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Draft Amendments No. 2 to CU Technical Regulation on Food Safety

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WTO Notifications
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FAIRS Subject Report

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Report Highlights:
On April 28, 2014, Russia notified the World Trade Organization (WTO) of draft amendments No. 2 to the Russia-Kazakhstan-Belarus Customs Union's Technical Regulation "On Food Safety" via WTO notification G/TBT/N/RUS/36. The comment period ends on June 17, 2014. Interested U.S. parties are encouraged to share their comments and concerns with the National Institute of Standards and Technology at ncsci@nist.gov.

General Information
On April 28, 2014, Russia notified the World Trade Organization (WTO) of draft amendments No. 2 to the Russia-Kazakhstan-Belarus Customs Union's (CU) Technical Regulation "On Food Safety" (draft amendments) via WTO notification G/TBT/N/RUS/36. An unofficial English translation of the above-referenced draft document can be found below.

According to Russia's WTO notification, the draft amendments took into account proposals received from the members of the Customs Union and Single Economic Space within the period of public discussion of the initial set of draft amendments to the CU Technical Regulation "On Food Safety" in 2013. Additionally, the new amendments should eliminate contradictions in the requirements established by the Technical Regulation and the Unified Sanitary-Epidemiological and Hygienic Requirements for Products Subject to Sanitary-Epidemiological Surveillance (Control), adopted by Decision of the Customs Union Commission No. 299 of May 28, 2010.

The comment period for the draft amendments to the CU Technical Regulation "On Food Safety" ends on June 17, 2014. Interested U.S. parties are encouraged to share their comments and concerns with the National Institute of Standards and Technology at ncsci@nist.gov.

For translation of the original CU Technical Regulation "On Food Safety" please see RS1233 Customs Union Technical Regulation on Food Safety.

The initial set of draft amendments to the CU Technical Regulation "On Food Safety" can be found in RS1328 Draft Amendments to CU Technical Regulation on Food Safety.

BEGIN UNOFFICIAL TRANSLATION:

Draft

ANNEX
to
Decision of the Council of the Eurasian Economic Commission No.___ dated _____, 201_

AMENDMENTS No. 2
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

1. Article 4 shall be supplemented with the terms as follows:

adequate consumption level – the level of daily consumption of foodstuffs and biologically active substances set based on the estimated or observed values or on the estimates of consumption of nutrient and biologically active substances by a group/groups of apparently healthy humans;

upper acceptable consumption level – the highest level of daily consumption of nutrient and biologically active substances constituting no threat of adverse effects on health status indicators for nearly all 18+ persons out of bulk population;

irradiation (treatment with radiation) of food products – treatment of food products with ionizing radiation for the purposes of: reducing contamination with pathogenic microorganisms and the total microbial load; extending expiration dates; suppressing root crop and seed sprouting; destroying or reducing grain and dried fruit contamination with insects and mites; enhancing processing behavior of food products;

irradiated (radiation treated) food products – food products that have been treated with ionizing radiation in accordance with the established requirements;

absorbed dose – measure of the amount of energy absorbed per a weight unit of irradiated food products;

2. In Article 4, the terms "adapted milk mixtures (human milk substitutes)", "novel food products", "food flavoring (flavoring)", "food additive", and "processing aid" shall be amended to read as follows:

adapted milk mixtures (breast milk substitutes) – food products for infants produced in liquid or powdered form on the basis of cow milk or milk of other productive animals, maximally approximated to human milk in terms of chemical composition, and intended to satisfy physiological needs of infants for essential substances and energy;

novel food products – food products (including food additives and flavorings) previously not used by humans as food in the customs territory of the Customs Union, namely: with a new or intentionally changed initial molecular structure; consisting of or extracted from microorganisms, micromyces, algae (including microalgae), and plants; extracted from animals; obtained from genetically modified micro-organisms or with the use thereof; nanomaterials and products of nanotechnology, except for food products obtained using conventional methods, being in circulation or deemed safe by virtue of experience;

food flavoring (flavoring) – food products not used by humans directly as food and containing flavoring substance (including natural flavors), or flavoring preparation, or thermal technological flavoring, or smoke flavoring, or flavoring precursors, or other flavorings (composed of components different from those listed above), or mixtures thereof (flavoring components), intended to modify and/or add flavor and/or taste (except for sweet, sour and salted) to food products, with or without addition of food additives or food raw materials;

food additive – any substance (or a mix of substances) regardless of its nutritional value, not normally used by humans directly as food or as a common component of food products, intentionally introduced into food products for technological reasons (function) for the purpose of production (manufacturing), packing, shipment (transportation) and storage thereof, which results or

can result in the said substance or its transmutation products turning to food product components; a food additive may serve several technological functions;

processing aid – substance or material that, though not being a food component, is intentionally used in processing of food raw materials and in production of food products for certain technological reasons; in the course of a production process processing aids (or derivatives thereof) shall be removed, however the finished products may contain the residual quantities thereof providing they constitute no unacceptable risk to human health; processing aids do not exert any technological effect on finished food products.

3. Part 9 of Article 7 shall be amended to read as follows: "In production (manufacturing) of food products from food (edible) raw materials (including food additives, flavorings, processing aids, or starter cultures of microorganisms) obtained from GMO of plant, animal, and microbial origin, the state-registered GMO lines (strains) must be used.

If the manufacturer did not use GMO of plant origin in the production of food products, GMO content of 0.9% and less in food products is an incidental or technically unavoidable admixture, therefore such food products shall not be qualified as food products containing GMO".

4. Part 12 of Article 7 shall be amended to read as follows: "The content of each nutrient or biologically active substance in enriched food products used for enrichment must be brought to the consumption level of 100 g or 100 ml, or a single serving of such product of at least 15% of the recommended daily consumption level.

The content of probiotic microorganisms in enriched food products must ensure that the level of consumption thereof in a daily serving of such products is in line with the requirements set forth in Annex No. 11 ("The values for daily consumption by adults of nutrient and biologically active substances as part of specialized food products and biologically active additives (BAAs) to food") hereto and makes at least 10^6 of colony-forming units (microbial cells) in 1 g or 1 ml of such products.

In production of enriched food products the use of the forms of vitamins and mineral salts shall be permitted pursuant to Annex No. 12 hereto.

The list of groups of those food products that can be enriched with vitamins and mineral substances is provided in Annex No. 13 hereto".

5. Article 7 shall be supplemented with Parts 13 and 14 to be set forth in the wording as follows:

"13. Irradiated food products should meet the requirements set in Annex No. 14 hereto.";

"14. Edible poppy seeds must not contain poppy straw.".

6. Item 20, Part 8 of Article 8 shall be amended to read as follows: "vegetable oils with peroxide number of more than 2 mmole of active oxygen/kg fat (except for olive oil); olive oil with peroxide number of more than 4 mmole of active oxygen/kg fat".

7. Parts 11 and 13 of Article 8 shall be amended to read as follows:

"11. In production (manufacturing) of food products for the nutrition of toddlers and biologically active food additives (BAAs) for children aged 1.5 to 3 years, the use of vitamins and minerals salts as specified in Annex No.9 hereto shall be permitted.";

"13. In production (manufacturing) of biologically active additives (BAAs) to food the use of plants and products derived therefrom, objects of animal origin, microorganisms, fungi, and biologically active substances listed in Annex No. 7 hereto shall not be permitted. The same shall be true for plants and derivatives thereof that are not normally used as food.

Biologically active food additives should have no adverse effect on human health and should not contain narcotic, psychotropic, poisonous, or drug-doping substances, human organs or tissues, or hormone-active animal tissues.

In production of biologically active additives (BAAs) to food for toddlers (up to 3 years of age) the use of wild-growing or medicinal plants (to the exception of dill, fennel, and chamomile) shall not be permitted.

In production of biologically active additives (BAAs) to food for children aged 3-14 years the use of plant raw materials shall be permitted pursuant to Annex No.8 hereto.".

8. Part 14 of Article 8 shall be amended as follows:

- the following provision shall be added after the first sentence: “The content of biologically active substances in a daily dose of biologically active additives (BAAs) to food as specified in use recommendations should make up at least 15% of the adequate consumption level and should not exceed the upper acceptable consumption level as per Annex No. 11 hereto. The daily dose of vitamins and mineral substances contained in BAAs to food for children aged 1.5 to 3 years should not exceed 50% of the daily physiological need for the above substances; for children older than 3 years (in terms of % of the daily physiological need for the above substances): for vitamins A and D, and mineral substances (selenium, cuprum, zinc, iodine, and iron) – 100%, for water-soluble and fat-soluble vitamins and other mineral substances – 200%.”;

- the second sentence shall be amended to read as follows: “The content in a daily dose of BAAs of each manufacturer-declared biologically active substance obtained from plant raw materials, for which no adequate or upper acceptable consumption levels are specified in Annex No. 11 hereto should make up at least 10% for BAAs containing such biologically active substances, at least 15% – for BAAs, from which such biologically active substances originate, and should not exceed 50% of the single therapeutic dose defined with respect to the use of such substances as a monocomponent medicinal agent”.

9. Article 8 shall be supplemented with Parts 15, 16, 17, 18, and 19 to the effect as follows:

“15. The list of essential biologically active substances and acceptable levels of consumption thereof by adults as part of biologically active additives (BAAs) to food are specified in Annex No. 11 hereto.”;

“16. The forms of vitamins, vitamin-like substances, and mineral substances for the use in production of BAAs to food for adults are specified in Annex No.15 hereto.”;

“17. Food products for infants shall be consistent with the age-specific physiological pattern. The timeframes for introducing basic types of food products and industrially manufactured complementary food products into infants’ food ration are specified in Annex No. 16 hereto.”;

“18. Child nutrition food products for toddlers, preschool-aged, and school-aged children shall correspond, in terms of nutritional value numbers, to the requirements specified in Annex No. 17 hereto and in the appropriate technical regulations of the Customs Union concerning individual types of food products.”;

“19. No mycotoxins may be contained in food products for child nutrition, dietetic therapeutic nutrition, and dietetic protective nutrition.”.

10. In Article 9, paragraph 3 shall be supplemented with the provision to the effect as follows: “The content of mineral substances, vitamins, and vitamin-like substances in a single package unit should not exceed the upper acceptable level of consumption thereof as specified in Annex No.11 hereto.”.

11. In item 3, Part 2 of Article 12, the words “food product” shall be replaced with the words “food products”.

12. Annex No.1 “Microbiological Safety Standards (Pathogenic)” to the Technical Regulation, to the extent it relates to the indicator “Pathogenic microorganisms, including salmonellae”, shall be amended as follows:

- in the column “Group of products”, in the row “Flour and cereals products (instant cereals, egg-containing pasta...)” the words “egg-containing pasta, with fillings” shall be amended to read as follows: “egg-containing pasta products, instant, with milk-based and plant-based additives, protein-free)”.

- in the column “Group of products”, the row “Fresh vegetables and potato; Vegetables, potato, mushrooms, fruit…” shall be supplemented with the words “Leaf lettuce: whole and chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; vegetables: fresh, chopped; vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state;”;

- in the column “Group of products”, the row “Protein isolates and concentrates and their derivatives;” shall be supplemented with words “; Cassia gum; Ready-to-eat culinary products,

including industrially manufactured food products for catering, cooled, packaged in polymeric films";

- in the column "Group of products", the row "Food products for children of pre-school and school age" shall be amended to read as follows:

	Food products for child nutrition for children of pre-school and school age; all types of culinary products including industrially manufactured cooled catering dishes packaged in polymeric films.	25 (100 – ultra-pasteurized milk without aseptic packaging in consumer containers; ultra-pasteurized cream without aseptic packaging in consumer containers)

- and the rows shall be added to the effect as follows:

	Carrageenan, tragacanth, gellan gum, acacia gum	10
	Konjac gum	12.5
	Agar	5
	Alginates	10
	Water – drinking, mineral, table, table-and-medicinal, medicinal	shall not be allowed in 100 cm^3

13. Annex No.1 "Microbiological Safety Standards (Pathogenic)" to the technical regulation, to the extent it relates to the indicator "Listeria monocytogenes", shall be amended as follows:

- in the column "Group of products", the row "Meat and meat products…" shall be amended to read as follows:

	Meat, by-products, derivatives thereof, and products made therefrom (except for edible blood and heat-dehydrated food concentrates)*	25

- in the column "Group of products", the row "Milk and milk products…" shall be amended to read as follows:

	Milk and milk products, composite milk products, and milk-containing products (except for raw milk and raw creams, sterilized and ultra-pasteurized products with aseptic pre-packing, cultured milk products, fermented, dry and thickened milk products); milk-clotting preparations	25 125 g (for soft and pickled cheeses – in 5 samples of 25 g each)

- in the column "Group of products", the row "Fish, non-fish species…" shall be amended to read as follows:

	Fish, non-fish species and derivatives thereof* (except for (naturally) dried and hung products and pasteurized roe)	25

- in the column "Group of products", the row "Vegetables and potatoes blanched…" after the words "salads of raw vegetables and fruits" shall be supplemented with the following words "leaf lettuce: whole and chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; vegetables: fresh, chopped; vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state";

- In the Column "Group of products", in the row "Food products for child nutrition for

children of preschool and school age:…" the words "(except for sterilized and ultra-pasteurized products with aseptic packaging)" shall be removed, and the words ", all types of culinary products including industrially manufactured cooled catering dishes packaged in polymeric films" shall be added instead;

- the row should be added to the following effect:

	Ready-to-eat culinary products including culinary products for catering, industrially manufactured cooled catering dishes packaged in polymeric films	25

14. In Annex No. 1 "Microbiological Safety Standards (Pathogenic)" to the technical regulation, the indicator "Enterobacter sakazakii" shall be replaced with "Cronobacter spp. (Enterobacter sakazakii)" and the corresponding row shall be amended to read as follows:

Cronobacter spp. (Enterobacter sakazakii)	Adapted milk mixtures, instant-type dry milk cereal dishes for children under 6 months of age; Specialized food products for dietary therapeutic nutrition for children under 6 months of age including low-lactose and lactose-free products; products based on soy protein isolate; dry high-protein milk products; products based on full protein hydrolysate; low-phenylalanyl or phenylalanyl-free products; dry products for the prematurely born infants; pasteurized reconstituted dry milk mixtures produced at children's milk kitchens for infants from birth.	30 samples of 10 g each in case of detection of Enterobacteriaceae bacteria belonging to neither E coli. nor to salmonellae, in the standardized amount

15. In Annex No. 1 "Microbiological Safety Standards (Pathogenic)" to the technical regulation, the row in the column "Group of Products" relating to the indicator "Yersinia genus bacteria" shall be supplemented with the following words: "; Salads of raw vegetables and fruits including leaf lettuce: whole and cut, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; vegetables: fresh, chopped; vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; Fresh squeezed vegetable juices, including those for child nutrition".

