

METABOLIC SYNDROME



WHAT IS METABOLIC SYNDROME?

Metabolic syndrome occurs when a person has a combination or cluster of related cardiovascular and metabolic disease risk factors:

- » Abnormal levels of blood fats (high 'bad fats' or low 'good cholesterol')
- » Raised blood sugar levels
- » Elevated blood pressure
- » Central obesity

Metabolic syndrome may be diagnosed if you have at least 3 or 5 of these risk factors in combination. It can contribute to the risk of heart (cardiovascular) disease and other conditions like type 2 diabetes.

HOW DOES EXERCISE HELP WITH METABOLIC SYNDROME?

Regular exercise can:

- » Decrease blood triglyceride levels ('bad fats') and modestly increase HDL-cholesterol ('good cholesterol')
- » Improve blood sugar levels
- » Lower blood pressure
- » Reduce body weight and waist circumference.

Exercise can significantly reduce the risk of progression to type 2 diabetes in adults who have metabolic syndrome. Although the combination of weight loss and exercise usually produces superior outcomes and should be encouraged, weight loss is often mistakenly considered the main reason for doing regular exercise. Evidence shows that the improvement in metabolic syndrome abnormalities can be achieved without weight loss. This is relevant to your care given that weight loss from most available therapies is usually modest and difficult to sustain in the long-term.

THINGS TO REMEMBER

If you have any questions as to whether, or what type of exercise is right for you, you should seek guidance from your medical practitioner and a referral to an accredited exercise professional. These professionals can conduct appropriate screening to determine what type of exercise will be both safe and beneficial for you, and can tailor a program to suit your goals, preferences and exercise abilities. This is particularly important if you are starting a new exercise program, or significantly changing your current exercise program. Visits to these allied health professionals may be covered by your private health insurance and Medicare (under a chronic disease management plan which can be developed by your General Practitioner)

WHAT TYPE OF EXERCISE IS BEST FOR METABOLIC SYNDROME?

Aerobic exercise (such as brisk walking, cycling, swimming, jogging, dancing and team sports) is beneficial for the management of metabolic syndrome and also improves the health of your heart, blood vessels and your cardiorespiratory fitness. Resistance exercise (such as weight lifting, body weight exercises, resistance band exercises and circuit training) can improve some metabolic syndrome abnormalities (although probably not abdominal fat levels) and also help to promote healthy muscles and bones. Undertaking a combination of regular aerobic exercise and progressive resistance training can reduce the risk of progressing to type 2 diabetes.

You should aim to achieve 150-300 minutes per week of aerobic exercise at a 'moderate' intensity. A simple rule of thumb is to exercise at a level that increases your breathing and heart rate but still allows you to maintain a conversation. Aim to do resistance training involving 2-3 sets of 8-10 different exercises, at a load that can be performed for 8-15 repetitions for each exercise, on two to three non-consecutive days per week.

PREPARED BY: Associate Professor Nathan Johnson and Professor Stephen Twigg | SOURCE: [Exercise is Medicine Australia](http://Exercise.is.Medicine.Australia)
Always seek professional advice from an Accredited Exercise Physiologist. Find one here: www.essa.org.au/find-aep