

EXERCISE AND WEIGHT LOSS

Before starting any exercise program, discuss it with your doctor to find a program appropriate for you. Aerobic exercise increases the blood flow to the muscles, increases the work of the heart, increases the oxygen capacity, and overall improves functioning of the heart, lungs and circulatory system. When a person's heart is "fit", the person can exercise vigorously for long periods without severe fatigue. The person is able to respond to sudden physical or emotional demands without as much strain to the heart or body. All the exercises mentioned in this handout are aerobic exercises.



◆ General Guidelines for Exercise for Weight Loss

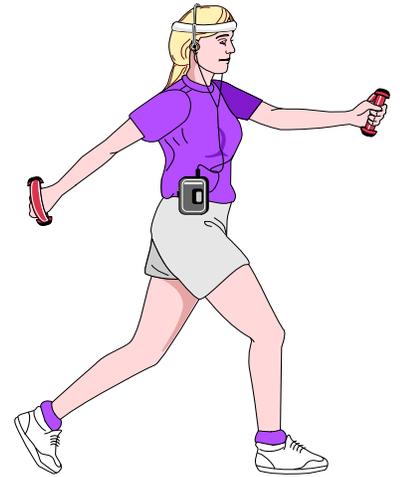
- See your doctor before starting exercise if:
 - You are over 40 and not accustomed to exercise
 - Have a history of heart disease, a heart murmur, or have had a heart attack
 - Have a family history of premature (less than age 50) heart disease or heart attacks
 - Have a history of high blood pressure, or you do not know your blood pressure
 - You have pain or pressure in the chest, neck, shoulder, or arm after you exercise
 - You experience extreme breathlessness after mild exertion
 - You have joint, bone, or muscle problems
 - You often feel faint or have spells of severe dizziness
 - You have diabetes
 - You have any other medical condition or are on daily medication
- The type and intensity of your exercise depends upon your health and activity level.
- Drink plenty of fluids to prevent dehydration.
- Warm-up before and cool-down after exercise.
- Check your pulse during exercise to ensure you are exercising at your target (see below).
- Start your exercise program and progress slowly
- Choose exercise activities that you will enjoy and continue (there are many to choose from: walk, bike, ski machine, stair machine, jog, swim, etc. etc.)
- Progress up to 30-60 minutes of exercise 5 days per week (but avoid high impact exercise every day such as running)
- Be consistent! Schedule your exercise and keep at it regularly.

◆ Determining Your Heart Rate

To determine your heart rate, hold your hand with your palm facing upwards and place the first two fingers of your other hand on the thumb side of the wrist. Press gently to feel the radial pulse

and count the number of the beats you feel in 10 seconds (starting with “0” as the first beat count). Multiply by 6 to get the total beats per minute.

To determine your maximum heart rate, subtract your age from 220. You should never exercise to your maximum heart rate. The desired goal for aerobic exercise is to increase your heart rate to 60-75% of your maximum rate. To calculate it, use the formula: $(220 - \text{Age}) \times .75 = \text{Target Heart Rate}$ (or use the chart below) for range of target heart rates.



Age	Target Zone (60-75% Max HR)	Maximum Heart Rate (100%)
20	120-150	200
25	117-146	195
30	114-142	190
35	111-138	185
40	108-135	180
45	105-131	175
50	102-127	170
55	99-123	165
60	96-120	160
65	93-116	155
70	90-113	150

Take your heart rate before exercising and immediately upon stopping the exercise. During the exercise, stop again and check the heart rate to make sure you are exercising enough to get the full aerobic effect on your body. You should be able to carry on a conversation during your exercise without becoming breathless. The more conditioned you become, the more you will notice that you have to do even more vigorous exercise to get your heart rate up to its target.

◆ Exercise Precautions

- Stop exercising before reaching maximum exertion or pain. Do not continue to exercise with a painful knee or hip.
- Stop exercising if you feel any chest pressure or tightness and see your doctor.

- If you are unusually breathless during the exercise, stop the exercise for at least one day, and decrease the intensity of the exercise. If the feeling persists, consult your doctor.
- Be aware of the temperature and humidity if you're exercising outdoors, and exercise only if the conditions are suitable for the exercise you are doing.
- Warm up your muscles before you begin and have a cool down (mild exertion) at the end of the exercise period.
- Drink lots of fluids while exercising (preferably water or low calorie drinks if you are dieting).

◆ Checklist

- Check with your doctor before starting an exercise program.
- Choose a program with aerobic exercises.
- Pick activities that you enjoy, that are suited to your needs, can be done year round and are independent of the weather.
- Wear appropriate clothing and shoes for the exercise.
- Remember to warm-up and cool down.
- If you exercise more than 3 days a week, remember to vary the exercise and not work the same muscles on consecutive days.
- Make a commitment to exercising for 12 months. After that, you may notice that exercising has become a part of your life that you do not want to give up.
- If you feel that other members of your family would benefit from an exercise program, encourage them to exercise with you. Your children would benefit by starting them at an early age to appreciate the value of a good exercise program.
- If you have diabetes and especially if you take insulin, you should observe the following guidelines and check with your doctor before exercising.
 - You may need to adjust insulin or oral agent when beginning an exercise program
 - Wear medic alert bracelet if you are exercising away from home
 - You may need a snack before and after exercise
 - Check feet for blisters and pressure points after exercising
 - Avoid heavy lifting and high impact aerobics if you have diabetic eye disease
 - Check blood sugar before, after, and frequently when first beginning an exercise program. There may be a delay (up to 12 hours) in lowering of blood sugar after exercise

