



Exercise with Heart Disease

April 2014

<p>How active should I be when I get home?</p>	<ul style="list-style-type: none"> • Set up an appointment with cardiac rehab when you get home. • Your discharge paperwork will list precautions and limitations with physical activity. It will also tell you how long these limitations should last. • It is important to be active when you get home. Aerobic exercise is usually safe to start. See the aerobic exercise section of this packet to help you at home until you start rehab.
<p>What is cardiac rehabilitation?</p>	<ul style="list-style-type: none"> • Exercise with keeping an eye on your heart rhythm, pulse, blood pressure and symptoms. • A personalized program meeting three times a week. • Education for lifestyle changes –healthy eating, blood pressure, diabetes and cholesterol management, quit smoking, handling stress and weight loss. • Supervised by health care workers, led by a heart doctor. • Sessions include aerobic exercise, strength training, stretching and education.
<p>What are the benefits?</p>	<p>Research shows that after 1 year, cardiac rehab participants who finish 24-36 sessions had up to a <u>58% less risk of death</u>. After 5 years, a <u>34% less risk of death</u>.</p> <ul style="list-style-type: none"> • Decreases risk of deadly heart attack ($\geq 25\%$) • Fewer symptoms such as shortness of breath and tiredness • Improved fitness and quality of life • Improved ability to perform daily activities • Increased understanding of heart disease • Improved management of healthy lifestyle choices • Decreased visits to the emergency room and hospital stays • Decreased risk of death from all causes
<p>Does insurance cover rehab?</p>	<p>Most insurance plans have cardiac rehab benefits including Medicare. The rehab you attend can help you understand your benefits.</p>
<p>How do I get started?</p>	<p>A hospital case manager will help you find the phone number to a cardiac rehab close to your home and answer general questions. If you have more questions or need more help locating a cardiac rehab, call The Johns Hopkins Clinical Exercise Center at 410-616-7220.</p>



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What is aerobic exercise?



When you first get home from the hospital, walking and stationary biking are recommended.

As your recovery improves other activities can be added such as swimming, some sports and dancing. Choose activities that you feel **safe** doing and you **enjoy**. If you are worried about the safety of an activity, discuss your concerns with your doctor or cardiac rehab staff.

Aerobic exercise can help:

- **Control** -Blood pressure -Cholesterol -Blood sugar
- **Lose** weight or to maintain a healthy weight
- **Increase** your energy

Aerobic
Frequency
&
Time

- Aerobic exercise is safe to do every day.
- Start with what you are comfortable with, as little as 5 minutes is ok. You can do many short bouts of exercise when you get home from the hospital. As you feel comfortable, increase the amount of time you exercise at one time.
- A good goal is 20-60 minutes most days of the week.

Aerobic
Intensity

How hard can I exercise?

- You and your heart doctor should discuss what is best for you.
- How hard you can work depends on your health and exercise routine before you came to the hospital.
- Cardiac rehab will teach you how to progress safely. Based on a **target heart rate range** (your pulse) or **rating of perceived exertion (RPE)**.
- Cardiac Rehab staff or your doctor can teach you about your target heart rate range.

It is ok to feel tired after exercising but you should never feel so tired that you can't do anything else that day.



To check your own heart rate (pulse):

- Place the tips of your pointer finger and your middle finger on the inside of your wrist of your opposite hand. Press and feel toward the edge of the wrist on the thumb side of your hand until you find a pulse.
- Count the beats you feel for 10 seconds and multiply that number by 6 to determine your HR in beats per minute.

This takes practice, so be patient with yourself.



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Aerobic Intensity

Rate of perceived exertion (RPE)

- Try to rate the amount of effort and tiredness that you feel during exercise.
- Always exercise according to your symptoms.

Work between a 3 and a 5, “moderate” to “hard” as long as you are not having any difficulties

1 - 10 Borg Rating of Perceived Exertion Scale	
0	Rest
1	Really Easy
2	Easy
3	Moderate
4	Sort of Hard
5	Hard
6	
7	Really Hard
8	
9	Really, Really, Hard
10	Maximal: Just like my hardest race

What are warm-ups and cool-downs?

