

# How are we calculating?

## A1C test

The [A1C test](#) is a blood test that measures the percentage of sugar that's attached to your hemoglobin, a protein in your [red blood cells \(RBCs\)](#). The higher the A1C, the higher your average blood sugar levels have been running over the past two or three months.

Type of results	A1C	Estimated average blood glucose level (mg/dL)
normal A1C results	below 5.7%	below 117
prediabetes A1C results	5.7 to 6.4%	117 to 137
diabetes A1C results	above 6.4%	above 137

## Fasting plasma glucose (FPG) test

The fasting plasma glucose (FPG) test is a blood test that's performed after you've been [fasting](#) overnight. It measures the sugar in your blood.

A normal fasting glucose test result is lower than 100 mg/dL. A result between 100 and 125 mg/dL is diagnostic for prediabetes. One that is 126 mg/dL or above is indicative of diabetes.

If your result is 126 mg/dL or above, you'll be retested on another day to confirm the diagnosis.

Type of results	Fasting plasma glucose (FPG) level (mg/dL)
normal FPG results	below 100
prediabetes FPG results	100 to 125
diabetes FPG results	above 125

# Random plasma glucose (RPG) test

A [random blood glucose \(RPG\) test](#) is a blood test that's performed any time of day that you aren't fasting. It measures the sugar level in your blood at that moment in time.

An RPG result that's over 200 mg/dL is indicative of diabetes, especially if you're having [symptoms of diabetes](#) such as excessive [thirst](#), [hunger](#), or [urination](#).

If your level is higher, your doctor will use one of the other tests listed to confirm the diagnosis.

## Oral glucose tolerance test (OGTT)

The [oral glucose tolerance test \(OGTT\)](#) takes a little more time than the other two glucose tests for diabetes. In this test, your blood is taken after an overnight fast, and then again two hours after you drink a sugary drink.

It's normal for blood sugar to rise after the drink. Normal blood sugar falls to below 140 mg/dL within two hours, however.

If your blood sugar is between 140 and 199 mg/dL, your doctor will diagnose prediabetes. Anything 200 mg/dL or above is diagnostic for type 2 diabetes.

Type of results	Blood glucose level (mg/dL)
normal OGTT results	below 140
prediabetes OGTT results	140 to 199
diabetes OGTT results	above 199

# Insulin

	Insulin Level	Insulin Level (SI Units*)
Fasting	< 25 mIU/L	< 174 pmol/L
30 minutes after glucose administration	30-230 mIU/L	208-1597 pmol/L
1 hour after glucose administration	18-276 mIU/L	125-1917 pmol/L
2 hour after glucose administration	16-166 mIU/L	111-1153 pmol/L
≥3 hours after glucose administration	< 25 mIU/L	< 174 pmol/L

**Sorry but we will not be able to disclose more information than this.**