

Diabetes

What is it?

Diabetes is a disease that is characterized by elevated blood glucose (blood sugar) levels in the blood stream. It can lead to many complications like diseases of the heart, kidneys, nerves, and eyes. If not treated properly it can cause heart failure, kidney failure, neuropathy (disease or dysfunction of the nerves). Diabetes will also slow down the body's healing process. Glucose (sugar) is necessary for our bodies to function and service. The problem with diabetes is that glucose is stuck in the blood stream instead of being used properly through the body.

Know your numbers?

Most guidelines use the standard diagnostic criteria proposed by IDF and World Health Organization (WHO) (Table 2).

Test	Intermediate Hyperglycemia ("Prediabetes")	Diabetes
Fasting glucose	100-125 mg/dL (6.1-7.0 mmol/L)	≥126 mg/dL (7.0 mmol/L)
OR 2-hour glucose following ingestion of 75-g glucose load	140-199 mg/dL (7.8-11.0 mmol/L)	≥200 mg/dL (11.1 mmol/L)
OR random plasma glucose in symptomatic patient		≥200 mg/dL (11.1 mmol/L)
OR HbA1c		≥6.5% (48 mmol/mol)

Fasting is defined as no caloric intake for at least 8 hours.
The HbA1c test should be performed in a laboratory using a method that is NGSP-certified and standardized to the Diabetes Control and Complications Trial assay.
The 2-hour postprandial glucose test should be performed using a glucose load containing the equivalent of 75-g anhydrous glucose dissolved in water.

What can help improve glucose levels?

Exercise has been proven to be an effective way of reducing the complications and effects of diabetes. Studies have reported that endurance and resistance training has decreased glycemic levels in less than 12 weeks with an exercise plan. The exercise recommendations are:

- 150 minutes of exercise a week, no longer than a two-day gap. Example: 40 minutes on Monday, 40 minutes on Wednesday, 40 minutes on Friday, 30 minutes on Sunday.
- Endurance training. That means think longer not faster. It's about going for a longer period at a comfort pace.
- Resistance training. This means exercising against some force other than gravity. You can use weights, resistance bands, balls, weight machines, even your own body weight.

***Check with your health care provider before starting any new exercise program. ***

What do you see?

There are some things you should watch out for when it comes to diabetes.

- Inspect feet. Check for feet for deformities, sores, burns, calluses, corns, and swelling.
- Inspect legs. Check the temperature of the skin on your legs with your hand to make sure you do not feel any unusual warm spots. Also check for sores, bursas, and swelling.

References

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