



Journal Website:

<http://usajournalshub.com/index.php/TAJMSPR>

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

On The Importance Of The Human Body, Nitrates

Abdumuminova R.N.

Samarkand State Medical Institute, Department of General Hygiene and Ecology, Uzbekistan

Baratova R.Sh

PhD, Samarkand State Medical Institute, Department of General Hygiene and Ecology, Uzbekistan

Bulyaev Z.K.

Samarkand State Medical Institute, Department of General Hygiene and Ecology, Uzbekistan

ABSTRACT

Currently, the role of food security in maintaining public health is high. Gastrointestinal and many other diseases can develop if the composition of food does not meet sanitary and hygienic requirements. As a result of the development of agro-industry, as a result of excessive and irregular application of nitrogen fertilizers, the amount of nitrate in fruits and vegetables is increasing. The negative and positive effects of nitrates on the body have been identified, and it has been found that nitrates consumed on a daily basis are important in maintaining our health.

KEYWORDS

Food safety, organic products, nitrates, nitrites, food poisoning, mineral fertilizers

INTRODUCTION

More than 420,000 people died in the poor quality of food consumed, and about 600 million people - sanitar- that does not meet hygiene standards' food products to the

consumer, after health violation in the world. Also , food-related risks lead to the development of more than 200 acute and

chronic diseases of the gastrointestinal tract, cancer [1].

The quality and safety of food is one of the most important issues in ensuring the health of the population. Food security is that the peculiarities of the production of food products to the he is up to and fro processing and service chain, each of which is associated with the risk. FAO is an international organization that oversees all aspects of the food chain and thereby implements a single overall vision of food security. This is facilitated by cooperation with the World Health Organization (WHO). Through their additional mandates, the FAO and WHO address a range of issues related to global food security and consumer health.

MATERIALS AND METHODS

The role of agro-industry in the production of quality food products is invaluable, which also leads to an increase in demand for food products due to population growth. Accordingly, the excessive use of mineral fertilizers in recent years to increase agricultural productivity has led to the accumulation of nitrates in fruits and vegetables, especially in early spring due to the excess of nitrate in strawberries, spinach, cabbage, beets, watermelons and others. It is no secret that they cause diseases.

Also, due to excessive and irregular application of nitrogen fertilizers, the amount of nitrates in drinking water is increasing as a result of soil washing and absorption into groundwater. In addition, meat and meat products are also treated with nitrates, which give them color, taste and long-term storage properties.

Europe at the amount of nitrates academic average of 5% of processed meat, vegetables and more than 80% of the corresponding[2]. Excessive intake of nitrites in the body leads to serious health disorders (primarily in children

and the elderly). Absorption of nitrates occurs mainly in the stomach. Up to 90% of nitrates are excreted in the urine within 8 hours. After the clinical symptoms of poisoning by nitrates organism 1 - 6 hours after the visible and palpable enlarged liver and stomach, mixed with scleral subikterikligi dyspeptic disorders characterized by the form. Changes in the nervous system can also be observed - symptoms of general malaise, severe headaches in the temples, drowsiness, dizziness, darkening of the eyes, impaired coordination of movements. The vasodilating effect of nitrates leads to a decrease in arterial blood pressure, sinus arrhythmia, chest pain, shortness of breath.

N and excreted nitrate is one of the main components of the T-forming salts, fertilizers and many people depend on farming practices such fertilizers is growing over the years has led to increase in the level of irritation. Long years, the people of dietary sources of nitrates metemoglobinemiya and cause cancer, and that it is harmful to human. However, it has also been found that normally taken nitrates are important for the body.

Accordingly, daily norms of nitrates in food for consumption have been developed for the body. At the beginning of nitric oxide in the 1980 Road E in the body nitrates prosecution email will be generated ndogen di, this is about the safety of nitrate. Nitrate and nitrite consumption e ng advantage of the most discussed and described its positive effects on the cardiovascular system is established. Recently, the heart and blood vessels, and infectious diseases, and to protect the sources of nitrate diet dishes were revealed. Tests in animals have shown that dietary nitrates and nitrites lower blood pressure through their antioxidant properties. Such a decrease in blood pressure by nitrates is due to the conversion of nitrates to nitrites and NO, which requires an assessment of the risks and

benefits associated with nitrates in our food and water supply. It should only be noted that in the elderly and infants (1-2 years) it is necessary to limit the amount of nitrate entering the body through water and milk.

According to the World Health Organization, the permissible amount of nitrate in food is 3.7

mg per 1 kg per day for adults, and 222 mg for those weighing an average of 60 kg.[2] . Table 1 below shows the permissible levels of nitrate in melons and fruits. Exceeding these indicators of daily consumption of vegetables and melons is considered dangerous for human health.

Table 1
Permissible norm of nitrate content in vegetables and melons *

Nº	Nomi	Nitrate content mg / kg
1	Greens	2000
2	Bodring	150-400
3	Pumpkin	400
4	Carrots	250
5	Beets	1400
6	Cabbage	900
7	Potatoes	250
8	Tomatoes	150-300
9	Bell peppers	200
10	Onion	80
11	Grapes	60
12	Don't	60
13	Apricot	60
14	Strawberries	100
15	Melon	90
16	Watermelon	60

* - Information from the site <https://www.botanichka.ru/>

It should be noted that, at present, a number of scientists by the amount of food containing nitrates allowed by the standards of many scientists abroad A.T.Donald, D. Kay, M. Super H . V , HEES , D . Data collected by Mackenie et al. In our country, detailed information is provided in the textbooks and monographs

recommended by Ph.D., Professor G. Shaykhova, Sh.I. Karimov. Hence, it is important to control the order in which nitrates in food enter the body . In general, healthy growth for the next generation, as well as a healthy lifestyle, of course requires adherence to food security.

CONCLUSION

Based on the above data, it is worth noting that in the conditions of the country there is not enough scientific work on the content of nitrates in food, which necessitates doctoral research in this area and the implementation of preventive measures among the population.

REFERENCES

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
4. The Future Of Food Safety First FAO / WHO / AU International Food Safety Conference Addis, 12-13 February
5. Zhu SG 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)
6. Nitrates and Nitrites in Foods Harmful? Kris Gunnars, BSc - Medically reviewed by Atli Arnarson BSc, Updated on February 10, 2020
7. Advances in Agronomy Volume 119, 2013, Pages 153- 182 Chapter Three - The Role of Nitrate in Human Health Author links links overlay panel Nathan S.Bryan

Websites :

1. <https://24tv.ua/health/ru>
2. <https://www.botanichka.ru>
3. <http://www.fao.org/food-safety/ru/>
4. <https://pubs.acs.org/doi/10.1021/acs.jafc.9b01194>

[1] <http://www.fao.org/food-safety/ru/>

[2]
<https://pubs.acs.org/doi/10.1021/acs.jafc.9b01194>