

Metabolic Syndrome:

The health risk you can have without feeling sick

Most people assume serious health problems announce themselves. Pain, fatigue, something clearly wrong. Metabolic syndrome doesn't. It develops quietly during working life, often in people who feel broadly well, stay employed, and keep up with family and work demands. That's what makes it important and often missed.

What is metabolic syndrome?

Metabolic syndrome is not a disease. It's a pattern or a cluster of risk markers that together raises the likelihood of future illness. A person is considered to have metabolic syndrome when three or more of the following are present:

1. Increased waist circumference (abdominal fat)
2. Elevated blood pressure
3. Higher than normal blood sugar
4. Low high-density lipoprotein (**HDL**) also referred to as 'good' cholesterol
5. High triglycerides (e.g. more fat in the blood than it can use or clear efficiently).

Individually, each marker may look mild or borderline but together - it signals that the body is under metabolic strain and heading toward higher risk of:

1. Type 2 diabetes
2. Heart disease and stroke
3. Chronic kidney disease

This clustering effect, rather than any single number, is what makes metabolic syndrome clinically meaningful.

New cases emerge across adulthood, particularly during the 30s, 40s, and 50s - that is peak working years. This timing is not accidental. Because it does not interrupt daily functioning, metabolic syndrome is often missed. People continue working, parenting and coping without feeling unwell - that is until medication or a major health event forces attention. By that point, reversal is harder and management more complex.¹

How modern working life contributes

Modern working life creates conditions where metabolic risk markers quietly accumulate:

- Long periods of sitting
- Irregular or rushed meals
- Inconsistent or inadequate sleep
- Chronic low grade stress.

Weight gain, rising blood pressure and drifting blood sugar often occur without illness or injury. Daily functioning remains intact, so nothing feels 'wrong' until thresholds are crossed and medication becomes necessary.

The 2022 Australian Burden of Disease Study shows cardiometabolic conditions account for a large share of preventable illness during mid life, not just retirement years. This makes metabolic syndrome a critical but often missed prevention window.⁶

This table below shows the key metabolic risk markets in Australian adults:

Metabolic risk marker	Australian population statistics
Waist circumference/ abdominal fat	<ul style="list-style-type: none"> 65.8% of Australian adults were overweight or obese (NHS 2022). 67.9% had a waist circumference in the 'increased risk of disease' range.² Abdominal fat is metabolically active and strongly linked to insulin resistance and cardiometabolic risk.¹
Blood pressure (often without symptoms)	<ul style="list-style-type: none"> 11.6% (~3.0 million) reported diagnosed hypertension in 2022. 74.5% of adults with high measured blood pressure did not report having hypertension.³
Blood sugar (early insulin resistance)	<ul style="list-style-type: none"> 1.2 million Australians (4.6%) were living with type 2 diabetes in 2021. Around 45,700 people were newly diagnosed that year (~125 per day). Blood glucose often rises years before diabetes is diagnosed.⁴
Low high-density lipoprotein (HDL) also referred to as 'good' cholesterol	<ul style="list-style-type: none"> Low HDL reduces vascular protection and commonly clusters with abdominal fat and insulin resistance. It is a core diagnostic marker in standard metabolic syndrome definitions.¹
Triglycerides ^	<ul style="list-style-type: none"> Elevated triglycerides reflect impaired fat and carbohydrate metabolism. They rise with excess energy intake and insulin resistance and are a core diagnostic marker.¹

^ Triglycerides are the most common type of fat in your body, derived from food (oils, butter) and excess calories converted by the liver. They travel in the blood to provide energy to cells, with excess stored in fat cells. High levels (hypertriglyceridemia) increase the risk of heart disease, stroke, and pancreatitis.

Why the pattern matters

When metabolic syndrome is present, the risk of major chronic disease rises steadily - often silently - until treatment becomes unavoidable.

The table below outlines the major health outcomes associated with metabolic syndrome in Australia.

Health outcome	Australian burden statistics
Type 2 diabetes	<ul style="list-style-type: none"> 1.2 million Australians living with type 2 diabetes in 2021.⁴ Type 2 accounts for ~88% of all diabetes cases.
Coronary heart disease	<ul style="list-style-type: none"> 600,000 adults (3.0%) had coronary heart disease in 2022. 57,100 acute coronary events occurred in 2023 (~156/day). Heart disease caused 18,600 deaths in 2022 (~9.8% of all deaths).⁵
Stroke	<ul style="list-style-type: none"> 425,000 Australians (1.7%) had experienced a stroke by 2022. 41,100 stroke events occurred in 2023 (~113/day). Stroke caused 8,400 deaths in 2022 (~4.4% of all deaths). One in four strokes occur in people under 65.⁶
Chronic kidney disease (CKD)	<ul style="list-style-type: none"> Diabetes and high blood pressure are leading causes. 11% of adults (~1.7 million) had biomedical signs of CKD.⁷ CKD contributed to ~22,000 deaths in 2022 (~11% of all deaths).⁸

Once blood sugar crosses diabetic thresholds or blood pressure requires medication, vascular and organ damage may already be established, making reversal harder and management more complex.⁵

Prevention

Preventing metabolic syndrome is not about extreme lifestyle change. It's about early course correction while changes are still reversible, and before lifelong medication is required.

What can help

1. Sleep is a metabolic input, not a luxury

An estimated 39.8% of Australian adults experience inadequate sleep, which is linked to insulin resistance, hypertension, weight gain and reduced productivity. Consistent sleep timing matters more than optimisation.⁹

2. Break up long sitting time

Australian workers spend ~76% of the workday sitting (about 5 hours), and a quarter sit more than 8 hours per day. Prolonged sitting is an independent metabolic risk factor. Light, frequent movement helps.¹⁰

3. Aim for steadier eating patterns

Irregular or rushed meals destabilise blood sugar and triglycerides. Predictable meals are often more effective than restrictive diets.²

4. Focus on waist, not weight

Waist circumference tracks metabolic risk more closely than body weight. Even modest reductions in abdominal fat can improve blood pressure, lipids and glucose.²

Consult with your doctor

If waist, blood pressure, and triglycerides cluster upward, ask your GP about a simple plan and a realistic review timeframe.¹¹

Recognising it early reframes health, not as a future problem but as something shaped during the years when people are most productive and most relied upon.

References

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