RAW MATERIAL MANUFACTURING PROCESS

(introduced by Amendments and Additions No. 22, approved by Resolution No. 177 of Chief State Sanitary Inspector of the RF dated 27.12.2010  
as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)

Index	Drug Name	Type of Farm Animals	Product Name	Maximum Permissible Levels of Residues (mg/kg, max) <*>	Notes
1	2	3	4	5	6
1.	Antimicrobial agents <*>				
1.1	Apramycin (aminoglycosides)	All types of livestock for slaughter and poultry	Meat, fat	1	
			liver	10	
			kidneys	20	
1.2	Gentamycin (aminoglycosides)	all types of livestock for slaughter	Meat, fat	0.05	
			liver	0.2	
			kidneys	0.75	
		cattle	Milk	0.1	
1.3	Kanamycin (aminoglycosides)	All types of livestock for slaughter and poultry, except fish	Meat, fat	0.1	

			liver	0.6	
			kidneys	2.5	
			Milk	0.15	
1.4	Neomycin	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat, fat	0.5	Including framycetin
			Eggs and liquid egg products	0.5	
			Kidneys	5	
			liver	0.5	
			Milk	1.5	
1.6	Paromomycin (aminoglycosides)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat	0.5	
			Liver and kidneys	1.5	
1.7	Spectinomycin (aminoglycosides)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery except sheep Sheep	Fat	0.5	
			Meat	0.3	
			Kidneys	5	
			Beef liver	1	
			Milk	0.2	
			Fat	0.5	
			Meat	0.3	
			Kidneys	5	
			Liver	2	
			Milk	0.2	

1.8	Streptomycin/ Dihydrostreptomycin (aminoglycosides)	All types of livestock for slaughter	Meat Fat Liver Kidneys	0.5 0.5 0.5 1	
		Poultry	Eggs and egg products	0.5	
1.9	Ceftiofur (cephalosporins)	All types of slaughter mammals, poultry	meat liver kidneys fat milk	1.0 2.0 6.0 2.0 0.1	Amount of all residues containing $\beta$ - lactam structure represented as desfuroil-ceftiofur
1.10	Cefacetrile (cephalosporins)	cattle	Milk	0.125	In case of intra- udder use
1.11	Cefalexin (cephalosporins)	cattle	Milk Meat Fat Kidneys liver	0.1 0.2 0.2 1 0.2	
1.12	Cefalonium (cephalosporins)	cattle	milk	0.02	
1.13	Cefoperazone (cephalosporins)	cattle	Milk	0.05	
1.14	Cefquinome (cephalosporins)	Cattle, pigs, horses	Meat, skin, fat, liver kidneys	0.05 0.05 0.05 0.1 0.2	
			milk	0.02	
1.15	Cefapirin (cephalosporins)	cattle	Meat, fat	0.05 0.05	Amount of cefapirin and desacetyl- cefapirin

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kidneys

0.1

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			Milk	0.01	
1.16.	All substances of sulfanilamide group (sulfanilamides)	All types of livestock for slaughter and poultry	Meat, fat, liver, kidneys	0.1 0.1 0.1 0.1	Amount of all residues of this group shall not exceed the Maximum Permissible Levels (MPL)
		Cattle Sheep Goats	Milk	0.025	
1.17.	Baquiloprium (diamino pyrimidine derivatives)	Cattle	fat	0.01	
			liver	0.3	
			kidneys	0.15	
		pigs	milk	0.03	
			skin and fat	0.04	
			liver	0.05	
			kidneys	0.05	
1.18.	Trimethoprim (diaminopyrimidine derivatives)	All types of livestock for slaughter and poultry, except horses	meat	0.05	
			liver	0.05	
			kidneys	0.05	
			fat	0.05	
			milk	0.05	
		Horses	meat	0.1	
			liver	0.1	
			kidneys	0.1	
			fat	0.1	
1.19.	Clavulanic acid (of beta-lactamases inhibitors)	Cattle, pigs	Meat	0.1	
			Fat (for pigs - skin and fat)	0.1	
			liver	0.2	
			kidneys	0.4	
		Cattle	milk	0.2	
1.20	Lincomycin / Clindamycin (lincosamides)	All types of livestock for slaughter and poultry	meat	0.1	
			fat, skin	0.05	