16. In Annex No. 1 "Microbiological Safety Standards (Pathogenic)" to the technical regulation, the row relating to the indicator "Staphylococcal enterotoxins" shall be amended to read as follows:

Staphylococcal enterotoxins	Cheeses with a period of maturation of 45 days maximum and cheese products, including those for child nutrition; In food products (such as cheeses with a maturation period of more than 45 days and cheese products; milk, creams, fermented milk products, beverages, ice-cream mixes, dry whey and buttermilk, milk mixtures and dry milk-based products for child nutrition) – in case of detection of coagulase-positive staphylococci in the standardized product amount	125 (in 5 samples, 25 g each);

17. In item 1.1 of Table 1, Annex No.2 "Microbiological Safety Standards" to the technical regulation, in the row "1.0" pertaining to the indicator "S.aureus", the words "egg products" in the column "Remarks" shall be supplemented with the word "dry".

18. In item 1.2 of Table 1, Annex No.2 "Microbiological Safety Standards" to the technical regulation, the rows pertaining to the indicator "V. parahaemolyticus, CFU/g, max." shall be

amended to read as follows:

V. parahaemolyticus, CFU/g, max.* *) to be controlled subject to epidemiological situation in the production region	10	Fish products from cold smoked sea fish, including ready-cut; Sea fish - dressed, soft-smoked, soft-salted, including filet
	100	Raw fish and live fish (sea); Cooled and frozen: fish (sea), fish products: fish filet, specially dressed fish (for sea fish), edible fish stuffing and stuffed products, including with flour component; milts and unscreened roe (for sea fish); Fish liver, heads - frozen; Non-fish species: crustaceans and other invertebrates: live, cooled, frozen; clams - cooled, frozen
	shall not be allowed in 25 g	Non-fish species: live clams

19. In item 1.2 of Table 1, Annex No.2 “Microbiological Safety Standards” to the technical regulation:

- in the row “$1x10^5$” pertaining to the indicator “Quantity of mesophilic aerobic and facultative anaerobic microorganisms” the column “Remarks” shall be supplemented with the words “; salted milt”;

- in the row “0.01” pertaining to the indicator “Coliform bacteria” the words “from dressed fish” shall be reworded as follows: “from undressed and dressed fish”.

20. In item 1.4 of Table 1, Annex No. 2 “Microbiological Safety Standards” to the technical regulation:

- in the row “$5x10^3$” pertaining to the indicator “Quantity of mesophilic aerobic and facultative anaerobic microorganisms” the column “Remarks” after the words “soft candy type” shall be supplemented with the word “sherbets,”;

- in the row “0.1” pertaining to the indicator “Coliform bacteria” the column “Remarks” after the words “soft candy type – glazed” shall be supplemented with the word “sherbets,”;

- in the row “0.1” pertaining to the indicator “S.aureus” the column “Remarks” shall be supplemented with the words “; Sponge-biscuit rolls with fillings (creamy, fatty)”.

21. In item 1.5 of Table 1, Annex No.2 “Microbiological Safety Standards” to the technical regulation:

- in the row “$5x10^5$” pertaining to the indicator “Quantity of mesophilic aerobic and facultative anaerobic microorganisms” the word “whole” in the column “Remarks” shall be replaced with the word “chopped”;

- the row “Vegetables – fresh, whole, non-blanched…” pertaining to the Indicator “Quantity of mesophilic aerobic and facultative anaerobic microorganisms, CFU/g (cm^3), max.” in the column “Remarks” shall be supplemented with the words “; Leaf lettuce: whole and cut, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; Vegetables: fresh, chopped; Vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state;”;

- the rows pertaining to the indicator “Enterobacteriaceae, CFU/g, max.” shall be added to the effect as follows:

Enterobacteriaceae,	$5x10^2$	Leaf lettuce: whole and chopped, fresh,

CFU/g, max.		cooled, industrially manufactured, packaged, ready-to-eat in the raw state
	When analyzing 5 samples from the batch: $5x10^2$ – in 3 samples out of 5; from $5x10^2$ to $1x10^3$ – in 2 samples	Vegetables: fresh, chopped, vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state

- in the row "500" pertaining to the indicator "Molds, CFU/g (cm^3)" the column "Remarks" shall be supplemented with the following words "; Leaf lettuce: whole and cut, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; Vegetables: fresh, chopped; Vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state";

- in the row "500" pertaining to the Indicator "Yeast, CFU/g, max." the column "Remarks" shall be supplemented with the words "; Leaf lettuce: whole and cut, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; Vegetables: fresh, chopped; Vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state";

- the indicator "Sulfite-reducing clostridia, shall not be allowed in product mass (g)" shall be replaced with "Mesophilic sulfite-reducing clostridia, shall not be allowed in product mass (g);

- the row pertaining to the indicator "Mesophilic sulfite-reducing clostridia, shall not be allowed in product mass (g)" shall be removed;

- the rows pertaining to the indicator "Non-spore forming microorganisms B.cereus" shall be amended to read as follows:

B.cereus	shall not be allowed in 0.1 g	Desserts - vegetable and fruit (heat-dehydrated)
	10^2 CFU/g, max	Powdered garlic (freeze-dried)
	10^3 CFU/g, max	Potatoes and vegetables - dried, non-blanched before drying

- the indicator "E.coli, shall not be allowed in product amount (g), max" shall be added with the corresponding row set forth to the effect as follows:

E.coli, shall not be allowed in product mass (g), max	in 1 g	Leaf lettuce: whole and cut, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state; Vegetables: fresh, chopped; Vegetables and leaf lettuce mixes: chopped, fresh, cooled, industrially manufactured, packaged, ready-to-eat in the raw state

22. In item 1.7 of Table 1, Annex No.2 "Microbiological Safety Standards" to the technical regulation:

- the row pertaining to the indicator "Pseudomonasaeruginosa, product volume in which shall not be allowed (cm^3)" shall be amended to read as follows:

Pseudomonas aeruginosa, product volume in which shall not be allowed, (cm^3)	100	Water - drinking, mineral, table, table-and-medicinal, medicinal

- the row pertaining to the indicator “Coliform bacteria (faecal coliform), shall not be allowed in product volume (cm^3)” shall be removed;

- the row pertaining to the indicator “Coliform bacteria (CB), shall not be allowed in product mass (g/cm^3)” with the acceptable level of “300 (in 3 samples, each of 100 cm^3) set for “Water – drinking, mineral, table, table-and-medicinal, and medicinal” shall be removed;

- the column “Remarks” pertaining to the indicator “Coliform bacteria (CB), shall not be allowed in product mass (g/cm^3)” with the acceptable level of “333” shall be supplemented with the words “; Water – drinking, mineral, table, table-and-medicinal, medicinal”;

- the indicator “Coliform bacteria (CB), shall not be allowed in product mass (g/cm^3)” shall be amended to read as follows “Coliform bacteria (coliforms), shall not be allowed in product mass (g/cm^3)”;

- the indicator “Molds and yeast (in the aggregate), CFU/cm^3, shall not be allowed” shall be amended to read as follows: “Molds and yeast (in the aggregate), CFU/40cm^3”; the figure “40” in the column “Acceptable levels” shall be replaced with the words “shall not be allowed”.

23. In item 1.8 of Table 1, Annex No.2 “Microbiological Safety Standards” to the technical regulation, to the extent it relates to the indicator “Quantity of mesophilic aerobic and facultative anaerobic microorganisms, CFU/g, max.”:

- the row “$5x10^3$” in the column “Remarks” after the words “Isolates and concentrates of vegetable protein, soya flour (for child products);” shall be supplemented with the words “Agar, xanthan gum, cassia gum;”;

- the row “$1x10^4$” in the column “Remarks” after the words “Edible gelatin for child and dietetic nutrition products;” shall be supplemented with the words “Gellan gum;”;

- the row “$5x10^2$” in the column “Remarks” after the words “Pectin for child and dietetic nutrition products;” shall be supplemented with the words “Stewed vegetables (stewed cabbage, vegetable ragout, etc.): industrially manufactured, cooled, packaged in polymeric films;”;

- the row “$1x10^3$” in the column “Remarks” after the words “Enzymatic protein hydrolyzate from raw soya materials” shall be supplemented with the words “Hot soups – industrially manufactured, cooled, packaged into polymeric films: borscht, cabbage soups, rassolnik, solyanka, soups with pasta products, potato, cream soups; dishes from curd cheese – industrially manufactured, cooled, packaged in polymeric films: curd puddings; fish dishes – industrially manufactured, cooled, packaged in polymeric films: dishes from fish hamburger mass (burgers, fish balls, etc.); dishes from meat and meat products – industrially manufactured, cooled, packaged in polymeric films: boiled meat, products from chopped meat (hamburgers, meat balls, etc.), goods from meat by-products; dishes from poultry and rabbit - industrially manufactured, cooled, packaged in polymeric films: boiled, fried, stewed, and baked goods from chopped poultry (burgers, etc.); garnishes – industrially manufactured, cooled, packaged in polymeric films: boiled rice, boiled pasta products, mashed potato, etc., fried potato, boiled potato; porridges (couscous, wheat cream, oatmeal, etc.); dishes from cereals - industrially manufactured, cooled, packaged in polymeric films; sauces and dressings for second courses – industrially manufactured, cooled, packaged in polymeric films”;

- the row with the acceptable level “$1x10^5$” shall be added with the column “Remarks” worded to the following effect: “Edible gelatin for mass-consumption products; Dry starch (potato, corn, and pea starch); Glucose-fructose syrup; dry fruit-and-berry drenches; Raw vegetable salads with the addition of eggs, canned vegetables, fruits, etc. without dressing and without addition of salty vegetables, with dressings (mayonnaise, sauces, etc.); Creams (from citrus fruits, vanilla, chocolate, etc.)”.

- the row shall be added to the effect as follows:

	$5x10^3$	Alginates

24. In item 1.8 of Table 1, Annex No.2 “Microbiological Safety Standards” to the technical

regulation:

- in the row "1.0" pertaining to the indicator "Coliform bacteria (coliforms), shall not be allowed in product mass, (g)" the column "Remarks" shall be supplemented with the words: "Hot soups – industrially manufactured, cooled, packaged into polymeric films: red-beet soups, cabbage soups, rassolnik, solyanka, soups with pasta products, potato, cereals; vegetable soups, fish soups with potato, cream soups; Dishes from curd cheese – industrially manufactured, cooled, packaged in polymeric films: curd puddings; Fish dishes – industrially manufactured, cooled, packaged in polymeric films: dishes from fish burger mass (burgers, fish balls, etc.); Dishes from meat and meat products – industrially manufactured, cooled, packaged in polymeric films: boiled meat, products from chopped meat (burgers, meat balls, etc.), goods from meat by-products; Dishes from poultry and rabbit – industrially manufactured, cooled, packaged in polymeric films: boiled, fried, stewed, and baked goods from chopped poultry (burgers, etc.); Garnishes - industrially manufactured, cooled, packaged in polymeric films: boiled rice, boiled pasta products, mashed potato, etc., fried potato, boiled potato; porridges (couscous, wheat cream, oatmeal, etc.); dishes from cereals – industrially manufactured, cooled, packaged in polymeric films; stewed vegetables (stewed cabbage, vegetable ragout, etc.) – industrially manufactured, cooled, packaged in polymeric films; Sauces and dressings for second courses – industrially manufactured, cooled, packaged in polymeric films";

- in the row "1.0" pertaining to the indicator "S.aureus" the column "Remarks" after the words "Compressed bakery yeast" shall be supplemented with the words ", Biomass of single-celled plants, yeast for commercial processing";

- in the row "1.0" pertaining to the indicator "S.aureus" the column "Remarks" shall be supplemented with the words "; Salads with addition of meat, poultry, fish, smoked goods etc. without dressings, with dressings (mayonnaise, sauces etc.)";

- in the row "10" pertaining to the indicator "Molds" the column "Remarks" shall be supplemented with the words "Crystalline amino acids and mixtures therefrom";

- the row containing the indicator "Presence of living producer cells in 1 g" shall be added with the column "Acceptable levels" set forth to the effect as follows: "shall not be allowed", and the column "Remarks" set forth to the effect as follows: "Biomass of single-celled plants, yeast for commercial processing";

- the row with the acceptable level "1.0" for to the indicator "E.coli, shall not be allowed in product mass, (g)" shall be amended to read as follows:

	1.0	Sprouted seeds of grain crops, grain legumes, other crops, and products therefrom; salads from raw vegetables and fruits: without dressing, with dressings (mayonnaise, sauces etc.); Jellied beef, pork, poultry (galantines); Pastes from meat and liver; Hot soups: cream soups; Fresh-squeezed vegetable and fruit juices; Hamburgers, cheeseburgers, sandwiches - ready to eat

- the rows for the indicator "E.coli, shall not be allowed in product mass, (g)" shall be added to the effect as follows:

	5	Carrageenan, agar, tragacanth, gellan gum, xanthan gum, konjac gum
	5	Alginates

- in the row with the acceptable level of "1.0" pertaining to the indicator "S.aureus, shall not be allowed in product mass, (g)" the column "Remarks" shall be supplemented with the words "Hot soups – industrially manufactured, cooled, packaged into polymeric films: red-beet soups, cabbage soups, rassolnik, solyanka, soups with pasta products, potato, cereals; vegetable soups, fish soups with potato, cream soups; Dishes from curd cheese – industrially manufactured, cooled, packaged in polymeric films: curd puddings; Fish dishes – industrially manufacture, cooled, packaged in polymeric films: dishes from fish burger mass (burgers, fish balls, etc.); Dishes from meat and meat

products – industrially manufactured, cooled, packaged in polymeric films: boiled meat, products from chopped meat (burgers, meat balls, etc.), goods from meat by-products; Dishes from poultry and rabbit – industrially manufactured, cooled, packaged in polymeric films: boiled, fried, stewed, and baked goods from chopped poultry (burgers, etc.); Garnishes of – industrially manufactured, cooled, packaged in polymeric films: boiled rice, boiled pasta products, mashed potato, etc., fried potato, boiled potato; Sauces and dressings for second courses – industrially manufactured, cooled, packaged in polymeric films";

- the row pertaining to the indicator "Molds and yeasts (in the aggregate), CFU/g, max." shall be amended to read as follows:

Molds and yeasts (in the aggregate), CFU/g, max.	300	Carrageenan, agar, xanthan gum

