"DO YOU KNOW THE NORM OF NITRATES?»

Tukhtarov B.E.

Samarkand region, Sammi Department of "general hygiene and ecology" Ph.D. associate professor

Abdumuminova R.N.

Assistant of the department "general hygiene and ecology" of Samarkand region, Sammi PhD

Annotation

Currently, there are increasing cases of an increase in the amount of nitrate in the composition of food around the world and its significant effect on the human body. The factors that cause this are a number of ways to get them into the body, as well as the regulation of the norm plays an important role. Vegetables and melons, which have been ranked among the marketplaces since early spring, are also the cause of increasing nitrate poisoning among the population due to the fact that the content of drinking water and meat and meat products has increased from the norm, as well as the excess of the daily rate of entry into the body during human consumption.

Base phrases:

Food insecurity, nitrate, nitrite, nitrate poisoning, the daily norm of nitrates, food, methemoglobinemia.

Introduction.

The main key to ensuring socio-economic and political stability in the world is to provide the population with food. The increasing number of the population Year by year also increases the need for food in evazi. Food security is one of the most pressing problems in the world. And also poisoning from food, in particular from nitrates, takes a key place in them. Several resolutions on food security have been adopted in the Republic, including the decree of the president of the Republic of Uzbekistan "on measures to ensure further food security of the country" PF 5303 in 2018-year 16 January...it is defined as "filling the market with quality, safe, cheap food products".

It is no secret that today, along with the development of agricultural technology, their misuse has a negative impact on the composition and quality of food. Due to the excessive use of nitrogen fertilizers to increase crop yields, the content of nitrates and nitrites in vegetables and melons is growing, causing various inconveniences when consumed by the population.

The main carriers of nitrate to the body are vegetables, potatoes, melons, fruits and berries. Among them, the maximum level of nitrates is noted in leafy soups, beets and white cabbage in the morning (summer varieties). A significant amount of nitrites falls on the body in combination with sausage products. Excessive accumulation of nitrates in feed raw materials leads to a decrease in its nutritional volumetric: vitamins, carbohydrates, amino acids are reduced, the mineral content of the product changes [3; 336 p.].

Absorption of nitrates occurs mainly in Uranium. For 8 hours with a rash, up to 90% nitrates decompose. Clinical signs of poisoning with nitrates appear 6 hours after they get into the body, and the liver becomes enlarged and aching when palpating, characteristic in the form of mixed dyspeptic disorders with sub icteric sclera. Also, on the part of the nervous system, symptoms of changes – general malaise, strong headaches in the pelvis, drowsiness, dizziness, darkening of the eye area, impaired coordination of movements can be observed. The vasodilating effect of nitrates leads to a decrease in arterial blood pressure, sinus arrhythmia, pain in the chest, shortness of breath [2; 263 p.]. Increased by the norm, nitrate turns into nitrite in the body, attaches to hemoglobin in the blood and turns into methemoglobin, and it no longer infects the function of oxygen transport. [4; 2181p.].

According to World Health Information, the permissible amount of nitrate in food is 1 kg per day for adults 3,7 mg.ni for those who have an average weight of 60 kg, reaching 222 mg, this is the norm. In Table 1, which is presented below, the permissible norm of the amount of nitrate in the composition of melons and fruit products is presented. Excess of these indicators of daily consumed vegetable and vegetable melons is considered dangerous for human health.

Table 1
Permissible norm of the amount of nitrate in the composition of vegetable and melons*

Nº	Name	The amount of nitrate
		is mg/kg
1	Large lake	2000
2	Cucumber	150-400
3	Calm and isolated	400
4	Carrot	250
5	Beet	1400
6	Prime	900
7	Potatoes	250
8	Tomatoes	150-300
9	Bulgarian pepper	200
10	Head onion	80
11	Grape	60
12	Apple	60
13	Apricot	60
14	Strawberry	100
15	Melon	90
16	Watermelon	60

^{*-} https://www.botanichka.ru/ site information

It should be noted that at present, a number of scientists on the observance of the permissible norm of the amount of nitrate in the composition of food by a number of scientists abroad have discovered that the content of nitrate in the diet can not exceed A.T.Donald, D.Blue, M.Super, H.V Heese, D. Mackenie and others. In our country, detailed information is provided in the textbooks and monographs recommended by Ph.D., Professor G. Shaykhova, Sh.I. Karimov. However, due to the shallow knowledge of the population about the effects of nitrates in food on the body and their poisoning, various frustrations occur in early spring.

In general, for the healthy growth of the future generation, as well as maintaining a healthy lifestyle, of course, requires adherence to food safety.

Conclusion.

On the basis of the above information it is worth to conclude that in the conditions of the Republic there are not enough scientific works on the standard of nitrates contained in food, of course, it is necessary to carry out doctoral scientific work in this field and take medical profilactic measures among the population.

Used literature

- 1. Decree of the President of the Republic of Uzbekistan dated January 16, 2018 No. PF 5303
- 2. Karimov Sh.I. Healthy eating is a criterion of health, Tashkent 2015
- 3. Shaykhova G.I. Food hygiene Tashkent 2011

https://conferencepublication.com

4. Zhu S.G. et al. Dietary nitrate supplementation protects against doxorubicin-induced cardiomyopathy by improving mitochondrial function. Journal of the American College of Cardiology, 57 (21): 2181–2189. (2011)

Websites:

- 1. https://24tv.ua/health/ru
- 2. https://www.botanichka.ru