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REVIEW

ROLE OF ORGANIC PRODUCTS IN THE IMPLEMENTATION OF THE STATE POLICY OF HEALTHY NUTRITION IN THE RUSSIAN FEDERATION

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Abstract: The state policy of the Russian Federation in the field of the healthy nutrition of the population includes a set of measures aimed at meeting the needs of various groups of the population for healthy nutrition, taking into account their traditions, habits and economic situation. The complex system development of the consumer food market, in addition to the economic aspect, covers the issues of public health, demography, effective nature management, resource saving and ecology. The current scientific approaches in the field of healthy food production involve the addition of functional ingredients, biologically active substances or probiotic microorganisms capable of replenishing the deficiency of necessary substances to a base product. However, in addition to their high nutritional value, healthy food products must be absolutely safe and be of high quality, which is extremely difficult to realize in the present conditions of raw material production. The review provides a rationale that the organic products manufactured using traditional technologies without the addition of chemical fertilizers, pesticides, food additives, hormonal and other drugs, can be attributed to healthy food products. The development of the organic sector of food production at the state level will allow not only to implement the adopted normative acts within the framework of the state policy of healthy nutrition, but also to fundamentally improve the situation in other areas: economy, health and ecology.

Key words: Healthy nutrition, state policy, organic products, organic agriculture

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The concept of healthy nutrition is so extensive that its precise definition is much more difficult to find than the slogans of how important it is to eat healthy and diversified food. Popular magazines contain hundreds of articles about the health benefits of a particular food product. Scientific literature describes various nutrition theories, among which there is balanced rational and allopathic nutrition with the appropriate evidence base and distinctive features [1, 2]. The mass media broadcast about the harmful effects of some products, traditional for Russians, on the body and promote healthy nutrition with the use of biologically active supplements and doubtful non-conventional medicines. What does the concept of "healthy food" used both by consumers and at the highest state level really include?

As a rule, healthy nutrition is understood as a diet that provides the growth, normal development and life activity of a human that contributes to health promotion and the prevention of diseases. The World Health Organization (WHO) has developed and implemented some countrywide integrated noncommunicable disease intervention (CINDI) programmes [3] and programmes to develop and implement the nutrition, infant feeding and food safety policy [4]. These programs contain a clear message that food products and the role they play in health

promotion should be regarded as an integral part of the "primary link of health" [3].

The CINDI Program Manual is a basic document for the design of national and regional nutrition programs. The basis of the development thereof is the scientifically based benefits of vegetable products that contain the biologically active substances (BAS) and vitamins that promote the normalization of blood cholesterol and blood sugar and prevent cancer, cardiovascular diseases, obesity and diabetes [1]. It is proposed to use the CINDI Manual as a basis for the development of regional programs and strategic plans for healthy nutrition, as well as for making the population to promote health. It differs from other documents in the field of nutrition by the fact that it considers not individual components and nutrients, but products in general, arranging them in the form of a pyramid with the use of the color scheme of traffic lights: green means "keep moving", orange – "caution", and red – "stop and think before you use". The essence of the document is twelve principles of healthy nutrition, each of which should be considered in the context of the others:

(1) Eat a variety of food products, most of which are vegetable products.

(2) Bread, flour products, cereals and potatoes should be included in the diet several times a day.

(3) Eat a variety of vegetables and fruits several times a day (at least 400 grams a day), it is better to eat fresh ones and those grown in the locality.

(4) In order to maintain the body weight within the recommended range (the body mass index of 20–25), moderate daily physical activity is necessary.

(5) Control the intake of fat from food (no more than 30% of the daily caloric value) and replace animal fat with vegetable oil.

(6) Replace fatty meat and meat products with beans, cereals, fish, poultry or lean meat.

(7) Use low-fat milk and dairy products (kefir, yogurt, sour milk and cheese) with a low fat and salt content.

(8) Choose the food products with a low sugar content and eat a moderate amount of sugar, limiting the amount of sweets and sugary drinks.

(9) The total amount of salt in food should not exceed 6 g (one teaspoon) a day. Iodized salt should be used.

(10) The total content of pure alcohol in alcoholic beverages (when consumed) should not exceed 20 g a day.

(11) Cooking should ensure food safety. Steam cooking, microwave cooking, baking or boiling will help you to reduce the amount of fat, oil, salt and sugar used when cooking.