- in the row with the acceptable level "1.0" pertaining to the indicator "Sulfite-reducing clostridia shall not be allowed in product mass, (g)" the column "Remarks" shall be supplemented with the words "; Fish dishes – industrially manufactured, cooled, packaged in polymeric films: dishes from fish burger mass (burgers, fish balls, etc.); Dishes from meat and meat products – industrially manufactured, cooled, packaged in polymeric films: boiled meat, products from chopped meat (burgers, meat balls, etc.), goods from meat by-products*; Dishes from poultry and rabbit – industrially manufactured, cooled, packaged in polymeric films: boiled, fried, stewed, and baked goods from chopped poultry (burgers, etc.); garnishes - industrially manufactured, cooled, packaged in polymeric films: boiled rice, boiled pasta products, mashed potato, etc., fried potato, boiled potato; porridges (couscous, wheat cream, oatmeal, etc.); dishes from cereals – industrially manufactured, cooled, packaged in polymeric films*; stewed vegetables (stewed cabbage, vegetable ragout, etc.) – industrially manufactured, cooled, packaged in polymeric films*; sauces and dressings for second courses – industrially manufactured, cooled, packaged in polymeric films*
(* - for products with the shelf life of more than 5 days)";

- in the row with the acceptable level "100" pertaining to the indicator "Yeast, CFU/g, max." the column "Remarks" shall be supplemented with the words "; Hot soups – industrially manufactured, cooled, packaged into polymeric films: red-beet soups, cabbage soups, rassolnik, solyanka, soups with pasta products, potato, cereals; vegetable soups, fish soups with potato, cream soups; Sauces and dressings for second courses – industrially manufactured, cooled, packaged in polymeric films";

- in the row with the acceptable level "500" pertaining to the indicator "Molds and yeasts (in the aggregate), CFU/g, max.", the column "Remarks" shall be supplemented with the word "; Alginates";

- the row pertaining to the indicator "Molds and yeasts (in the aggregate), CFU/g, max." shall be added to the following effect:

	100	Cassia gum; Dishes from curd cheese – industrially manufactured, cooled, packaged in polymeric films: curd puddings; Garnishes – industrially manufactured, cooled, packaged in polymeric films: boiled rice, boiled pasta products, mashed potato, etc., fried potato, boiled potato; porridges (couscous, wheat cream, oatmeal, etc.); dishes from cereals – industrially manufactured, cooled, packaged in polymeric films; stewed vegetables (stewed cabbage, vegetable ragout, etc.) – industrially manufactured, cooled, packaged in polymeric films

- in the row with the acceptable level "100" pertaining to the indicator "Molds, CFU/g, max." the column "Remarks" shall be supplemented with the words "; Sauces and dressings for second courses – industrially manufactured, cooled, packaged in polymeric films".

25. In item 1.14 of Table 1, Annex No.2 "Microbiological Safety Standards" to the technical regulation, the row should be added to the following effect:

V.parahaemolyticus*, CFU/g *) to be controlled subject to epidemiological situation in the production region	100	Raw fish – cooled, sub-frozen, frozen (sea)

26. Item 1 of Annex No.3 “Hygienic safety requirements for food products” to the technical regulation shall be amended as follows:

- in the row with the acceptable level “0.6” pertaining to the indicator “lead”, the column “Remarks” shall be supplemented with the words “; By-products, semi-finished goods from poultry by-products, meat products containing poultry by-products, skin (pastes, liver sausages, etc.). Preserves from poultry – pastes”;
- the row with the acceptable level “1.0” pertaining to the indicator “arsenic” shall be supplemented with the words “; By-products, semi-finished goods from poultry by-products. Meat products containing poultry by-products, skin (pastes, liver sausages, etc.)”;
- the row with the acceptable level “0.3” pertaining to the indicator “cadmium” shall be supplemented with the words “; By-products, semi-finished goods from poultry by-products. Meat products containing poultry by-products, skin (pastes, liver sausages, etc.). Preserves from poultry - pastes”;
- the row with the acceptable level “0.1” pertaining to the indicator “mercury” shall be supplemented with the words “; By-products, semi-finished goods from poultry by-products. Meat products containing poultry by-products, skin (pastes, liver sausages, etc.). Preserves from poultry – pastes”;
- The row pertaining to the indicator “benzo(a)pyren” shall be amended as follows:

	0.001	Smoked meat products, meat-containing and poultry products. Smoked meat products containing poultry by-products, skin, pastes, etc.

- in the row with the acceptable level “0.002” pertaining to the indicator “Nitrosamines (dimethylnitrosamine + diethanolnitrosamine)”, the column “Remarks” shall be supplemented with the words “; Sausage products, products from meat and by-products of productive animals, poultry, culinary products from meat, poultry meat; meat, poultry meat (freeze-dried and heat-dehydrated);
- in the row with the acceptable level “0.004” pertaining to the indicator “Nitrosamines (dimethylnitrosamine + diethanolnitrosamine)”, the column “Remarks” shall be supplemented with the words “; Freeze-dried and heat-dehydrated meat; Meat products containing poultry by-products, skin (pastes, liver sausages, etc.) (for smoked products)”;
- the row with the acceptable level “0.000006 (in terms of fat)” pertaining to the indicator “dioxins” shall be supplemented with the words “; Dunghill-fowl liver; Dunghill-fowl liver and products therefrom; Meat products containing poultry by-products, skin (pastes, liver sausages, etc.); Freeze-dried and heat-dehydrated meat”.

27. Item 2 of the Section “Attachments for all sections”, Annex No.3 to the technical regulation shall be supplemented with the words: “Dioxins are the sum of polychlorinated dibenzo-p-dioxins (PCDDS) and polychlorinated dibenzofurans (PCDFs), that are expressed as a sum of toxic equivalents (TEs):

Toxic Equivalents	TE value
dibenzo-p-dioxins (PCDDS)	
2,3,7,8-tetrachlordibenzodioxin	1
1,2,3,7,8-pentachlordibenzodioxin	1
1,2,3,4,7,8-hexachlordibenzodioxin	0.1

1,2,3,4,7,8-hexachlordibenzodioxin	0.1
1,2,3,7,8,9-hexachlordibenzodioxinин	0.1
1,2,3,4,6,7,8- heptachlordibenzodioxin	0.01
Octachlordibenzodioxin	0.0001
Dibenzofurans (PCDFs)	
2,3,7,8-tetrachlordibenzofuran	0.1
1,2,3,7,8-pentachlordibenzofuran	0.05
2,3,4,7,8-pentachlordibenzofuranн	0.5
1,2,3,4,7,8-hexachlordibenzofuran	0.1
1,2,3,6,7,8-hexachlordibenzofuran	0.1
1,2,3,7,8,9-hexachlordibenzofuran	0.1
2,3,4,6,7,8-hexachlordibenzofuran	0.1
1,2,3,4,6,7,8-heptachlordibenzofuran	0.01
1,2,3,4,7,8,9-heptachlordibenzofuran	0.01
Octachlordibenzofuran	0.0001

28. Item 2 of Annex No.3 “Hygienic safety requirements for food products” to the technical regulation shall be amended as follows:

- the row pertaining to the indicator “dioxins” shall be added to the following effect:

	0.000002 (in terms of fat)	Cream-and-vegetable spread, baked cream-and-vegetable mixture

- the row pertaining to the indicator “peroxide number” shall be added to the effect as follows:

	4 mmole active oxygen/kg fat	Drinking milk and drinking cream (sterilized)

29. In item 3 of Annex No.3 “Hygienic safety requirements for food products” to the technical regulation, in the row with the acceptable level “0.2” pertaining to the indicator “HCH (α, β, γ-isomers)” the column “Remarks” shall be supplemented with the words “; Fish – dried, jerked, smoked, salted, spiced, pickled, fish culinary and other ready-to-eat fish products”.

30. Item 4 of Annex No.3 “Hygienic safety requirements for food products” to the technical regulation shall be amended as follows:

- the row pertaining to the indicator “cadmium” shall be added to the effect as follows:

	0.2	Seeds of a sunflower intended for direct use as food

- the row shall be added to the following effect:

Fumonisins (B1+B2)	Not allowed	Grain-based products for dietetic nutrition

31. Item 6 of Annex No.3 “Hygienic safety requirements for food products” to the technical regulation shall be amended as follows:

- in the row with the acceptable level “0.2” pertaining to the indicator “arsenic”, the column “Remarks” shall be supplemented with the words “; Vegetable, fruit, berry preserves”;

- the row with the acceptable level “0.03” pertaining to the indicator “cadmium” shall be amended to read as follows:

	0.03	Vegetables, potatoes, vine crops, fruits, berries, and products therefrom, including vegetable, fruit, and berry preserves*; Flavored ice-cream and edible ice; juice products from fruits and

		(or) vegetables

- in the column “Remarks” for the indicator “tin”, after the word “berry” the word “, mushroom” shall be added;

- in the column “Remarks” for the indicator “chromium”, after the word “berry” the word “, mushroom” shall be added;

- in the row with the acceptable level “2000” pertaining to the indicator “Nitrates”, the words “Iceberg type lettuce grown in protected ground” in the column “Remarks” shall be replaced with the words “Iceberg type lettuce grown in unprotected ground”;

- in the row with the acceptable level “2500” pertaining to the indicator “Nitrates”, the words “Iceberg type lettuce grown in unprotected ground” in the column “Remarks” shall be replaced with the words “Iceberg type lettuce grown in protected ground”.

32. Item 7 of Annex No.3 “Hygienic safety requirements for food products” to the technical regulation shall be amended as follows:

- in the row with the acceptable level “0.1” pertaining to the indicator “lead”, the column “Remarks” after the words “Plant oils (all types), plant oil fractions,” shall be supplemented with the words “crude fat from beef, pork, mutton and other slaughter animals (cooled, frozen),”;

- for the indicator “lead”, the row shall be added to the following effect:

	0.2	Peanut oil

- in the row with the acceptable level “0.1” pertaining to the indicator “arsenic”, the column “Remarks” after the words “Plant oils (all types), plant oil fractions,” shall be supplemented with the words “crude fat from beef, pork, mutton and other slaughter animals (cooled, frozen),”;

- for the indicator “nickel”, the column “Remarks” shall be supplemented with the word “, margarine”.

33. Item 8 of Annex No.3 “Hygienic safety requirements for food products” shall be amended as follows:

- in the row with the acceptable level “0.05%, max.” pertaining to the indicator “Methyl alcohol”, the column “Remarks” shall be supplemented with the word “, vinegar”;

- a sub-item specifying the safety indicators for mineral waters in terms of composition shall be added to the effect as follows:

8.1. Safety indicators for mineral water in terms of composition

Name of component	**Mass concentration, mg/dm^3, max.**
Nitrates ($N0_3^-$)	50.0
Nitrites ($N0_2^-$)	2.0
Arsenic (As) <*>	0.1
Lead (Pb)	0.01
Zinc (Zn)	5.0
Cadmium (Cd)	0.003
Cuprum (Cu)	1.0
Mercury (Hg)	0.001
Selenium (Se)	0.05
Strontium (Sr)	25.0 (for medicinal and table-and-medicinal water)
Fluorine (F): in medicinal water	15.0
in medicinal-and-table water	10.0
<*> In natural mineral drinking medicinal water containing natural biologically active arsenic, the latter is not a toxic element.	

34. Item 9 of Annex No.3 “Hygienic safety requirements for food products” shall be amended as follows:

- in the row with the acceptable level “2.0” pertaining to the indicator “lead”, the word “Carrageenans,” in the column “Remark” shall be removed;
- in the row with the acceptable level “5.0” pertaining to the indicator “lead”, the column “Remarks” shall be supplemented with the word “, carrageenans”;
- in the row with the acceptable level “1.0” pertaining to the indicator “lead”, the column “Remarks” shall be supplemented with the words “Cassia gum; flakes and oil meal from seeds of grain-leguminous crops, bran”;
- the row with the acceptable level “3.0” pertaining to the indicator “arsenic” shall be amended to read as follows:

	3.0	Pectin, alginates, agar, carrageenan, gum-water, gums (of carob tree, guar, xanthane, gellan, konjak, tragacanth, acacia, karaya, thar)

- in the row with the acceptable level “0.1” pertaining to the indicator “cadmium”, the column “Remarks” after the words “flakes and oil meal therefrom” shall be supplemented with the word “bran;”;
- the row with the acceptable level “1.0” pertaining to the indicator “cadmium” shall be amended to read as follows:

	1.0	Alginates, gum-water, agar, gums (guar, of carob tree, gellan, tragacanth, acacia, karaya, thar)

- the row pertaining to the indicator “cadmium” shall be added to the effect as follows:

	2.0	Carrageenan

- in the row with the acceptable level “0.03” pertaining to the indicator “mercury”, the column “Remarks” after the words “flakes and oil meal therefrom” shall be supplemented with the word “bran;”;
- in the row with the acceptable level “1.0” pertaining to the indicator “mercury”, the column “Remarks” shall be supplemented with the words “, alginates, gum-water, gums (of carob tree, guar, gellan, tragacanth, acacia, karaya, thar), pectin”;
- in the row with the acceptable level “0.5” pertaining to the indicator “HCH (α, β, γ-isomers)”, the column “Remarks” after the words “flakes and oil meal therefrom (in terms of fat);” shall be supplemented with the word “bran;”;
- in the row with the acceptable level “0.02” pertaining to the indicator “DDT and its metabolites”, the column “Remarks” after the words “flakes and oil meal therefrom (in terms of fat);” shall be supplemented with the word “bran;”.

35. In item 10 of Annex No.3 “Hygienic safety requirements for food products” to the technical regulation, to the extent it relates to the indicators “Heptachlor” and “Aldrin”, the words “For all BAAs types” in the column “Remarks” shall be supplemented with the words “(except for BAAs on natural-mineral basis (zeolites, etc.), including mumijo)”.

36. In item 11 of Annex No.3 “Hygienic safety requirements for food products”, to the extent it relates to the indicators such as “lead”, “arsenic”, “cadmium”, “mercury”, “HCH (α, β, γ-isomers)”, “DDT and its metabolites”, the column “Remarks” after the words “instant herbal teas (on vegetable basis)” shall be supplemented with the words “(in a ready-to-eat product)”.

37. Item 1 “Antibiotics” of the Subsection “Supplements to all Sections”, Annex No.3

"Hygienic safety requirements for food products" to the technical regulation shall be amended to read as follows:

- in the row specifying the acceptable level for the content of "laevomycetin (chloramphenicol)" in milk, milk products, and milk-clotting enzyme preparations, the words "shall not be allowed (< 0.0003 mg/kg)" shall be supplemented with a footnote <**> to the following effect: "The indicator for laevomycetin (chloramphenicol) content shall become effective from July 1, 2015";

- the row pertaining to the indicator "grizin" shall be removed.

