



## THE VALUE OF CONFECTIONERY PRODUCTS IN HUMAN NUTRITION

Fayziboev Pirmamat Normamatovich

Ph. D. Associate Professor of the Department of General Hygiene and  
Ecology Samarkand State Medical University

### Abstract

The problem of food safety, including confectionery, for human life and health has been focused on the study and reduction of risk factors for many years.

Confectionery products are multicomponent food products, ready to use, having a certain predetermined shape, obtained as a result of technological processing of the main types of raw materials - sugar and (or) flour, and (or) fats, and (or) cocoa products, with the addition of or without the addition of food ingredients, food additives and flavorings.

The most important factor in maintaining health, rehabilitation of patients with dental pathologies of active longevity of a person is a full and regular supply of the body with the necessary micronutrients - vitamins, minerals, microelements.

Under these conditions, new types of enterprises are being formed related to the production of food raw materials and food products, their storage, sale, transportation, new relationships of all participants in this complex process.

### Relevance of the Topic

Food safety for human consumption is one of the most pressing issues facing countries around the world.

In recent years, the structure of nutrition of the population has changed dramatically, the consumption of proteins, vitamins, and minerals has decreased, which leads to a persistent deterioration in health indicators, as well as to an increase in disability and mortality.

The nature of nutrition is the most important vital (life-determining) factor, which is the initiator and regulator of metabolism, responsible for the life support processes of the human body.

One of the directions of state policy is the development of medical aspects of healthy nutrition, which provides for the implementation of continuous monitoring of the quality of nutrition of the population, nutritional status, as well as the prevalence of alimentary-dependent diseases and the health status of various population groups.

This task is closely related to the implementation of the system of social and hygienic monitoring, is its mandatory component in terms of developing criteria for the quality of nutrition and health of the population, points of application of monitoring.





In addition, the deterioration of the quantitative and qualitative characteristics of nutrition largely determines the occurrence of dental pathologies and common chronic non-communicable diseases, such as dental caries, stomatitis, obesity, diabetes mellitus, etc. The observed negative trends in the health of the population of Uzbekistan due to the socio-economic crisis are called Syndrome of "social tension".

At present, in Uzbekistan, as in developed countries, the main share of morbidity and premature mortality are non-communicable diseases. In 2018, non-communicable diseases were the cause of death in 94.8% of cases, external causes (accidents, poisoning, injuries) accounted for 3.6%, infectious diseases - 1.6%.

The group of non-communicable diseases included: cardiovascular diseases (63.9%), neoplasms (8.9%), respiratory diseases (5.5%), diseases of the digestive system (5.5%), other (11.3%). Non-communicable diseases are mainly caused by unhealthy diets associated with food production high in salt, sugar, trans-fatty acids, unhealthy additives and behavioral risk factors that accompany economic transformation, rapid urbanization and lifestyles in the 21st century.

### **The Purpose of the Study**

To develop a system for analyzing risk factors (risks) and assessment criteria at checkpoints using microbiological, chemical, sanitary-hygienic and radiological methods in the production and sale of high-quality and nutritious confectionery products.

### **Object and Methods of Research**

The object of research is the production and processing of confectionery products, on which hygienic and bacteriological methods are applied in laboratory tests of sugar, flour, oils and cocoa products, which are raw materials for confectionery products.

### **Results of the Study**

Depending on the ingredients used, all types of confectionery products are divided into three main groups: flour, sugar and chocolate. Flour confectionery - confectionery, which is a baked food product or a product containing a baked semi-finished product, based on flour and sugar, with a flour content in the baked semi-finished product of at least 25%.

Flour confectionery products are:

Wafers and wafer wafers; Cupcakes and rolls; Sweet cookies, including gingerbread; Dry cookies (biscuits and crackers); cakes; Gingerbread; Cakes; Oriental sweets and



other flour confectionery products of non-durable storage; Other flour confectionery products with long shelf life.

Sugar confectionery products are called food products, most of which consist of sugar, most often modified, or another sweet substance (honey, xylitol, sorbitol), as well as molasses, various fruits, berries, nuts, etc. The following are considered sugar confectionery products: Oriental sweets (the category includes: halva, Turkish delight, oriental sweets of all kinds, including navat).

The range of confectionery products includes more than 3,000 items, which allows us to satisfy any needs of the population. Many confectionery products are nutritious long-term storage products (chocolate, cookies, biscuits, etc.), which allows their use in the nutrition of military personnel and other organized groups of the population.

Confectionery products have high nutritional value and digestibility due to the use of various high-quality raw materials for their production: sugar, molasses, dairy, egg and fat products, cocoa beans, nuts, fruits, flour, etc.

