

*Danbury Hospital Patient Education Sheet*

**Exercise for the Heart**

**EXERCISE**

Most of us tend to forget that the heart is a muscle, and like any muscle, it can improve with exercise. The heart can become stronger through exercises that progressively increase the body's demand for oxygen. These are called aerobic exercises.

**EXERCISE FOR THE HEART**

Cardiorespiratory fitness is important for maintenance of a healthy heart and circulatory system. Oxygen is a vital element for the proper functioning of all the body's organ systems. It is essential for the body's production of energy. By improving the ability of the heart and blood vessels to supply oxygen to the body, aerobic conditioning enhances the body's capacity to take in and utilize oxygen.

During exercise the heart, as a muscle, must respond by increasing its rate of contraction, measured by the number of heart beats per minute. It must also increase the force of each contraction, which is measured by the blood pressure. This helps the heart pump more blood to the muscles so they can do more work.

**Warming Up**

As you warm up, the vessels that supply your muscles with blood widen, increasing the amount of blood-and therefore, oxygen-that reaches them. As more oxygen reaches your muscles

they become more pliable and less vulnerable to injury from straining. They can also contract with more force. Your heart also benefits from a warm up. Begin your activity at a slower, more relaxed pace. As the level of the activity increases, your muscles use more oxygen and their temperature rises.

**Aerobic Exercise**

Aerobic exercise refers to those activities which increase the body's demand for oxygen for prolonged periods, such as, walking, biking, rowing, swimming, running, & cross-country skiing. This trains the body to take-in, transport, and utilize oxygen. Aerobic exercise is also referred to as cardiovascular or cardiorespiratory exercise. Cardio refers to the heart: vascular – the blood vessels and circulation and respiratory – the lungs and respiratory system.

**FITT Principle**

There are four factors to consider in developing a proper exercise program, called the FITT principle. **Frequency**—number of times per week you exercise. **Intensity**—How hard you work during exercise. **Time (Duration)**—how long is your exercise session. **Type**—the type of activity in which you participate.

Recommendations:

**Frequency** – 3 to 5 times per week.

**Intensity** – 60-75% of maximal heart rate.

**Time** – 30-60 minutes of aerobic activity.

**Type** – any exercise that uses the large muscle groups.

**Cooling Down**

It is as unwise to stop exercising abruptly as it is to start exercising suddenly. During your workout your heart has been pumping large amounts of blood to supply your

muscles with oxygen. The muscles in your legs have been acting as a second pump, contracting and expanding to push blood up to your heart. If you stop exercising suddenly your leg muscles stop pumping and blood can pool in your legs instead of returning upwards. The blood supply to your brain is suddenly reduced, making you dizzy. Your heart must increase its pace to compensate for the work the leg muscles have been doing. This extra work may put you at risk for an increased number of heart arrhythmia. To cool down, slowly reduce your level of activity.