

# The role of regular exercise in cardiovascular health

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Exercise is a medicine that has been shown to prevent or treat many disabling or fatal diseases including noncardiovascular diseases such as non-insulin-dependent diabetes, osteoporosis, hypertension, and breast and colon cancer. The current prevailing view in the medical world is that more active or fit individuals tend to develop less coronary heart disease (CHD) than their sedentary counterparts and if CHD develops it tends to occur later in life and is often less severe.

## What are the benefits of Exercise?

The major cardiovascular risk factors are high blood pressure, dyslipidaemia, smoking, obesity and a sedentary lifestyle. Reducing these risk factors decreases the chance of having a cardiac event or coronary revascularization procedure. These can all be favourably influenced by regular physical activity.

## Effects of exercise on Cardiovascular Risk factors:

- Decrease in blood pressure (hypertension);
- Decrease in bad (total and LDL) cholesterol;
- Increase in good (HDL) cholesterol;
- Increase in insulin sensitivity;
- Reduction in body fat percentage;
- Increase in exercise tolerance;
- De-stressor effect;
- Reduction if not complete cessation of cigarette smoking.

Besides these obvious benefits there are a number of physiological improvements that further strengthen the argument for regular exercise. Amongst these there is a marked improvement in aerobic capacity (oxygen utilization by the body) and muscular function and these lead to less every day living related fatigue.

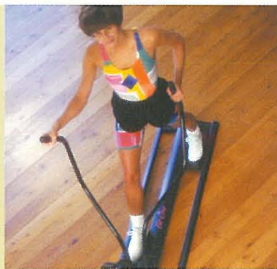
## How much Exercise?

Recommendation for Physical Activity From the CDC/ACSM Consensus Statement and Surgeon General's Report (USA):

Every adult should participate in at least 30 minutes or more of moderate intensity activity on most, and preferably all, days of the week.

- Moderate activities are: activities which are comparable to walking briskly at about 3 to 4 miles per hour and; may include a wide variety of occupational or recreational activities, including yard work, household tasks, cycling, swimming, etc.
- Thirty minutes of moderate activity daily equates to 600 to 1200 calories of energy expended per week.

The vast majority of health professionals are aware of these figures. However, what a number of professionals are not aware of is that the 30 minutes refer to accumulated time, i.e. the sum of all the moderate activity undertaken during the day. Thus 3 10 minute bouts are equivalent to 30 minutes exercise. This is vital information



for a CHD patient who could otherwise not be able to achieve the desired daily exercise quota due to easy fatigability.

## Exercise Risks

For adults without CHD, the risk of a cardiac event or complication ranges between 1 in 400 000 to 800 000 hours of exercise whilst for patients with CHD an event can occur on average once in 60 000 hours. Importantly, the risk of a cardiac event is significantly lower among regular exercisers. However it is important

to note that individuals who exercise regularly are significantly less likely to experience a problem during exercise. Appropriate exercise is therefore extremely safe. Nevertheless, it is a good idea to make your patients aware of the warning signs or symptoms that may indicate a problem.

## Tips on how to start Exercising

- Get a medical check up even if you are healthy. If you suffer from a chronic disease a more thorough check up might be warranted;
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- Start cautiously and slowly increase the time and frequency;
- Choose an activity you like and if possible one you are familiar with;
- Exercising with a partner makes it easier, more fun and harder to stop;
- Warm up, cool down and stretch with every activity;
- The Use of a Heart Rate Monitor can help you maintain the desired exercise intensities;
- Drink fluids and adjust your exercise according to the weather conditions;
- Ensure that you are in a safe environment and your training equipment is the correct one (e.g. footwear);
- Inform your family where you are exercising and how long you shall be out for;
- Most of all enjoy it.

It is important to remember that as health professionals many of us should already exercise, and if we do not, we **must** exercise for our own health and well-being. **WE ARE ROLE MODELS !!**