(12) Encourage infants to breastfeed for only the first 6 months. Complementary food should be introduced gradually, in parallel with breastfeeding [2, 3].

Generalizing dozens of different concepts [1–3, 5, 6], the following most complete formulation can be provided: healthy food is the reception of a variety of balanced food products with the minimal human effect to provide the life, growth and development of a human and, combined with regular physical activity, health promotion and the prevention of diseases. The general recommendations for healthy nutrition developed by WHO are as follows:

– the control of body weight and caloric value of products;

– the restriction of consumption of fats, simple carbohydrates and salt;

– the increase in the proportion of fruits, vegetables, whole grains, legumes and nuts in the diet;

– the consumption of vitamins and the food products rich with micronutrients;

– the development of individual diets by dietarians [6].

However, there is no information in WHO documents on the nature of the origin of the recommended products. A person can adhere to all the principles of healthy nutrition recommended by WHO, but at the same time to replace animal fats with the vegetable ones derived from genetically modified plants, to eat fresh vegetables containing agrochemical residues, lean meat and skimmed dairy products with antibiotics several times a day. It is not known whether synthetic fertilizers, pesticides, growth stimulants and genetically modified organisms (GMOs) were used in their cultivation and production. There is a question in this context – will there be a real benefit from the use of such products?

The problem of healthy nutrition is considered at the highest level in a lot of countries of the world. The state policy of the Russian Federation in the field of healthy nutrition of the population means a set of measures aimed at providing the conditions that satisfy the needs of different groups of the population for healthy nutrition in accordance with the requirements of medical science, taking into account their traditions, habits and economic situation [7]. The Concept of the National Policy of Healthy Nutrition of the Population of the Russian Federation was for the first time formulated in 1998. An important aspect of the implementation of the Concept was the adoption of the programs aimed at improving the structure of food consumption of the population as well as the organization of health-improving food centers, including child and dietary nutrition centers, and the formation of a healthy lifestyle for the population [8].

Recognizing a sharp increase in mortality caused by noncommunicable diseases, including cardiovascular diseases, diabetes and certain types of cancer, WHO member states have proposed the formulation of the Global Strategy on Diet, Physical Activity and Health (hereinafter referred to as the Global Strategy). The global strategy, adopted in May 2004, includes:

– a need to ensure correct and balanced information – education, information and public awareness, including full marking;

– taking measures in the field of food and agriculture – promoting the manufacture and consumption of healthy products, the formation of agricultural and fiscal policies and the organization of food programs;

– a multisectoral policy to the promote physical activity of citizens;

– attracting investment in supervision, scientific research and much more [6].

The national strategies developed on the basis thereof should include specific goals, objectives and

actions, taking into account the climatic, cultural and other characteristics of countries, as well as a diet and physical activity guide.

The Order of the Government of the Russian Federation "On the Fundamentals of the State Policy of the Russian Federation in the Field of Healthy Nutrition of the Population for the Period up to 2020" notes that, despite the positive trends in the nutrition of the population, the mortality caused by chronic diseases remains significantly higher than in most European countries. The nutrition of the majority of the adult population does not meet the principles of healthy nutrition because of the consumption of the food products that contain the large amounts of animal fat and simple carbohydrates, lack of vegetables and fruits, fish and seafood in the diet, which leads to an increase in overweight and obesity, the prevalence of which has increased from 19% to 23% for the last 8–9 years, increasing the risk of diabetes, cardiovascular and other diseases.

The Russia's state policy in the field of healthy nutrition is aimed at preserving and promoting the health of the population and the prevention of the diseases caused by poor and unbalanced nutrition. The main tasks are the expansion of domestic production of high-quality food raw materials and food products, including enriched and special ones; the development of innovative technologies and educational programs on healthy nutrition issues; the organization and provision of adequate nutrition for children, pregnant and lactating women and organized groups, as well as the monitoring of the nutritional status of the population [7, 8].

The key trends of implementation of the state policy in the field of healthy nutrition are:

– the development and adoption of the technical regulations that concern food products;

– the legislative consolidation of the manufacturer's responsibility for the manufacture of the food products that are falsified and do not conform to the specified requirements;

– the development of the national standards that ensure the compliance with the requirements of technical regulations for food products and food raw materials;

– improving the quality control mechanisms in relation to the food products and food raw materials produced on the territory of the Russian Federation and supplied from abroad;

– the priority development of fundamental studies in the field of modern biotechnological and nanotechnological methods for obtaining new sources of food and the medical and biological estimation of their quality and safety;

– an increase in the promotion of healthy nutrition of the population, including that with the use of the media [7].

