

HYGIENIC ASPECTS OF STORAGE AND PROCESSING OF FOOD RAW MATERIALS UNDER CERTAIN CONDITIONS

Kamilova Dilnoza Abdugafirovna,
Qutliyeva Nilufar Hakimjonovna
Assistant of the Department of Obstetrics and
Gynecology of the Academy of Nursing

Abstract

In this article, the quality and safety of products, which are very important in the food sector, the issue of prevention of infectious diseases, legal and economic aspects, training and education, technological reforms, types of technological processing of raw materials and products used in food preparation the importance of food products and raw materials and technological processing is discussed.

Keywords: food, product quality and safety, infectious diseases, legal and economic aspects, training and education, technological reforms, raw materials.

Introduction

The relevance of hygiene is very important in the food industry. The quality and safety of food products often depends on their hygienic condition. The relevance of hygiene is of primary importance for future health, maintaining the quality of products and preventing infectious diseases. Therefore, there are several key factors to consider when maintaining and maintaining hygiene. In it:

- Health and Safety: Non-compliance with hygiene requirements in health protection can endanger human health. For example, microbes and bacteria multiply in food, and their consumption can cause stomach diseases, infections and many other health problems in humans.

1. Prevention of infectious diseases: Compliance with hygiene requirements significantly reduces the spread of infectious diseases.

- Maintaining product quality: Prevention: Ensuring hygienic conditions plays an important role in maintaining the quality of products. For example, proper storage, processing and transportation of food products, if hygienic norms are observed, ensures that the product is clean and of high quality.
- Extending the shelf life of products: Compliance with hygienic conditions extends the shelf life of products and helps maintain their quality for a long time.





2. Legal and economic aspects:

- Legislation and standards: Hygienic requirements are based on legislation and standards in many countries. Compliance with these requirements ensures compliance with applicable standards and compliance with the law for businesses.
- Economic efficiency: Compliance with hygiene requirements increases the quality of products and improves competitiveness in the market. It also enjoys the brand's reputation for providing high-quality and safe products.

3. Training and education:

- Education of working personnel: To implement hygiene requirements, it is necessary for working personnel to be qualified. Workers must be informed about hygienic norms and standards and implement them.

4. Technological reforms:

- New technologies: It is very important to use modern technologies to ensure hygiene requirements. For example, food safety can be ensured with the help of automated sanitation systems, accurate temperature and humidity control.

The relevance of hygiene and its maintenance is the main factor in ensuring the safety, quality and human health of food products. This requires attention to all factors, compliance with hygienic standards and the introduction of modern technologies.

The body receives all the nutrients and biologically active substances necessary for growth and activity from the food it eats. Various technological treatments are given to food raw materials and products in food preparation.

Types of technological processing of raw materials and products used in food preparation

1. Primary processing.

- Defrosting.
- Boiling dry products.
- Washing.
- Cleaning from pods.
- Giving various forms according to technological requirements

2. Heat treatment.

- Heating.
- Boiling.
- Roasting.
- Baking.
- Other methods.

In practice, food is prepared from several products with different chemical composition. As a result, foods with a chemical composition and organoleptic indicators suitable for the requirements of the human body are developed. Therefore, it is very important to prepare food with the addition of various fruits.