According to BusinessStat estimates, in 2016-2020, sales of confectionery products in the CIS countries increased by 2.7%: from 4.93 to 5.06 million tons. In 2016-2019, they grew by 2.4-3.5% in year and in 2019 reached its five-year high - 8.38 million tons.

In 2020, sales of confectionery products in the CIS decreased by 5.9% compared to 2019. The coronavirus crisis led to a deterioration in the well-being of buyers, in order to save money, some of them were forced to cut spending on goods not included in the mandatory consumer basket.

Moreover, due to the coronavirus pandemic, a significant part of public catering establishments (cafes, restaurants, coffee houses) selling various kinds of desserts and pastries were closed.

In 2016-2020, in the CIS countries, more than half of the sales of all confectionery products accounted for flour products - an average of 51.4%. The second place was occupied by chocolate products with an average share of 28.4%. The share of sugar products in the years under review averaged 20.2%.

In 2020, sales of chocolate products fell the most (as the most expensive product on the confectionery market): by 10.1% compared to 2019. Sales volumes of flour products in 2020 decreased by 2.8% compared to the previous year.

In an unstable economic situation, consumers were more likely to buy cheaper products. At the same time, the transition of buyers to other products occurred both within the boundaries of a separate segment (for example, in flour confectionery products, more attention was paid to inexpensive cookies than cakes), and between segments (for example, I bought caramel, not chocolates).





In 2021-2025, sales of confectionery products in the CIS countries will recover at a rate of 1>-2.3% per year and in 2026 will reach 5.61 million tons, which will exceed the level of 2020 by 10.9% and by 4.4% - the level of 2019. In 2021, flour confectionery products will show the largest increase in sales. As the economies of the CIS countries stabilize, the growth rate of sales of flour products will slow down, while sugar and chocolate products will grow.

Confectionery due to sugar has a high calorie content - 100 g - 380 kcal. But despite these benefits of sugar, excessive consumption (more than 50-60 grams per day with low physical activity) is not recommended for healthy people. Sugar is more useful in the form of fruit and berry and confectionery products: jam, marmalade, compotes, etc., which, being a valuable source of energy, at the same time enrich food with useful nutrients.

Unlike sucrose, fructose is sweeter and almost does not require insulin for its absorption, which allows it to be consumed in smaller doses (30-40 g per day). When oxidized in the body, 1 g of fructose gives about 4 kcal.

The source of simple carbohydrates is honey, which contains 36% glucose, 38% fructose and 2% sucrose. The composition of honey in a small amount includes almost all vitamins, minerals, organic acids, enzymes. 100 g of honey contains 314 kcal. The daily dose of honey should not exceed 60-80 g with a decrease in the amount of other sugary products (1 g of sugar \u0003d 1.25 g of honey).

In conclusion, we can say that, subject to the information and standards, we will be able to ensure the demand and safety of the population for high-quality confectionery products, the development of sanitary and hygienic rules.

## Findings

1. Safety control methods are long, and its control cannot fully ensure the safety of products. The safety of confectionery products (CI) can only be ensured at the production stage by controlling the process of its formation. To do this, it is necessary to study the formation process in the course of the technological process.
2. The processes of formation of the microbiological safety of CI determine the ways to manage it, i.e. determine the possibility of using any actions that allow you to change the quantitative and qualitative composition of the microflora.





## Bibliography

1. Khudaiberganov A.S. Aholida soglom ovkatlanishni shakllantirish omillari va mavzhud muammolar. Collection of scientific and practical conference (with international participation) "Modern achievements and prospects for the development of public health". - Tashkent, 2019. - P.194-196.
2. Codex Alimentarius Commission // Procedure Manual. Nineteenth edition. WHO/FAO. - Rome. 2010. - S. 213.
3. Food hygiene. Basic texts. Joint FAO/WHO Food Standards Program CODEX ALIMENTARIUS COMMISSION Second edition. Rome 2005, 245 p.
4. SanPiN No. 0257-08 "Hygienic requirements for the production of bread, bakery and confectionery products." [www.minzdrav.uz](http://www.minzdrav.uz)
5. SanPiN No. 0366-19 "Hygienic food safety standards". [www.minzdrav.uz](http://www.minzdrav.uz)
6. The action plan in the field of food and nutrition for 2015-2020. WHO Regional Office for Europe, Copenhagen, 2011.
7. Seydakhmetova A.A., Kauyzbay J.A., Kalmenov N.J. et al. Implementation of a chronic noncommunicable disease management program. Collection of scientific-practical conference (with international participation) "Modern achievements and prospects for the development of public health." - Tashkent, 2019.