In addition to the economic aspect, the integrated system development of the consumer food market covers the issues of public health, demography, effective use of natural resources, resource saving and the ecological component. Over the years, a number of documents have been approved at the highest state level aimed at providing adequate nutrition, preventing diseases, increasing the duration and improving the quality of living of the population, stimulating the development of manufacture and circulation of food products of appropriate quality in the food market, including the Food Security Doctrine [9] and the Strategy for Improving the Quality of Food Products in the Russian Federation until 2030 (hereinafter referred to as the Strategy) [10, 11].

The Food Security Doctrine has been approved by the Decree of the President of the Russian Federation as part of the Russian National Security Strategy and represents a set of official views on the goals, objectives and main trends of the state economic policy in the field of food security of the Russian Federation. Food security is understood as the most important component of the demographic policy and a necessary condition for the implementation of a strategic national priority – improving the quality of living of Russian citizens by guaranteeing the high standards of livelihood.

The strategic goal of food security is to provide Russians with safe agricultural products, fish and other products from aquatic biological resources and food. The guarantee of its achievement is the stability of domestic production of safe raw materials and products, its physical and economic accessibility to ensure the active and healthy lifestyle of every Russian citizen and the availability of the necessary reserves.

The implementation of the provisions of the Doctrine will ensure food security as an essential part of national security, predict and prevent emerging threats and risks for the country's economy, increase its stability, create conditions for the dynamic development of agro-industrial and fisheries complexes and improve the well-being of the population [9].

To form a healthy diet, the Doctrine proposes:

– to develop the fundamental and applied scientific research on the medical and biological estimation of the safety of new sources of food and ingredients, to introduce the innovative technologies that include bio- and nanotechnologies, organic food product and food raw material manufacturing technologies and to rev up the production of new enriched, dietary and functional foods;

– to develop the educational programs on healthy nutrition for the population as an essential component of a healthy lifestyle with the involvement of the media;

– to formulate the norms of social catering and measures to support it;

– to develop and implement a set of the measures aimed at reducing the consumption of alcohol and other alcohol-containing products [9].

The strategy is a basis for the formation of a national food quality management system aimed at providing the quality of food products as an essential component of health promotion and an increase in the duration and quality of living of the population, generating demand and supply and respecting for consumers' rights to such products.

The objectives of the Strategy are proposed in the following areas:
(1) The development of a regulatory framework in the field of food quality, including the legal aspects of compensatory mechanisms for protecting consumers' rights. The improvement of the state regulation, control (supervision) and application of administrative measures for non-compliance with the requirements to the quality of food products by the manufacturer;
(2) The improvement of the methodological basis for estimating the compliance of food quality indicators. Ensuring the monitoring thereof;
(3) The development and integration of a quality management system for food products. Creating a single information traceability system;
(4) The creation of incentive mechanisms for manufacturers to produce the foods that meet the quality criteria and healthy nutrition principles, as well as the products of the new generation with the specified quality characteristics;
(5) The recovery of the production of food ingredients in the Russian Federation;
(6) Updating the current normative levels of the content of food supplements, flavors, biologically active and potentially hazardous substances in food products;
(7) The priority development of scientific research in the field of nutrition of the population, the prevention of non-communicable diseases and the development of the production technologies aimed at improving the quality of food products;
(8) Promoting the principles of healthy nutrition [10].

The abovementioned documents are bound by one common goal – to ensure the health of their citizens, which is achieved, first of all, by providing the population with safe and balanced food products. The state took the necessary measures to identify unscrupulous manufacturers and to curb the manufacture of poor-quality and falsified food products. Through agitation and propagation, Russian citizens began to understand the importance of adequate nutrition and food safety for their own health.

