

## Exercise for People with a Mechanical Circulatory Device (MCD)

### Why aerobic exercise?

Exercise is vital for good healing after a MCD 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 lung function, reduce the risk of lung infections, 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 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.
- Improves digestion and decreases constipation.
- 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 MCD flow is different than your "normal" flow rate.
- For patients with pulsatile MCDs-systolic blood pressure (top number) is greater than 150 mmHg or less than 80 mmHg.
- For patients with non-pulsatile MCDs-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 MCD 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 MCD 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:

\_\_\_\_\_

**Warm- up:** \_\_\_\_\_ minutes at a difficulty rating of \_\_\_\_\_.

**Exercise phase:** Begin with \_\_\_\_\_ minutes at a difficulty rating of \_\_\_\_\_.

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, 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 to 1 session per day.

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

## Check Your Intensity

1. **Talk test** - You should be able to talk during exercise. If you can't talk without shortness of breath you should reduce the intensity.
2. **RPE scale** – Your aim should be 12-14 or “somewhat hard.”

6
7 Very, Very, Light
8
9 Very Light
10
11 Fairly Light
12
13 Somewhat Hard
14
15 Hard
16
17 Very Hard
18
19 Very, Very Hard
20

## 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 (Rehab)

Outpatient cardiac rehab 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 teach you to live 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 rehab staff will help find and contact your local program before you go home.

Your local Cardiac Rehab program:

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Phone Number:

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UW Hospital Inpatient Cardiac Rehab  
**(608) 263-6630**