

The table provides general guidance. An individual target set by your healthcare team is the one you should aim for.

Target Levels by Type	Upon waking	Before meals (pre prandial)	At least 90 minutes after meals (post prandial)
Non-diabetic*		4.0 to 5.9 mmol/L	under 7.8 mmol/L
Type 2 diabetes		4 to 7 mmol/L	under 8.5 mmol/L
Type 1 diabetes	5 to 7 mmol/L	4 to 7 mmol/L	5 to 9 mmol/L
Children w/ type 1 diabetes	4 to 7 mmol/L	4 to 7 mmol/L	5 to 9 mmol/L

NICE recommended target blood glucose level ranges

NORMAL AND DIABETIC BLOOD SUGAR RANGES

For the majority of healthy individuals, normal blood sugar levels are as follows:

- **Between** 4.0 to 5.4 mmol/L (72 to 99 mg/dL) when fasting [\[361\]](#)
- **Up to** 7.8 mmol/L (140 mg/dL) 2 hours after eating

For people with diabetes, blood sugar level targets are as follows:

- **Before meals** : 4 to 7 mmol/L for people with type 1 or type 2 diabetes
- **After meals** : under 9 mmol/L for people with type 1 diabetes and under 8.5mmol/L for people with type 2 diabetes

BLOOD SUGAR LEVELS IN DIAGNOSING DIABETES

The following table lays out criteria for diagnoses of diabetes and prediabetes.

Plasma glucose test	Normal	Prediabetes	Diabetes
Random	Below 11.1 mmol/l Below 200 mg/dl	N/A	11.1 mmol/l or more 200 mg/dl or more
Fasting	Below 5.5 mmol/l Below 100 mg/dl	5.5 to 6.9 mmol/l 100 to 125 mg/dl	7.0 mmol/l or more 126 mg/dl or more
2 hour post-prandial	Below 7.8 mmol/l Below 140 mg/dl	7.8 to 11.0 mmol/l 140 to 199 mg/dl	11.1 mmol/l or more 200 mg/dl or more

Blood sugar levels in diagnosing diabetes

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	Normal	Pre-diabetes	Diabetes	Pregnancy
HbA1c	≤ 40 mmol/mol	41–49 mmol/mol	≥ 50 mmol/mol	≥ 50 mmol/mol
Fasting blood glucose		6.1–6.9 mmol/l	≥ 7.0 mmol/l	≥ 5.5 mmol/l
Random glucose			≥ 11.1 mmol/l	≥ 11.1 mmol/l
2 hours after 75g of glucose				≥ 9.0 mmol