

METABOLIC SYNDROME



holding your hand through health

DO YOU HAVE METABOLIC SYNDROME?

If you have a large waist circumference and also have any two of the following conditions:¹

- High blood pressure
- High blood sugar levels or are diabetic
- High cholesterol

You may have METABOLIC SYNDROME

Why is it important to know if you have metabolic syndrome?

When a person has several of these characteristics together, the chance of developing diseases of the heart and blood vessels or diabetes is far greater than when only a single characteristic is present. For example, a person with high blood pressure, excess abdominal fat and raised blood sugar levels is at a much higher risk of developing heart problems or diabetes than a person who only has high blood pressure.²

People with metabolic syndrome are 3 times more likely to have a heart attack or stroke and 5 times more likely to develop type 2 diabetes, compared to people without the syndrome. They also have a greater chance of dying from these diseases.²

It is important to diagnose metabolic syndrome as soon as possible since early treatment reduces the risk of heart disease and diabetes.²

Who is at risk of developing metabolic syndrome?

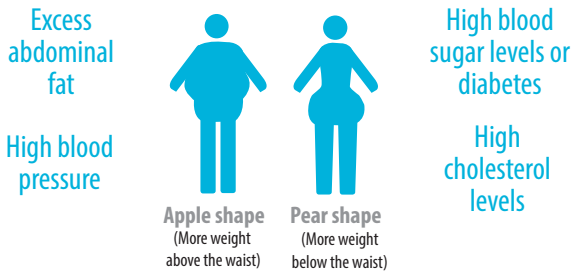
The following factors increase the risk of developing metabolic syndrome:³

- Being overweight (body mass index of 25 kg/m² or more)
- High carbohydrate diet
- Lack of physical activity
- Smoking
- Increasing age
- Menopause in women
- Family history of diabetes or metabolic syndrome

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How is metabolic syndrome diagnosed?

A person is diagnosed with metabolic syndrome if they have a large waist circumference (abdominal obesity) and 2 or more other characteristics.¹



APPLE SHAPES ARE AT RISK

The waist circumference is measured in all people as they may not be overweight and yet store excess fat in the abdomen.¹ The recommended waist circumference guidelines are gender and ethnic-group specific.²

WAIST CIRCUMFERENCE INDICATING ABDOMINAL OBESITY¹

Region	Male waist circumference	Female waist circumference
European, Sub-Saharan Africans	≥94 cm	≥80 cm
Asian-Indian, Chinese, Japanese	≥90 cm	≥80 cm
United States (higher cut-off point)	≥102 cm	≥88 cm

The greater the waist circumference, the higher the risk of metabolic syndrome and its complications.¹



Important: Waist circumference should be measured around the waist at the level of the navel, not around the narrowest part of the waist.⁴

Doctors will also measure blood pressure as well as fasting blood sugar and fat (cholesterol) levels.³

How is metabolic syndrome treated?

Metabolic syndrome is treated to reduce the risk of developing cardiovascular disease and type 2 diabetes.²

Healthy lifestyle

The first step in treating metabolic syndrome is to follow a healthy lifestyle.² Stop smoking to reduce the risk of heart disease.⁵ Aim to lose 5-10% of your body weight over the first year by following a healthy diet and exercising.²



Exercise:

Regular exercise is important because it burns calories and helps reduce weight.¹ In addition, it also helps in:⁶

- Improving blood sugar control in people with diabetes
- Decreasing blood pressure, especially in patients with high blood pressure
- Restoring recommended cholesterol levels
- Helping patients to quit smoking

Exercise of a moderate intensity such as brisk walking, for at least 30 minutes per day, covering around 2,5 km during this period, is recommended.⁶ Increasing the level of physical activity further enhances the beneficial effects.⁷

Choose an activity that you will enjoy to encourage long-term commitment. Alternative options include cycling, swimming, rowing, dancing or stair climbing. You should be able to carry on a normal conversation during moderate intensity training. If you are breathless, tired and sweating, you have worked hard enough. You may also alternate the exercises to keep it interesting, for instance walk 3 times a week and swim or cycle 3 times a week.⁶

If you cannot fit an exercise program into your daily routine, try integrating exercise by taking the stairs instead of an elevator, parking further away from the entrance at the shopping mall or walking the long way round to your destination.⁶



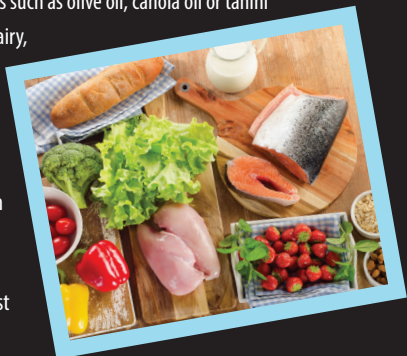
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Diet:

The goal of any diet is to burn more calories than you eat. The types of foods we eat are related to whether we gain or lose weight over a period of time.⁸ A healthy diet such as the Mediterranean diet which consists of large portions of fruits, vegetables, nuts, whole grain and olive oil, reduces the risk of heart disease.^{3,9}

The Mediterranean diet recommends:^{8,9}

- Eating plant-based foods such as fruits, vegetables, legumes, nuts and whole grains (7-10 servings per day)
- Replacing butter with healthy fats such as olive oil, canola oil or tahini
- Moderate amounts of milk and dairy, preferably in the form of cheese
- Using herbs and spices instead of salt to flavour foods
- Limiting red meat to no more than a few times per month
- Eating fatty fish (salmon, lake trout, mackerel, sardines and albacore tuna) and poultry at least twice a week
- Drinking red wine in moderation, if at all (1 glass per day for women and 2 glasses per day for men)¹⁰



Try to avoid soft drinks, sugar-sweetened beverages, sweets, cakes and biscuits as they rarely contain important nutrients.⁸ Refined grains such as white bread and white rice should be replaced by whole grain foods such as whole wheat bread, oats and brown rice.¹⁰

Treatment with medication

For some people, lifestyle changes may not be enough, especially if they are considered to be at high risk of cardiovascular disease.¹ For these people, each component of the metabolic syndrome can be treated with medication:

- Blood pressure lowering medication
- Medication that increases the body's sensitivity to insulin
- Cholesterol lowering medication

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