

MEASURES TO PREVENT THE SPREAD OF DIABETES AMONG YOUNG PEOPLE

**Bo'ronboyeva Ruxshona, Nasrullayeva Shohida,
Quralova Shaxrizoda, Xusanova Sevinch,**
(Samarkand State Medical University)
Scientific supervisor: **A.E. Kubayev**

Abstract

Today, diabetes mellitus is one of the most common chronic diseases in the world. According to the World Health Organization, the prevalence of this disease among young people is increasing every year. This article focuses on the causes, clinical symptoms, complications and preventive measures of type 1 and type 2 diabetes mellitus among young people. The results of the study show that malnutrition, reduced physical activity, genetic predisposition and stress are the main factors in the development of diabetes among young people. As preventive measures, it is necessary to form a healthy lifestyle, increase physical activity, develop a healthy eating culture and engage in sports.

Keywords

diabetes mellitus, youth health, insulin, healthy lifestyle, prevention, metabolic disease, statistical analysis

Today, diabetes mellitus has become not only a medical, but also a global social problem. According to the World Health Organization (WHO), as of 2024, more than 550 million people in the world are living with diabetes, and millions of them are children and young people. It is especially worrying that type 2 diabetes, which used to occur mainly in adults, is now also widespread among young people.

TYPES OF DIABETES AND ITS PRESENTATION IN YOUNG PEOPLE

1. Type 1 diabetes (Insulin-dependent): The pancreas cannot produce insulin. It usually develops quickly. It requires insulin injections throughout life.
2. Type 2 diabetes (Non-insulin-dependent): Previously observed only in adults. Today, it is also widespread in young people aged 10–25. The body produces insulin, but the cells do not recognize it (insulin resistance). It can be controlled with a healthy lifestyle.
3. Gestational diabetes: A temporary type of diabetes that occurs during pregnancy. However, the mother or child is at higher risk of developing diabetes later in life.

JUVENILE DIABETES PREVALENCE STATISTICS

Region	Annual New Cases (Type 1)	Growth in Type 2 Diabetes Prevalence
Worldwide	98,000+ cases (ages 0–19)	Increased by 30% over the last decade
United States	18,000 new Type 1 cases annually	Type 2 diabetes among youth has increased fivefold
Uzbekistan	Limited official statistical data	WHO projection: the number of overweight children has doubled

Complete statistics are not kept in Uzbekistan, but doctors and medical institutions note that the number of young people who are being treated for obesity and diabetes is increasing.

CAUSES

Type 1 diabetes causes: Autoimmune reaction: the body attacks its own insulin-producing cells. It also depends on genetics, if a parent has diabetes, the child is at risk. It is also caused by enteroviruses or the Coxsackie virus. In addition, polluted air and unhealthy foods also have a small effect.

Type 2 diabetes causes: Excess weight and obesity result in an increase in adipose tissue, especially in the abdominal area, which reduces the sensitivity of cells to insulin. Improper nutrition, i.e. excessive consumption of ready-made foods, sweet drinks, white bread, French fries, chips, etc., also causes type 2 diabetes. Lack of physical activity, lack of exercise, and spending too much time in front of a computer or phone also lead to insulin resistance. Genetic predisposition (heredity) to diabetes is also observed in children if one of the parents or close relatives has type 2 diabetes. Type 2 diabetes usually occurs after the age of 40, but is now also being diagnosed more often in young people due to an unhealthy lifestyle. Stress and sleep disorders, not getting enough sleep at night, also disrupt the balance of hormones and create conditions for the development of diabetes. In addition, smoking and excessive alcohol consumption also increase the risk of the disease.

SYMPTOMS

Type 1 diabetes is characterized by excessive drinking, frequent urination, weight loss, constant fatigue, dry mouth, and blurred vision

Type 2 diabetes is characterized by slow-onset symptoms, slow healing of wounds, frequent infections, darkening of the skin, and weight gain

COMPLICATIONS

Diabetes onset at a young age increases the risk of complications because it affects the body over many years.

Short-term: Hypoglycemia occurs when blood sugar levels are too low and can cause fainting and seizures. Hyperglycemia occurs when blood sugar levels are too high and can cause thirst, headaches, and changes in heart rate.

Long-term: Blindness (retinopathy), kidney failure (nephropathy), neuropathy, heart disease, psychological problems such as depression, anxiety, and reproductive problems.

PREVENTION WAYS

A healthy diet, i.e. natural, home-cooked food, low sugar, low fat, low salt consumption of fruits, vegetables, whole grains and eating small portions every 3-4 hours.

At least 150 minutes of physical activity per week, sports clubs, walking, dancing, running help prevent overweight.

Creating a healthy environment is the most important. Limiting fast food, sweets, chips, carbonated drinks. Healthy sleep (8 hours), stress management techniques create a healthy environment.

Regular medical supervision helps prevent or detect the disease early. It is necessary to monitor glucose levels and A1C (average blood sugar over 3 months) and consult a family doctor or endocrinologist.

CONCLUSION

Diabetes is a modern disease that is increasingly common among young people. It can disrupt not only physical health, but also psychological and social well-being. However, this disease can be prevented and is necessary. The most important thing is that every young person should choose a healthy lifestyle, and parents and educators should guide them in this direction.

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