

## PRIMARY PREVENTION OF DIABETES

*Tashkent Medical Academy*

*"Organization and management*

*of higher nursing work"*

*major, 1st year graduate student.*

***Shodiyabonu Erkaboyeva***

*shodiyabonuerkaboyeva@gmail.com*

*Senior teacher of TTA JSSM*

***Adilova Zilola Ulmasovna***

**Abstract:** this article discusses the causes of diabetes, its origin and preventive factors, as well as primary prevention.

**Key words:** diabetes, diabetes mellitus, diabetes symptoms, insulin, physical activity, hypoglycemia, diabetes diet, metabolic syndrome, diabetes complications.

Diabetes is one of the most common diseases in the world today. This disease makes life difficult for many people and causes serious damage to health. Prevention of diabetes is an important step to prevent this disease and reduce the risk of its development. A detailed knowledge of the primary prevention of diabetes and useful information about what to do to maintain your health can be an important tool for your life.

Factors such as modern lifestyle, improper diet and lack of physical activity are causing the wide spread and appearance of diabetes. But with the help of preventive measures, this risk can be reduced. Diabetes information and research show that it is very important to take certain measures to prevent the disease. Therefore, it is desirable

for everyone to learn, follow, and use preventive measures to control their health and protect themselves from diabetes.

Diabetes mellitus is a disease caused by insulin deficiency and metabolic disorders in the body. Diabetes has been known in Eastern folk medicine for a very long time. Abu Ali ibn Sina pays special attention to this pain. "Water comes out the way it was drunk," he explains. If the patient drinks a lot of water, it causes other diseases, and the patient becomes very thin. After stopping the treatment, the doctor says: "Give the patient cold liquids, put them in a cooler, drink sour yogurt, give them fruits, drink mint, that is, wet the patient and cool him." This means that the disease occurs due to excess heat in the human body. According to historical medical sources, it is observed that diabetes can be hereditary. In diabetes, the sugar content in the blood increases sharply, it is excreted in the urine (it contains sugar content), thirst, weight loss, weakness, body itching and other symptoms appear. In this regard, European scientists also cite the following points:

Dr. Frank Hu (Harvard T.H. Chan School of Public Health) "Through a healthy lifestyle, physical activity and proper nutrition, the development of diabetes can be significantly reduced. These simple but effective measures are important in preventing the disease " - puts forward the idea.

Also Dr. William C. Knowler (National Institute of Diabetes and Digestive and Kidney Diseases): "Regular testing and control of blood sugar levels is important in the prevention of diabetes. Unregulated sugar levels lead to the development of the disease." - says that it is necessary to prevent diabetes.

Based on the above considerations, the following can be recommended for primary prevention of diabetes:

1) Changing the lifestyle - changing the lifestyle is important in preventing diabetes. Regular physical activity and correct

nutrition is beneficial for the human body and helps maintain normal blood sugar levels. For example:

- Physical activity: at least 150 minutes of moderate or vigorous physical exercise per week is recommended;
- Eat a healthy diet: Eat foods rich in fruits and vegetables, whole grains, lean proteins, and omega-3 fatty acids.

2) Controlling body weight - controlling body weight significantly reduces the risk of diabetes. Overweight and obesity increase insulin resistance in the blood, which can lead to diabetes. To maintain a healthy weight:

- Diet control: choose low-calorie and low-fat foods;
- Regular activity: increase physical activity and avoid a sedentary lifestyle.

3) Controlling sugar levels - Regularly checking blood sugar levels and keeping them at normal levels is important in preventing diabetes. To achieve this goal:

- Analysis of the diet: it is necessary to control the glycemic index of food;
- Regular medical examination: It is necessary to undergo regular medical examinations.

4) Healthy lifestyle - a healthy lifestyle significantly reduces the risk of diabetes. This includes:

- Avoiding bad habits: Smoking and excessive alcohol consumption should be avoided.
- Adherence to the sleep regime: Sufficient and quality sleep should be ensured, because lack of sleep can also affect the development of diabetes.

Of course, every patient, before becoming a patient, uses the first primary preventive measure if he starts a healthy lifestyle. Such words of Ibn Sinoni are famous

among our people - "we are three people in overcoming the disease. You and me and disease. If you are on my side, we are strong, we will overcome the disease, and if you are on the side of the disease, I will be defeated." , it is appropriate if we follow a healthy lifestyle.

Ibn Sina (Avicenna) presented his views on diabetes. In his teaching, he emphasized that the "temperament" of diabetes mellitus changes to the "cold" side. He also considered the methods of treatment of this disease.

In his works, he talked about the possibility of using synthetic and chemically developed drugs for the treatment of diabetes. Ibn Sina considered this disease to be one of the most urgent problems of modern medicine.

A national program was developed by the decrees of our president to prevent this disease and provide more effective medical care to the population. It is even more important to determine what to focus on when looking at the main primary prevention measures of diabetes. It can be explained as follows:

First, the forms of the disease - to determine which of the four clinical forms it is;

Secondly, the causes of origin - which clinical type, that is, type 1 and type 2 diabetes are the most common types of the disease. The insulin-dependent form of diabetes develops as a result of the destruction of  $\beta$ -cells that produce insulin, as well as as a result of autoimmune damage to the pancreas;

Thirdly, the factors causing the development of diabetes - Excess weight;

- Genetic predisposition, because 9% of patients with the disease have relatives with diabetes;



- Improper nutritional composition (lack of fiber and high carbohydrates in the diet);
- Taking diabetogenic drugs (diuretics, glucocorticoid hormones, cytostatics, hypotensive drugs);
- Presence of cardiovascular diseases.

