

Oxygen: The Key to Getting Lean and Fit

by MARLA RICHMOND, M.S., ACE-certified

While there are several important components of fitness, when it comes to taking control of your body from the inside out, three words come to mind: OXYGEN DELIVERY CHALLENGE. You may wonder what oxygen has to do with getting lean and fit. The answer is *almost everything*. The more of it you take in and the faster it gets from your heart and lungs to your cells, the better fat burner you become, at rest and during activity.

Your cells must be reminded often to utilize oxygen faster and better. The practice of cardiovascular or aerobic exercise (cardio) three times a week to daily presents your body with just such a reminder. By definition, cardio is the rhythmical movement of large muscles of the body for ten to several minutes. During cardio, your heart pumps oxygen-laden blood to selected muscle groups. Working muscles slurp up what they need to make and use energy (calories). Then, by contracting, they push the blood back to the heart in the same rhythmical pattern. Some familiar examples of cardio include walking, jogging, cycling, elliptical training, swimming, and dancing.

Each type of cardio involves a specific set of instructions, which are sent from your nervous system, through your spinal column, to the muscles selected for the exercise. There are endless patterns, kinds, and sizes of movement. Each movement requires specific numbers, not only of nerves and muscles, but also breaths, heartbeats, calories, types of fuel, and quantities of oxygen per minute. For example, during each minute of a walk at 3.5 to 4.0 miles per hour, a fit 140-pound person uses about 12 to 15 breaths, 110 to 120 heartbeats, 5 to 6 calories, some fat, some carbohydrate, and about a liter of oxygen.

Instead of body parts, it is a specific movement pattern that is being trained. Rather than “train” your heart, lungs or blood vessels, per se, you present your body with *very specific oxygen delivery challenges* with different cardiovascular activities. The heart, lungs and blood vessels merely serve as segments of the oxygen delivery system for a particular movement pattern. In other words, cardiovascular exercise training is specific to what you regularly practice. You do not become a better runner by swimming or vice-versa.

When frequently exposed to any type of cardiovascular activity, the challenge for your body is to find the best and quickest ways to send oxygen to working muscles. The training effects from regular practice of a particular activity are evidenced by the ways your body changes.

Frequent OXYGEN DELIVERY CHALLENGE changes your body from the inside out. It makes your lungs better at sucking oxygen out of the air. Once inhaled, that oxygen must get loaded onto your red blood cells, which are ultimately going to carry it down river, through your blood vessels, to your cells. Regular cardio obligates your body to construct more and bigger red blood cells and grow a larger river system of blood vessels. By necessity, your blood vessels will branch out to find the most direct and fastest route for oxygen to your muscles cells. Once the oxygen arrives at muscle cells, the fuel-burning machines (called mitochondria) have to pick up the fat-burning pace.

In order to stay excited about cardio, your body's systems must to learn how to work together under a variety of different conditions. In other words, you've got to mix it up and keep it fresh. Cross-train! Walk, jog, bike, rollerblade, row, dance, or kick-box. You must also vary the duration (shorter, longer) and intensity of your workouts (from not so hard to very hard efforts). As a result, your body will begin to plan, create and construct numerous different oxygen-delivery systems. By the way, even if you think that *you* prefer predictability, *your body* will get bored long before you do. As it appears to in life, change causes all sorts of commotion in your body. That is a good thing.

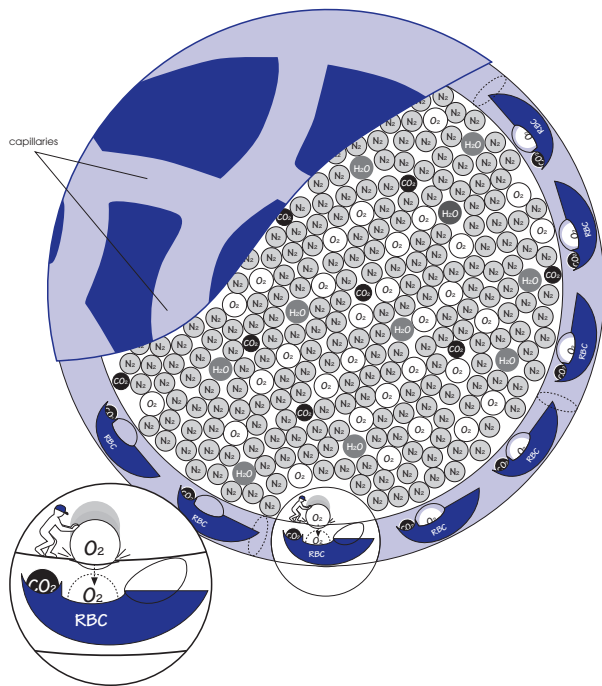
Bottom line, getting leaner and more fit is under your control. The more oxygen and the faster it arrives at, and is used by, your cells, the more body fat will be used. Come and discover how to create your own personalized cardio programs in 45 minutes or less. Learn how to power up your oxygen-delivery systems and get the results you want!

Come join me in the Northwestern University Fitness Studio at SPAC, 2311 Campus Drive, Evanston Campus, on Wednesday evening, October 19th, from 8:30 to 9:30 pm for my first of six presentations in the series ...