38. The item "Baby Food Products" of the Subsection "Supplements to all Sections", Annex No.3 "Hygienic safety requirements for food products" to the technical regulation shall be amended as follows:

- the words "shall not be allowed <0.01 u/g" pertaining to the indicator "penicillin" shall be replaced with the words "shall not be allowed <0.004";

- the row pertaining to the indicator "laevomycetin (chloramphenicol)" shall be added to the effect as follows:

	shall not be allowed <0.01	Fruit-and-vegetable preserves with addition of milk components

- the row pertaining to the indicator "tetracycline group" shall be added to the effect as follows:

	shall not be allowed <0.01	Fruit-and-vegetable preserves with addition of milk components

- the row pertaining to the indicator "penicillin" shall be added to the effect as follows:

	shall not be allowed <0.004	Fruit-and-vegetable preserves with addition of milk components

- the row pertaining to the indicator "streptomycin" shall be added to the effect as follows:

	shall not be allowed <0.2	Fruit-and-vegetable preserves with addition of milk components

- in the row pertaining to the indicator "Metal admixtures", the column "Remarks" after the words "dry non-milk" shall be supplemented with the words "and milk" (cereal dishes);

- in the row pertaining to the indicators "Aflatoxin B1", "Deoxynivalenol", "Zearalenone", "T-2 toxin", and "Ochratoxin A", the column "Remarks" after the words "dry non-milk" shall be supplemented with the words "and milk" (cereal dishes).

39. Annex No.9 to the technical regulation shall be amended to read as follows:

Annex No.9
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

Forms of Vitamins and Mineral Salts to be Used in Production of Food Products for Infant Nutrition and BAAs to Food for children aged 1.5 – 3 years

Name	Form
Biotin	D-biotin
Vitamin D	D3 cholecalciferol; D2 ergocalciferol
Vitamin A	Retinol acetate; retinol palmitate; retinol; beta-carotene
Vitamin B1	Thiamine hydrochloride (thiamine chloride); thiamine mononitrat
Vitamin B12	Cyanocobalamin; hydroxocobalamin
Vitamin B2	Riboflavin; sodium riboflavin-5-phosphate

Vitamin B6	Pyridoxine hydrochloride; pyridoxine-5-phosphat; pyridoxine dipalmitate
Vitamin E	D-alpha tocopherol; DL-alpha tocopherol; D-alpha tocopherol acetate; DL-alpha-tocopherol acetate
Vitamin K	Phylloquinone (phytomenadione)
Vitamin PP (niacin)	Nicotinamide; nicotinic acid
Vitamin C	L-ascorbic acid; sodium L-ascorbate; calcium L-ascorbate; 6-palmitil-L-ascorbic acid (ascorbyl palmitate); potassium ascorbate
Iron	Iron (II) gluconate; iron (II) sulphate; iron (II) lactate; iron (II) fumarate; iron (III) diphosphate (pyrophosphate); iron (II) citrate; iron (III) ammonium citrate; iron (II) bisglycinate
Inosite	Inosite
Iodine	Potassium iodide; potassium iodate; sodium iodide; iodine casein (in production of consumer milk used only for nutrition of children over two years old)
Potassium	Potassium citrate; potassium lactate; potassium salts of orthophosphoric acid; potassium bicarbonate; potassium carbonate; potassium chloride; potassium gluconate; potassium hydroxide (except for BAAs to food for nutrition of children aged 1.5 to 3 years)
Calcium	Calcium carbonate; calcium citrate; calcium gluconate; calcium glycerophosphate; calcium lactate; calcium salts of orthophosphoric acid; calcium chloride; calcium hydroxide
Carnitine	L-carnitine; L-carnitine hydrochloride; L-carnitine L-tartrate
Magnesium	Magnesium carbonate; magnesium citrate; magnesium chloride; magnesium gluconate; magnesium salts of orthophosphoric acid; magnesium sulphate; magnesium lactate; magnesium hydroxide; magnesium oxide
Manganese	Manganese carbonate; manganese chloride; manganese citrate; manganese gluconate; manganese sulphate
Copper	Copper carbonate; copper citrate; copper gluconate; copper sulphate; copper-lysine complex
Sodium	Sodium citrate; sodium chloride; sodium bicarbonate; sodium gluconate; sodium carbonate; sodium lactate; sodium salts of orthophosphoric acid; sodium hydroxide (except for BAAs to food for nutrition of children aged 1.5 to 3 years)
Pantothenic acid	Calcium D-pantothenate; sodium D-pantothenate; dexpanthenol
Selenium	Sodium selenite and sodium selenate (in production of dry and liquid adapted and partially adapted milk mixtures and food products for dietetic (both medicinal and protective) nutrition, intended for feeding infants and enriching dry and liquid milk, milk-containing and composite milk beverages for nutrition of infants)
Folic acid	Folic acid
Choline	Choline chloride; choline citrate; choline hydrogen tartrate (bitartrate); choline
Zinc	Zinc acetate; zinc sulphate; zinc chloride; zinc lactate; zinc citrate; zinc gluconate; zinc oxide

40. The Technical Regulation shall be supplemented with Annex No.11 to be set forth to the effect as follows:

Annex No.11
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

The values of daily consumption by adults of nutrients and biologically active substances as part of specialized food products (SFP) and biologically active additives (BAAs) to food (energy value of 10,000 kJ or 2,300 kcal)

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
		Amino acids		
Amino acids	Proteins of animal and vegetable origin	Unconventional raw materials of animal, vegetable, and biotechnological origin obtained by chemical synthesis		
Essential amino acids:	-«-	-«-		
Valine	-«-	-«-	2.5 g	3.9 g
Isoleucine	-«-	-«-	2 g	3.1 g
Leucine	-«-	-«-	4.6 g	7.3 g
Lysine	-«-	-«-	4.1 g	6.4 g
Methionine + cystine	-«-	-«-	1.8 g	2.8 g
Threonine	-«-	-«-	2.4 g	3.7 g
Tryptophane	-«-	-«-	0.8 g	1.2 g
Phenylalanine + tyrosine			4.4 g	6.9 g
Non-essential amino acids:				
Alanine	-«-	-«-	6.6 g	10.6 g
Arginine	-«-	-«-	6.1 g	9.8 g
Aspartic acid	-«-	-«-	12.2 g	19.5 g

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
Histidine	-«-	-«-	2.1 g	3.4 g
Glycine	-«-	-«-	3.5 g	5.6 g
Glutamic acid	-«-	-«-	13.6 g	21.8 g
Glutamine	-«-	-«-	0.5 g	1 g (in SFP for sportsmen – 5 g)
Serine	-«-	-«-	8.3 g	13.3 g
Taurine	-«-	-«-	400 mg	1.2 g
Ornithine	-«-	-«-	200 mg	800 mg
Proline	-«-	-«-	4.5 g	7.2 g
		Fatty acids		
Saturated fatty acids of average chain lengths of C8 through C14	cow's milk fats, palm oil, and other natural sources		15 g (in SFP for sportsmen)	25 g
Monounsaturated fatty acids (myristoleinic, palmitinic, oleinic, erucic)	fats from fish and marine mammals vegetable oils (olive, safflower, sesame, rapeseed, and pumpkin seeds oil)	fat of badger, marmot	15g	-
Polyunsaturated fatty acids (PUFAs), of which:	vegetable fats, fats from fish, and other natural sources	pumpkin oil (Cucurbita), shark liver fat	12 g	20 g
OMEGA-3 family	vegetable fats (flax-seed, soya, mustard, sesame, from seeds of cruciferous vegetables, etc.), and muscle fat of fish, fats from marine mammals (liver of shark, cod-fish, etc.), and other natural sources		2 g	5 g

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
Eicosapentaenoic acid (EPA)	-«-	-	600 mg	-
Docosahexanoic acid (DHA)	-«-		700 mg	
Alpha-linolenic acid	-«-	-	700 mg	-
OMEGA-6 family	vegetable oils, including oils from nuts and other natural sources	currant seed oil (*Ribes L.*), evening primrose oil (*Oenothera biennis*), borage seed oil (*Borago officinalis*), of biotechnological origin	10 g	-
Linoleic acid	-«-	-«-	1 g	-
Gamma-linolenic acid	-«-	-«-	600 mg	-
Conjugated linoleic acid	animal fats	extracted from sunflower and safflower seed oil	800 mg	1,200 mg
Alkoxi glycerides (alkyl glycerines)	liver of fish (burbot, catfish, etc.), shark liver, breast milk, beef and pork liver, and other natural sources		1 g	2 g
		Phytosterols		
beta-Sitosterol	soybeans, carrots, figs, coriander, and other food sources	garden angelica: roots and fruits (*Angelica archangelica*); roots of *Ferula ferulaeoides*; blindweed:	100 mg	450 mg

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
		aerial plant part (*Capsella bursa-pastoris*); common licorice: roots, rootstock (*Glycyrrhiza glabra*)		
beta-Sitosterol-D-glycoside	carrots, oranges	Chinese magnolia vine (schizandra): wood tissue (*Schisandra chinensis*)	100 mg	600 mg
Stigmasterol	soybeans, kidney beans, tomatoes, wild rose	Saint-Mary-thistle: seeds (*Silybum marianum*); torosa cassia: seeds (*Cassia torosa cav.*)	100 mg	600 mg
Squalene	vegetable oils (olive, rice, etc.)	blood amaranth seed oil (*Amaranthus cruentus*); liver fat from sharks and whales	0.4 g	1.5 g
Phospholipids (phosphatidylcholine (lecithine), phosphatidylethanolamine, phosphatidylserine, etc.)	Vegetable oils, birds' eggs		7 g	15 g
		Mono- and disaccharides		
Mono- and disaccharides	fruits, vegetables, milk, and products produced therefrom	products of enzymatic hydrolysis of polysaccharides produced by chemical synthesis and products of biotechnological origin	21 g (added mono and disaccharides – 10% of the daily ration caloric value)	65 g
		Monosaccharides		
Glucose	fruits, vegetables, honey, and food	product of hydrolysis of	-	25 g

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
	products derived therefrom	polysaccharides, of biotechnological origin		
Fructose	fruits, vegetables, honey, and food products derived therefrom	product of hydrolysis of polysaccharides (inuline), of biotechnological origin	35 g	45 g
Galactose	milk and milk products	product of lactose hydrolysis	0.7 g	2 g
D-ribose	forms part of RNA** of plant and animal cells (liver and milts of salmon-family fishes, sprouted grains)	product of biotechnological origin	0.2 g	1 g (in SFP for sportsmen – 4 g)
		Disaccharides* **		
Saccharose	sugar, fruits, vegetables, and products derived therefrom	product of hydrolysis of polysaccharides (starch)	21 g (added sugar - 10% of the daily ration caloric value)	65 g
Maltose	malt extract, sprouted grains	product of hydrolysis of polysaccharides (starch)	-	65 g
Lactose	milk and milk products		15 g	30 g
		Cyclic polyatomic alcohols		
Xylitol	fruits and vegetables	product of hydrolysis of xylans (birch wood, corn cobs, cottonseed hulls, etc.)	15 g	40 g

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
Sorbitol	apples, cherries, pears, plums, mountain ash, hawthorn	product of chemical synthesis; blindweed: aerial plant part (*Capsella bursa-pastoris*); European ash: rind (*Fraxinus excelsior*); greater plantain: leaves (*Plantago major*)	15 g	40 g
Mannitol	pomegranate, pomegranate juice, celery	produced by biotechnological synthesis	1 g	3 g
Erythritol	fruits, wine, beer, soy sauces	Product of biotechnological processing of corn and wheat starch	15 g	45 g
		Derivatives of monosaccharide		
Glucosamine	by-products of animal origin	product of hydrolysis of cartilaginous tissue of birds, animals, marine organisms, chitin	0.7 g	1.5 g
Galactosamine	by-products of animal origin, laminaria	product of hydrolysis of cartilaginous tissue of birds, animals, marine organisms	0.7 g	1.5 g
Hyaluronic acid	by-products of animal origin	product of hydrolysis of cartilaginous tissue of birds, animals, marine organisms	50 mg	150 mg
Glucuronic acid	by-products of animal origin,	German chamomile (*Matricaria*	0.5 g	0.75 g

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	laminaria, grapes, higher fungi, tea fungus, apples, tomatoes	*chamomilla*), American larch (*Larix laricina*), product of hydrolysis of cartilaginous tissue of birds, animals, marine organisms		
Fructooligosaccharid	by-products of animal origin	product of hydrolysis of cartilaginous tissue of birds, animals, marine organisms	5 g	10 g
Glucosamineglucans	by-products of animal origin	product of hydrolysis of cartilaginous tissue of birds, animals, marine organisms	300 mg	600 mg
Chondroitin sulfate	by-products of animal origin	product of hydrolysis of cartilaginous tissue of birds, animals, marine organisms	0.6 g	1.2 g
		Polysaccharides, including:		
(Galacto)glucomannans	contained in vegetable mucus, non-filtered wines, beer, brew for dough (sponge dough)	Sparrowgrass: seeds (*Asparagus officinalis*); white willow: wood tissue, rind (*Salix alba*); brewer's yeast	2.5 g	8 g
Polyfructosanes (inulin, etc.)	Jerusalem artichoke, chicory	Great burdock: roots (Arctium lappa); carline thistle: roots (*Carlina acaulis*), Saint-Mary-thistle: roots (*Silybum marianum*), milk-witch gowan: roots (*Taraxacum officinale Web.)*	2.5 g	8 g

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Arabinogalactan	contained in vegetable mucus	larch-wood extract	10 g	20 g
Chitosan	by-products of animal origin	crustaceans shells, insects chitin	3 g	7 g
Beta-glucans	higher fungi, cereal seeds	baker's yeast	200 mg	1,000 mg
		Dietary fibers:		
Dietary fibers, of which:			20 g	40 g
Soluble fibers				
Pectin, gums, carrageenans, agar-agar, water-gum (Arabic gum), alginates, arabinogalactan, etc.	apples, grape fruits, blueberries, guelder rose, barberry, seaweeds, stone-fruit trees, cereals, grains, beets, etc.	bell-flower: root (*Platycodon grandiflorus*), bitter apple: fruits (*Citrullus colocynthis*), common flax: seeds (*Linum usitatissimum L.*), carboxymethyl cellulose	2 g	6 g
Insoluble fibers:				
Cellulose, hemicelluloses, lignin, etc.	cabbages, apricots, citrus fruits, leafy greens, apples, carrot, etc.	common licorice: roots, rootstock (*Glycyrrhiza glabra*), carthamoid rhapontic: rootstock (*Rhaponticum carthamoides*)	20 g	40 g
		Micronutrients		
Vitamins				
Vitamin C	wild rose, sweet pepper, black currant, sea buckthorn, wild strawberry, citrus fruits, kiwi, cabbage, green peas, green onion, potato	produced by chemical synthesis; pine needles, wild hop: flowers (*Humulus lupulus*), snail clover: sprouts (*Alfalfa*) (*Medicago sativa*), acerola: fruits (*Malpighia glabra L.*)	90 mg	900 mg
Vitamin B1	lean pork, liver, kidneys, cereals (millet, oats, buckwheat), bread	produced by chemical synthesis; brewer's yeast	1.5 mg	5 mg