Fourthly, monitoring the symptoms of the disease - the first type of diabetes is acute, and the second, on the contrary, develops slowly. There is also an asymptomatic type of the disease. Both types of diabetes have different symptoms, but they also have common symptoms.

Fifth, conducting a diagnostic analysis - Diabetes is diagnosed when the fasting blood sugar level exceeds 6.5 mmol/l. People with diabetes do not have glucose in their urine, because the kidneys do not allow it to pass, but when the blood sugar level exceeds 8.8 mmol/l, glucose is present in the urine. If there is a suspicion of the disease, the doctor recommends the patient to undergo an examination and directs the following tests.

Effective work is being done in this regard in our country. At the same time, further development of the endocrinology service involves taking comprehensive measures to assess the epidemiological situation and prevent the occurrence of diabetes and iodine deficiency, as well as to combine the areas of endocrinology with the areas of pediatric endocrinology that are in high demand. requires reconsideration. In 2019-2021, the national program for improving endocrinology care for the population of the republic was put into practice by the decisions of our president. It has the following goals:

Implementation of comprehensive measures to provide children, adolescents and pregnant women diagnosed with diabetes with analogue insulin and insulin delivery devices and self-monitoring tools;

On the basis of regional self-monitoring schools, involving professional instructors, training patients with endocrine diseases and their family members in proper management and control of diseases;

Improvement of the system of training, retraining and advanced training of medical personnel of endocrinology institutions, as well as strengthening their personnel potential;

Expanding the scope of local scientific research in the field of endocrinology, international cooperation, and applying world best practices and scientific developments to healthcare practice;

Modernization of endocrinology institutions by construction of new endocrinology institutions, reconstruction and overhaul of existing ones, equipping them with modern diagnostics and special medical equipment, instruments and inventories (additional equipment) and further strengthening their material and technical base and financial support. Support measures have been introduced.

Diabetes does not discriminate between age and gender. Symptoms of this disease can be observed at any age. It is known that the human body stops growing at the age of 25. Therefore, the body weight at the age of 25 is called normal weight

accepted. Everyone should be able to maintain the weight of this age until the end of life. The pancreas, which is already adapted to deliver insulin to the weight of this age, naturally cannot deliver more than this. As a result, sugar metabolism goes out of control. Due to the lack of insulin, excess sugar that is not used or absorbed by the body accumulates first of all in the blood. The amount of sugar in the blood increases and exceeds its normal limit and begins to be excreted through urine. The more sugar accumulates in the blood, the more water you drink and the more you urinate. Thus, the main symptoms of diabetes are known as drinking a lot of water (thirst) and urinating a lot. At the same time, poor absorption of sugar by the body due to low production or lack of insulin also causes the patient to feel hungry. But the patient

cannot eat a lot of food, because the food cannot be digested due to the lack of insulin, the patient begins to lose weight. Instead of a conclusion, it is desirable to give the following recommendations is relevant: what changes in the body of patients with diabetes lead to the development of cardiovascular diseases?

1. AG - high blood pressure
2. Insulin resistance - low sensitivity of tissues and cells to insulin
3. Genetic factors - hereditary predisposition
4. Obesity 5. Low mobility.

In order to prevent the above factors in their lifestyle, everyone should follow a healthy lifestyle as a primary preventive measure, undergo regular medical examinations, and arrange their internal and external needs. Today, various medical conferences are held to prevent this disease and to take measures, including, on June 14, 2023, the Department of Internal Medicine and Endocrinology No. an international scientific-practical conference was held. At the conference, modern views of scientists and experts on early diagnosis and treatment of endocrinological diseases, comorbid conditions, management and rehabilitation of patients with diabetes, and disease prevention were presented.

In it, the First Moscow State Medical University named after M. Sechenov;

V.G. I.I. of the Ministry of Health of the Russian Federation Northwestern State Medical University named after Mechnikov; Uzbek scientists from the National Academy of Sciences of Ukraine gave a lecture to the leading experts in the field, and ideas were exchanged through interesting lectures.

In conclusion, it should be said that it is important to lead a healthy lifestyle to prevent diabetes. Measures such as regular physical activity, proper nutrition, control of body weight and regular testing of blood sugar levels can significantly reduce the

risk of developing diabetes. A healthy lifestyle includes avoiding bad habits and getting enough sleep.

According to scientific studies and experts, these preventive measures play an important role in preventing diabetes and reducing its complications. Therefore, everyone should pay attention to their health and follow these preventive measures.

### **List of used literature:**

1. Decision of the President of the Republic of Uzbekistan, PQ-4295 dated 04.19.2019/  
<https://lex.uz/ru/docs/-4295527>
2. Dr. Frank Hu Harvard T.H. Chan School of Public Health.  
. Dr. William C. Knowler (National Institute of Diabetes and Digestive and Kidney Diseases)
4. 4. Matokhin Z.P. Basic physiology, nutrition, hygiene and sanitation. Textbook.  
Moscow, 2002. -C. 198-233.
5. Ibragimov Takhir "Diabetes with rapid improvement" Tashkent-2019 148 b
6. Mamadalieva Z. R. Saidmurodova Z. Znachenie mikroelomov v jivyx  
organism. Samarkand-2015 year 34 p
7. Sabirova R, A. Biological chemistry. Tashkent, Ijod Pechat. 2020
8. <https://med24.uz/uz/bolezni/sakharnyy-diabetes>
9. "The Canon of Medicine (Al-Qanun fi'l-Tibb)" by Avicenna.
10. - "Avicenna's Medicine" by Mones Abu-Assab, Hakima Amri, and Marc Micozzi.
11. <https://med24.uz/uz/bolezni/sakharnyy-diabetes>.
12. <https://scientific-jl.org/new/article/view/7199> "1".