
RANDOX
HEALTH

PID	XXXXXXX
Forename	Diabetes Status
Surname	Example
Fasted For	10 hours and 55 minutes
DOB	dd-Mmm-yyyy

CONTENTS

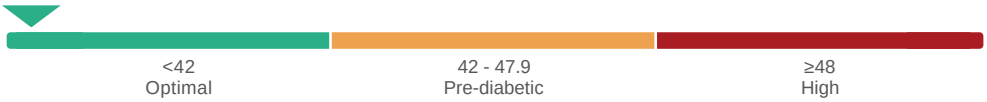
Diabetes Health

Diabetes mellitus is a chronic condition that is characterised by a high blood glucose level. Normally, insulin (a hormone produced by the pancreas) regulates blood glucose levels. Type 1 diabetes is a condition in which the insulin producing cells of the pancreas are destroyed resulting in very little or no insulin production. Type 2 diabetes is a condition in which the pancreas continues to produce insulin but blood sugar levels remain high due to an insufficient amount of insulin or insulin resistance. Although glucose provides an essential fuel for the body, long-term high levels of glucose are destructive, causing damage to blood vessels, nerves and organs. This damage can increase the risk of developing high blood pressure, heart disease, kidney disease and loss of vision. The Diabetes Health panel includes measurement of glucose and HbA1c levels in the blood, which is useful for the diagnosis and monitoring of diabetes. Higher than normal levels can be associated with a greater risk of developing diabetes in the future ('high risk' or 'pre-diabetes').

Glucose

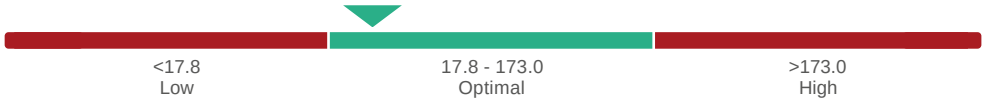
4.49 mmol/l

HbA1c



32.7 mmol/mol

Insulin



39.1 pmol/l

Results for your Doctor

This section contains all your test results. Your doctor may prefer to see your test results in this format. The results that are either positive or fall outside the reference range are highlighted in red.

Test	Result	Units	Reference Range
Diabetes Health			
Glucose	4.49	mmol/l	4.0 - 5.59 Optimal
HbA1c	32.7	mmol/mol	<42 Optimal
Insulin	39.1	pmol/l	17.8 - 173.0 Optimal

Understanding Your Results

Glucose is a simple sugar that provides energy for the body. An increased fasting glucose level is characteristic of diabetes, while higher than normal levels can be associated with a greater risk of developing diabetes in the future ('high risk' or 'pre-diabetes'). Increased levels can a l s o occur following a meal and can be associated with hyperthyroidism (an overactive thyroid gland), pancreatitis (inflammation of the pancreas), chronic kidney failure, and rare conditions such as acromegaly (excess production of growth hormone) and Cushing's syndrome (excess production of adrenal hormones). Various medications such as steroids and diuretics can also increase glucose levels. Decreased levels may be associated with starvation, hypothyroidism (an underactive thyroid gland), extensive liver disease, insulin overdose, and rare conditions such as insulinoma (a tumour of the pancreas), hypopituitarism (an underactive pituitary gland) and Addison's disease (a disorder of the adrenal glands).

HbA1c is a substance formed when haemoglobin in red blood cells (RBCs) combines with glucose in the blood. The HbA1c level does not change quickly as RBCs live for 2-3 months. This test can therefore provide an accurate long-term index of the average glucose level in the blood. Increased HbA1c levels can be associated with diabetes mellitus, gestational diabetes (diabetes that develops during pregnancy), acute stress response, corticosteroid therapy, and other rare non-diabetic conditions including acromegaly (excess production of growth hormone) and Cushing's syndrome (excess production of adrenal hormones). Higher than normal levels can be associated with a greater risk of developing diabetes in the future ('high risk' or 'pre-diabetes').

Insulin is a hormone produced by the pancreas that is essential for regulation of blood glucose levels. Increased insulin levels are associated with insulin resistance, which is a feature of type 2 diabetes and metabolic syndrome. An elevated insulin level may also be associated with obesity, hypoglycaemia (low blood glucose), insulinoma (a rare insulin- producing tumour of the pancreas) or Cushing's syndrome (a rare condition in which the adrenal glands are overactive). Decreased insulin levels may be associated with hypopituitarism (a rare condition in which the pituitary gland is underactive), chronic pancreatitis (inflammation of the pancreas) and type 1 diabetes.