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	(rye, whole-grain), beans, green peas			
Vitamin B2	liver, kidneys, curd cheese, cheese, wild rose, whole milk, beans, green peas, meat, cereals (buckwheat, oats), bread (from coarse flour)	produced by chemical, biotechnological synthesis; baker's yeast	1.8 mg	6 mg
Vitamin B6	liver, kidneys, poultry, meat, fish, beans, cereals (buckwheat, millet, barley), pepper, potato, bread (from coarse flour), pomegranate	produced by chemical synthesis; brewer's yeast	2 mg	6 mg
Vitamin PP	liver, cheese, meat, sausage, cereals (buckwheat, millet, oats), beans, bread (from coarse wheat flour)	produced by chemical synthesis; baker's yeast	20 mg	60 mg
Folic acid	liver, cod liver, beans, whole-grain rye bread, greens (parsley, spinach, lettuce, green onion, etc.)	produced by chemical synthesis; brewer's yeast	400 µg	600 µg
Vitamin B12	liver, kidneys, meat, fish,	produced by chemical synthesis, brewer's yeast	3 µg	9 µg
Pantothenic acid	liver, kidneys, beans, meat, fish, egg yellow, tomatoes	produced by chemical synthesis, brewer's yeast, wheat germs	5 mg	15 mg

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Biotin	liver, kidneys, beans (soybeans, peas), eggs, peas	produced by chemical synthesis, brewer's yeast	50 µg	150 µg
Vitamin A	cod liver, liver, butter, milk products, fish	fish oil; biotechnological synthesis (purple bacteria *Halobacterium halobium*)	0.9 mg RE	3 mg RE
Vitamin E	vegetable oils, cereals, bread, nuts	produced by chemical synthesis – wheat germ oil, pumpkin seed oil (*Cucurbita*), Saint-Mary-thistle seed oil (*Silybum marianum*), blood amaranth seed oil (*Amaranthus cruentus*)	15 mg TE	150 mg TE
Vitamin D	cod liver, fish, fish oil, liver, eggs, butter	produced by chemical synthesis – shiitake mushroom	10 µg (400 IU)	15 µg (600 IU)
Vitamin K	spinach, cabbage, marrow squash, vegetable oils	produced by chemical synthesis, great nettle: leaves (*Urtica diocia*)	120 µg	360 µg
		Vitamin-like substances		
Carotenoids, of which:			15 mg	30 mg
Beta-carotene	carrot, parsley, dill, onion, apricots, pumpkin, sea buckthorn, tomatoes, mountain ash, wild rose	produced by chemical synthesis, dunaliella salt seaweed (*Dunaliella salina)*, biomass of the fungus *Blakeslea trispora*, spirulina	5 mg	10 mg
Lycopene	pumpkin, tomatoes, red sweet pepper, watermelon, papaya, red	produced by chemical synthesis, biomass of the fungus *Blakeslea*	5 mg	10 mg

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	and orange fruits and vegetables	*trispora*		
Lutein	cabbage, marrow squash, spinach, garden cress, parsley, green peas, green sweet pepper, wild rose	produced by chemical synthesis, Aztec marigold: aerial part (*Tagetes erecta*), oil from wheat germs, spirulina, snail clover: fruits (*Medicago sativa*)	5 mg	10 mg
Zeaxanthin	corn, spinach, mandarin	produced by chemical synthesis	1 mg	3 mg
Astaxanthin	salmon-family fish, crabs, prawns	haematococcus algae	2 mg	6 mg
Inositol (B8)	liver, by-products, soy beans, cabbage, melon, grapefruits, raisins	produced by biotechnological or chemical synthesis, brewer's yeast	500 mg	1,500 mg
L-carnitine	meat, fish, poultry, milk, cheese, curd cheese	produced by biotechnological or chemical synthesis; from food (edible) raw materials	300 mg	900 mg
Acetyl L-carnitine (ALC)	meat, fish, poultry, milk, cheese, curd cheese	produced by biotechnological or chemical synthesis; from food (edible) raw materials	300 mg	900 mg
Coenzyime Q10 (ubiquinone)	meat, milk, soybean oil, soy beans, eggs, fish, spinach, peanuts	produced by biotechnological or chemical synthesis; from food (edible) raw materials	30 mg	100 mg
Lipoic acid	liver, kidneys	produced by biotechnological or	30 mg	100 mg

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		chemical synthesis		
Methylmethionine sulfonium (U)	cabbage, asparagus, carrot, tomatoes	produced by biotechnological or chemical synthesis	200 mg	500 mg
Orotic acid (B13)	milk, liver	produced by biotechnological or chemical synthesis, yeast	300 mg	900 mg
Choline	egg yellows, liver, milk, etc.	produced by biotechnological or chemical synthesis	0.5 g	1 g
Paraaminobenzoic acid	liver, kidneys, bran, molasses	produced by biotechnological or chemical synthesis, brewer's yeast	100 mg	300 mg
		Mineral substances		
Macronutrient elements: Calcium	cheese, curd cheese, milk, fermented milk products, eggs, beans (kidney beans, soybeans), nuts	salts of organic and inorganic acids, egg shell, powder from shells of marine invertebrates, pearl, stag-horn powder, dolomites, kieselguhr (tripoli powder), shark fins, etc.	1,000 mg	2,500 mg
Phosphorus	cheese, beans, cereals, fish, bread, eggs, poultry, meat, mushrooms, nuts	salts of organic and inorganic acids, phytin (defatted press cakes)	800 mg	1,600 mg
Magnesium	cereals, fish, soya, meat, eggs, bread, beans, nuts, dried apricots, broccoli, bananas	salts of organic and inorganic acids, dolomites, wheat bran	400 mg	800 mg

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Potassium	beans, potato, meat, sea fish, mushrooms, bread, apples, apricots, currant, sun-dried apricots, raisins	salts of organic and inorganic acids, potato, apricots	2,500 mg	3,500 mg
Sodium (only in SFP for sportsmen nutrition)			1,300 mg	
Micronutrient elements:				
Iron	meat, liver, kidneys, eggs, potato, king bolete mushrooms, peaches, apricots	salts of organic and inorganic acids, raw materials produced by biotechnological methods (yeast, spirulina, chelate amino acid complexes, etc.); white, blue, and green clays, zeolites, mumijo	18 mg – for females 10 mg – for males	40 mg – for females 20 mg – for males
Zinc	meat, fish, oysters, by-products, eggs, beans, pumpkin seeds, wheat bran (Triticum L.)	salts of organic and inorganic acids, raw materials produced by biotechnological methods (yeast, spirulina, chelate amino acid complexes, etc.);	12 mg	25 mg
Iodine	sea fish, laminaria (sea kale), milk products, buckwheat, potato, chokeberry, walnut in wax ripeness, feijoa	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.), marine algae *Ascophyllum nodosum*, rockweed (*Fucus*), bischofite	150 µg	300**** µg

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		(*Bishofit*), partitions of walnut fruits (*Juglas regia*)		
Selenium	grain crops, seafood, liver, kidneys, heart, garlic	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.), brewer's yeast, locoweed (*Astragalus memranaceus*), Chinese artichoke: tubers (*Stachys*)	75 μg – for males 55 μg – for females	150 μg
Copper	meat, seafood, nuts, grain crops, cocoa, bran	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.), copper complexes of chlorophyll	1 mg	3 mg
Molybdenum (VI)	liver, kidneys, kidney beans, peas, green leafy vegetables, melon, apricot, whole cow's milk	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.)	70 μg	600 μg
Chromium (III)	liver, cheese, beans, peas, whole grain, black pepper	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.)	50 μg	250 μg
Manganese	liver, cereals, kidney beans, peas, buckwheat, peanuts, tea, coffee, green leaves of vegetables	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.)	2 mg	5 mg

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Silicium (silicon)	whole grain, beet, carrot, turnip, beans, small radish, corn, banana, cabbage, apricot	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.), field horsetail: stems (*Equisetum arvense*)	30 mg	50 mg
Cobalt	liver, kidneys, fish, eggs	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.)	10 µg	30 µg
Fluorine	sea fish, tea	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.)	4 mg	6 mg
Vanadium	vegetable oils, mushrooms, soya, grain crops, sea fish, seafood	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.), marine algae	15 µg	60 µg
Boron	fruits, vegetables, nuts, cereals, beans, milk, wine	salts of organic and inorganic acids, raw materials of biotechnological origin (yeast, spirulina, chelate amino acid complexes, etc.), pine needles	2 mg	6 mg
Argentum	cucumbers, pumpkin, watermelon	salts of organic acids, colloidal form of biotechnological origin (yeast,	30 µg	70 µg

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		chelate amino acid complexes, etc.)		
		Biologically active substances of natural origin. Minor nutrients		
Phenolic compounds				
1.1. Simple phenols				
Arbutin	cranberry, pear, cowberry	barren myrtle: shoots, leaves (*Arctostaphylos uvaursi*), common pipsissewa: aerial plant part (*Chimaphila umbellata*), greater plantain: seeds and leaves (*Plantago major*), leather bergenia: leaves (*Bergenia crassifolia*); blueberry: leaves (*Vaccinium myrtillus L.*); red cowberry: leaves (*Vaccinium vitis-idaea*)	8 mg	25 mg
Hydroquinone	blueberry, anise, wild basil, pear, cowberry	sainfoin: root (*Onobrychis meschetica*), barren myrtle: leaves (*Arctostaphylos uvaursi*), leather bergenia: leaves (*Bergenia crassifolia*)	5 mg	15 mg
Resveratrol	red grapes, red mulberry, bog whortleberry, blackberry, peanuts, cocoa, red wine		30 mg	150 mg
Synephrine	bitter orange		5 mg	30 mg
Thyrozol, hydroxythyrosol	European olive fruits, olive oil	rosewort (*Rhodiola rosea*), rhodiola tetramerous (*Rhodiola quadrifida*)	10 mg	30 mg

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		Phenolic acids, including:		
1.2. Hydroxycinnamic acids (cichoric, caftaric)	yerba mate leaves, coffee tree seeds	coneflower: flowers, root (*Echinacea purpurea*)	10 mg	20 mg
1.3. Hydroxycinnamic acids (chlorogenic, neochlorogenic, crypto-chlorogenic, dicaffeoylquinic, ferulic, caffeoylmalic)	yerba mate leaves, coffee tree seeds, artichoke leaves, sunflower seeds, apples, mountain ash fruits, black chokeberry fruits	German chamomile: flowers (*Matricaria recutita*), milk-witch gowan: flowers, root (*Taraxacum officinale*), great burdock: leaves, fruit (*Arctium lappa*), lemon balm: leaves (*Melissa officinalis*), peppermint: leaves (*Mentha piperita*), greater nettle: herb (*Urtica dioica*), foalfoot: leaves (*Tussilago farfara*), cranberry bush: fruits (*Viburnum opulus*), propolis	200 mg	500 mg
1.4. Gallic, p-oxybenzoic, protocatechuic	raspberry, garden strawberry, cranberry, red grapes juice, cowberry, blueberry, tea, coffee, wine, sorrel, rhubarb	common licorice: root (*Glycyrrhiza glabra*), grape seeds	100 mg	300 mg
Anthracene derivatives (anthraquinones), Aloe emodin, aloin, emodin rhaponthin, rhein, physcion, chrysophanic acid, A+B sennosides	rhubarb, sorrel, beans	Cassius torus: seeds (*Cassia tora*), *Aloe vera*: aerial plant part, snake-root knotgrass: aerial plant part (*Polygonum bistoria*), horse sorrel: root, fruits (*Rumex confertus*), dyer's madder: root (*Rubia tinctorum*)	10 mg	30 mg
Hypericin	common Saint-John's wort (grass, flowers – tea substitute)	common Saint-John's wort: aerial plant part (*Hypericum perforatum L.*)	0.3 mg	1 mg

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Xanthones (Magniferin)	mango (*Mangifera indica L.*), mangosteen (*Garcinia mangostana L.*)	Alpine/Siberian tick trefoil (*Hedysarum alpinum L.*), flavescent tick trefoil (*Hedysarum flavescens Rgl. et Schmalh.*), Saint-John's wort of Rochelle (*Hypericum rochelii Griseb. et Schenk*), common Saint-John's wort (*H. perforatum L.*), mountain Saint-John's wort (*H. montanum L*), etc.	20 mg	50 mg
		Flavonones and flavonols		
Flavonoids, of which:	Product of plant origin	wild-growing and medicinal plants	250 mg	500 mg
Flavonols and flavonol glycosides (quercetin, kaempferol, myricetin, isorhamnetin, rutin)	apple, apricot, peach, plum, mango, citrus fruits, currant, garden strawberry, blueberry, bog whortleberry, cherry, wild rose, cowberry, cranberry, sea buckthorn (Hippophae), grapes, blackthorn, onion, white and red cabbage, cauliflower, broccoli, sweet pepper, celery, coriander, parsnip, parsley, green lettuce, tomatoes, small radish, turnip, rhubarb, sorrel, carrot, beet, horseradish, green and black tea, red wine	Maidenhair tree: leaves (*Ginkgo biloba*), European ash: leaves, buds (*Fraxinus Excelsior*), fine-leaved hawthorn: leaves, flowers (*Crataegus microphylla*), quinquelobate motherwort: aerial plant part (*Leonurus quinquelobatus*), round-leaved harem: root, aerial plant part, flowers (*Bupleurum rotundifolium*), door-weed (knotgrass): aerial plant part (*Polygonum aviculare*), clover: leaves, stems, flowers (*Trifolium pratense*), *Actinidia kolomikta* leaves, pistachio leaves (*Pistacia*	30 mg (in terms of rutin)	100 mg (in terms of rutin)

