

Exercise and coronary artery disease



Exercise is a key part of treating coronary artery disease

In addition to medicinal treatment, the essential basis of treating coronary artery disease includes regular exercise, heart-friendly food, weight control, mental wellbeing, getting enough sleep and abstaining from tobacco. Exercise can increase your chances of making an impact on your coronary artery disease. Did you know that regular exercise can reduce the risk factors that make coronary artery disease worse and even slow down the advance of the disease? It is always worth getting started with exercise.

Regular exercise

- improves the pumping efficiency of your heart as well as its strain tolerance
- helps improve the condition of your heart and vascular system

- improves the functioning of the inner layers of your arteries and the formation of new blood vessels
- increases the good HDL cholesterol of your blood and decreases the bad LDL cholesterol, which slows down the constriction, or narrowing, of arteries
- decreases the rate of triglycerides in the blood
- lowers your resting blood pressure
- helps you to control your weight
- increases the insulin sensitivity of your body and improves the blood sugar balance
- improves muscular strength
- generates energy

→ Regular exercise improves quality of life, helps you have the energy to deal with daily life, and improves your prognosis.



Photos Anna Kara

An active lifestyle

One important element of exercising is to do it regularly, as part of your daily routine. If your fitness has deteriorated or you are unaccustomed to doing much exercise, it is important to start slow and build up your stamina incrementally. Use several short periods of exercise as building blocks for a day's fitness regime. As you get fitter, you can increase the time you spend exercising to 30–60 minutes a day, after which you can begin to increase the potency of what you do. An appropriate level corresponds to a brisk walk, while getting a little short of breath is good for you.

Daily exercise can consist of daily movement, such as biking to work, gardening, and a slightly winding endurance exercise (rate of perceived exertion, RPE 13–14, see page 5). If you are fit and can exercise without symptoms, you can exert yourself more (RPE 15–16). At first, try doing higher intensity training at intervals, alternating between higher and lower intensities of exercise.

For endurance exercise you can try walking, golfing, nature hikes, riding an exercise bike, long-distance (not alpine) skiing, swimming, stick walking, jogging, dancing, rowing and various ball games. Choose forms of exercise that you enjoy. Increased endurance fitness makes everyday chores easier and allows you to get about better and for longer periods.

Take care to work on your muscle strength at least twice a week. At home, at the gym or in nature, work to strengthen your muscles in a well-balanced way. Focus your strength training on the big muscle groups that are important for functioning. For your mobility, the big muscles in your legs are key. Good muscle tone makes many daily chores and actions easier, which becomes increasingly important as we age.

TIPS FOR SUCCESS

- Make the most of all everyday exercises.
 - Set your goals at 30–60 minutes of brisk exercise a day and muscle training twice a week.
-

Boldly go, but listen to your body

How you feel is key to finding a level of exertion that suits you. When you exercise, it's all right and even good to feel slightly out of breath. Appropriate exercise is efficient when it doesn't cause symptoms, doesn't exhaust you, and you feel energised afterwards. It is important that you can tell the difference between feeling slightly out of breath and being really short of breath. Getting a of breath is part of exercising and becomes more pronounced the more you exert yourself. Being very short of breath, known medically as dyspnoea, causes anxiety and does not ease off with rest. By listening to your body, you learn to exercise safely and efficiently. By using the rate of perceived exertion (RPE) scale you can assess the rate of exertion you feel.

Extraordinary tiredness or exhaustion can be a sign of too much exertion. Usually, it takes as long to bounce back from exercising as it takes to do the exercise itself. Some heart medicines, such as beta blockers, slow the natural increase of heart rate during exercise. That is why starting slowly or having a long (5–15 minutes) initial warm-up and ending your exercise session with a gradual cool-down ensure that you will feel the benefits of exercise.

Medications that ease symptoms can make it possible to continue exercising

by increasing the flow of oxygen to the heart muscle and improving its tolerance to exertion. Chest pain (angina), shortness of breath, pain in the upper abdomen and feeling sick when exercising are typical signs of coronary artery disease. If you experience such symptoms when you walk up a hill, for instance, then slow down, take a breather and if necessary take a nitroglycerin tablet to relieve the symptoms. If rest and nitroglycerin do not relieve the symptoms quickly, you will need to get help.



RPE Scale

Using the **RPE table** below, you can assess the intensity of your physical activity. The numbers on the scale illustrate breathing rate and the overall intensity of your exercise.

