

How to deal with Heart disease : What Exercise do I Need?

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Why Exercise?

Sport is a part of the management of patients with heart disease. Lack of physical activity includes four major risk factors that increase mortality in heart disease patients (after hypertension, smoking, and high blood sugar). By exercising, we can reduce the risk of coronary heart disease, stroke, diabetes, colon cancer, breast cancer, and depression.¹

What types of sports are recommended?

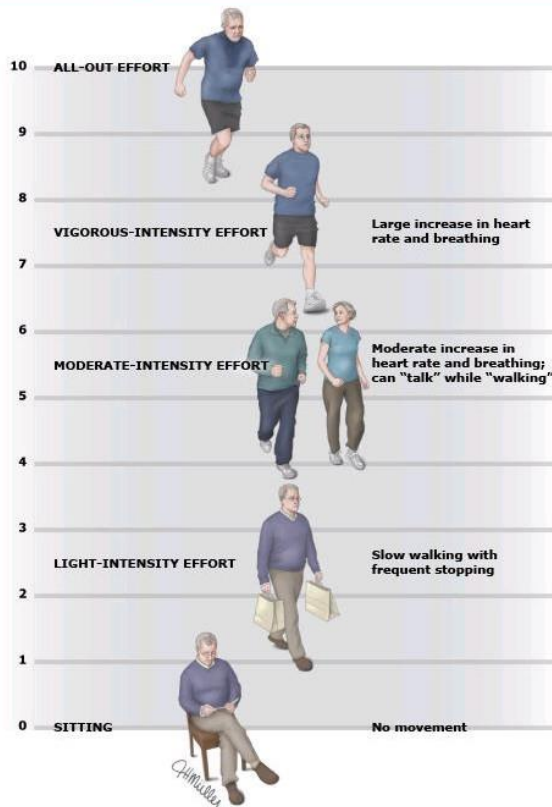
According to the WHO Global Recommendations on Physical Activity for Health in 2010, there were 4 recommendations for sports in adults, namely 1) The type of exercise performed should be moderate intensity aerobic exercise (minimum 150 minutes) or high intensity aerobic exercise (75 minutes) or a combination of both for one week. 2) Aerobic activity must be carried out in a minimum duration of 10 minutes. 3) To increase health benefits, it is recommended to increase moderate intensity aerobic exercise up to 300 minutes per week, or high intensity aerobic exercise up to 150 minutes per week, or an equivalent combination of moderate and strong intensity activities. 4) Muscle strengthening activities can be carried out by involving large muscles for 2 or more days in one week.

What is aerobic exercise? How can we say that a moderate or high intensity exercise?

Aerobic exercise is a sport that increases the cardiac-pulmonary (cardiorespiratory) functional capacity. Examples are brisk walking, running, bicycling, jumping rope, and swimming.

Moderate activity is defined as an activity whose intensity is 3-6 times the rest. Or if patients are asked to determine the scale of their efforts when exercising, they will call a scale of 5-6 on a scale of 0-10. Meanwhile, high activity is defined as an activity with an intensity of more than 7 times the rest, or patients will mention the capacity of their efforts to do exercise on a scale of 7-8 out of 10.

10-point scale of perceived exertion



Scale reproduced and illustrated with permission from: Borg G. Psychophysical bases of perceived exertion. *Med Sci Sports Exerc* 1982; 14:377.

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What is the FITT Method?

Method F.I.T.T. (Frequency, Intensity, Time, Type) are common methods that can help you create an effective workout plan for achieving fitness. It is important to remember that fitness targets will vary by individual depending on age, gender, current fitness level, and available resources.

Frequency

The first thing to prepare with your exercise plan is frequency - how often you exercise. The frequency depends on the type of exercise you are doing, how hard you are training, your level of fitness, and your training goals.

The American College of Sports Medicine has developed general physical exercise guidelines, includes how often you should exercise.

Cardio training: Recommended moderate exercise activities for five or more days a week or strenuous exercise activities for three days a week. If you want to lose weight, maybe you should increase the frequency to six or more days a week.

Muscle strength training: The recommended frequency is two to three days (non-consecutive days) a week (at least 1-2 days between sessions). However, your frequency often depends on the exercise you do, because you want to train your muscles at least twice a week.

Intensity

Choose the activity with the least intensity, and try to add some stronger activities for a week. A strong activity is an activity that makes you breathe freely and sweat. (Achieving a certain heart rate is not required.).

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Examples of Moderate Activity	Examples of Vigorous Activity
Slow walking (3.5 mph)	Fast walking (4.5 mph)
Slow bike riding (<10 mph)	Fast bike riding (>10 mph)
Dancing	Jogging or running
Weight lifting—light workout	Aerobics
Stretching	Competitive sports: basketball, football, soccer

Time

The next element is how long you exercise during each session. There is no set rule for how long you have to exercise and will usually depend on your level of fitness and the type of exercise you do. ACSM recommends 30-60 minutes (150 minutes per week) for moderate intensity or 20-60 minutes per day (75 minutes per week) for severe intensity. If you are a beginner, you might start with exercise 15 to 20 minutes per day.

Type

Types of activities can include various team sports, individual sports, recreational activities, family activities, active hobbies, and walking or cycling for fun and transportation. Several times each week doing weight-bearing activities that increase muscle strength, flexibility, and bone health. The most important thing is to choose something fun!

The concept of FITT is beneficial to provide the best exercise program for your fitness. Consult more specifically with your doctor. If boredom approaches you, you can manipulate one of the FITT methods by changing the frequency, changing the intensity, increasing time, or changing your type of exercise. Good luck.

REFERENCES

1. *Global health risks: mortality and burden of disease attributable to selected major risks.* Geneva, World Health Organization, 2009.
2. American College of Sports Medicine. Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: guidance for prescribing exercise.