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		vera)		
Flavones (luteolin, apigenin, acacetin, diosmetin, baicalein) or flavone glycosides (vitexin, isovitexin, orientin, baicalin)	lemon, orange, grapefruit, black chokeberry, carrot, celery, turnip, parsley, kidney beans, red pepper, carrot, peas, thyme, saffron	propolis, German chamomile: flowers (*Matricaria recutita*), milk-witch gowan: root (*Taraxacum officinale*), Persian ferula: aerial plant part (*Ferula persica*), carrot-like visnaga: fruits (*Visnaga daucoides*), common tansy: flowers (*Tanacetum vulgare*), common mullein: leaves (*Verbascum thapsus*), garden chrysanthemum: flowers (*Chrysanthemum morifolium*), creeping thistle: leaves (*Cirsium arvense*), etc.	10 mg	25 mg
Flavanones (naringenin, hesperitin, eriodictyol) or flavanone glycosides (naringin, gesperedine)	lemon, orange, mandarin, grapefruit, plum, wild strawberry, black chokeberry, cranberry, cherry, guelder rose, hawthorn, actinidia, honeysuckle, tomatoes, parsley, sorrel, mint	common Saint-John's wort: aerial plant part (*Hypericum perforatum*), Scotch lovage: rootstock (*Ligusticum scoticum*), Kuril tea: leaves, flowers (*Pentaphylloides fruticosa*), small-leaved linden: flowers (Tilia cordata), common mullein bear ear: aerial plant part (*Verbascum thapsus*), Saint-Mary-thistle: fruits (*Silybum marianum*), bird cherry: wood tissue, fruits (*Padus ssiori Schneid*)	200 mg (in terms of gesperedine or naringin)	400 mg (in terms of gesperedine or naringin)

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Dihydroflavonols (dihydroquercetin, dihydrokaempferol)	peanuts	Rind of Siberian larch (*Larix sibirica*), Siberian spruce (*Picea abovata*), Siberian/maritime pine (*Pinus sibirica*, *P. Maritima*)	25 mg	100 mg
Flavan-3-ols (catechins) (epigallocatechin gallate) catechin, epicatechin, gallocatechin	green and black tea, chocolate (cocoa), red wine, apple, quince, garden strawberry, raspberry, red grapes, sea-buckthorn, dogwood, gooseberry, apricot, blueberry, bog whortleberry, green beans, pistachio, chestnut, bay leaf, rhubarb, sorrel, almond, hawthorn	grape seeds, Saint-Mary-thistle: fruits (*Silybum marianum*), snakeroot: aerial plant part (*Polygonum bistorta*), blue gum: rind (*Eucalyptus globulus*), fine-leaved hawthorn: leaves (*Crataegus microphylla*), frutescent cherry: rind (*Cerasus fruticosa*), common blueberry: leaves (*Vaccinium myrtillus*), common sea buckthorn: leaves (*Hippophae rhamnoides*)	100 mg	300 mg
Flavolignans (silibin, silidianin, silichristin, etc.)	Chinese magnolia vine fruits, sesame seeds	Saint-Mary-thistle: fruits, aerial plant part (*Silybum marianum*), common flax: seeds (*Linum usitatissimum L.*), great burdock: aerial plant part (*Arctium lappa*), common mullein: aerial plant part (*Verbascum thapsus*)	30 mg	80 mg
Isoflavones (genistein, daidzein, glycitein) or isoflavone glycosides (genistin, daidzin, glycitin)	soya, kidney beans	red clover, field clover: leaves (*Trifolium pratense, T. Campestre*), Japanese pagoda tree: fruits (*Sophora japonica*), Indian kayan-	50 mg	150 mg

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		pea: rind (*Cajanus cajan*), kudzu: flowers (*Pueraria thunbergiana*), common hop: cones (*Humulus lupulus*), scurvy pea: leaves, seeds (*Psoralea corylifolia*)		
Anthocyanins (anthocyans)	apple, black currant, blueberry, bog whortleberry, black thorn, Chinese magnolia vine, honeysuckle, bird cherry, basil, cherry, cowberry, red grapes, red cabbage, red onion, red beans, carrot, cocoa, red wine	red grapes skin, common Saint-John's wort: aerial plant part (*Hypericum perforatum L.*), multi-florous primrose: aerial plant part, under-ground plant part (*Primula x polyantha hort.*), rice: leaves (*Oryza sativa*), black crowberry: fruits, aerial plant part (*Empetrum nigrum*)	50 mg	150 mg
		Polymeric phenol compounds		
Proanthocyanidins	chocolate (cocoa), coffee, apple, red grapes, cranberry, bog whortleberry, blueberry, almond, peanuts, barley, corn, avocado, cola	grapes stems, skin, and seeds, blueberry: leaves (*Vaccinium myrtillus L.*), maritime pine: rind (*Pinus maritima*)	100 mg	200 mg
Tannins	apple, quince, persimmon, banana, blueberry, mountain ash, guelder rose, cowberry, raspberry, wild strawberry, artichoke, nuts, cocoa, tea, bird cherry, asparagus, sorrel, apricot, Peruvian guava	Birch: rind, leaves (*Betula humilis*), swamp mahogany: rind, leaves (*Eucalyptus robusta*), guelder rose: rind, fruits (*Viburnum opulus*), walnut: husk (*Juglans regia*), quince tree: seeds (*Cydonia oblonga*), common pomegranate: fruit peels (*Punica granatum*)	300 mg	900 mg

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Alkaloids				
Indole-3-carbinol	white cabbage, cauliflower, broccoli, Brussels turnip, garden cress, turnip cabbage, radish, small radish, horse radish, mustard	of biotechnological origin, produced by chemical synthesis	50 mg	300 mg
Caffeine	tea, cocoa, coffee	yerba mate: twigs, leaves (*Ilex paraguariensis A. St-Hil.*), guarana: seeds (*Paullinia cupana*), cola-nut tree: seeds (*Cola nitida*), produced by chemical synthesis	50 mg	150 mg (in SFP for sportsmen nutrition – 200 mg)
Theobromine	cocoa, tea	cola pointed: seeds: (*Cola acuminate Schott et Endl.*), yerba mate: twigs, leaves (*Ilex paraguariensis A. St-Hil.*), guarana: seeds (*Paullinia cupana*), cola-nut tree: seeds (*Cola nitida*)	35 mg	80 mg
Theophylline	tea, cocoa, chocolate	guarana: seeds (*Paullinia cupana*), cola-nut tree: seeds (*Cola nitida*)	50 mg	150 mg
Trigonelline (N-methyl nicotinic acid)	coffee, barley, soybeans, tomatoes, peas, fish	fenugreek (*Trigonella foenumgraecum*)	40 mg	100 mg
Terpenoids				
Betulin	common persimmon, hyssop	Black/gray alder: rind (*Almus glutinosa L/incana L.*); drooping birch: rind (*Betula pendula Roth*);	40 mg	80 mg

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
		Japanese pagoda tree: buds, fruits (*Sophora japonica*); common hazel: rind (*Corylus avellana L*)		
Valerenic acid	hyssop, field mint, bay laurel, wild strawberry, cocoa beans	garden angelica: roots, leaves (*Angelica archangelica L.*), sambul: root (*Ferula sumbul*), Persian ferula: root (*Ferula persica*), garden heliotrope: rootstock (*Valeriana officinalis L.*)	2 mg	5 mg
Ginsenosides (panax azids)	ginseng root	Ginseng: leaves (*Panax ginseng*)	5 mg	30 mg
Glycyrrhizic acid	licorice (various species) – flavoring agent used in production of fish products as well as fruit and vegetable preserves	common licorice: root (*Glycyrrhiza glabra*), erianthous astragalus: aerial part (*Astragalus dasianthus*)	10 mg	30 mg
including iridoids Oleuropein	European olive fruits (Olea europaea), olive oil	European olive leaves (*Folium Oleae europaea*), olive oil (*Oleum olivarum*)	20 mg	100 mg
Harpagoside	Spices	Grapple plant: root (*Harpagophytum procumbens*); Flomoides Angren: leaves (*Phlomoides lehmanniana Adyl.*); green figwort: leaves (*Scrophularia*	20 mg	50 mg

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
		umbrosa)		
Asperulozidic and diacetyl asperulozidic acid	Great morinda fruits (Morinda citrifolia), great morinda juice	Great morinda: leaves (*Morinda citrifolia*)	5	20
		Other compounds		
Allicin	onions, garlic, ramson	-	4 mg	12 mg
Betaine	honeysuckle, fruits; beets, sea buckthorn, fruits, rice, barley, oats, bananas, pepper, tea, beans, potatoes, watermelon, coffee, pine nuts, asparagus	Common licorice: root (*Glycyrrhiza glabra*); lucerne: aerial part (*Medicago sativa*); betony: herb, root (*Betonnica officinalis L.*); Chinese wolfberry: fruits; (*Lycium chinence Mill.*); common sunflower: flowers and leaves (*Helianthus annuus L.*); Echinacea purpurea: aerial part (*Echinacea Moench*)	2 g	4 g
Vanillic acid	raspberries, strawberries, cranberries, juice from red grapes, cowberries, blueberries, tea, chocolate, wine, sorrel, rhubarb	common licorice: root (*Glycyrrhiza glabra*); grape seeds	100 mg	300 mg
Gamma-oryzanol	rice bran	-	150 mg	450 mg
Hydroxycitric acid	garcinia mangosteen (fruits)	Cambodian garcinia: stems,	100 mg	300 mg

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
		leaves (*Garcinia camboyana*)		
Hydroximetilbutirat	fish, dairy products	-	1.5 g	3 g
Humic acids	natural soy sauce	mumijo	50 mg	150 mg
Carnosine	meat, fish (sturgeon, sterlet)	produced by chemical synthesis	200 mg	2,000 mg
Creatine	meat	produced from food raw materials	3 g only in SFP for sportsmen nutrition	20 g only in SFP for sportsmen nutrition
Curcumin	turmeric	-	50 mg	150 mg
Limonene	dill, cumin, cardamom, mint	Pine essential oils (*Pinus*), garden angelica: root, fruits (*Angelica archangelica*), Indian adenosma: aerial part (*Adenosma Indiana (Lour.) Merrill*), gomalonema fragrant: rootstocks (*Homalonema aromatica Schott.*), common myrrh: resin (*Commiphora molmol Engl.*)	5 mg	50 mg
Menthol	mint	Essential oils	20 mg	80 mg
Peptides: di-, tri-, tetra-, and oligopeptides	tissues and organs of animals		based on proved physiological effects	
Polyprenols	liver of animals, higher fungi: king bolete, suillus, aspen	Larch, fir, pine needles, produced by biotechnological	10 mg	20 mg

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
	mushrooms, etc.; seeds of rice, corn, sunflower, etc.	synthesis		
DNA***** + RNA**	fish roe, milt	produced from food raw materials	150 mg	500 mg
Serotonin	bananas, pineapples, walnuts, fruits, avocados, tomatoes	eastern black walnut: seeds (*Juglans nigra*), Manchurian walnut: seeds (*Juglans mandshurica*), griffonia simple: leaves (*Griffonia simplicifolia*)	3 mg	15 mg
Schisandrin	Chinese magnolia vine: fruits, seeds	scarlet kadsura: fruits (*Kadsura coccinea*), Chinese magnolia vine: roots, leaves, stems (*Schisandra chinensis (Turcz.) Baill*)	500 µg	1 mg
Phaseolamin	white kidney beans (cannellini)		based on proved inhibition of alpha-amylase	
Phycocyanins	edible seaweeds	spirulina (*Spirulina*)	50 mg	150 mg
Fucoidan	edible seaweeds	-	50 mg	100 mg
Chlorophyll	green parts of edible plants, laminaria	microalgae (chlorella, odontella, spirulina)	100 mg	300 mg
Cetylmiristoleat	whale organs	organs of wild animals	300 mg	600 mg
Citrulline	cabbage, avocado, grapes	black/gray alder: rind (*Almus glutinosa L/incana L.*); drooping	100 mg	500 mg

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
		birch: rind (*Betula pendula Roth*)		
Eleutherosides	eleutherococcus senticosus, root	eleutherococcus senticosus: fruits (*Eleutherococcus senticosus*)	1 mg	2 mg
Succinic acid	gooseberries, grapes, currants, asparagus, sweet potatoes, fermented milk products, aged cheeses	produced by chemical synthesis	200 mg	500 mg
Lactitol		produced by chemical synthesis	2 g	10 g
Lactulose	baked and sterilized milk	produced by lactose isomerization	2 g	10 g
Enzymes standardized based on the specific activity (of animal and vegetable origin, as well as produced by biotechnological method)			based on proved enzyme activity	
Amylase	honey, vegetables, fruits, edible plants, pancreas of cattle	product of biotechnological origin	based on proved glycolytic activity	
Lactase	vegetables, fruits, edible plants	- « -	- « -	
Maltase	vegetables, fruits, edible plants	- « -	- « -	

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
Saccharase	vegetables, fruits, edible plants		- « -	
P-galactosidase	yoghurt	- « -	- « -	
Pepsin	stomach of livestock for slaughter and poultry, flower pollen	- « -	based on proved proteolytic activity	
Trypsin	pancreas of cattle stock, flower pollen	- « -	- « -	
Chymotrypsin	pancreas of cattle stock	- « -	- « -	
Bromelain	pineapple, papaya	Pineapple: stems (*Ananas comosus Merrill*)	- « -	
Papain	papaya, kiwi, mango	common fig tree: leaves (*Ficus carica L.*); melon tree (papaya): latex (*Sarica papaya L.*)	- « -	
Dipeptidase		- « -	- « -	
Lipases	seeds of legumes, sunflower, cruciferous, cereals; carrots, papaya, flower pollen	- « -	based on proved lipolytic activity	
Lysozyme	horseradish, eggs	produced by biotechnological synthesis	based on proved enzyme activity	
		Microorganisms		
Bacteria of the genus Bifidobacterium, including B.infantis,	fermented milk products	product of biotechnological origin	$5x10^8$ CFU / day	$5x10^{10}$ CFU / day

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
B.bifidum, B.longum, B.breve, B.adolescentis, etc. with proven probiotic efficiency				
Bacteria of the genus Lactobacillus, including L.acidophilus, L.fermentii, L.casei, L.plantarum, L.bulgaricus, etc. with proven probiotic Efficiency	fermented milk products, cheeses, pickled and fermented vegetable products	- « -	$5x10^7$ CFU / day	$5x10^9$ CFU / day
Bacteria of the genus Lactococcus spp., Streptococcus thermophilus in monocultures and in associations with probiotic microorganisms	fermented milk products, cheeses, pickled and fermented vegetable products	- « -	10^7 CFU / day	10^9 CFU / day
Propionibacterium shermanii in combination with probiotic and lactic	cheeses, fermented milk products (in combination with lactic microorganisms)	- « -	10^7 CFU / day	10^8 CFU / day

Nutrients and biologically active food components	Conventional food products and food (edible) raw materials of animal and vegetable origin	Alternative sources of nutrients and biologically active food substances identical to the conventional ones	Adequate consumption level (units of measurement: µg, mg, g, CFU*/day)	Upper acceptable consumption level (units of measurement: µg, mg, g, CFU*/day)
microorganisms				

Note: The upper acceptable level of consumption of nutrients as part of SFP for sportsmen - regardless of energy value of the ration
* CFU – colony forming units
**RNA – ribonucleic acid
*** Only for specialized food products
****From seaweed – 1,000 µg (with low digestibility taken into account)
*****DNA – deoxyribonucleic acid