			liver	0.5	
			kidneys	1.5	
			milk	0.15	
			eggs and liquid egg products	0.05	
1.21	Pirlimycin (lincosamides)	all types of livestock for slaughter and poultry	meat	0.1	
			liver	1	
			kidneys	0.4	
			milk	0.1	
1.22	Thiamphenicol (florfenicols)	all types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat (for fish - in adequate ratio with skin)	0.05	As sum of thiamphenicol and thiamphenicol conjugates in terms of thiamphenicol
			liver(except fish)	0.05	
			kidneys(except fish)	0.05	
			Fat (for pigs and poultry - in natural ratios with skin)	0.05	
			milk	0.05	
1.23	Florfenicol (florfenicols)	Cattle and small cattle	meat	0.2	Amount of florfenicol and its metabolites in the form of florfenicol amine
			liver	3	
			fat	0.2	
			kidneys	0.3	
		Pigs	meat	0.3	
			liver	2	
			kidneys	0.5	
			fat, skin	0.5	
		Poultry	meat	0.1	



			liver	2.5	
			kidneys	0.75	
			fat, skin	0.2	
		Fish of pond and cage culture fishery	Meat (in natural ratios with skin)	1	
		Other types of animals	meat	0.1	
			fat	0.2	
			liver	2	
			kidneys	0.3	
1.24	Flumequine (quinolones)	Cattle and small cattle, pigs	meat	0.2	
			liver	0.5	
			kidneys	1.5	
			fat	0.3	
			milk	0.05	
		Poultry	meat	0.4	
			liver	0.8	
			kidneys	1	
			fat, skin	0.25	
		Fish of pond and cage culture fishery	Meat (in natural ratios with skin)	0.6	
		Other types of animals	meat	0.2	
			liver	0.5	
			kidneys	1	
fat	0.25				
1.25	Ciprofloxacin / enrofloxacin / Pefloxacin / ofloxacin / norfloxacin (fluoroquinolones)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat	0.1	Sum of fluoroquinolones
			Fat (for pigs - in natural ratios with skin)	0.1	

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		Cattle and small cattle	Milk	0.1	
			Liver	0.3	
			Kidneys	0.2	
		Poultry	Liver	0.2	
			Kidneys	0.3	
			Skin	0.1	
		Pigs, rabbits	Liver	0.2	
			Kidneys	0.3	
1.26	Sarafloxacin (quinolones)	Turkeys, chickens	Meat	0.01	
			Liver	0.1	
			Kidneys	0.1	
			Skin and fat	0.01	
		Fish of pond and cage culture fishery (salmon)	meat (in natural ratios with skin)	0.03	
1.27	Danofloxacin (quinolones)	Cattle and small cattle, poultry	Meat	0.2	
			Liver	0.4	
			Kidneys	0.4	
			Fat (for poultry - skin and fat)	0.1	
			Milk	0.03	
		Other types of livestock for slaughter, including fish of pond and cage culture fishery	Meat (for fish in natural ratios with skin)	0.1	
			Liver	0.2	
			Kidneys	0.2	
			Fat (for pigs - in natural ratios with skin)	0.05	

1.28.	Difloxacin	Cattle and small cattle	Meat	0.4	
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	(quinolones)		Liver Kidneys Fat	1.4 0.8 0.1	
		Pigs	Meat Liver Kidneys Skin and fat	0.4 0.8 0.8 0.1	
		Poultry	Meat Liver Kidneys Skin and fat	0.3 1.9 0.6 0.4	
		Other types of livestock for slaughter, including fish of pond and cage culture fishery	Meat (for fish - in natural ratios with skin)  Liver Kidneys Fat	0.3  0.8 0.6 0.1	
1.29.	Marbofloxacin (quinolones)	Cattle, pigs	Meat Fat (for pigs - in natural ratios with skin)  Liver Kidneys Milk	0.15 0.05  0.15 0.15 0.075	
1.30	Oxolinic acid (quinolones)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat (for fish - in natural ratios with skin) liver kidneys Fat (for pigs and poultry - skin and fat in natural ratios)	0.1  0.15 0.15 0.05	