In pursuance of the above documents, specialists conduct the research and design the new types of products, as well as enriched, special and functional products that meet the specified requirements including dietary products for curative and preventive nutrition. Such products have a balanced ratio of substances and components and scientifically grounded and confirmed properties that replenish a nutritional deficiency and prevent the risk of certain diseases. The developed methodologies and scientific approaches in the field of manufacturing healthy food products imply the introduction of functional ingredients, biologically active substances or probiotic microorganisms into the base product [12–17]. Thus, Sanitary Rules and Norms SanPiN 2.3.2.2804-10 that supplement SanPiN 2.3.2.1078-01 "Hygienic requirements for food safety and nutritional value" were used for many years to enrich consumer products for children over 3 years old and adults with essential substances. In accordance with the specified document, at least 15% and not more than 50% of the daily requirement for micro- or macronutrients, BAS, vitamins and minerals that enrich the product should be contained in one average daily portion of enriched food products. The compliance with this requirement in the production of enriched products ensured that they would help to prevent a deficiency in the substances needed for the body and at the same time be safe for human health. The enrichment of products with essential substances (vitamin substances, BAS, etc.) in low amounts (less than 15% of the daily requirement per serving) is ineffective and does not benefit from eating them regularly [18].

A food product can be converted into a functional one in two ways – by reducing the content of the ingredients harmful to health in the product and by enriching products with scarce micronutrients.

The manufacture of functional products with a low content of harmful components suggests a change in the formulation, mainly in reducing the total content of fats and sugar. The reduction of total of fats in a product significantly reduces its energy value (caloric value). At the same time, it is especially important to reduce the consumption of animal fats – the sources of cholesterol and saturated fatty acids, as well as hydrogenated fats – the sources of trans-isometric fatty acids. Reducing the content or complete replacement of sugar also helps to reduce the caloric content of a product and reduce its glycemic index [12].

The enrichment of products with the additional useful substances is justified and effective only if certain principles of food enrichment that are based on the long-term results of nutritional research in our country and abroad are observed [13–20]. The development of such products is necessary and timely.

However, the authors believe that attention should also be paid to one of the main tasks of the state policy in the field of healthy nutrition – the development and introduction of innovative technologies in agriculture and food industry, including biotechnology and organic production technologies. In this context, the organic (BIO) products, manufactured using traditional technologies without the addition of chemical fertilizers, pesticides, food supplements, hormonal and other drugs, also have a beneficial effect on the human body and can be attributed **to healthy food products** [23–25].

In accordance with GOST R 56104-2014 "Organic foods. Terms and definitions", an organic food product is a product in the natural or processed form manufactured from the vegetable and animal raw materials grown in the areas for organic farming, as well as the forest, bee and fish products grown, manufactured, processed, certified, labeled, stored and sold in accordance with the rules of organic production regarded as the food for consumption in the processed or unprocessed form. In other words, the manufacture of organic products is nothing more than processing, by means of sparing methods, the raw materials obtained using the traditional method for cultivating the land, plant growing, cattle breeding, etc., applied by our ancestors-farmers a hundred or more years ago [26]. At present, such activity is called "organic agriculture".

This term implies a system of agricultural production that excludes the use of chemically synthesized mineral fertilizers, pesticides, growth regulators, feed supplements and GMOs, which is based on the use of special modern varieties of plants and animal breeds, crop rotations, green fertilizers, biological pest control methods, mechanical cultivation of soils, and also corresponds to the officially approved special norms [27].

The International Federation of Organic Agricultural Movement (IFOAM) has formulated four principles that are the basis of the concept of organic agriculture:

(1) the principle of health – the support and improvement of the health of soil, plants, animals, human and the planet as a whole;

(2) the principle of ecology – the internal management and the management taking into account the characteristics of the natural system and life cycles and the environment;

(3) the principle of justice – ensuring general food security, the availability of high-quality products, decent conditions for animals, plants, people and their descendants;

(4) the principle of care – protecting the health and well-being of the present and future generations and the environment.

The following elements are the features of organic agriculture technology:

– special tillage;

– the rejection of chemically synthesized fertilizers;

– crops are selected taking into account their biological characteristics and specific conditions;

– the pest, weed and disease control system is developed individually for each crop on a particular farm;

– competent crop rotation to preserve soil fertility [28].