SAVE THIS TABLE AND USE IT IN YOUR DAILY LIFE.

HOW INTENSE DOES YOUR EXERCISE FEEL?		
6		breathing easily
7 extremely light activity		
8		
9 very light activity		
10		breathing more difficult
11 light activity / singing is possible		
12		
13 moderate / talking is possible		
14		very difficult to breathe
15 vigorous / breathing heavily		
16		
17 strenuous activity		
18		
19 very strenuous activity		
20		

Rate of Perceived Exertion (RPE), adapted from Borg (1982)

What kind of exercise do you enjoy?

Coronary artery disease never prevents every physical activity. Plan and make time for regular exercise. Consider how you can make physical exercise a permanent part of every day. Think about your own history of exercise and your habits. Using an activity planner and/or diary can help. There are many different ways to be physically active. Do you prefer exercising in company or alone? Would nature hikes get you going? Would exercise more easily become a regular habit if you set up a schedule to walk with a friend or family member, for instance? Aim to find a time that best suits you to do something you enjoy. The positive experience of such activities will encourage you to take more regular physical exercise.

If the thought of exercise feels scary to you or causes anxiety, you can talk to a physiotherapist, a doctor, a nurse, or a peer support person. You could join an exercise group or an exercise-based cardiac rehabilitation programme. Your physician can give you a referral note when necessary.

CHECKLIST FOR ACTIVITIES

- Start by warming up (5–15 minutes) and end gradually by cooling down.
- Increase your exertion rate according to how you feel.
- It is natural and good to start breathing more deeply during exercise.
- You should feel good during and after exercise.
- Ask your doctor how your medication can affect your exercise.
- Switch to a lighter activity when weather conditions are extreme.
- Keep your nitroglycerin at hand. If a symptom comes on suddenly, take your pill and rest until the symptom has passed. Only then, continue at an easier pace.
- If your symptoms are severe, call emergency services immediately.
- Engaging in regular physical activity will improve your health.

Consider how you can make physical exercise a permanent part of every day. Think about your own history of exercise and your habits.

Support for exercise

Many kinds of support are available for your exercise regime. If you need help to get started, you can seek individual assistance from a physiotherapist at your local healthcare centre, from your cardiac nurse, from your occupational health service, the local Heart Association or Heart District, or through the physical activities councillor for relevant groups in your municipality.

Information, knowledge and support for your illness as well as practical tips for activities and how to manage your condition are available in Finnish and Swedish on the Finnish Heart Association website sydan.fi and in Finnish on the Kuntoutumistalo.fi rehabilitation site (kuntoutumistalo.fi → Kuntoutujalle → Sydänsairaudet). The Heart Association also offers courses where you can meet others with similar heart conditions and share experiences, including learning about and doing physical activities together (sydan.fi/

sydan.fi/ kurssikalenteri). You can also ask about 'Tulppa' rehabilitation at your healthcare centre. With a peer support person, you can speak in confidence about exercise, your feelings and what you have experienced (sydan.fi/vertaistukihaku). At sydan.fi/tulemukaan there is information about Heart Association activities in Finnish and Swedish that you can join. There are web lectures and an event calendar to show you what is going on. If you like, you can become a member. You are heartily welcome to join in Heart Association physical activities.



IF YOU NEED PROFESSIONAL ASSISTANCE, GET IN TOUCH

Name _____

Phone _____

E-mail _____

Six-minute walking test

Distance walked _____

Reference value _____

Notes



Instructions and notes

Individual instructions

My notes

Exercise plan

The following questions will help you to think about how you exercise. Using them, you can plan how and when to increase your physical activity. You can make your plan together with a professional in healthcare or training, or on your own.

How are you physically active at present?

When and how would you like to be physically active?

HAVING A PLAN
HELPS YOU
SUCCEED.

Exercise diary

WEEKDAY	TYPE OF EXERCISE ¹	AMOUNT ²	RPE	BREATHLESS ³
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

1 e.g., gardening, stick walking, cleaning, gym

2 distance/duration/steps

3 not / a bit / a lot



Read more about cardiac health and well-being, get to know our activities or become a member

sydan.fi

For anyone with coronary artery disease, this booklet gives general guidelines for exercising. If your physician or physiotherapist has given you specific instructions, do please follow them.

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