A Warm-up is...

- 3-10 minutes of exercise at the beginning of your work-out at an easy and comfortable pace.
- Increases blood to your muscles and gives your heart time to slowly increase your heart rate.
- Makes exercise more comfortable and lowers your chance of symptoms.

A Cool-down is...

- 3-5 minutes of exercise at the end of your work-out at an easy and comfortable pace.
- Can prevent dizziness and soreness.
- Allows your heart rate and blood pressure to drop more slowly.

What is strength training?



Benefits include:

- Strength training improves muscle and bone strength.
- Increased strength with activities like carrying groceries, cleaning your house and doing laundry.
- Walking faster and walking up more stairs without needing a break.

Strength training exercises can be done using:

- Your body weight
- Exercise bands or tubes
- Hand or ankle weights
- Strength machines



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It is best to start strength training with help from cardiac rehab to learn how to do strength exercises safely. Strength exercises are usually done 3 times per week. It is best to pick exercises to strengthen all your major muscle groups.

What is stretching?



Flexing and bending your joints through their full range of motion.

Benefits include:

- Improves flexibility and posture.
- Decreases the chance of injury in everyday activities.

Learn to do stretches with help (cardiac rehab).

- Hold each stretch for 15-30 seconds, repeat up to three times.
- Do not stretch to the point of pain, you should feel a mild to moderate pull in your muscles.
- Breathe regularly, don't hold your breath.

When can I resume sexual activity?

You should be able to walk at a quick pace for about 20 minutes or climb 2 flights of stairs without feeling out of breath before you resume sexual activity. If you are unable to do this much exercise, you can still have sex but choose easier positions. Ask your doctor or cardiac rehab staff for information on easier positions.

What are some activity precautions?

Adjust exercise to the weather. Avoid exercise in extreme cold or extreme heat. Use the RPE scale in this handout to find out what is "moderate" for you on that day.

Drinking fluids before, during, and after you exercise is important. On hot, humid days, if you experience headache, dizziness, faintness, nausea, coolness, cramps, and/or palpitations, you may have heat overload. If you have any of these symptoms, stop exercising and move to a cooler place.

Do not exercise soon after eating. Wait at least 2 hours. Your stomach needs more blood flow to digest your meal. This conflicts with your muscles that need blood flow for exercise.

Do not exercise if you are very ill. Do not exercise with a fever or the flu.



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Wear the right clothes and shoes. Dress in loose fitting, comfortable, breathable clothing appropriate for the weather. Wear shoes made for exercise, such as a walking shoe.

Be alert for symptoms.

If you feel any of the following signs or symptoms, stop exercising, stop the activity and contact your doctor right away:

- Pain, pressure, heaviness or fullness in the chest (aching, burning, or tightness)
- Pain or pressure in the jaw or teeth
- Pain spreading to one or both arms, shoulders, or upper back
- Irregular pulse
- Unexplained nausea, vomiting or a feeling of “bad indigestion”
- Shortness of breath, lasting for more than 5 minutes
- Unexplained breaking out in a cold sweat or feeling clammy
- Unexplained extreme dizziness, lightheadedness or fainting

References / Resources

For more information on exercise with heart disease visit the following internet pages:

The Johns Hopkins Heart & Vascular Institute

http://www.hopkinsmedicine.org/heart_vascular_institute/clinical_services/centers_excellence/womens_cardiovascular_health_center/patient_information/health_topics/exercise_heart.html

The American Heart Association

http://www.heart.org/HEARTORG/GettingHealthy/PhysicalActivity/American-Heart-Association-Recommendations-for-Physical-Activity-in-Adults_UCM_307976_Article.jsp

References

1. "Cardiac Rehabilitation: Low Cost, Low Technology, Great Medicine!". American Association of Cardiovascular and Pulmonary Rehabilitation, January 2013, Web. November 25, 2013.
2. Coronary Artery Disease Cardiac Rehabilitation and Survival in Older Coronary Patients. Suaya, JA., et al. J Am Coll Cardiol 2009;54:25–33