

Generalized Exercise Plan

Frequency:

It is recommended to exercise 3-5 days per week. For weight reduction purposes, 4-5 days of exercise per week are better. Exercise over 5 days a week is unnecessary and has been shown to lead to injury and burn-out.

Intensity:

It is recommended to exercise at an intensity of 50-85% of maximal heart rate. For unfit individuals, an intensity of 40-50% of maximal heart rate is recommended. Target heart rate is found by using the following steps (these calculations should be done twice, once for the higher percentage and once for the lower percentage to give a target heart rate range):

- $220 - \text{age} = \text{estimated max heart rate (HR)}$
- $\text{Estimated max HR} - \text{resting HR} = \text{Heart rate reserve (HRR)}$
- $\text{HRR} \times \text{percentage of intensity} = \text{percentage of HRR}$
- $\text{Percent of HRR} + \text{resting HR} = \text{target HR}$

To find intensity level, take heart rate in the middle of exercise and right at the end before cool down. This is done by palpating either on the wrist or neck and counting the beats for 30 seconds, then multiplying by 2. This is your heart rate. A heart rate monitor can also be used if there is access to one.

Duration:

A duration of 20-60 minutes of aerobic activity, not including warm-up and cool-down is recommended. Aerobic activity can be done continuously or intermittently.

Mode:

This is the type of activity that can be used for cardiorespiratory improvement. The activities that provide the most improvement are ones that use large muscle groups and are repetitive. Any activity that will increase heart rate to desired intensities and can be done continuously could be used. These activities include, but are not limited to:

Walking	Running	Brisk walking	Cycling
Swimming	Jumping rope	Elliptical machine	Stair-stepping
Cross-country skiing	Aerobics	Basketball	Skating (ice or roller)
Soccer	Tennis	Racquetball	Volleyball

It is important to use different modes of aerobic activity, this will decrease the possibility of burn-out. Another recommendation is to have a “work-out buddy”, this way both people motivate each other to stay active.

Extras:

Flexibility exercises are important after each exercise session and should include all of the major muscle groups in the legs, hips, back, stomach, chest, shoulders and arms. Increases in flexibility promote recovery in the muscles and also help develop general muscle tone.

A warm up of 3-5 minutes before exercise and a cool down of 3-5 minutes at a slow-steady pace is highly encouraged. The warm-up augments blood flow, stretches postural muscles and increased metabolic rate from the resting level to the aerobic requirements for exercise. The cool down allows heart rate and blood pressure to return to near resting values, enhances venous return, and promotes more rapid removal of lactic acid than stationary recovery.

Progression:

This depends on the individual. Starting point, current duration, intensity, and desired goals are all factors in rate of progression. As a general guideline either intensity or duration should be increased every 2-3 weeks, until at desired intensity and duration. Individuals who have health conditions should consult their doctor for guidance on appropriate intensity levels and duration of aerobic exercise.