

Diabetes

Disease

Diabetes is a disease characterized by the inability of the body to produce insulin or use insulin properly, and by high blood glucose levels, as insulin is the “key” that unlocks the “doors” to the cells and allows glucose to enter. If insulin is missing, glucose remains in the blood instead of providing the cells with energy.

Two major types of diabetes are distinguished:

- Type 1 diabetes is caused by destruction of the insulin-producing cells of the pancreas. It tends to develop before the age of 30 but may occur at any age. It affects about 10% of all people with diabetes globally.
- Type 2 diabetes is much more common and accounts for 90 to 95% of all diabetes cases worldwide. This form of diabetes occurs almost entirely in adults and is due to the progressive failure of appropriate insulin production of the pancreas and from the inability of the body to respond to the action of available insulin.
- A third type, the so-called gestational diabetes, is a temporary form of insulin resistance that may occur during pregnancy. It affects ca. 4% of all pregnant women.

Complications from diabetes, such as coronary artery and peripheral vascular disease, stroke, diabetic neuropathy, amputations, renal failure and blindness, are resulting in increasing disability, reduced life expectancy and enormous health cost for virtually every society.

Prevalence

According to current estimates of the International Diabetes Federation, about 246 million people are affected by diabetes worldwide. In 2025 some 380 million people are expected to have diabetes. In other words, it is likely to increase by more than 50% in about 20 years. It is the fourth leading cause of death in most developed countries. Every 8 seconds a person dies from diabetes and its complications.¹

Diabetes is certain to be one of the most challenging health problems in the 21st century. In December 2006, the General Assembly of the United Nations passed a landmark resolution recognizing the global threat of the

diabetes epidemic.²

For the first time, governments have acknowledged that a non-infectious disease poses an as serious threat to world health as infectious disease like HIV/AIDS, Tuberculosis and Malaria.

Prevention & Therapy

Diabetes can be avoided by

- Appropriate diet
- Weight reduction to normal, supported when necessary by a weight management program
- Increased physical activity

People with diabetes can lead a normal and active life. One important requirement is that they learn how to manage their diabetes:

- Testing blood glucose regularly
- Be aware of glucose levels and level of control of glycemia
- Modify lifestyle with increased physical exercise, adopted diet and eating habits

In people with diabetes who are overweight or do not take sufficient exercise, appropriate lifestyle changes can have significant positive impact on the disease. Effective weight control is therefore very important in the long-term management of type 2 diabetes. Moderate weight loss of 5 to 10% of body weight can improve blood glucose levels and also the responsiveness of the body to insulin.

Control increased blood glucose levels with antidiabetic drugs that increase insulin production in the pancreas and/or improve the ability of the body's cells to respond to insulin.

In the later stages of type 2 diabetes, use of insulin may become essential. As a type 1 diabetes patient the use of insulin is mandatory at all stages of the disease either via injections or continuously with an insulin pump.

For further information please visit: www.accu-chek.com

References:

1 IDF Atlas 3rd edition, 2006

2 United Nations resolution 61/225, 20th December 2006