



Cardiac rehabilitation

Regular exercise is important for everyone, especially those who have any form of heart disease.

Even if you were in great shape before, it's important to start slowly and gradually increase the difficulty with any exercise after surgery or recent illness.

The three stages of cardiac rehabilitation

Cardiac rehabilitation is divided into three stages. Stage one begins in the hospital and takes about 6-8 weeks. When it ends stage two begins and ends three months after the beginning of the cardiac rehabilitation. Stage three is the person's own responsibility and it lasts for the rest of their life.

After discharge from the hospital it's important to gradually build up strength and endurance with daily exercise, such as walking, and slowly increase the duration. For those who aren't used to exercise, or are still recovering from surgery it's important to begin slowly. Start with walking for 10-15 minutes daily, and increase the duration by 1-2 minutes each day. For those who are used to exercise it's good to start by walking for about 15-20 minutes and gradually increase the duration by 1-2 minutes each day. It's recommended to walk twice daily at first, but when the duration gets up to 30-60 minutes it's enough to walk once per day. For many people 15-20 minutes walking is fitting, but it is important to respect your own limits. Those people who are used to regular exercise may be able to progress faster.

Stage 1 (6-8 weeks)

It's recommended to attend cardiac rehabilitation with a physical therapist. The physical therapist monitors the blood pressure and heart rate before and after exercise to monitor the function of the heart muscle, and guides you through the first weeks of rehabilitation. Landspítali - Hringbraut offers cardiac rehabilitation on an outpatient basis for people who are beginning with exercise after heart surgery or illness. For those who are unable to utilize this service, it is recommended to go to a physical therapist near you for cardiac rehabilitation.



Stage 2 (from week 8 to 3 months after illness/surgery)

In stage two of cardiac rehabilitation the intensity increases and strength training will increase. In the beginning of stage two you will do a maximum tolerance test which is used to calculate a suitable training intensity and to evaluate the condition of the heart. Stage two is available at the HL-stöðin rehabilitation center in Reykjavík or Akureyri or at the rehabilitation center in Reykjalundur. In order to go to Reykjalundur your doctor must send an application, and the program is usually four weeks long. For those who are unable to utilize these options, it is recommended to go to a physical therapist in your neighborhood for stage two cardiac rehabilitation.



Stage 3 (from 3 months after illness/surgery)

Stage three begins three months after the beginning of the cardiac rehabilitation. The goal of this level is to maintain the progress which was gained in stages one and two. In this stage most people have become able to train independently. It's important to find a suitable exercise form like walking, cycling etc. and continue exercising on a regular basis. Many locations offer maintenance training for people with heart disease: HL stöðin in Reykjavík and Akureyri, Reykjalundur, Sjúkraþjálfarinn in Hafnarfjörður, MT stofan, Heilsuborg, Styrkur and Gáski, and more.

Composition of training

Cardiac rehabilitation consists of both endurance and strength training. It's important to begin and end the training with light intensity exercise. It's desirable when exercising to experience light shortness of breath, light sweating, and a little fatigue, but beware not to be exhausted or tired for the rest of the day. For those who have little stamina or get chest pains from light exercise it is more suitable to exercise with regular breaks; for example, walking for two minutes and resting for one minute. When your endurance and strength increase, you can increase the intensity slowly but gradually, but continue to rest in between. It's recommended to do a few strength exercises and stretches after exercising.

Normal reactions to training

It's normal for the heart rate to increase, to sweat and to feel tired and short of breath. The shortness of breath should not be so strong that you can not keep up a conversation.

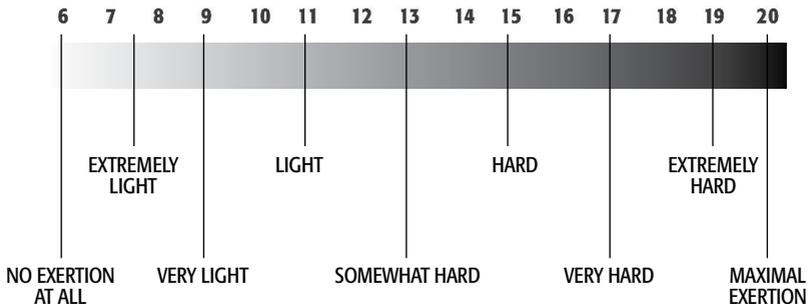
Abnormal reactions to training

Great increase in heart rate, chest pain, irregular heart rhythm, intense shortness of breath, dizziness, visual disturbances, cold sweat or nausea are abnormal reactions to exercise. If you have any of these symptoms when exercising, you should discontinue the training. If the symptoms don't disappear with rest it's advisable to take a nitro tablet or contact your doctor.

Positive effects of training

The heart's function is to pump blood through the body so it will get the oxygen and nutrition it needs to maintain healthy function. The heart is a muscle, like any other muscle in the body, which is responsive to exercise. By training the heart muscle the blood flow will increase to the tissues of the body and will enable us to strengthen other muscles in the body, which will in turn relieve the strain on the heart.

The modified Borg scale is used to measure perceived exertion during physical activity



Work at a rate where the exercise feels between light and somewhat hard (11-13) in the first few weeks but between light and hard (11 - 15) when endurance has increased.

Good to consider

When people are recovering from illness or surgery, it's normal to have good and bad days. Many people experience increased fatigue and weakness at first, but this will decrease day by day. It's good to rest as required but it's also necessary to exercise. Keep in mind that the exercise should give you sense of ease and wellbeing. If you experience a lot of fatigue and weakness it's good to exercise for a shorter period of time, but more often each day. It's important to listen to your body and it's normal that the exercise duration and intensity vary day by day depending on how you feel.

If you have any questions we recommend that you contact a health professional such as a physical therapist, doctor or nurse.

Useful websites:

- The Directorate of Health website:
<https://island.is/en/physical-activity-recommendations-from-doh>
- Information and educational materials about cardiovascular disease risk factors can be obtained from Landspítali's website: www.landspitali.is/hjartaendurhaefing

