

## *Oxygen: The Key to Getting Lean and Fit*

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

**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.

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.

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.

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.

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.

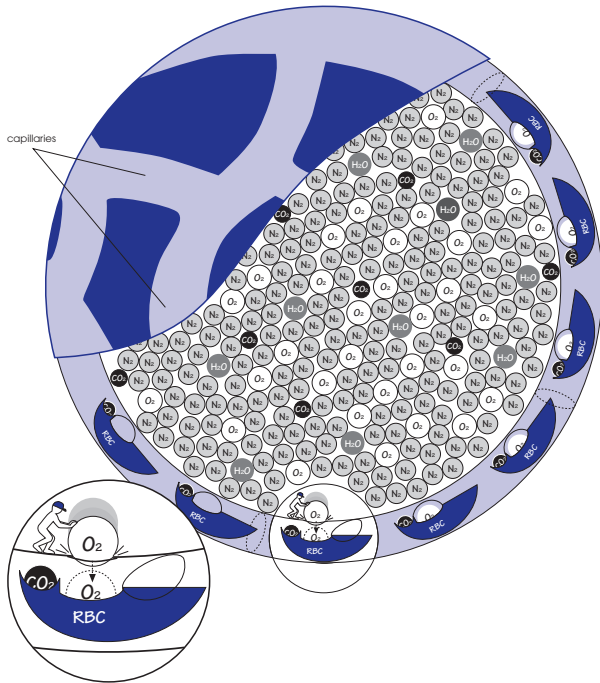
In other words, you've got to mix it up and keep it fresh. Cross-train! Walk, jog, bike, rollerblade, row, dance, or kick-box. You must also vary the duration (shorter, longer) and intensity of your workouts (from not so hard to very hard efforts). As a result, your body will begin to plan, create and 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.

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!

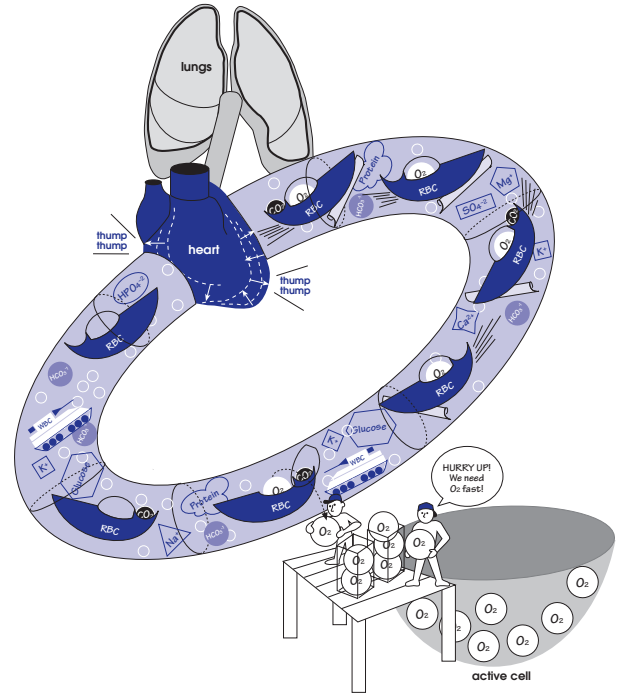
Come join me at the Northwestern University Fitness Studio at SPAC, 2311 Campus Drive, Evanston Campus, on Wednesday evening, October 19th, from 8:30 to 9:30 pm for my first of six presentations in the series ...

