

# Insight of Type 1 diabetes and its effects in day to day life

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## Introduction

Type 1 diabetes, also known as insulin-dependent diabetes or juvenile diabetes, is a chronic illness in which the pancreas produces little or no insulin. Insulin is a hormone that allows sugar (glucose) into cells for energy production. Type 1 diabetes can be caused by a variety of factors, including genetics and viruses. Although type 1 diabetes most commonly manifests in infancy or adolescence, it can also manifest in adulthood. Diabetes is a condition in which your blood glucose, or blood sugar, levels are too high. Your pancreas does not produce insulin if you have type 1 diabetes.

Insulin is a hormone that aids glucose absorption into cells for energy production. Too much glucose remains in your blood without insulin. High blood glucose levels can cause major problems with your heart, eyes, kidneys, nerves, gums, and teeth over time. Despite ongoing research, there is no treatment for type 1 diabetes. To avoid complications, treatment emphasises on controlling blood sugar levels with insulin, food, and lifestyle changes. Dehydration. You pee more if you have too much sugar in your blood. That's how your body eliminates it. Your body will become dry as a result of the huge amount of water lost through pee.

## Loss of weight

When you pee, the glucose you excrete contains calories. Many persons with high blood sugar lose weight as a result of this. Dehydration is another factor to consider.

## Ketoacidosis in diabetics (DKA)

When your body runs out of glucose, it breaks down fat

cells as a source of energy. Ketones are formed as a result of this. To assist you, your liver releases sugar that it has stored. However, because your body cannot utilise it without insulin, it accumulates in your blood, along with acidic ketones.

Type 1 diabetes is thought to be caused by an autoimmune reaction (when the body accidentally attacks itself) that destroys the beta cells in the pancreas, which produce insulin. Before any symptoms develop, this process might carry on for months or even years. Some people have genes (characteristics passed down from parents to children) that make them more likely to acquire type 1 diabetes, while many people who have the genes will not develop type 1 diabetes. It's also suggested that being exposed to a trigger in the environment, such as a virus, has a role in the development of type 1 diabetes. Type 1 diabetes is not caused by diet or lifestyle choices. People with clear-cut diabetic symptoms are frequently tested for type 1 diabetes by health care experts.

The random plasma glucose (RPG) test is the most common way for doctors to identify type 1 diabetes.

This blood test takes a single reading of your blood glucose level. The A1C blood test is sometimes used by doctors to determine how long someone has had high blood glucose. These tests can confirm that you have diabetes, but they can't tell you what type it is. Because treatment differs depending on the type of diabetes, it's crucial to know if you have type 1 or type 2. Your health care provider may test your blood for particular autoantibodies to determine if you have type 1 diabetes. Autoantibodies are a type of antibody that is produced by the body.

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