**Importance is given to food products and raw materials and technological processing in 2 different ways.**

1. Physiological significance.
2. Hygienic significance

It is known that after harvesting and slaughtering of animals, agricultural plant products are stored for a certain period of time under optimal conditions that allow to preserve their chemical composition as much as possible. Storage of food raw materials and products allows to provide consumers with them throughout the year. When preparing dishes from food raw materials and products, parts of them that cannot be digested by the human body and have low nutritional value (bones, grains, pods, shells, seeds) are removed. Semi-finished products obtained as a result of this processing and foods made from them improve their chemical composition, increase their nutritional and biological value. As mentioned above, dishes are prepared according to certain recipes and at least two or more types of products are used to prepare one dish. This allows the chemical composition and energy value of the food to be maximally adapted to the requirements of the human body for nutrients and vitamins, because the closer the chemical composition and energy value of the food is to the body's requirements, the more the content of the food is partially absorbed by the body. . When preparing food, products are given different shapes of different sizes (according to the requirements of the preparation technology). In addition, when processed under the influence of heat, a raw aroma, delicate taste and exquisite colors are created, which are not characteristic of raw materials and raw products and only ready-to-eat products. The pleasant smell, taste and elegant appearance of the prepared food cause a large amount of saliva to be released from the glands of the digestive organs. It is known that the more saliva is released, the faster the food is digested and its components are maximally absorbed by the body. In addition, as a result of heat treatment, plant products soften and become juicy. Physiological importance of technological processing of food raw materials and products in food preparation consists of the above.

Food poisoning.

The main measures of food poisoning are:

1. Removal of the source of the disease.
2. Stopping the process of food poisoning.
3. Preventing food products from being damaged by microbes.

Protection of contaminated food products from epidemiologically dangerous microbes.

In order to prevent harmful work, it is necessary to avoid dangerous factors that may occur during the preparation of food products.

Animal (cow, sheep, goat, pig, poultry) products are the most dangerous source of food poisoning by microbes. In such cases, the main responsibility is assigned to veterinary and sanitary workers. Animals are subjected to veterinary and sanitary control before slaughter. Sanitary-hygiene and veterinary measures should be introduced at all stages of preparation. If the product is contaminated with microbes, veterinary staff must take appropriate measures. It is forbidden to slaughter an animal at home. Even if it is necessary to slaughter, it should be subjected to veterinary control and bacteriological examinations.





Control of sick animals and poultry meat before use is also the responsibility of veterinary and sanitary workers. If the quality of prepared food is suspected to be bad, it is sent to the laboratory for chemical analysis and bacteriological examination. Strict adherence to sanitary-hygienic rules in food storage and cooking is one of the main conditions for food preparation.

It is also important to observe the storage and use-by dates of perishable ingredients in the prevention of food poisoning.

Since the source of the infectious disease is a person, it is necessary to carry out medical care among them.

In order to identify and prevent the causes of food poisoning, every case of poisoning must be investigated and taken into account by the sanitary-epidemiological service institutions. Avoiding germ-free food poisoning depends mainly on eliminating the contamination of food products. On August 26, 1996, the Chief State Sanitary Doctor of the Republic of Uzbekistan approved "Sanitary standards and hygienic regulations for the hygienic classification of pesticides according to their toxicity and danger". This document is aimed at preventing the use of new pesticides that are dangerous to human life, protecting the environment, water, air, and soil.

The hygienic importance of technological processing of food products is that when preparing food from grain products, it is cleaned from foreign impurities (stone, sand, soil, iron particles, soot, wood) that are harmful to the consumer and life. In addition, fruits and vegetables are cleaned from soil residues and factors contained in it, worms and larvae. Processing under the influence of heat completely kills microorganisms that have entered semi-finished products from the environment. In addition, spore-forming microorganisms are completely destroyed.

Practical training in the "Food hygiene" section is usually aimed at teaching the rules necessary to ensure healthy eating and clean food preparation. This training may cover the following key areas:

1. Storage of opposite products:

- Food Storage Areas: Checking refrigerator and freezer operation for proper food storage. Creating separate zones for storing products, for example, separate storage of raw meat and cooked food.
- Shelf life check: Check the shelf life of products and their shelf life.

2. Food cleaning and preparation:

- Hands and utensils: Wash hands and clean utensils before preparing food. Use of clean kitchen utensils.
- Checking the quality of water: Checking the purity and safety of water used in food preparation.

3. Food safety:

- Temperature control: Temperature control during cooking and storage to ensure proper cooking and safety of products.
- Prevent contamination: Follow proper hygienic practices in safe food preparation, such as separating raw from cooked products.





4. Keeping documents:

- Recordkeeping: Maintain and manage records related to food safety and hygiene, including records of sanitary inspections and storage conditions.