Organic agriculture is developed in more than 179 countries of the world. The organic sector is currently the fastest growing food trade branch in the world. According to the data for 2015, 2.4 million farmers have reclaimed 50.9 million hectares of organic agricultural lands, 45% of which are in Oceania and 25% – in European countries. The global ecologic product market has grown more than 4.5 times over the past 15 years: in 2000, the global sales of organic food and beverages amounted to 18 billion US dollars, in 2010 this value reached 59 billion US dollars, and in 2015 – about 81.6 billion US dollars. According to the forecasts, the turnover of organic food can reach 250 billion US dollars by 2020. The leading markets of organic products are the USA, Germany, France and the United Kingdom. At the same time, the EU and the USA consume 96% of all eco-products [29]. The domestic production capacity of these countries has almost been exhausted, and the demand for this type of products is steadily growing. In this regard, the organization of organic production is most active in developing countries: there are 585,000 manufacturers in India, 203,602 in Ethiopia, and more than 200,000 in Mexico. Australia ranks first in the list of the countries with the highest organic land growth in 2015 [30] where 4,350 thousand hectares of land were certified as organic, the United States with 474,8 thousand hectares take the second place, and India with 460 thousand hectares – the third. Russia ranks seventh: in 2015, 139.3 thousand hectares were identified as organic lands, over 10 years – 382 thousand hectares that account for only 0.2% of the total number of agricultural lands. [31–33].

Despite an increase in the areas of organic lands, it should be noted that the organic sector of food production in Russia functioned spontaneously until mid-2015. The only document in the sphere of organic products was SanPiN 2.3.2.1078-01 (Supplements and Revisions No. 8). The largest manufacturers of organic products were: Ecoproduct Corporation (the Moscow region), AgriVolga Agricultural Holding (the Yaroslavl region) and a number of farms in the Tula, Kaluga, Penza and other regions. They have been certified by European companies for compliance with the requirements of EU Regulations No. 834/2007 and No. 889/2008 on organic production and labeling of organic products [22, 31].

In the developed countries, the regulation of the consumer market by state structures is one of the most important tasks. In general, the market regulation mechanism, which is a set of constantly acting measures implemented along the entire path of goods movement from the manufacturer to the consumer, must, on the one hand, prevent the appearance of dangerous products in the market and ensure the reliability of information about goods, and on the other – minimize administrative barriers for manufacturers.

The technical regulation document system of Russia, as a member state of the EEU, includes technical regulations (TR CU) and interstate standards (GOST) for products and measurement methods, as a result of which voluntary compliance with TR CU requirements is ensured. Regulations impose stringent requirements not only for raw materials and finished products, but also for terminology, food supplements, packaging and labeling (including the requirements for names, composition and other information applied). All the products manufactured and sold on the territory of the Russian Federation are to comply with the requirements of TR CU for quality and safety, as well as for marking.

At present, the output of organic products for the consumer market of Russia is in accordance with the general requirements of TR CU for all food products – there are no individual regulations with regard to the organic origin and production method, is provided with declarations, and its voluntary certification is carried out by certification bodies on the basis of international standards due to the absence of a functioning national system for organic products certification in Russia.

The emergence of organic products in the Russian market, the growing interest of domestic producers in organic production and the accession of the Russian Federation to the WTO have intensified the work on national standardization in this segment, and also protected the interests of the country and our consumers when developing international standards. The Technical Committee 040 "Organic Products"

established in March 2009 on the basis of the National Consumer Protection Fund has initiated the development of a number of standards for organic products in order to standardize relevant terminology, production rules and certification procedure.

The national standard GOST R 56104-2014 "Organic foods. Terms and definitions" was approved and put into effect by the Order of the Federal Agency for Technical Regulation and Metrology of September 10, 2014, No. 1068-st. The standard establishes terms and definitions in the field of production, composition and properties of organic food products and their derivative products that meet the requirements of organic production. The standardized terms are recommended for use in all types of documentation and literature on organic food products in the field of organic production that are part of the scope of standardization work and/or use the results of this work [26].

The Order of the Federal Agency for Technical Regulation and Metrology No. 844-st of June 30, 2015 approved and put into effect the national standard GOST R 56508-2015 "Organic production. Regulations for production, storage, transportation" developed by the State Duma Committee on Agrarian Issues. The standard establishes the requirements for the manufacture, storage and transportation of organic products in the natural and processed form and includes the requirements for organic production (plant growing, cattle breeding, beekeeping and aquaculture facilities), as well as the rules for collecting, packaging, marking, transporting and storing organic products [34].

GOST R 57022-2016 "Organic production. The procedure of voluntary certification of organic production" was approved by Order No. 906-st of August 5, 2016. GOST R 57022 establishes a procedure for the voluntary certification of organic production for compliance with the requirements of GOST R 56508. It is intended for use by organic production certification bodies, legal entities or individual entrepreneurs who claim to receive an organic production conformity certificate or the holders of organic production conformity certificates [35]. At present, OOO Eco-Control and NP Ecological Union – the Leaf of Life marking – successfully operate in Russia [31].

