

# What is Insulin Resistance?

Insulin resistance (IR) occurs when your cells fail to respond to the hormone insulin.

Insulin resistance is when cells in your muscles, fat, and liver don't respond well to insulin and can't use glucose, from the foods you eat, for energy. To make up for it, your pancreas makes more insulin. For a while this will work and your blood sugar levels will remain within normal range. However, over time your pancreas won't be able to keep up and blood sugar levels may rise and contribute to metabolic dysregulation, obesity, and more seriously progress to Type 2 Diabetes (1). Making dietary changes to the way you eat, and incorporating regular exercise can support blood glucose regulation as prevention for insulin resistance.



## Symptoms

You can't tell that you have insulin resistance by how you feel. You'll need to get a blood test that checks your blood sugar levels. Likewise, you won't know if you have most of the other conditions that are part of insulin resistance syndrome without testing. These include: high blood pressure, low HDL "good" cholesterol levels, and high triglycerides.

Signs of insulin resistance and metabolic dysregulation include:

- Lethargy, thirst, hunger cravings, frequent urination and difficulty concentrating (brain fog)
- Central weight gain. A waistline over 94cm in men and 90cm in women
- High Blood pressure of 140/90mmHg or higher
- Elevated blood sugar. A fasting blood sugar level greater than 5.4 mmol/L
- Elevated cholesterol levels. Triglycerides higher than 1.8 mmol/L
- A HDL cholesterol level under 1 mmol/L

## Diet & Nutrition

Diet and lifestyle factors play an important role in blood glucose and insulin regulation and losing weight, eating well and exercising can help you manage the condition. The foods we eat play an important role in supporting our long-term health and wellbeing. BANT nutrition practitioners assess and identify potential nutritional imbalances to understand how these may contribute to an individual's symptoms and health concerns. Practitioners consider each individual to be unique and recommend personalised nutrition and lifestyle programmes rather than a 'one size fits all' approach.

1. <https://www.webmd.com/diabetes/insulin-resistance-syndrome>

