

Aerobic Conditioning

Max Heart Rate = 220 – Age

Heart Rate Zone = Max Heart Rate x Zone Percentage

TRAINING ZONES

Healthy Heart Zone (Warm up) --- 50 - 60% of maximum heart rate: The easiest zone and probably the best zone for people just starting a fitness program. It can also be used as a warm up for more serious walkers. This zone has been shown to help decrease body fat, blood pressure and cholesterol. It also decreases the risk of degenerative diseases and has a low risk of injury. 85% of calories burned in this zone are fats!

Fitness Zone (Fat Burning) --- 60 - 70% of maximum heart rate: This zone provides the same benefits as the healthy heart zone, but is more intense and burns more total calories. The percent of fat calories is still 85%.

Aerobic Zone (Endurance Training) --- 70 - 80% of maximum heart rate: The aerobic zone will improve your cardiovascular and respiratory system AND increase the size and strength of your heart. This is the preferred zone if you are training for an endurance event. More calories are burned with 50% from fat.

Anaerobic Zone (Performance Training) --- 80 - 90% of maximum heart rate: Benefits of this zone include an improved VO2 maximum (the highest amount of oxygen one can consume during exercise) and thus an improved cardio-respiratory system, and a higher lactate tolerance ability which means your endurance will improve and you'll be able to fight fatigue better. This is a high intensity zone burning more calories, 15 % from fat.

Red Line (Maximum Effort) --- 90 - 100% of maximum heart rate: Although this zone burns the highest number of calories, it is very intense. Most people can only stay in this zone for short periods. You should only train in this zone if you are in very good shape and have been cleared by a physician to do so.

--Maintenance Goals: 30-60 minutes/day of 50-70% Maximum Heart Rate

--Aerobic Performance Improves when training 2-5 times/week.

Aerobic Training Guidelines

A safe and effective aerobic training guideline for improving aerobic performance uses a formula that includes frequency, intensity, and time (FIT).

- **Frequency.** Exercise aerobically 3 to 4 times a week.
- **Intensity.** Exercise hard enough to reach your target heart rate range
- **Time.** Exercise aerobically for at least 20 minutes without stopping.

Beginning an Aerobic Exercise Program

To help you stay motivated and committed to your exercise goals, choose an aerobic activity that you enjoy. Aerobics is not just running or walking — there are a wide range of activities that will get your heart rate going.

If it has been a long time since you have exercised, you can gain health benefits with just 5 to 10 minutes of aerobic conditioning. One way to start is with:

- 5 minutes to warm up (50-60% Max Heart Rate)
- 5 minutes of aerobic training activity (60-80% Max Heart Rate)
- 5 minutes to cool down and stretch

Repeat this routine 3 or 4 times a week. Gradually add time to the aerobic training portion, working up to at least 20 minutes of aerobic exercise in each session.

Recent research shows that some health benefits can be gained by exercising at a moderately intense level for 30 minutes during most days of the week. This 30 minutes can be done all in one stretch or broken up into shorter intervals. A 10-minute brisk walk three times a day is just one way to get started on a healthier and fitter lifestyle

R. Judd Robins, MD
Orthopaedic Sports Medicine