

Transplant recipients: walking for health

“Walking is man’s [and woman’s!] best medicine.”
Hippocrates

Hippocrates’ comment was made thousands of years ago, yet it is still true today! There are many benefits to walking. Although our culture touts the virtues of running or jogging, walking provides as many benefits—and it’s safer! For example, walking helps to burn calories, curb the appetite, lower blood pressure, improve muscle tone, boost energy levels, and lessen anxiety. At the same time, walkers are less prone to injuries than runners or joggers.

Getting Started

The first thing to do is consult with your transplant team or your primary care physician. Tell them you are interested in starting a walking program and ask for their advice regarding any specific limitations that you might have. Ask about your target heart rate. If you find it difficult to take your own pulse, consider buying a heart rate monitor.

Footwear

A well-fitting pair of shoes is the single most important piece of “equipment” you will need. However, there is no one “best” shoe. Because everyone’s feet are different, the “best” shoes are the ones that fit you properly, are lightweight and comfortable, and provide good support, flexibility, and cushioning. It is important to take some time in selecting a good shoe. You may want to consult with an athletic shoe fitting expert who can help you select a shoe for your particular weight, stride, and walking speed and distance. Such an expert will analyze your gait, have you try on several styles of shoes and observe how you walk in each of them. It is important to invest in a good pair of walking shoes; they will help prevent injuries and should last for many miles.

Where to Walk

Many transplant recipients enjoy walking outdoors. This is fine, as long as you are not exposed to extreme temperatures. Walking in hot weather puts you at risk for heat sickness. Walking in cold weather can also be dangerous—not only because of the cold temperature but also because of ice or snow. On very

cold days or hot, humid days, it is better to walk indoors; for example, at your local, air-conditioned shopping mall. Many malls open early in the morning to accommodate “mall walkers.”

Clothing

Wear loose fitting clothes. Avoid rubberized clothing. In cooler weather, dress warmly and wear gloves. Wear layers of clothing that trap the heat. You can remove a layer if you get too warm. Wear a hat. You will lose about 30% of your body heat through your head. In warmer weather, wear light clothing made of wicking, breathable fabrics. If you are walking outdoors on a sunny day, don’t forget to protect your skin from the sun’s rays by applying sunscreen lotion (sun protection factor [SPF] 15 or higher) and wearing a wide-brimmed hat.

Warming Up

Each time you walk, you should warm up by walking slowly for 10 to 15 minutes. This is particularly important for heart transplant recipients. Because the transplanted heart has no nervous system supply, the only way your heart will “know” that you are exercising is by the release of certain chemicals. It takes time for these chemicals to be released; therefore, heart transplant recipients must be careful to warm up properly.

How to Walk

Good posture is key. As you walk, keep your head up and your spine straight. Keep your arms and shoulders loose. Take long, smooth strides with your arms swinging gently at your sides. Keep your elbows close to your body and bent at a 90-degree angle. Keep your hands loose. Don’t clench your fists... this will increase your blood pressure. Take deep, regular breaths. Don’t hold your breath. If you are walking with someone, you should be able to carry on a conversation in full sentences.

Weight Loss

If losing weight is one of your goals, let “slow and steady” be your motto. The number of calories you will “burn” by walking depends on your weight

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Table 1 Warning signs of heat exhaustion and heat stroke

Heat exhaustion	Heat stroke
Heavy sweating	Warm, dry skin with no sweating
Cold, clammy skin	Strong, rapid pulse
Dizziness or fainting	Confusion or unconsciousness
Weak, rapid pulse	High fever
Muscle cramps	Throbbing headache
Shallow and fast breathing	Nausea and/or vomiting
Nausea and/or vomiting	

and the distance you walk. For example, if you weigh 140 pounds and walk at 2 miles per hour, you will burn about 93 calories per mile. However, if you weigh 200 pounds and walk at 2 miles per hour, you will burn about 133 calories per mile. As you begin your walking program, it is more important to increase distance than to increase speed.

A sensible weight loss goal is 1 to 2 pounds per week. A pound of fat is equal to 3500 calories. In order to lose 1 pound a week, you will need to “spend” 3500 more calories than you eat during the week. You can do this by burning more calories through walking, eating fewer calories, or both. Check with your transplant team dietician for advice about your daily caloric intake. This is particularly important for diabetic patients.

Cooling Down

Just as you warmed up before your walk, you should spend 10 to 15 minutes cooling down. You can do this by walking on a flat surface at a slower speed. Again, this is important for heart transplant recipients. The only way the transplanted heart will “know” that you have stopped exercising is when the special chemicals have gone away. It takes time for these chemicals to dissipate.

Having fun

You will be more inclined to walk if you make it a pleasant experience. Invite a family member or friend to join you. Keep track of your progress. Consider buying a pedometer that will count your steps, distance, and calories spent. If you are walking in a mall, consider walking to music or listening to a book on tape while you walk. If you are walking outdoors, be careful about listening to tapes while walking.... You don't want to be a pedestrian accident waiting to happen!

Safety

Keep safety in mind as you walk. If you are walking in the early morning, evening, or at night, be sure to wear reflective devices such as vests or bands and carry a flashlight. Consider taking your cell

Table 2 Warning signs of heart attack

Uncomfortable pressure, squeezing, fullness, or pain in the center of your chest that lasts for more than a few minutes or goes away and then comes back
Pain or discomfort in one or both arms, your back, neck, jaw, or stomach
Feeling out of breath
Breaking out in a cold sweat
Feeling sick to your stomach
Feeling lightheaded
Extreme fatigue

Note: Because there is no nervous system supply to the donor heart, it is very unlikely that heart transplant recipients will have pain. They are more likely to have the other symptoms of a heart attack.

phone with you. Be aware of your surroundings at all times. If you are walking at a time when mosquitoes are out, be sure to protect yourself against mosquito bites (and possible West Nile virus infection). Wear long-sleeve clothing and long pants. Ask your transplant team about applying an insect repellent that contains DEET. Keep the following warning symptoms in mind. If they occur, immediately stop walking and call for assistance.

Heat Exhaustion and Heat Stroke

Outdoor temperatures over 70° and humidity over 70% can interfere with your body's cooling process. When you exercise in these conditions, you put yourself at risk for dehydration, heat exhaustion, and heat stroke. If you have any of the following symptoms, immediately stop exercising, cool down by dousing yourself with cold water, and seek medical attention (Table 1).¹

Heart Attack

Certain types of transplant recipients may be at higher risk for heart attacks because of their antirejection medications and other medical problems such as high blood pressure or diabetes. While it is important to exercise, you must also be aware of the warning signs of a heart attack (Table 2).¹

If you have any of the above symptoms while walking, you must get medical attention immediately (within 5 minutes). Have someone dial 9-1-1 or call the emergency medical services in your area. If you can't access the emergency medical services, have someone drive you to the nearest hospital.

Reference

1. American Heart Association. Available at: <http://www.americanheart.org>. Accessed April 14, 2004.

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