

EXERCISE AND HEART DISEASE

The American Heart Association has now added "lack of exercise" to the list of major risk factors for heart disease. The other risk factors are smoking, high blood pressure, and high blood cholesterol.

Exercise not only helps fight heart disease, but for sedentary people, just adding a little exercise to your daily routine reduces the risk of high blood pressure, osteoporosis, breast and colon cancer, depression, anxiety and stress. Ideally, you should exercise three to five times a week for 20-50 minutes within your target heart rate. However, your health can benefit simply by accumulating 30 minutes of moderate activity per day, such as stair climbing, walking to work, or gardening. Also it is not just aerobic exercise such as walking, cycling, jogging and swimming that is recommended. Resistance/strength training (light weight lifting), and interval training are important components of a good fitness program because they increase your strength and stamina, lead to decreased body fat and help improve blood cholesterol levels. This type of exercise is best individualized and initiated under controlled settings where facilities are available. For deconditioned or heart failure patients briefer periods of supervised exercise may be carried out 2-4 times per day initially with gradual increase in duration.

Benefits of Regular Exercise

- Improves heart and lungs
- Decreases resting blood pressure
- Decreases body fat
- Decreases total and LDL cholesterol ("bad cholesterol")
- Raises HDL cholesterol ("good cholesterol")
- Increases energy level
- Increases tolerance to stress and depression
- Controls or prevents the development of diabetes
- Decreases risk of orthopedic injury

Guidelines for Safe Exercise

- Frequency - 3-5 times a week
- Duration - 20-60 minutes
- Intensity (how hard) - within your target heart rate

Calculating Your Target Heart Rate

- 1) $220 - \text{age} = \text{_____ MHR}$ (maximum heart rate)
- 2) $\text{MHR} \times 0.8 = \text{_____}$ (this is the upper end of your target HR)
- 3) $\text{MHR} \times 0.7 = \text{_____}$ (this is the mid range of your target HR)
- 4) $\text{MHR} \times 0.6 = \text{_____}$ (this is the low end of your target HR)
- 5) $\text{MHR} \times 0.5 = \text{_____}$ (low end target HR for Heart Failure patients)

For patients with ischaemia and/or exercise induced arrhythmia, set exercise HR in a 10-15 beat range, 10 beats below the onset of ischaemia and/or arrhythmia. Initiate exercise at 60% of maximum predicted HR (MPHR) and progress to 70-80 % of maximum HR. For Heart Failure patients, initiate at 50% MPHR and progress to 60-70 % MPHR.

If you develop chest pain, undue shortness of breath or dizziness during exercise, stop your activity. If symptoms persist seek medical attention. Even if symptoms subside, alert your physician to their occurrence.