

Aim of the study. To perform the analysis of salt assortment in the food-market networks and assess the iodine content as well as content loss over time in different types of kitchen salt.

Materials and methods. We conducted the market analysis of the salt assortment present in the food shop networks in Chisinau. The assortment is presented by 27 types of kitchen salt, of which 7 are expensive. From the remaining 20 types, only 6 are iodized. Under laboratory conditions, using ionometry and spectrophotometry, we tested these 6 types of iodine salt for real iodine presence. The experience has been repeated over 15 days to see the dynamic stability of iodine in salt, and over the next 2 years, the experience has been repeated every 6 months to see the changes that have occurred.

Results. In most salt samples tested, iodine concentration was determined within the normal range, except for one type of salt imported from the European Union, with a 19,42 mg/kg concentration at first test and 17,96 mg/kg after 15 days, which proves an instability of the iodine compounds and a concentration below the initial limit. Otherwise, was determined the elimination of the iodine compounds from 1 to 4 percent in 15 days from the initial concentration at the opening of the pack and during the 6 months, the percentage reached 10% of the initial concentration.

Conclusion. In the Republic of Moldova, most of the salt on the market is non-iodized. Iodized salt in the Republic of Moldova corresponds to the iodine load of 83% of the total volume marketed in municipal food shop networks. It is recommended to use iodized salt with commercial brand exchange for prevention of deficient iodine state.

Key words: salt, iodine, endemic goiter, prevention.

211. HYGIENIC ANALYSIS OF ALIMENTARY INTOXICATIONS AND ACUTE DIARRY DISEASES CAUSED BY FOOD IN RISCANI RAY

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Introduction. Alimentary intoxications results from the use of food contaminated with pathogenic or contaminated microorganisms with toxic or non-microbial toxic substances.

Aim of the study. The hygienic evaluation of alimentary intoxication in Rîșcani district during a 5-year period and the elaboration of measures to prevent them.

Materials and methods. A retrospective study on dietary intoxications and acute diarrheal diseases in Rîșcani district was performed over a 5-year period (2012-2016). The main foods incriminated, the causes of the outbreak, the conditions that favored illnesses, the factors and the ways of transmission were established.

Results. Morbidity through food poisoning and acute diarrheal diseases in the Rîșcani district during the period 2012-2016 remains high, constituting an average of 341 cases annually, the morbidity index showing a periodic increase and decrease. Thus the maximum level was recorded in 2012 with 348 cases per 100 thousand populations, and the minimum - in 2016 with 295 cases 100 thousand population. Studying the etiological structure, we found that the vast majority are caused by Salmonella - making up 53%, Escherichia coli - 18% and Staphylococcus aureus - 18%, the others having a small share. It was found that 63% of all said outbreaks took place at home and only 37% in organized collectives. During this period, 718 cases of food intoxication and acute diarrheal diseases were recorded with 1525 affected persons. During the study period, cases of botulism were not recorded. Of the total number of food intoxications, 7 people suffered as a result of the consumption of poisonous fungi. The analysis of the multiannual dynamics of morbidity by food poisoning and acute diarrheal disease has shown that the morbidity index is decreasing, but is still lower in 2016 (372.4% 000 cases) and higher in 2012 (542.6% 000 cases) (19%) and Klebsiella (17%), other microorganisms (Enterobacter, St.

Aureus, Escherichia, Erwinia, Enterococcus and Pseudomonas) with a lower weight. The main incriminated foods were culinary products, milk and dairy products and fish and fish products.

Conclusions. In Râșcani district food poisoning and acute diarrheal diseases remain a current problem because they are recorded annually. In 63% of cases, maladies broke home and only 37% in organized communities. This speaks of improving the hygienic surveillance of food objectives in recent years, but also of the need to promote health among the population.

Key words: food, alimentary intoxications, acute diarrheal diseases

212. THE IMPACT OF FOOD SUPPLEMENTS ON THE HUMAN BODY

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Introduction. We are aware of the fact that the human organism requires daily consumption of food, which gives it a certain amount of energy and trephines. We can provide the human organism with various nutrients: proteins, lipids, carbohydrates, and vitamins. The elements consist of about 70-80 simple compounds: amino acids 23-25, fatty acids 20, mineral elements 15-20, vitamins 12-13 (M. Barnea, Al. Calciu, 1979).

Aim of the study. Currently, the population confront with serious problems related to influence of toxic substances on the products quality and their influence on the human health. The lack of material resources and lack of knowledge about healthy nutrition in the Republic of Moldova lead to consumption of products containing food supplements.

Materials and methods. At present time, there is a very high aversion to the use of food additives, and are explained by the negative effects of uncontrolled use of chemical agents in the foodstuffs. According to Codex Alimentarius, we can state according to International (as well as to national) specification lists, the additives are divided into 25 categories: coloring agents (E100-E182); preserving agents; antioxidants; emulsifying agents; melting salts etc. Additives cause allergies, manifested by rash, limbs swelling itching as asthma skin, in the case of the sick persons.

Results. The allergies effects are: itchy nose, sneezing, heavy breathing, anaphylactic shock. For example, E-123 is a coloring agent causing eczema, asthma, ADHD syndrome, some forms of cancer. In the Republic of Moldova, the prevalence of allergic rhinitis according to the official statistical data of the National Center for Health Management is also in increase. Statistics show that in 2015, 934 cases of allergic rhinitis were among the children under the age of 18, out of whom 698 were new illnesses. The number of dermatitis was 11,911 cases, out of which 11,358 are new cases. Compared to 2011, allergic rhinitis was nearly 360 less, and dermatosis - of 1,711 more. A patient suffering from an allergic disease must be aware of the precautionary measures and the measures as a matter of urgency. The test required to detect allergic diseases is anamnesis, There are also various tests used to identify allergens: nonspecific tests, specific skin test (patch test, prick test).

Conclusions. However, the action of all substances is rather various and has a directly or indirectly influence on the human organism (through primary influence on food). Typically, these are chronic intoxications, and various slow evolution diseases. Thus, we can say that we do not have to consume food products containing trephines, but only healthy foodstuffs that will help to our body growth and its development.

Key words: supplements, allergies, coloring agents

213. SLEEP AND CIRCADIAN RHYTHM DISRUPTION IN SHIFT WORK

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