

Metabolic syndrome

Metabolic syndrome is a medical term for a combination of obesity, high blood pressure, diabetes, reduced good cholesterol, and elevated bad cholesterol levels.

It puts you at greater risk of getting heart disease, stroke, liver disease and other conditions that affect the blood vessels.

How common is it?

Metabolic syndrome affects an estimated 1 in 3 older adults aged 50 or over in the UK.

Do I have metabolic syndrome?

Metabolic syndrome may be diagnosed if you have 3 or more of the following:

- Abdominal obesity:
 - Waist circumference in men ≥ 102 cm (40 inches) and in women ≥ 88 cm (35 inches)
- Raised blood pressure:
 - Blood pressure $\geq 140/90$ mm Hg
 - Or receiving treatment for high blood pressure
- Reduced HDL-cholesterol (good cholesterol):
 - < 1.03 mmol/L in men
 - < 1.29 mmol/L in women
- Raised triglycerides (a form of fat in our blood):
 - > 1.7 mmol/L or > 2.3 if ate before test
 - Or receiving treatment for this fat abnormality
- Raised fasting glucose:
 - Fasting plasma glucose 6.1 mmol/L or HbA1c > 47

What contributes to type 2 diabetes?

Insulin resistance leads to high blood sugar and diabetes. It is more common in people who are obese, especially if they are carrying the excess fat around their waistline. Excess fat can get stuck inside the pancreas where it can cause problems with blood sugar control.

How do you know if you have a healthy weight and shape?

	Raised health risk	Serious health risk
Women	80 cm (32 inches) or above	88 cm (35 inches) or above
Men	94 cm (37 inches) or above	102 cm (40 inches) or above
Asian men	90 cm (36 inches) or above	101 cm (39 inches) or above

Preventing or reversing metabolic syndrome

You can prevent or reverse metabolic syndrome by making lifestyle changes, including:

- losing weight
- exercising regularly
- eating a healthy, balanced diet
- stopping smoking
- cutting down on alcohol

Recommended exercise:

- Walking, cycling, jogging, swimming and/or other aerobic physical daily activities for at least 150 minutes per week or 75 minutes per week of vigorous physical activity, or a combination of the two
- Muscle-strengthening activities performed on at least two occasions per week

Are there any recommended diets?

The top two diets in 2023 are:

- The Mediterranean diet – emphasises fruits, vegetables, whole grains, lean proteins and healthy fats
- The DASH diet – “Dietary approaches to stop hypertension”, this is a flexible balanced and heart healthy eating plan promoted by the National Heart, Lung and Blood Institute

Follow the links at the end for more information on these diets. They can be altered to suit vegetarians and vegans.

Weight loss programmes

- NHS Digital Weight Management Programme (free of charge)
- Weight Watchers weight loss programme (subscription fee)
- Slimming World (subscription fee)

Do I need medications?

- Statins are considered first-line treatment when lifestyle measures do not achieve the desired cholesterol levels
- Medications to treat high blood pressure
- Medications to control diabetes

Follow up

- Annual follow up is recommended. Get you blood pressure, body weight and baseline blood tests done annually at your surgery

Are there any complications?

- Non-alcoholic fatty liver disease (NAFLD)
 - Studies suggest that 20-30% of individuals in Western countries have NAFLD
- Heart disease and Stroke risk increases 2-3 fold
- Eye and nerve damage
- Resistant high blood pressure

References:

Diabetes UK

British medical journal

HEART UK

<https://health.usnews.com/best-diet/mediterranean-diet>

<https://health.usnews.com/best-diet/dash-diet>

<https://www.nhsinform.scot/healthy-living/12-week-weight-management-programme>