Russia is ideal in many ways for the development of organic agriculture. From 1990 to the present time, more than 40 million hectares of arable agricultural lands and millions of hectares of other lands are empty, the intensity of agricultural production in Russia is low, the level of anthropogenic impact and pollution of vast areas is low, most farms do not introduce fertilizers at all, and growing genetically modified plants is prohibited by law. With the abundance and a relatively low cost of land, to be engaged in organic, i.e. extensive low-cost, agriculture can be very beneficial and useful [11, 28]. In Russia, one of the leading agrarian countries in the world, organic production is not developed enough: according to IFOAM, the percentage of organic agricultural products in the world market that accrues to Russia along with the CIS countries, is only 1.4% [31].

In the annual messages of the President of the Russian Federation [36, 37], V.V. Putin repeatedly drew the attention of the Federal Assembly to the need to develop agriculture, improve the quality indicators of production efficiency and introduce advanced agricultural technologies: "... Russia is able to become the largest world supplier of healthy, ecologically clean and high-quality food which the Western producers have long lost, especially given the fact that demand for such products in the world market is steadily growing ... We need technologies for manufacturing, storing and processing agricultural products, as well as a seed and breeding fund of our own ... ".

With regard to agriculture, the Federal Law "On the Development of Agriculture" [38] is currently in force, as well as the State Program of Agricultural Development and Regulation of Markets for Agricultural Products, Raw Materials and Food for 2013–2020 [39] and the Federal Science and Technological Program for the Development of Agriculture for 2017–2025 [25]. The strategy of scientific and technological development of the country [41] determines the priority trends for the next 10–15 years that will allow us to obtain scientific and scientific and technical results and create the technologies that are the basis for the innovative development of the domestic market of products and services, will ensure Russia's stable position in foreign markets. The implementation of the measures in these areas should provide a transition to highly productive and environmentally friendly agro- and aquaculture, the development and integration of the systems for the rational use of chemical and biological protection equipment for agricultural plants and animals, the storage and effective processing of agricultural products, the manufacture of safe and quality, as well as functional, food products [38–40, 42].

At a meeting with the representatives of business circles of the Yaroslavl region, held on April 25, 2017 in Rybinsk, President Putin noted that organic agriculture is a promising trend of development the nation's health depends on. At the same time, it is important to make organic products economically available [43], for which it is necessary to provide special conditions; it is important to speed up the adoption of the draft federal law regulating this sphere by the State Duma.

The draft federal law "On organic production and circulation" has been under discussion and revision for more than 5 years. The bill establishes a legal framework for regulating the relations in organic production and circulation and covers the relations that arise in the course of organic production and circulation. Its purpose is to develop the domestic market and meet the needs of Russians in organic products, as well as to increase the competition among manufacturers and increase exports. In addition to the principles of organic products and the voluntary compliance confirmation system, the bill provides for the creation of a unified state register of manufacturers and their products. The register is necessary for informing consumers and providing state support in

accordance with the Federal Law "On the Development of Agriculture" [38].

As a result of the adoption of the bill, legal conditions will be provided to develop organic agriculture in Russia, which will make it possible to become a full-fledged participant in the international market. According to some expert estimates, the Russian market of organic products will grow more than 10 times and will be commensurable with the leading countries of Europe within 5 years from the adoption of the bill [31, 33, 44, 45].

Organic agriculture is a production system that improves the ecosystem, preserves soil fertility, protects human health, and, taking into account the local conditions and relying on the ecological cycles, preserves biological diversity and does not use the components that can be harmful for human and the environment [46]. It combines traditional farming practices, innovative technologies and modern scientific and technological developments that have a beneficial effect on the environment and, while maintaining a close interrelation among all the life forms included in the system, maintain and ensure their favorable development [47]. The qualitatively organized organic agriculture and organic production will allow us not only to implement the bases of the state policy in the field of healthy nutrition and state programs, but also provide some other positive results at the local and federal levels [32, 48].

