

explainity explains: Diabetes

This is Kaya. For some time now, Kaya's been feeling tired and weak. When he started having unquenchable thirst, and trouble seeing - he finally decided to see his doctor.

The doctor had a hunch and tested Kaya's blood. His suspicions was right. Kaya's blood sugar level was way too high. He has Diabetes.

The medical term "Diabetes mellitus" comes from the ancient Greek word "diabainein", meaning "to go through" or "flow through" and from the Latin word "mellitus", meaning "sweet as honey". In everyday language, this metabolic condition is called "diabetes". It usually occurs in the form of type 1 diabetes and type 2 diabetes and is shown as an excessive amount of sugar in the blood. But what causes it?

Through the food we eat, we take in carbohydrates, which are converted by the stomach and liver into glucose. From there, they enter the bloodstream. Next, the pancreas releases the insulin hormone. This ensures that the muscle and fat cells open to absorb the energy-producing glucose and the blood sugar level lowers.

If this does not happen, the bloodstreams clot due to the excessive glucose content, the sugar level rises and the organs suffer from low energy. This has different causes depending on the type of diabetes:

In **TYPE 1** diabetes, the body's own defense cells attack the islet cells of the pancreas, so that they can no longer produce insulin. This form of diabetes usually develops in adolescence. These patients have to take insulin shots for the rest of their lives, and make sure to live a healthy lifestyle to avoid damaging their bodies.

TYPE 2 diabetes, on the other hand, develops as a result of the limited effect of the insulin hormone, known as "insulin resistance". The risk of illness is made worse by a lack of exercise, excessive weight and an unhealthy diet. Although insulin is released by the pancreas, it is still unable to open the cells for glucose. Insulin production goes up at first. But after a few years of high production and no effect, the insulin secretion goes down. If patients do not change their lifestyle, type 2 diabetes can also turn into type 1 diabetes.

Back to Kaya. Further testing shows that he has the curable form, type 2 diabetes. For Kaya, this was a blessing in disguise. He takes a diabetes class, where he learns to stay fit through a healthy diet and exercise and how to permanently lower his blood sugar level.

After a while, Kaya gets better and feels like new!

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