41. The Technical Regulation shall be supplemented with Annex No.12 to be set forth to the effect as follows:

Annex No.12
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

Forms of Vitamins and Mineral Salts to be Used in Production of Enriched Food Products apart from Food Products for Toddlers and BAAs to Food

Name	Form
	Vitamins
Vitamin A	Retinol, retinol acetate; retinol palmitate; beta-carotene
Vitamin D	D2 (ergocalciferol); D3 (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
Vitamin B1	Thiamine hydrochloride; thiamine bromide; thiamine mononitrate
Vitamin B2	Riboflavin; flavin mononucleotide sodium salt (sodium riboflavin-5′-phosphate)
Vitamin PP (niacin)	Nicotinamide; nicotinic acid and salts of nicotinic acid
Vitamin B6	Pyridoxine hydrochloride; pyridoxine-5-phosphat; pyridoxal; pyridoxamine; pyridoxamine-5′-phosphate; pyridoxine dipalmitate
Pantothenic acid	D-calcium pantothenate; D-sodium pantothenate; dexpanthenol
Vitamin B12	Cyanocobalamin; methylcobalamin; hydroxocobalamin
Folic acid	Folic (N-pteroyl-L-glutamic) acid; calcium L-methylfolate
Vitamin C	L-ascorbic acid; sodium L-ascorbate; potassium L-ascorbate; calcium L-ascorbate; 6- palmitoyl-L-ascorbic acid (ascorbyl palmitate)
Vitamin K	K1(phylloquinone, phytomenadione); K2 (menaquinone)
Biotin	D-biotin
	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, calcium citrate malate; calcium malate
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; magnesium-potassium citrate
Potassium	Potassium lactate; potassium salts of orthophosphoric acid; potassium gluconate; potassium glycerophosphate; potassium chloride; potassium citrate; potassium carbonate; potassium bicarbonate; potassium hydroxide
Phosphorus	Sodium, potassium, calcium, and magnesium salts of phosphoric acid
Iron	Iron (II) gluconate; iron bisglycinate; iron (II) carbonate; iron (II) sulphate; iron (II) lactate; iron (II) fumarate; iron (II, III) citrate; iron (III) diphosphate (pyrophosphate); elemental iron (carbonyl + electrolytic + hydrogen-reduced); ammonium iron (III) citrate; iron (III) orthophosphate; iron succinate; iron (III) saccharate; iron amino acid complexes; iron (III) sodium complex of ethylenediaminetetraacetic acid; sodium-iron diphosphate
Zinc	Zinc acetate; zinc bisglycinate; zinc carbonate; zinc sulphate; zinc chloride; zinc citrate; zinc lactate; zinc gluconate; zinc amino-acid complexes; zinc oxide
Iodine	Potassium iodide; sodium iodide; potassium iodate; sodium iodate; iodine casein
Fluorine	Potassium fluoride, sodium fluoride (for salt enrichment)

42. The Technical Regulation shall be supplemented with Annex No.13 to be set forth to the effect as follows:

Annex No.13
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

The List of Groups of Food Products that can be Enriched with Vitamins and Mineral Substances

Groups of food products	Micronutrient for enrichment
Vitamins	
1. Wheat flour of top and first grades	Vitamins: B1, B2, B6, PP, folic acid, C (process aiding additive); Mineral substances: iron, calcium
2. Bread and bakery products	Vitamins: B1, B2, B6, PP, folic acid, beta-carotene; Mineral substances: iron, calcium, iodine
3. Milk products (milk, composite milk, milk-containing products, and products of milk processing)	Vitamins: C, A, E, D, K, beta-carotene, B1, B2, B6, PP, B12, folic acid, pantothenic acid, biotin; Mineral substances: iron, calcium, iodine
4. Alcohol-free beverages	Vitamins: C, A, E, D, K, beta-carotene, and other carotenoids, B1, B2, B6, PP, B12, 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, fruit and (or) vegetable juice-containing beverages)	Vitamins: C, A, E, beta-carotene, B1, B2, B6, PP, folic acid Mineral substances: iodine, iron, calcium
6. Cereal products (ready-to-eat breakfast cereals, ready-to-eat expansion extruded products, instant-type pasta and cereal products)	Vitamins: C, A, E, D, beta-carotene, B1, B2, B6, PP, B12, folic acid, pantothenic acid, biotin Mineral substances: iron, calcium, iodine
7. Oil and fat products (vegetable oils, margarines, spreads, mayonnaises, sauces)	Vitamins: A, E, D, beta-carotene
8. Edible concentrates (kissels (drenches), instant drinks, no-boil instant dishes)	Vitamins: C, A, E, D, K, beta-carotene, B1, B2, B6, PP, B12, folic acid, pantothenic acid, biotin Mineral substances: iodine, iron, calcium, magnesium, potassium
9. Confectionery products	Vitamins: C, A, E, beta-carotene, B1, B2, B6, PP, folic acid; Mineral substances: iodine, iron, calcium, magnesium
10. Fruit-and-berry concentrates with addition of sugar or other sweeteners (fruit pastes, jams, confitures, jellies, fruit ice-creams, etc.)	Vitamins: C, A, E, beta-carotene, B1, B2, B6, PP, folic acid; Mineral substances: iodine, iron, calcium
11. Edible table salt	Mineral substances: iodine, fluorine*, potassium, magnesium

* for areas that experience deficit in the micronutrient element specified

43. The Technical Regulation shall be supplemented with Annex No.14 to be set forth to the effect as follows:

Annex No.14
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

Safety requirements for Irradiated Food Products

1. Irradiation (treatment with radiation) of food products may only be conducted provided that:

1) such treatment is required for process-related reasons;

2) irradiated food products have no adverse effect on human health;

3) radiation treatment confers food products being irradiated with the properties that are deemed to be useful for consumers;

4) radiation treatment is not conducted in lieu of the necessary sanitary and hygienic measures to be taken in the course of production or cultivation of food products.

2. Irradiation (treatment with radiation) of food products may only be conducted for the purpose of:

1) decreasing the incidence of food poisonings through the destruction of pathogenic microorganisms and opportunistic pathogens;

2) reducing spoilage of food products by delaying or slowing down the onset of putrefaction processes or destroying spoilage microorganisms in food products;

3) reducing losses of food products due to premature ripening or germination;

4) reducing contamination of food products with agricultural pests and causative agents of parasitic diseases.

3. In terms of safety and nutritional value indicators, irradiated food products shall meet the requirements applicable to non-irradiated food products.

4. To be admitted for circulation in the territory of the Member States of the Customs Union and the Single Economic Space, the radiation-absorbed dose in irradiated food products shall not exceed 10 kGy.

5. Irradiated food products, or food products containing irradiated ingredients, that are released for circulation in the customs territory of the Customs Union shall undergo the established procedures for conformity assessment (verification) and shall be accompanied with the document bearing information on the safety and compliance of such food products with the requirements of this Technical Regulation and other applicable technical regulations of the Customs Union.

6. Food products subject to treatment with ionizing radiation shall be packaged using packaging materials capable of ensuring adequate degree of protection against recontamination with allowance made for operational performance of irradiation plants (machines).

7. Below is the list of permitted sources of ionizing radiation that may be used for radiation treatment of food products:

1) gamma radiation from 60Co or 137Cs isotopes;

2) X-ray radiation generated by X-ray machines operated at an energy level of 5 MeV max.;

3) radiation from high-energy accelerated electrons generated by plants operated at an energy level of 10 MeV max.

8. For the purposes of radiation treatment, the minimum dose of radiation absorbed by food products shall be sufficient to achieve the process-related objectives, while the maximum absorbed-radiation dose shall be lower than that associated with potential onset of a hazard to the safety of consumers or that potentially capable of having an adverse effect on the structural integrity, functional,

and/or organoleptic properties of food products. The maximum absorbed-radiation dose shall not exceed 10 kGy.

To ensure safety of food products treated with radiation, radiation monitoring shall be carried out throughout the production process of every single batch of food products

9. Irradiated food products, apart from those with the low water content (cereals, beans, dried food products, etc.), which have been exposed to radiation for the purpose of reducing insect contamination shall not be subjected to repeated irradiation.

Food products shall not be deemed repeatedly irradiated if:

1) initial treatment with low doses of radiation was performed for the purposes other than ensuring food safety (e.g., to prevent premature sprouting of grains, roots, and tubers);

2) the content of irradiated components in food products to be treated with radiation is less than 5%;

3) more than one step is needed for such food products to obtain a full dose of ionizing radiation as necessary to reach the desired effect towards the achievement of specific process-related objectives.

The maximum absorbed-radiation dose accumulated by food products as a result of repeated irradiation shall not exceed 10 kGy and shall not affect safety, consumer properties, and nutritional value of such food products.

10. To determine if food products in circulation have been irradiated, the appropriate methods approved in accordance with the established procedure shall be used.

11. The processes of production (manufacture) of irradiated food products shall meet the requirements set out in this Technical Regulation and in other applicable technical regulations of the Customs Union concerning particular types of food products and the relevant production (manufacture) processes.

The processes of production (manufacture) of irradiated food products shall meet the requirements set out in the applicable laws of the Member States of the Customs Union in the field of radiological safety and environmental protection.

44. The Technical Regulation shall be supplemented with Annex No.15 to be set forth to the effect as follows:

Annex No.15
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

Forms of Vitamins, Vitamin-Like Substances and Mineral Substances to be used in Production of BAAs to Food for Adults

Name	Form
β-carotene	Beta-carotene
Lycopin	Lycopin
Lutein	Lutein and lutein esters
Zeaxanthin	Zeaxanthin
Astaxanthin	Astaxanthin
Vitamin A	Retinol, retinol acetate; retinol palmitate; beta-carotene
Vitamin D	D2 (ergocalciferol); D3 (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; D-gamma-tocopherol; DL-gamma-tocopherol; concentrate of tocopherol blend, tocotrienols
Vitamin B1	Thiamine hydrochloride; thiamine bromide; thiamine mononitrate; thiamine monophosphate chloride, thiamine diphosphate (pyrophosphate) chloride (thiamine pyrophosphate chloride)
Vitamin B2	Riboflavin; flavin mononucleotide sodium salt (sodium riboflavin-5′-phosphate)
Vitamin PP (niacin)	Nicotinamide; nicotinic acid and salts of nicotinic acid; inositol hexanicotinate
Vitamin B6	Pyridoxine hydrochloride; pyridoxine-5-phosphat; pyridoxal; pyridoxal-5′-phosphate; pyridoxamine; pyridoxamine-5′-phosphate; pyridoxine dipalmitate
Pantothenic acid	D-calcium pantothenate; D-sodium pantothenate; dexpanthenol; pantethine;
Vitamin B12	Cyanocobalamin; hydroxocobalamin; methylcobalamin; 5′-deoxyadenosylcobalamin
Folate	Folic (N-pteroyl-L-glutamic) acid; calcium L-methylfolate
Vitamin C	L-ascorbic acid; sodium L-ascorbate; calcium L-ascorbate; potassium L-ascorbate; magnesium L-ascorbate; zinc L-ascorbate; 6- palmitoyl-L-ascorbic acid (ascorbyl palmitate)
Vitamin K	K1(phylloquinone, phytomenadione); K2 (menaquinone)
Biotin	D-biotin
Choline	Choline chloride, choline citrate; choline bitartrate
Inositol	Inositol
Carnitine	L-carnitine; L-carnitine tartrate; L-carnitine hydrochloride; acetyl-L-carnitine;
Coenzyme Q10	Ubiquinone
Lipoic acid	α-lipoic acid
Methylmethionine sulfonium	Methylmethionine sulfonium chloride
Orotic acid	Potassium orotate, magnesium orotate, zinc orotate, calcium orotate
Para-aminobenzoic acid	Para-aminobenzoic acid
Calcium	calcium carbonate; calcium salts of citric acid; calcium chloride; calcium gluconate; calcium glycerophosphate; calcium lactate; calcium salts of orthophosphoric acid (calcium orthophosphates); calcium malate; calcium citrate-malate; calcium bisglycinate; calcium pyruvate; calcium succinate; calcium L-lysinate; calcium asparginate; calcium sulphate; calcium hydroxide; calcium oxide; calcium acetate; calcium L-ascorbate; calcium L-pyroglutamate (pidolate); calcium L- threonate
Sodium	Sodium bicarbonate; sodium carbonate; sodium citrate; sodium chloride; sodium gluconate; sodium lactate; sodium hydroxide; sodium salts of orthophosphoric acid
Magnesium	Magnesium carbonate; magnesium L-ascorbate; magnesium bisglycinate; citric magnesium (magnesium citrates); magnesium chloride; magnesium gluconate; magnesium salts of orthophosphoric acid; magnesium L-lysinate; magnesium malate, magnesium-potassium citrate, magnesium pyruvate; magnesium succinate; magnesium sulphate; magnesium lactate; magnesium acetate; magnesium salt of taurine acid; magnesium glycerophosphate; magnesium hydroxide; magnesium oxide; magnesium asparaginate; magnesium L-pyroglutamate (pidolate); magnesium salt of acetyl-taurine acid; magnesium amino-acid complexes
Potassium	Potassium citrate; potassium lactate; potassium bicarbonate; potassium carbonate; potassium chloride; potassium gluconate; potassium glycerophosphate; potassium malate; potassium salts of orthophosphoric acid; potassium hydroxide; potassium amino acid complexes; potassium L-pyroglutamate (pidolate)
Phosphorus	Sodium, potassium, calcium, and magnesium salts of phosphoric acid
Iron	Iron (II) gluconate; iron (II) carbonate; iron (II) sulphate; iron (II) lactate; iron (II) fumarate; iron (II, III) citrate; iron (III) diphosphate (pyrophosphate); elemental iron (carbonyl + electrolytic + hydrogen-reduced); ammonium iron (III) citrate; iron succinate; iron bisglicinate; iron phosphate; iron (II) taurate; sodium-iron diphosphate; iron (III) saccharate; iron amino-acid complexes; iron L-pyroglutamate (pidolate)
Copper	Copper carbonate; copper citrate; copper gluconate; copper sulphate; copper L-aspartate; copper bisglicinate; copper lysine complex; copper (II) oxide; copper amino-acid complexes
Zinc	Zinc acetate, zinc sulphate, zinc chloride, zinc citrate, zinc gluconate, zinc lactate, zinc oxide, zinc carbonate, zinc L-ascorbate, zinc L-aspartate, zinc bisglycenate, zinc L-lysinate, zinc malate, zinc

	mono-L-methionine sulphate, zinc picolinate, zinc amino-acid complexes, zinc L-pyroglutamate
Manganese	Manganese carbonate; manganese chloride; manganese citrate; manganese gluconate; manganese sulphate; manganese glycerophosphate; manganese L-aspartate; manganese bisglycenate, manganese amino-acid complexes; manganese L-ascorbate; manganese L-pyroglutamate (pidolate)
Iodine	Potassium iodide; potassium iodate; sodium iodide; sodium iodate; iodine casein
Selenium	Sodium selenate; sodium selenite; monosubstituted sodium selenite; selenious acid; L-selenomethionine; selenium-enriched yeast (Saccharomyces); 9-phenyl-simm-octahydroselenium xanthenes; BIS (1,3-dimethylpyrazole)-4-selenide
Molybdenum	Ammonium molybdate (VI), sodium molybdate (VI); potassium molybdate (VI);
Chrome	Chrome (III) chloride; 3-hydrate chrome (III) lactate; chrome nitrate; chrome (III) sulphate; chrome nicotinate; chrome picolinate; chrome amino-acid complexes
Fluorine	Potassium fluoride; calcium fluoride; sodium fluoride; sodium monofluorophosphate
Boron	Boric acid; sodium borate
Silicon	Silicon dioxide; choline-stabilized orthosilicic acid, silicic acid (in gel form)
Cobalt	Cobalt (II) acetate; cobalt (II) asparaginate; 7-hydrate sulfuric cobalt (cobalt sulphate); chelate cobalt complexes; basic hydrous cobalt carbonate
Vanadium	2-hydrate sodium metavanadate; BIS (L-malato) oxovanadium (IV); vanadium sulphate; vanadium aspartate; vanadium glycinate; vanadium citrate; ammonium vanadate; vanadium amino chelate; chelate vanadium complexes
Silver	Colloidal silver, chelate silver complexes

