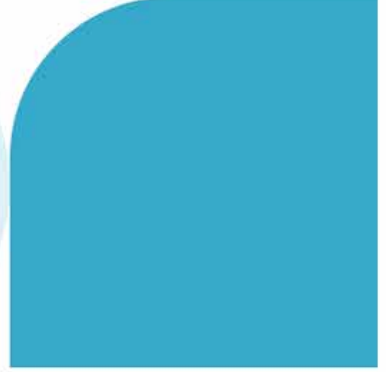
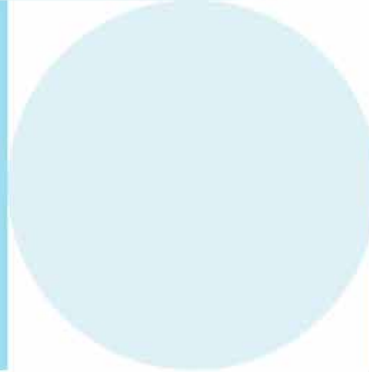
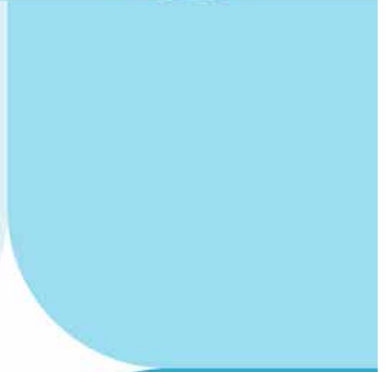
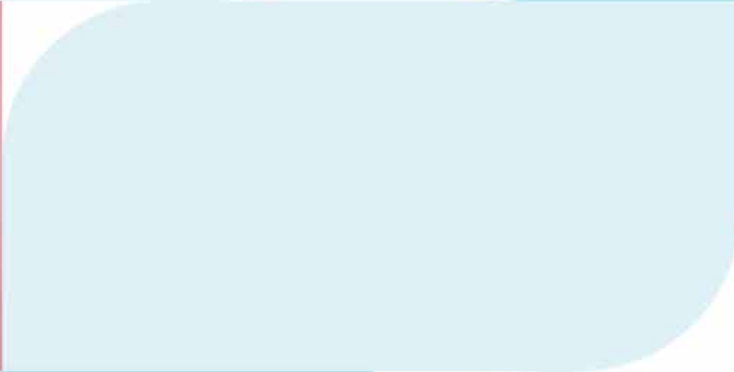




Test report



At-home test




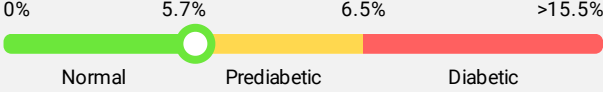
Diabetes test

Lab test

Blood

Name: **Sample Report** Date of test: **04/07/2024** Analysis-ID: **UXC5RM-036**

Diabetes Test - Your results

Name	Your value	Reference value	Scale
HbA1c	 5.60 %	Normal: <5.7% Prediabetic: 5.7% - 6.5% Diabetic: >6.5%	 0% 5.7% 6.5% >15.5% Normal Prediabetic Diabetic

About diabetes

Diabetes is one of our most common public health diseases and is caused by high blood sugar (glucose) in the blood. The condition is called hyperglycemia (high blood sugar) and is caused by reduced insulin levels and/or insulin resistance. Insulin is a hormone that is created by the pancreas and its main role is to regulate the blood sugar level in the blood.

Diabetes is a metabolic disease and means that there is too much glucose (sugar) in the blood. Glucose is the body's most important fuel source and provides the body with the energy it needs to function properly. Insulin is secreted from the pancreas, whose main task is to keep the blood sugar/glucose levels in the blood steady and within normal ranges.

Diabetes (type 1) is caused by reduced secretion of insulin from the pancreas and/or insulin resistance. A certain amount of glucose is always circulating in the bloodstream. The insulin acts as a key that opens the door for the glucose we take in through food and drink so that glucose can enter the cells to be converted into the necessary energy the body needs while keeping the blood glucose level within a normal range. Without insulin, glucose cannot enter the cells and remains in the bloodstream. The result is that the blood sugar level rises, especially after a meal. This is what is called diabetes (type 1). At this stage, the body will tell you that something is wrong through various symptoms.

There are two main types of diabetes: diabetes type 1 and diabetes type 2. The effects of untreated diabetes are similar for both types, however, the underlying causes differ.

Diabetes type 1

People affected by type 1 diabetes completely lack their own insulin production. This type is caused by autoimmune processes attacking the beta cells of the pancreas so that they cannot produce enough of the hormone insulin. The reaction can be triggered by infections, vaccinations and allergies. Type 1 diabetes is often referred to as juvenile diabetes as it often debuts in a young age. Type 1 diabetes is treated with insulin injections based on daily regular blood sugar measurements and adapted insulin doses. Insulin doses are affected by when you eat and how physically active you are.

Diabetes type 2

Type 2 diabetes means that the cells in the body become less sensitive to insulin, which results in the body requiring more and more insulin. When the insulin the body is able to produce isn't enough, blood sugar rises. If blood sugar gets too high, sugar molecules can stick to proteins in the body and the proteins get glycosylated. Negative effects of glycosylation are vascular damage, kidney damage etc.

Your blood sugar levels are affected by high sugar and/or carbohydrate intake and the amount of physical activity. By continuously measuring blood sugar, you can prevent the risk of developing insulin resistance and type 2 diabetes. Blood sugar is considered high if it is higher than 6.0 mmol/L after 10 hours of fasting. Fasting blood sugar is affected by, for example, stress (increases the value) and by physical activity (lowers the value). One therefore also uses a marker that shows measures of how the blood sugar has been over time. This marker is called HbA1c and is a blood protein that shows how sugar-coated (glycosylated) the red blood cells hemoglobin is.

Diabetes symptoms

High blood sugar can lead to type 1 diabetes. By continuously measuring your blood sugar, you can reduce the risk of developing insulin resistance and type 2 diabetes. The symptoms of diabetes are many and often quite subtle. When the blood sugar level becomes too high, the body responds by getting rid of glucose via the urine. When this happens, various symptoms occur in the body:

- Increased thirst
- Large amounts of urine than usual
- Abnormal fatigue
- Strong feeling of hunger
- Loss weight without trying
- Wounds that heal slowly
- Dry, itchy skin
- Loss of sensation in feet, tingling in hands and feet
- Sexual dysfunction
- Blurred vision

When you talk about diabetes, you usually talk about high blood sugar, but low blood sugar is of course not good either. Too low blood sugar can affect type 1 diabetes when they take too much insulin. The most symptoms of low blood sugar are fatigue, irritability and tremors. These symptoms can affect even a perfectly healthy person. For a person with type 1 diabetes, it can go even further and result in altered speech and unconsciousness. In the worst case, a drop in blood sugar for type 1 diabetes can lead to death. However, the body has many reserve mechanisms to avoid this and raise blood sugar – an example of which is the stress hormone adrenaline.

Diabetes and treatment

Diabetes is treated through healthy diet and physical activity to keep blood sugar levels steady. It is also important that you maintain a normal body weight and avoid tobacco. Type 1 diabetes must be treated with insulin injections. Type 2 diabetes can be treated with drugs in the form of tablets that increase insulin sensitivity or insulin release. Contact a doctor or qualified nutrition therapist to get a diet plan adapted to you.

This test does not replace medical consultation. Always seek medical attention if you experience severe symptoms.