***CREATE YOUR BEST BODY
FROM THE INSIDE OUT***

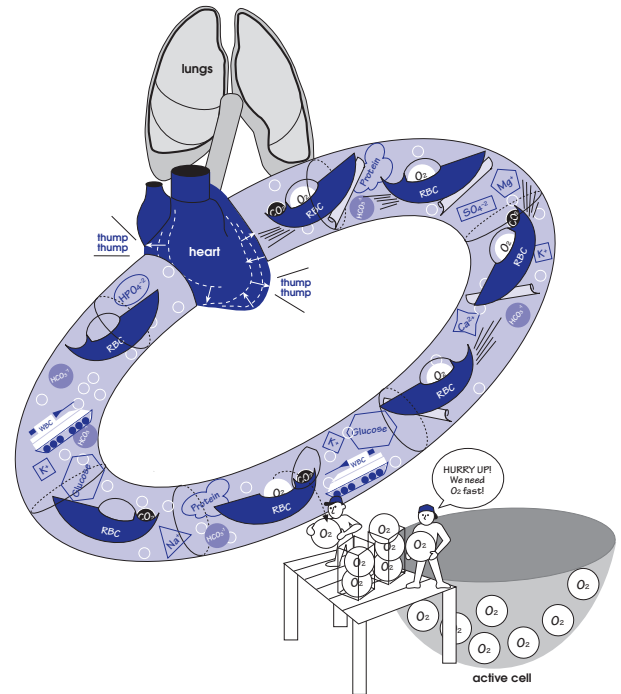
~ An Essential Series for Young Women ~

1 Oxygen – from air into blood



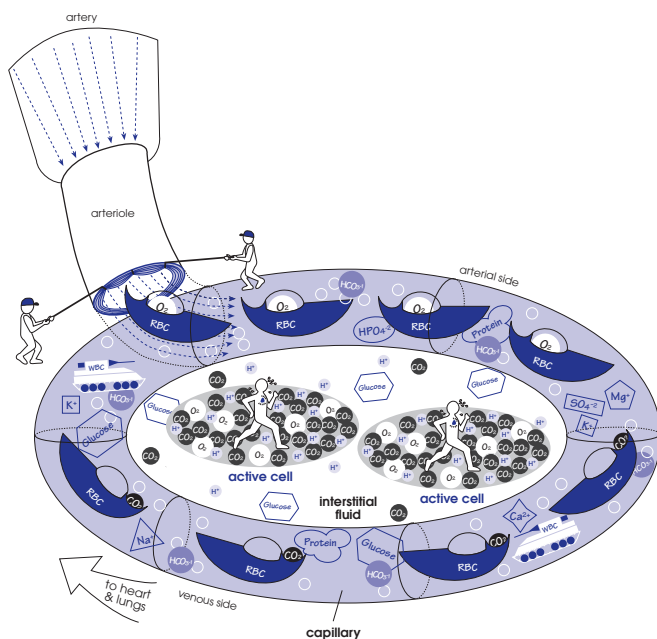
Frequent oxygen delivery challenge changes your body from the inside out. It makes you lungs better at sucking oxygen out of the air.

2 Oxygen – to working muscles



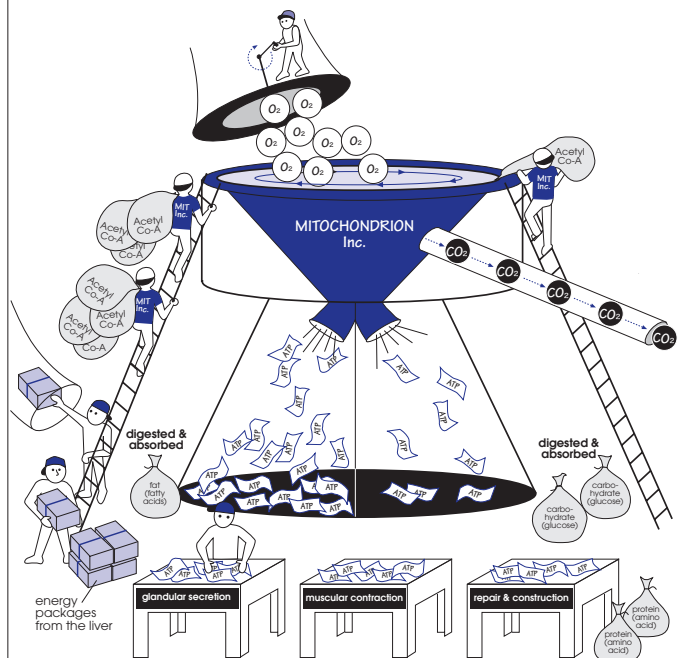
During cardio, your heart pumps oxygen-laden red blood cells to specific muscle cells; those which have been selected to perform a particular pattern of movement.

3 Oxygen – travels through blood vessel



The red blood cells travel in the fluid of the blood to active muscle cells via the branches of blood vessel system.

4 The more oxygen, the more fat burned



Once the oxygen arrives at the muscle cells, it enters energy (calorie) burning machines, called mitochondria, which then must pick up the fuel burning pace. The more available oxygen, the more fat is used—at rest and during exercise.