

What are the symptoms of type 2 diabetes?

Type 2 disease advances very slowly, sometimes without external symptoms. 1 in 3 diabetes cases are diagnosed only after complications develop. In these instances some of the effects may be irreversible.

The most common external symptoms of type 2 diabetes are excessive thirst; frequent passing of urine; hunger; unintentional weight loss; lack of energy; blurred vision; slow healing cuts or bruises; tingling or loss of feelings in hands or feet; recurring infection of the skin, gum, vagina, or urinary tract (2).

How to prevent or minimize type 2 diabetes complications?

To avoid complications it's important to detect diabetes as early as possible. Those who are overweight or obese and over 45 years of age, would be wise to request simple diabetes test from their doctor once a year.

For those diagnosed with type 2 diabetes, maintaining good control of blood glucose, blood fats and blood pressure are priority goals. To achieve good control of blood glucose, both medications and lifestyle changes may be needed. Lifestyle changes include a healthier eating plan and physical exercise.

Regular visit to the doctor's office will also ensure early detection of any developing health complications.

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What You Should Know About

TYPE 2 DIABETES
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What is type 2 diabetes?

Diabetes is a condition characterized by high blood sugar levels and undesirable changes in blood fats (1). Type 2 diabetes is the most common type of diabetes. 85 - 95% of all diabetes cases are type 2 diabetes. It usually occurs in adulthood, although a small but increasing number of children and adolescent who are overweight are developing the illness also.

How many people are affected by type 2 diabetes?

India has the highest number of people with diabetes in the world (35.5 million persons), followed by the People's Republic of China in second place with 23.8 million diabetics. In 2003, 39.3 million people in the South-East Asian region were estimated to be diabetic, which is equivalent to 5.6% of the population.

Who is at risk of type 2 diabetes?

Family history of type 2 diabetes: Genetic plays a role in type 2 diabetes. If one or more direct family has type 2 diabetes, the risk of developing diabetes is significantly increased.

Overweight and obese people: More than 8 out of 10 type 2 diabetics are either overweight or obese.

Inactive persons: Type 2 diabetes usually affects more sedentary persons. Being physically active can reduce the chance of developing type 2 diabetes by half.

Advancing age: 1 in 5 persons over 65 years old has type 2 diabetes.

How can I prevent or delay the onset of type 2 diabetes?

1. Avoid Excess Body Weight

Reducing excess body weight by 7 - 10% of current weight halves the chance of developing type 2 diabetes.

Assessing overweight/obesity

*BMI (Body Mass Index) is a common method for assessing overweight and obesity. BMI of 18.5 to 22.9. is low risk for most Asian populations, although 18.5-25 is recommended for some.

*** Fat accumulated around the abdominal area particularly increases the risk of developing diabetes and associated complications.**

Fat around the abdomen can be measured by measuring waist circumference. To do this use a tape measure midway between the lowest rib and the upper part of the hip bone. Waist circumference of <90 cm for men or < 80 cm for women is considered low risk.

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height x Height (m)}}$$

BMI, Waist Circumference, and Risk of Developing Type 2 Diabetes (adapted from WHO: The Asia-Pacific Perspective on Obesity 2001)

BMI	Classification	Waist < 90cm (male) < 80cm (female) Risk of disease	Waist >90cm (male) > 80cm (female) Risk of disease
< 18.5	Underweight		
18.5 - 22.9	Normal	Normal	Slightly increased
23.0 - 24.9	Overweight	Slightly increased	Increased
25.0 - 29.9	Obesity I	Increased	High Risk
> 30.0	Obesity II	High Risk	Very High Risk

Did you know?

- Chromium supplements in the form of chromium picolinate may improve blood sugar levels of those with diabetes, although further research is needed to confirm this.
- Asian ginseng may improve control of type 2 diabetes, but as there is a risk of side effects, prior consultation with a physician is essential.

2. Include Physical Activity Regularly

Active use of muscle increases the muscle's ability to absorb glucose and to use insulin, both of which will benefit those with or at risk of type 2 diabetes. A combination of aerobic exercise, strength training, and flexibility exercise is recommended.

- **Aerobic exercise:** Recommended at least 5 times a week for about 30 minutes a day. If you need to lose weight, more exercise time is beneficial. Consult your physician before increasing exercise levels.
- **Strength training:** Building up muscle is for diabetics to burn more calories and improve the body's own ability to lower blood sugar levels. Weight lifting is an example of strength training.
- **Flexibility exercises** like stretching helps to keep the joints flexible and reduces the risk of getting injured during exercise.

Tips to increase your physical activity:

- Park at the far end of the parking lot.
- Do some gardening at home.
- Get involved in active play with your children or grandchildren.
- Take the stairs instead the lift or elevator, or climb the elevator.
- Wash your vehicle.
- Stop a few blocks away from your usual bus stop/station and walk the distance.

3. Eat a Healthful Diet

The two most important dietary strategies that can reduce type 2 diabetes risks are choosing high fibre and unrefined carbohydrate foods and choosing foods that are low in fat, especially saturated fats.

- Choose wholegrain, high fiber carbohydrate sources and limit consumption of highly refined carbohydrates. Wholegrain high fiber carbohydrates are slowly absorbed, which limits increase of blood glucose levels and reduces insulin demand: Good choices include brown rice, unpolished white rice, oats, wholegrain bread, medium cooked noodles, mung bean vermicelli, most beans and bulgur.
- Use unsaturated fats instead of saturated and trans fats: Unsaturated fats, such as canola, olive, peanut, sunflower, or corn oil help in preventing type 2 diabetes. Saturated and trans fats such as coconut, palm and palm kernel oil and hard and semi-hard margarines accelerate development of type 2 diabetes and complications.