45. The Technical Regulation shall be supplemented with Annex No.16 to be set forth to the effect as follows:

Annex No.16
to the Customs Union Technical Regulation “On Food Safety”
(TR TS 021/2011)

Timeframes for the introduction of basic types of food products and industrially manufactured complementary food products in infant nutrition

1. Complementary food products on cereal and cereal-and-milk basis (milk-free and milk cereal dishes):

a) gluten- free monocomponent cereals (rice, buckwheat) – for infants older than 4 months of age;

b) gluten-free cereals: corn cereal and corn cereal mixed with rice and buckwheat cereals; gluten-containing cereals: wheat, semolina, oats, oatmeal porridge, etc.; soluble biscuits – for infants older than 5 months of age;

c) gluten-free and gluten-containing cereal mixes combined of 3 and more cereal components including tapioca and millet (no more than 18% of millet by product weight) – for infants older than 6 months of age;

d) muesli-like cereals – for infants older than 9 months of age;

e) cereals with additional components:
fruit components – in accordance with the timeframes specified in item 2 of this Annex;
honey – for infants older than 9 months of age;
cocoa – for infants older than 9 months of age.

2. Complementary food products on fruit-and-vegetable basis:

a) Fruit, fruit-and-vegetable, and vegetable juices and nectars:

apple and pear juices and nectars (including clarified and pulpy ones) – for infants older than 4 months of age;

plum, peach, apricot, and carrot juices and nectars (including clarified and pulpy ones); juice-containing beverages on the basis of dried plums – for infants older than 4 months of age;

monocomponent juices and mixed (poly-component) juices and nectars from black and red currant, raspberry, sweet cherry, quince, cherry, blueberry, pumpkin, etc. – for infants older than 5 months of age;

mixed (poly-component) juices and nectars containing no greater than 20% of cowberry and cranberry juice – for infants older than 5 months of age;

monocomponent juices and mixed (poly-component) juices and nectars from citrus fruits (mandarins, oranges, and grapefruits), melon, tropical fruits (pineapples, bananas, and mangoes), garden strawberry, wild strawberry, tomatoes, grapes (as components of mixed juices), etc. – for infants older than 6 months of age;

monocomponent juices and mixed (poly-component) juices and nectars from papaya, kiwi, maracuja, and guava – for infants older than 8 months of age;

clarified grapes juice – for infants older than 9 months of age;

b) puree-like food products on fruit and fruit-and-vegetable basis: monocomponent puree-like food products from apples, pears, plums, peaches, and apricots – for infants older than 4 months of age;

monocomponent and poly-component puree-like food products from fruits, cherries, and vegetables, including puree from black and red currant, raspberry, sweet cherry, quince, and cherry – for infants older than 5 months of age;

monocomponent and poly-component puree-like food products with inclusion of citrus fruits, mangoes, bananas, wild strawberries, and garden strawberries – for infants older than 6 months of age;

monocomponent and poly-component puree-like food products from papaya, kiwi, maracuja, and guava – for infants older than 8 months of age;

fruit-and-cereal and fruit-and-milk purees, including fruit-and-yoghurt purees (with yoghurt content of no greater than 20%), and other combined puree dishes – for infants older than 6 months of age;

c) puree-like food products on vegetable basis:

monocomponent puree-like food products from marrow squash, cauliflower, broccoli, potato, sweet potato, and carrot – for infants older than 4 months of age;

monocomponent and poly-component puree-like food products, including puree from pumpkin, beet, and white cabbage, – for infants older than 5 months of age;

poly-component puree-like food products with addition of tomatoes – for infants older than 6 months of age;

vegetable-and-cereal and vegetable-and-milk purees, including vegetable-and-yoghurt purees (with yoghurt content of no greater than 20%), and other combined puree dishes – for infants older than 6 months of age;

poly-component puree-like food products with addition of green peas – for infants older than 7 months of age;

poly-component puree-like food products with addition of spinach – for infants older than 8 months of age.

3. Complementary food products on meat basis:

a) from beef, horse meat, pork, mutton, chicken, turkey, and rabbit – for infants older than 6 months of age;

b) puree dishes with addition of by-products (liver, heart, and tongue) – for infants older than 8 months of age.

4. Fish-based complementary food products from cod, hake, pike-perch, salmon-family fish species, walleye pollock, haddock, mugil soiuy, and other species of oceanic, sea, and fresh-water fish – for infants older than 8 months of age.

5. Complementary food products on meat-and-vegetable basis and vegetable-based complementary food products with addition of meat:

a) in accordance with the assortment and timeframes of introduction for vegetables and meat products with addition of dill and cumin as specified in items 2 and 3 of this Annex – for infants older than 6 months of age;

b) poly-component purees that can contain onion, garlic, beans, celery, and parsley – for infants older than 8 months of age;

c) poly-component purees that can include sweet and white pepper, and bay leaf – for infants older than 9 months of age;

d) poly-component purees that can include basil, coriander, and allspice – for infants older than 10 months of age.

6. Vegetable-based complementary food products with fish in accordance with the assortment of fish, vegetables, and spices as specified in items 2, 4, and 5 of this Annex – for infants older than 8 months of age.

7. Curd (cottage) cheese and products on the basis thereof – for infants older than 6 months of age.

8. Non-adapted fermented milk products for infant nutrition (kefir, yoghurt, etc.) – for infants older than 8 months of age.

9. Baby herbal teas (subject to doctor's recommendations):

a) sugar-based instant (granulated) teas with inclusion of one or several (no more than 5) species of herbs and dry fruits – for infants older than 4 months of age (subject to introduction timeframes for components as specified in paragraph a), item 2 of this Annex);

b) monocomponent brewing teas in filter packs (tea bags) containing dill, fennel, or chamomile – for infants older than 1 month of age;

c) monocomponent and poly-component brewing teas in filter packs (containing no more than 5 species of herbs or dry fruits) – for infants older than 4 months of age (subject to introduction timeframes for components as specified in paragraph a), item 2 of this Annex).

10. Timeframes for introducing complementary food products depending on fineness degree of ground food products and dishes:

a) Puree-like fruit, fruit-and-vegetable, and vegetable food products ground to different degrees of fineness:

homogenized (with the amount of 0.15 mm pulp particles of no more than 30%, of which the amount of pulp particles, which size exceeds 0.3mm, shall be no more than 7% of the total amount of such particles) – for infants older than 4 months of age;

strained (max. particle size: 0.4 mm) and course-ground (particle size: 2—5 mm) – for infants older than 6 months of age;

b) Meat, meat-and-vegetable, and vegetable-based preserves containing meat ground to different degrees of fineness:

homogenized (particle size: up to 0.3 mm; may contain up to 20% of particles with a max. size of 0.4mm) – for infants older than 6 months of age;

puree-like (particle size: up to 1.5 mm; may contain up to 20% of particles with a max. size of 3 mm) – for infants older than 8 months of age;

coarsely ground (particle size: up to 3 mm; may contain up to 20% of particles with a max. size of 5 mm) – for infants older than 9 months of age;

c) Fish-and-vegetable preserves with the components ground to different degrees of fitness:

puree-like (particle size: up to 1.5 mm; may contain up to 20% of particles with the max. size of 3 mm) – for infants older than 8 months of age;

coarsely ground (particle size: up to 3 mm; may contain up to 20% of particles with a max. size of 5 mm) – for infants older than 9 months of age.

Notes: 1. For those complementary food products that contain the types of food products not covered by this Annex, introduction timeframes shall be reconciled at the stage of state registration of such food products with the competent authorities.
2. Timeframes for introduction of complementary food products shall mean the minimum age, starting from which food products of that type may be used for baby nutrition.

46. The Technical Regulation shall be supplemented with Annex No.17 to be set forth to the effect as follows:

Annex No.17
to the Customs Union Technical Regulation "On Food Safety"
(TR TS 021/2011)

Requirements to physicochemical parameters for specific types of specialized food products for baby nutrition

I. Food products for infant nutrition

1. Grain-based complementary food products

Flour and cereals that require boiling

Nutritional value per 100 g of product

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
Moisture	g, max.	9	
Proteins	g	7—14	
Fats	g	0.5—7	
Carbohydrates	g	70—85	
Energy value	kcal	310—460	
Ash	g	0.5—2.5	
Mineral substances:			
Sodium	mg, max.	25	
Iron	mg	1—8	

2. Dry instant milk-free cereals

Nutritional value per 100 g of product

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
Moisture	g	4—6	
Proteins	g, min.	4	
Fats	g, max.	12	
Carbohydrates (including added saccharose*)	g	70—85	
Energy value	kcal	315—480	
Ash	g	0.5—3.5	
Mineral substances:			
Sodium	mg, max.	30	

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
Calcium	mg	300—600	for enriched products
Iron	mg	5—12	for enriched products
Iodine	μg	40—80	for enriched products
Vitamins:			
Thiamine (Vitamin B1)	mg	0.2—0.6	for vitamin-enriched products
Riboflavin (Vitamin B2)	mg	0.3—0.8	for vitamin-enriched products
Nicotinic acid/niacin (Vitamin PP)	mg	3—8	for vitamin-enriched products
Ascorbic acid (Vitamin C)	mg	30—100	for vitamin-enriched products
Retinol (Vitamin A)	μg-equiv.	300—500	for vitamin-enriched products
Tocopherol (Vitamin E)	mg	5—10	for vitamin-enriched products

* Saccharose may be replaced with fructose in the amount of 15 grams at the most. Control shall be performed against the actual composition.

3. Soluble biscuits

Nutritional value per 100 g of product

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
Proteins	g	5—11	
Fats	g	6—12	
Carbohydrates	g	65—80	
Energy value	kcal	330—440	
Mineral substances:			
Sodium	mg, max.	500	
Calcium	mg, max.	300—600	for enriched products
Iron	mg, max.	10—18	for enriched products
Vitamins:			
Thiamine (Vitamin B1)	mg	0.3—0.6	for vitamin-enriched products
Riboflavin (Vitamin B2)	mg	0.3—0.8	for vitamin-enriched products
Nicotinic acid/niacin (Vitamin PP)	mg	4—9	for vitamin-enriched products
Ascorbic acid (Vitamin C)	mg	20—50	for vitamin-enriched products

4. Food products on fruit-and-vegetable basis, fruit-and-vegetable preserves (puree-like food products on fruit and (or) vegetable basis; fruit-and-milk and (or) vegetable-and-milk and fruit-and-cereal and (or) vegetable-and-cereal purees)

Nutritional value per 100 g of product

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
Weight fraction of dry substances	%	4—25	for puree-like food products on fruit and (or) vegetable basis
Carbohydrates	g	3—25	
Proteins	g, min.	0.5	for fruit-and-milk and (or) vegetable-and-milk and fruit-and-cereal and (or) vegetable-and-cereal purees
Weight fraction of ethanol	%, max.	0.2	
Sodium chloride (table salt)	%, max.	0.4	for food products from vegetables
Mineral substances:			
Potassium	mg	70—300	for food products on fruit-and-vegetable basis
Sodium	mg, max.	200	
Iron	mg, max.	3	for enriched products
Vitamins:			
Ascorbic acid (Vitamin C)	mg, max.	75	for enriched products
β-carotene	mg, max.	1—4	for enriched products

5. Instant herbal teas for babies

Nutritional value per 100 g of product

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
Carbohydrates	g	85—96	
Energy value	kcal	340—385	

II Food products for nutrition of preschool and school age children

1. Bread and bakery, flour confectionery, and flour-and-cereal food products

Nutritional value per 100 g of product

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
Flour-and-cereal food products			
Proteins	g	10—13	
Fats	g	1—3	
Carbohydrates	g	60—70	
Energy value	kcal	300—360	
Mineral substances:			
Iron	mg	1—2	for enriched products
Vitamins:			
Thiamine (Vitamin B1)	mg	0.15—0.25	for vitamin-enriched products
Riboflavin (Vitamin B2)	mg	0.1—0.15	for vitamin-enriched products
Nicotinic acid/niacin	mg	1—3	for vitamin-enriched products

Criteria and indicators	Units of measurement	Acceptable levels	Remarks
(Vitamin PP)			
		Bread and bakery products	
Proteins	g	8—13	
Fats	g	1—8	
Carbohydrates	g	45—55	
Energy value	kcal	210—340	
Mineral substances:			
Iron	mg	1.8—3	for enriched products
Vitamins:			
Thiamine (Vitamin B1)	mg	0.15—0.40	for vitamin-enriched products
Riboflavin (Vitamin B2)	mg	0.1—0.5	for vitamin-enriched products
Nicotinic acid/niacin (Vitamin PP)	mg	1.5—3	for vitamin-enriched products
		Flour confectionery products	
Fats	g, max.	25	
Trans isomers	% of total fats, max.	7	
Added sugar	g, max.	25	for biscuits
		38	for goods produced from sponge-cake semi-finished products

47. In Annexes to the technical regulation, the words “Annex” shall be supplemented with the succeeding symbol “No.”

48. The Section “Table of Contents” shall be excluded.

END UNOFFICIAL TRANSLATION.