Exercise for People with a Ventricular Assist Device (VAD)

Why aerobic exercise?

Exercise is vital for good healing after a VAD placement. Aerobic exercise makes you use the major muscle groups of your body such as your legs in a constant, rhythmic manner. This movement helps your heart to pump more blood and oxygen to your working muscles. It can also reduce risk of blood clots, improve how your lungs function, and increase your energy and fitness levels.

Benefits for the heart and blood vessels

- Lessens the heart’s need for oxygen. The heart pumps fewer times while still meeting the body’s need for oxygen-rich blood.
- Lowers the levels of triglycerides and LDL (“bad”) cholesterol. Both of these types of blood fats have been linked with an increased risk of heart disease.
- Raises the level of HDL (“good”) cholesterol that may protect against heart disease.
- Lowers blood pressure. High blood pressure (hypertension) puts an added strain on the heart and blood vessels in your body.
- May increase the amount of blood reaching your heart muscle.
- Helps to open the blood vessels during times when more blood flow is needed.
- Thins the blood to keep the vessels clear of blood clots and plaque.
- Improves your mood.
- Helps to decrease feelings of stress.
- Helps you sleep at night.

Other benefits

- Helps to maintain proper blood sugar levels in persons with diabetes.
- Assists with weight control.
- Reduced risk of thinning bones (osteoporosis).
- Reduced risk of colon and breast cancer.
Exercise Is Important!

What to expect while you exercise

- Increased heart rate
- Some sweating
- Muscle fatigue
- An increase in breathing

When not to exercise

- When your VAD flow is different than your “normal” flow rate
- For patients with pulsatile VADs-systolic blood pressure (top number) is greater than 150 mmHg or less than 80 mmHg
- For patients with non-pulsatile VADs-mean arterial blood pressure is greater than 90
- If your temperature is greater than 100°F
- If you are feeling faint or have a headache
- If you are short of breath
- If you have chest pain or pressure

When to stop

Stop and call your VAD Coordinator or doctor if you notice any symptoms listed below.
- Chest pain (angina)
- Frequent skipped beats
- Excess shortness of breath
- Feeling faint or dizzy
- Excess sweating
- Nausea
- Blurred vision
- Cramping in your arms or legs
- Headache
- ICD shock (if you have an ICD)

If symptoms persist or become worse, call 911 and then call your VAD coordinator. If 911 is not available in your area, what number would you call? ___________________
Getting Started

Method of exercise ___________________________________________________________
How often __________________________________________________________________
How long per session ______________________________________________________
How intense
  Difficulty (RPE scale) rating ________________________________

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<thead>
<tr>
<th>Warm-up _______ minutes at a difficulty rating of ___________________________.</th>
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<tr>
<td>Exercise phase  Begin with __________minutes at a difficulty rating of ___________</td>
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| Increase the exercise phase by ___________minutes at each exercise session until you reach 
  ____________minutes. |
| Cool down _________ minutes at a difficulty rating of __________________________. |

Stop exercise if you feel faint, are dizzy, have chest pain, nausea, blurred vision, frequent skipped heart beats or cannot catch your breath.

How Should I Increase My Exercise Program?

Example: Begin with 5 minutes of walking 3-4 times per day. Add 1-2 minutes to each session every day. As you add time, the number of sessions can be decreased. For instance, when you complete 10 minutes of exercise, decrease your routine to 3 sessions per day. When you complete 30 minutes, decrease the frequency to 1 session per day.

Intensity: Once you are able to perform 20-30 minutes at one time, intensity can be increased slowly. Increase your intensity for 3-5 minutes at a time. Then resume your normal routine for the rest of your workout. Increase the intensity slowly. Always keep the RPE scale and Talk Test rule in mind (see below).

Check your intensity

1. Talk test - You should be able to converse during exercise. If you aren’t able to carry on a conversation without shortness of breath you should reduce the intensity.

2. RPE scale – Your aim should be 12-14 or “somewhat hard.”
3. Climbing stairs

Climbing stairs is a heavy exercise in a very short amount of time. To lower the energy level, you will need to climb stairs at a slower rate—one stair every 2 seconds. Do not exert yourself more than what feels “somewhat hard.” Rest as needed. As you get better and progress in your exercise program, you can slowly increase the rate.

To protect your VAD site

- Do not lift, push, or pull more than 10 pounds.
- Avoid any arm motion that causes pain in your incision.
- Do not drive.
- Do not bend at the waist or do things that may cause your drive line to kink or bend.
- Do not raise your arms above shoulder height.

Outpatient Cardiac Rehabilitation

Outpatient cardiac rehabilitation is vital to your recovery. It is a program that features exercise and education. It is made to help you gain muscle strength, energy, and endurance. It also will help guide you to living a heart healthy lifestyle. You can receive this follow-up care through the UW Hospital Cardiac Rehab program or a program nearer your home. The inpatient cardiac rehabilitation staff will help find and contact your local program before you go home.

Your local Cardiac Rehab program:______________________________
Phone Number: ________________________________
UW Hospital Inpatient Cardiac Rehab (608) 263-6630

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 3/2016 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6163