With regard to organic products, a mechanism for implementing the state policy in the field of healthy nutrition can be easily triggered with the help of technical regulation tools – the development and approval of the appropriate technical regulations, federal laws, national and interstate standards, as well as uniform rules for conformity assessment, supervision and control. The remarkable features of the resources of the Russian Federation for the development of organic agriculture and an increase in its role in the field of healthy nutrition of the population are [11, 28, 38, 49]:

– more than 40 million hectares of free agricultural land [50];
– the soil that has not been used for more than 20 years and that has been recovered naturally;
– 20% of the world's fresh water supply;
– the opportunity to generalize the available world experience;
– according to expert estimates, more than 30 thousand farmers (instead of 70 at the moment) can switch to organic farming [31];
– the grow of the interest of Russians in environmentally friendly products;
– the development of product export related to the stable demand of exporters from the developed countries (primarily Germany and the USA) [31, 33].

The analysis of the principles of organic agriculture and the features of processing the obtained raw materials standardized in GOST R 56508-2015 [34] allows us to predict a possible social effect from the organization of organic production in Russia, both at the nationwide and local levels, and estimate the role of organic products in the implementation of the state policy in the field of healthy nutrition in general [11, 49, 51–53]:

(1) "Organic production should be located far from the sources of environmental pollution, industrial facilities and intensive agriculture areas" – the implementation of this principle contributes to the reconstruction of obsolete and abandoned production facilities, as well as the construction of new cities remote from large ones. This will entail the formation of new settlements and infrastructure in environmentally friendly areas, the development of rural areas, the improvement of living standards by ensuring the employment of the population, the enhancement of the skills thereof and, ultimately, the improvement of the demographic situation;

(2) "Organic plant growing should use the soil cultivation methods aimed at preserving the soil natural composition, preventing the development of degradation processes and maintaining the biodiversity of ecosystems; maintaining and enhancing soil fertility and biological activity" – in this regard, it is required to develop new high-yielding varieties and hybrids of various crops with a high resistance to diverse climatic conditions of our country;

(3) "Hydroponic production and the use of mineral nitrogen fertilizers, synthetic herbicides, fungicides, insecticides and other pesticides, growth regulators and synthetic dyes is not allowed." Organic plant growing is the guarantee of improving the ecological situation and implementing effective nature management, preserving the existing and involving new agricultural lands in production, and improving the cropping culture through the natural recovery of soil fertility;

(4) "Animals for organic production must be born or incubated in the conditions of production facilities that meet the special requirements of organic cattle breeding" – the implementation of this principle can act as a fillip to the recovery and development of cattle breeding and poultry in the Russian Federation and an increase in the total livestock number;

(5) "Pastures, grazing areas or paddocks for cattle run must be available for all animals. At least 50% of feed for herbivores should be produced using organic production methods in the same region" – the introduction of this principle will allow the development of animal feed production, the reduction of the volume of their imports and the maximal involvement of agricultural lands in production;

(6) "The prevention of animal diseases in organic cattle breeding does not allow the use of chemically synthesized drugs or antibiotics, including those that are used for a preventive purpose, as well as the use of special substances and hormones to stimulate growth and control reproduction" – there is a need to develop and organize the production of modern domestic medicines for veterinary use and to stimulate the development of zoopharmacy and this sector of economy;

(7) "Organic food and feed are manufactured from organic raw materials using mainly biological, mechanical and physical methods, except when the ingredient is not an organic product; the use of food

supplements is limited "- this principle contributes to the development of science and technology, the expansion of the volume and assortment of domestic ingredients and the appropriate food supplements, and the promotion of healthy food principles;
(8) "The final result of completion of the technological process of the organic method of production from organic raw materials is ready-to-eat organic products" – the partial or complete resolution of the problem of import substitution (cheese, vegetables, fruits, etc.). The fundamental requirements for organic products cause the expansion of traditional products, for example, national dairy products according to interstate or national standards.

The development of organic complexes requires highly skilled specialists of various profiles – from agronomists and veterinarians to milk and meat technologists – can motivate young professionals to work in their specialty in rural areas having a decent salary and housing – a base for family foundation and children birth. Herewith, an important role is played by the psychological adaptation of specialists to new living and working conditions.

The implementation of a system of measures to stimulate agricultural manufacturers, develop state instruments for the standardization of organic products and support consumer agricultural cooperation and small and medium business that provides services to agricultural manufacturers has the key value to the successful development of organic agriculture in Russia. Equally important is the state support in the field of training and retraining of personnel, information and methodological and scientific and methodological support of the agricultural manufacturers who are engaged in organic agricultural production or the persons who are planning to organize it.

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