1.31	Erythromycin (macrolides)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat (for fish - in natural ratios with skin) Liver Kidneys Fat (for pigs - in natural ratios with skin) Milk Eggs and liquid Egg products	0.2 0.2 0.2 0.2 0.04 0.15	
1.32	Spiramycin (macrolides)	Cattle Chickens Pigs	Meat Fat Liver Kidneys Milk Meat Skin and fat Liver Meat Liver Kidneys Fat	0.2 0.3 0.3 0.3 0.2 0.2 0.3 0.4 0.25 2 1 0.3	Amount of spiramycin and neospiramycin  equivalents of spiramycin (residues with antimicrobial activity)
1.33	Tilmicosin (macrolides)	Poultry	Meat skin and fat liver	0.075 0.075 1	

			kidneys	0.25	
		Other types of livestock for slaughter, including fish of pond and cage culture fishery	Meat (for fish in natural ratios with skin) Liver Kidneys Fat (for pigs - in natural ratios with skin)	0.05  1 1 0.05	
			Milk	0.05	
1.34.	Tylosin (macrolides)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat (for fish - in natural ratios with skin) Liver Kidneys Fat (for pigs and poultry - in natural ratios with skin) Eggs Milk	0.1  0.1 0.1 0.1  0.2 0.05	As tylosin A
1.35.	Tylvalosin (macrolides)	Pigs	Meat Fat and skin Liver Kidneys	0.05 0.05 0.05 0.05	Amount of tylvalosin and 3-O-acetyltylosin
		Poultry	Meat Fat and skin Liver	0.05 0.05 0.05	
1.36.	Tulathromycin (macrolides)	Cattle	Fat liver	0.1 3	(2R, 3S, 4R, 5R, 8R, 10R, 11R, 12S, 13S,

			kidneys	3	14R) - 2-ethyl- 3,4,10,13- tetrahydroxy- 3,5.8,10,12,14 - hexamethyl - 11- [[3,4.6-trideoxi-3- (dimethylamino)- $\beta$ -D- xylo- hexopyranosil] oxy]-1-oxa-6- azacilopent-decan -15- one, represented as equivalents of tulathromycin
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		Pigs	Skin and fat	0.1	
			Liver	3	
			Kidneys	3	
1.37.	Tiamulin (pleuromutilins)	Pigs, rabbits	Meat	0.1	Amount of metabolites that may be hydrolyzed in 8- $\alpha$ - hydroximutilin
			Liver	0.5	
		Chickens	Meat	0.1	
			Skin and fat	0.1	
			Liver	1	
			Eggs and liquid egg products	1	
		Turkeys	Meat	0.1	
			Skin and fat	0.1	
			Liver	0.3	
1.38.	Valnemulin (pleuromutilins)	Pigs	Meat	0.05	
			Liver	0.5	
			kidneys	0.1	
1.39.	Rifaximin/Rifampicin (ansamycins)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	meat	Since 01.01.2012	rifaximin
		Cattle	milk	0.06	

		Bees	honey	Since 01.01.2012	
1.40.	Colistin (polymyxins)	All types of livestock for slaughter, including poultry and fish pond and cage culture fishery	Meat (for fish - in natural ratios with skin) Fat (for pigs and poultry - skin and fat in natural ratios) liver kidneys Milk Eggs and liquid egg products	0.15  0.15  0.15 0.2 0.05 0.3	
1.41.	Bacitracin (polypeptides)	Cattle Rabbits	milk Meat Fat Liver kidneys	0.1 0.15 0.15 0.15 0.15	Amount of bacitracins A, B, C, including, in the form of zinc-bacitracin
1.42.	Novobiocin	Cattle	milk	0.05	
1.43.	Avilamycin (orthozomycins)	Pigs, fowl, rabbits	Meat Fat Liver Kidneys	0.05 0.1 0.3 0.2	Dichloroizo-evernyn acid
1.44.	Monensin (ionophores)	Cattle  Other types of livestock for slaughter and poultry, except broilers, turkeys	Meat Fat Liver Kidneys milk Liver	0.002 0.01 0.03 0.002 0.002 0.008	monensin A

