

Insulin Resistance and Type 2 Diabetes: Causes and Risk Factors

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DESCRIPTION

Diabetes is a long-term metabolic disorder that impacts millions of people around the world. It is a condition where the body is unable to produce or use insulin properly, which leads to an increase in blood glucose levels. Diabetes is classified into several types, including type 1, type 2, gestational, and prediabetes.

Type 1 diabetes is an autoimmune disorder in which the immune system of the body attacks insulin-producing pancreatic cells. This type of diabetes typically develops during childhood or adolescence but can occur at any age. The exact cause of type 1 diabetes is still unknown, but genetics and environmental factors may play a role.

Symptoms of type 1 diabetes include increased thirst, frequent urination, extreme hunger, unexplained weight loss, fatigue, and blurred vision. Treatment for type 1 diabetes involves insulin injections or the use of an insulin pump, monitoring blood glucose levels, and adopting a healthy lifestyle that includes regular exercise and a balanced diet.

The most common type of diabetes, accounting for 90% of all cases, is type 2 diabetes. This type of diabetes occurs when the body becomes resistant to insulin or does not produce enough insulin to meet the body's needs. Type 2 diabetes is typically diagnosed in adults, but it can occur at any age. Risk factors for type-2 diabetes include obesity, a sedentary lifestyle, family history, and certain medical conditions such as high blood pressure and high cholesterol.

Symptoms of type 2 diabetes include increased thirst, frequent urination, blurred vision, slow-healing wounds, and fatigue. Treatment for type 2 diabetes involves making lifestyle changes, such as losing weight, exercising regularly, and eating a healthy diet. Medications such as metformin and insulin may also be prescribed to help manage blood glucose levels.

Gestational diabetes

Gestational diabetes is diabetes that develops during pregnancy. It usually appears in the second or third trimester of pregnancy and affects about 2-10% of pregnant women. Gestational diabetes is caused by hormonal changes during pregnancy that make the body's ability to use insulin effectively difficult. Women who are overweight or who have a family history of diabetes are more likely to develop gestational diabetes. Increased thirst, frequent urination, blurred vision, and fatigue are all symptoms of gestational diabetes. Treatment for gestational diabetes includes blood glucose monitoring, lifestyle changes such as eating a healthy diet and exercising regularly, and, in some cases, insulin injections. Prediabetes is a condition characterized by higher-than-normal blood glucose levels but not being diabetic. It is estimated that about 84 million adults in the United States have prediabetes, and without intervention, about 30% of people with prediabetes will develop type2 diabetes within five years. Symptoms of prediabetes are often not noticeable, which is why it is essential to get regular check-ups and blood tests. Treatment for prediabetes involves making lifestyle changes, such as losing weight, exercising regularly, and eating a healthy diet. In some cases, medication may be prescribed to help manage blood glucose levels.

Complications of diabetes

If left untreated, diabetes can lead to several complications, including:

Cardiovascular disease: People with diabetes are at an increased risk of developing heart disease, stroke, and other cardiovascular problems.

Nerve damage: High blood glucose levels can cause nerve damage, leading to pain, tingling, and numbness in the hands and feet.

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