5. Principles of healthy eating:

- Balanced diet: Apply healthy eating principles to food choices, such as choosing foods rich in vitamins and minerals.

A balanced diet is essential for maintaining good health and well-being. Here are some key principles to apply healthy eating when making food choices:

1. Variety

Include Different Food Groups: Aim to incorporate a range of foods from all food groups: fruits, vegetables, whole grains, lean proteins, and healthy fats. This ensures you get a broad spectrum of nutrients.

2. Fruits and Vegetables

Rich in Vitamins and Minerals: Choose a variety of colorful fruits and vegetables. Dark leafy greens, berries, oranges, and cruciferous vegetables (like broccoli and cauliflower) are particularly nutrient-dense.

3. Whole Grains

Fiber and Nutrients: Opt for whole grains over refined grains. Foods like brown rice, quinoa, whole wheat bread, and oats are high in fiber, vitamins, and minerals.

4. Lean Proteins

Healthy Choices: Incorporate lean proteins such as chicken, turkey, fish, legumes (beans and lentils), tofu, and low-fat dairy. These provide essential amino acids without excess saturated fats.

5. Healthy Fats

Focus on Good Fats: Include sources of healthy fats such as avocados, nuts, seeds, and olive oil. Limit saturated and trans fats found in processed foods and fatty cuts of meat.

6. Limit Added Sugars and Salt

Choose Naturally Sweet Options: Minimize added sugars by opting for whole fruits instead of sugary snacks and desserts. Use herbs and spices to flavor food instead of relying on salt.

7. Hydration

Drink Plenty of Water: Stay hydrated with water, herbal teas, or other low-calorie beverages. Limit sugary drinks and high-calorie beverages.





8. Mindful Eating

Listen to Your Body: Pay attention to hunger and fullness cues. Eating slowly and savoring your meals can help you enjoy your food more and prevent overeating.

9. Portion Control

Balanced Portions: Be mindful of portion sizes. Use smaller plates to help control portions and reduce the likelihood of overeating.

10. Meal Planning

Plan Ahead: Preparing meals in advance can help you make healthier choices and avoid last-minute unhealthy options.

Summary, by following these principles and making conscious food choices, you can create a balanced diet that supports overall health, provides necessary nutrients, and contributes to long-term well-being. Practical trainings serve to increase food safety and ensure healthy eating. The methods and recommendations used in each section may vary depending on the goals and objectives of the practical training.

References

1. Bolshakov A.M. General hygiene. Textbook. – Moscow: GEOTAR-Media, 2014.-P.9-14.
2. Azizov M.A. General hygiene and ecology. - Tashkent: Tasvir publishing house, 2008. - P. 9-15. Iskandarov T.I., Otaboyev Sh.T, Iskandarova G.T. – Toshkent: Hilol Media, 2019. – B. 6-14.
3. Shukurov I.Kh., Maksumov Sh.T., Bozorov Z.M. Sanitation and hygiene. Study guide. - Samarkand: Samarkand Institute of Economics and Service, 2017. - P.65-72.
4. Maxsudov V.G. Integration of theoretical and practical knowledge in laboratory training. - Tashkent: Pedagogy, 2016, No. 6. p. 84-88.
5. Maxsudov V.G. Yeshchyo raz o zadachax po physics. Austria, Vienna: European journal of education and applied psychology, 2016.
6. Maxsudov V.G. Improving the methodology of teaching the "Mechanical Vibrations" department of physics in higher medical educational institutions. - Tashkent: UzksNMU, 2021. -144 p.
7. Maxsudov V.G. Improvement of methodological bases of teaching "Mechanical vibrations" in higher educational institutions. Dissertation. - Toshken: Library of UzMU, 2018. 156 p.
8. Sh Tashkenbayeva U.A., Bazarbayev M.I., Maxsudov V.G. The use of distance learning technologies in the creation of electronic training courses in the Moodle system for professors and teachers of a higher educational institution. Study guide. - Tashkent: UzksNMU, 2021. - 144.