			Other products	0.002	
1.45.	Lasalocid (ionophores)	Poultry	Meat Skin and fat Liver Kidneys eggs	0.02 0.1 0.1 0.05 0.15	lasalocid A
		Other types of livestock for slaughter, including fish of pond and cage culture fishery	Milk  Liver Kidneys Other products	0.001  0.05 0.05 0.005	Sodium-lasalocid
1.46.	Nitrofurans (including furazolidone)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery, bees	Meat Skin and fat Liver Kidneys eggs milk honey	0.001	Shall become effective since 01.01.2012
(as amended by Amendments No. 24, approved by Resolution No. 79 of Chief State Sanitary Inspector of the RF dated 01.06.2011)					
1.47.	Metronidazole / dimetridazole ronidazole / dapsone / clotrimazole / aminotrizole	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery, bees	Meat Skin and fat Liver Kidneys eggs milk honey	Since 01.01.2012	not allowed for products of animal origin at the level of methods identification
1.48.	Flavomycin (streptothricyns)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery, prawns	Meat Liver Kidneys Fat	Till 01.01.2012 0.7 0.7 0.7 0.7	flavophospholipol

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| Eggs

| 0.7

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			Milk	0.7	
1.49.	Doxiciclin (tetracyclines)	Cattle	Meat Liver Kidneys	0.1 0.3 0.6	
		Pigs, fowl	Meat Skin and fat Liver Kidneys	0.1 0.3 0.3 0.6	
1.50.	Benzylpenicillin/ Penethamate (penicillin group)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat (for fish - in natural ratios with skin) Fat (for pigs and poultry - in natural ratios with skin) Liver Kidneys	0.05  0.05  0.05 0.05	
1.51.	Ampicillin (penicillin group)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat (for fish - in adequate ratio with skin)  Fat Liver Kidneys Milk	0.05  0.05 0.05 0.05 0.004	
1.52.	Amoxicillin (penicillin group)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat (for fish - in adequate ratio with skin)  Fat Liver Kidneys Milk	0.05  0.05 0.05 0.05 0.004	

1.53.	Cloxacillin (penicillins)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat Fat Liver Kidneys Milk	0.3 0.3 0.3 0.3 0.03	
1.54.	Dicloxacillin (penicillins)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat Fat Liver Kidneys Milk	0.3 0.3 0.3 0.3 0.03	
1.55.	Nafcillin (penicillins)	All types of ruminant animals	Meat Fat Liver Kidneys Milk	0.3 0.3 0.3 0.3 0.03	
1.56.	Oxacillin (penicillins)	All types of livestock for slaughter, including poultry and fish of pond and cage culture fishery	Meat Fat Liver Kidneys Milk	0.3 0.3 0.3 0.3 0.03	
1.57.	Phenoximethylpenicil lin (penicillin group)	Pigs	Meat Liver Kidneys	0.025 0.025 0.025	
		Fowl	Meat Skin and fat Liver Kidneys	0.025 0.025 0.025 0.025	

2.	Antiprotozoal agents <*>				
2.1.	Diclazuril	sheep	meat	0.5	as diclazuril
		rabbits	liver	3.0	
			kidneys	2.0	
			fat	1.0	
		Poultry (broiler chickens, turkeys for fattening up), pigs	meat	0.5	
			liver	3	
			kidneys	2	
			fat, skin	1	
		Other types of livestock for slaughter, including fish of pond and cage culture fishery	Eggs	0.002	
			Liver	0.04	
			Kidneys	0.04	
			Other products	0.005	
2.2.	Imidocarb	cattle	meat	0.3	as imidocarb
			Fat	0.05	
			Liver	2	
			Kidneys	1.5	
			Milk	0.05	
		Sheep	meat	0.3	
			Fat	0.05	
			Liver	2	
			Kidneys	1.5	
2.3.	Toltrazuril	All types of productive mammals	Meat	0.1	Toltrazuril sulfone
		Fowl	Fat	0.15	
			Liver	0.5	
			Kidneys	0.25	
			Meat	0.1	
			Skin and fat	0.2	
			Liver	0.6	
			Kidneys	0.4	
2.4.	Nicarbazin	Broiler chickens	Meat	0.2	as N, N'-bis (4-nitrofenil) urea
			Liver	0.2	
			Kidneys	0.2	
			Fat, skin	0.2	

