

# Exercise Your Heart

## ACHIEVEMENT SERIES

Aerobic exercise is any repetitive activity that you do long enough and hard enough to challenge your heart and lungs. To get this effect, you generally need to use your big muscles, including your butt, legs, back and chest. Walking, bicycling, swimming and stair climbing count as aerobic exercise. If you hopped up and down on one foot long enough and hard enough, I suppose that'd be aerobic, too, though why you'd want to do that is beyond me.

The word aerobic was coined in the late 1960s by Dr. Kenneth Cooper, and it literally means with air. When you exercise, your body needs an extra supply of oxygen, which, of course, your lungs extract from the air. During workouts, your body continuously delivers oxygen to your muscles. However, if you push yourself hard enough, eventually, you'll reach the breaking point: Your lungs can no longer suck in enough oxygen to keep up with your muscles' demand for it. But you won't collapse, at least not right away. Instead you'll begin to rely on your body's limited capacity to keep going without oxygen. During this time, you are exercising anaerobically, or without air.

Anaerobic exercise refers to high-intensity exercise like all-out sprinting or very heavy weight lifting. After about 90 seconds, you begin gasping for air and you feel a burning sensation in your legs. That's when your body will eventually force you to stop.

The point at which your extra oxygen supply runs out and you slip into the reserve mode is referred to as your anaerobic threshold. Then you're in poor physical shape, your body isn't very efficient at taking in oxygen, and you hit your anaerobic threshold while exercising at relatively low levels. As you become more fit, you're able to go farther and faster, yet still supply oxygen to your muscles. If a couch potato tries to run an 8-minute mile pace, he's going to go anaerobic pretty fast; an elite runner can run an entire marathon at about a 5-minute pace and still stay primarily aerobic.

Run a 10K and you'll join an elite crowd—less than 1 percent of all Americans have done one.

### Training schedule

If you can run two miles today, you can run a 10K in two months. If you can't run that far currently, alternate between running and walking for two miles three times a week until you can run the whole way. Then start Week One of this schedule, developed by organizers of Atlanta's U.S. 10K Classic. On the "X-train" days, cross-train by walking, cycling, swimming, or doing any other strenuous activity for the allotted time. If you hit the gym, emphasize high reps at low weights so you don't add bulky muscle mass. Particularly helpful are free-weight squats, hamstring curls, leg extensions, leg presses, calf raises, and low pulley abductor and adductor leg pulls.

Day	Week 1	Week 2	Week 3	Week 4
Mon	X-train 30 min.	2.5-mile run	REST	X-train 40 min.
Tue	2-mile run	X-train 35 min.	3.5-mile run	REST
Wed	X-train 30 min.	REST	X-train 40 min.	4-mile run
Thu	2-mile run	3-mile run	3.5-mile run	REST
Fri	REST	X-train 35 min.	X-train 40 min.	4-mile run
Sat	2.5-mile run	3-mile run	REST	X-train 40 min.
Sun	X-train 35 min.	X-train 40 min.	4-mile run	REST

Day	Week 5	Week 6	Week 7	Week 8
Mon	4-mile run	4-mile run	4-mile run	4-mile run
Tue	X-train 40 min.	REST	REST	REST
Wed	3-mile run	3-mile run	3-mile run	5-mile run
Thu	5-mile run	5.5-mile run	6-mile run	REST
Fri	REST	REST	REST	3-mile run
Sat	4-mile run	4-mile run	4-mile run	X-train 40 min.
Sun	X-train 40 min.	X-train 40 min.	X-train 40 min.	RACE

### KNOW YOUR TARGET HEART RATE

The most time honored method for determining the maximum heart rate is for men to subtract their age from 220. Keep in mind this formula gives you only an *estimate*. Your true max might be as much as 15 beats higher or lower. Also, this formula is generally used for activities during which your feet hit the ground. (To estimate your max for bicycling, subtract about 5 beats from the final result; for swimming subtract about 10 beats.)

Using this easy formula to find your max, find your target heart rate zone by calculating 50% and 85% of your maximum. Here's the may for a 40-year old man:

$$220 - 40 = 180 \text{ (estimated maximum heart rate)}$$

$$180 \times .50 = 90 \text{ (low end of target zone)}$$

$$180 \times .85 = 153 \text{ (high end of target zone)}$$

### Make It FUN!

#### Calories Burned During Popular Activities

Activity	15 min.
Basketball	171
Bicycling (12 mph)	142
Bicycling (15 mph)	177
Bicycling (15 mph)	213
Circuit weight training	189
Cross-country skiing	146
Downhill skiing	105
Golf (carrying clubs)	87
In-line skating	150
Jumping rope (70 skips/min.)	143
Karate/tae kwon do	192
Kayaking	75
Racquetball	114
Rowing machine	104
Running (10-minute mile)	183
Running (8-minute mile)	223
Swimming (35 yds/min.)	124
Tennis	116
Walking	
20-minute mile, flat	60
20-minute mile, hills	81
15-minute mile, flat	73
15-minute mile, hills	102