		Other types of livestock for slaughter, including fish of pond and cage culture fishery	Eggs Milk Liver Kidneys Other products	0.1 0.005 0.1 0.1 0.025	
2.5.	Amprolium	Broiler chickens, turkeys	Meat Skin and fat Liver Kidneys Eggs	0.2 0.2 0.2 0.4 1	
2.6.	Robenidine	All types of livestock for slaughter, fish and poultry, except broilers, turkeys and rabbits for fattening up	Eggs Liver Kidneys Skin and fat Other products	0.025 0.05 0.05 0.05 0.005	Robenidine hydrochloride
2.7.	Semduramicin	All types of livestock for slaughter, including fish of pond and cage culture fishery, except broiler chickens	All types of products	0.002	
2.8.	Narasin	All types of livestock for slaughter, including fish of pond and cage culture fishery, except broiler chickens	Eggs Milk Liver Other products	0.002 0.001 0.05 0.005	
2.9.	Maduramicin	All types of livestock for slaughter, including fish of pond and cage culture fishery, except broiler chickens and turkeys	All types of products	0.002	



2.10.	Salinomycin	All types of livestock for slaughter, including poultry, fish of pond and cage culture fishery, except broiler chickens and rabbits for fattening up	Liver(except rabbit's liver)	0.005	Salinomycin sodium
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			Eggs	0.003	
			Other products	0.002	
2.11.	Halofuginone	All types of livestock for slaughter, including poultry, fish of pond and cage culture fishery, except broiler chickens, turkeys and cattle, except dairy cattle	Meat Fat and skin Liver Kidneys Eggs Milk Other products	0.01 0.025 0.03 0.03 0.006 0.001 0.003	
2.12.	Decoquate	All types of livestock for slaughter, including poultry, fish of pond and cage culture fishery, except broiler chickens, cattle and small cattle, except dairy cattle	All types of products	0.02	

3. Insecticides <*>					
1	2	3	4	5	6
3.1.	Cyhalothrin	cattle, pigs, sheep	meat liver kidneys fat milk	0.02 0.02 0.02 0.4 0.03	as cyhalothrin
3.2.	Dicyclanil	sheep	meat liver kidneys fat	0.2 0.4 0.4 0.15	Amount of dicyclanil and 2,4,6-triamino- pyrimidine-5- carbonitrile
3.3.	Trichlorfon (Metrifonate)	cattle	milk	0.05	as trichlorfon
3.4.	Deltamethrin	cattle, sheep, chickens  Cattle, chickens fish (salmon)	meat liver kidneys fat milk eggs meat	0.03 0.05 0.05 0.5 0.03 0.03 0.03	as deltamethrin
3.5.	Phoxim	sheep, goats	meat liver kidneys fat	0.05 0.05 0.05 0.4	as phoxim
		pigs	Meat Skin and fat Liver Kidneys	0.02 0.7 0.02 0.02	
		chickens	Meat Skin and fat Liver	0.025 0.55 0.05	

			Kidneys	0.03	
			Eggs	0.06	
3.6.	Cyfluthrin	cattle, goats	Meat	0.01	as cyfluthrin (sum of isomers)
			Fat	0.05	
			Liver	0.01	
			Kidneys	0.01	
			Milk	0.02	
3.7.	Cypermethrin and Alpha-Cypermethrin	All ruminant animals	meat	0.02	Cypermethrin (sum of isomers)  Muscles and skin of fish in natural ratios
			Fat	0.2	
			Liver	0.02	
			Kidneys	0.02	
			Milk	0.02	
		Salmon	meat	0.05	
3.8.	Fluazuron	cattle	meat	0.2	
			liver	0.5	
			kidneys	0.5	
			fat	7.0	
3.9.	Amitraz	Cattle	Fat	0.2	Amount of amitraz and all metabolites, containing 2,4-dimethoxyamphetamine (2,4-DMA) group represented as amitraz
			Liver	0.2	
			Kidneys	0.2	
			Milk	0.01	
		Sheep	Fat	0.4	
			Liver	0.1	
			Kidneys	0.2	
			Milk	0.01	
		Goats	Fat	0.2	
			Liver	0.1	
			Kidneys	0.2	
			Milk	0.01	
		Pigs	Skin and fat	0.4	
			Liver	0.2	
			Kidneys	0.2	
		Bees	honey	0.2	

Note:

<\*> Maximum permissible levels of residues of antimicrobial agents for fat, liver and kidneys do not apply to fish.

<\*\*\*\*> Control over all drugs included in Index No.1 "Antimicrobial Agents", except streptomycin / dihydrostreptomycin, agents of sulfanilamide group (sulfanilamides), antibiotics of tetracycline group, bacitracin in meat, liver, kidneys, penicillin group, Index No.2 "Antiprotozoal Agents", Index No.3 "Insecticides" – from the moment of approval of identification methods.