***CREATE YOUR BEST BODY  
FROM THE INSIDE OUT***  
~ An Essential Series for Young Women ~

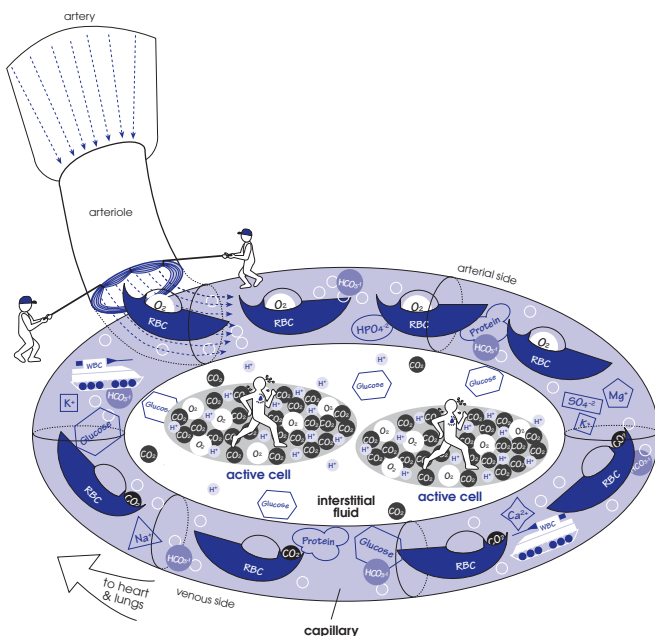
- 1** Frequent oxygen delivery challenge changes your body from the inside out. It makes you lungs better at sucking oxygen out of the air.



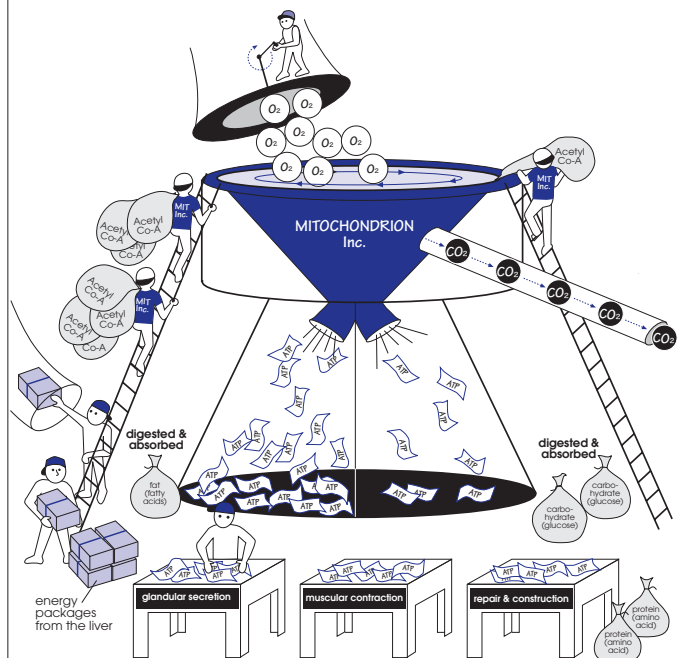
- 2** During cardio, your heart pumps oxygen-laden red blood cells to specific muscle cells; those which have been selected to perform a particular pattern of movement.



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



- 4** 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.



## Think about your answers to the following questions:

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Exercise programs to achieve any of these is different in terms of frequency, intensity, type and time.

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Regardless of where you begin, you are only going to get better. There are simple ways to assess your fitness level so you know where to get started and where you might improve.

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You may be surprised by what is available to you.

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You don't have to accomplish your cardio all in one bout. Fitting cardio into your lifestyle requires that you schedule it. There will always be *something that comes up* that can potentially prevent you from doing it.

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Depends on how important you make it. Either way, you must create the strongest obligation for yourself. You will discover that there are several ways to monitor intensity no matter where you work out.

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If you know what you are doing, there will always be space to do cardio.

**POLAR®**

Once you have assessed your fitness and set your goals, consider purchasing a Polar heart monitor to help you stay within your prescribed heart rate range and intensities.

**Palos Sports**

### CAN'T GET TO THE GYM ON A GIVEN DAY?

Palos Sports carries affordable, portable equipment for all of your fitness needs.

**WHOLE  
FOODS  
MARKET**

### YOU DON'T NEED TIME FOR BREAKFAST— YOU JUST NEED FUEL

While considered the most important meal of the day, breakfast does not have to be a major production or a time consuming event. What is most important is that you “break the fast” with something nutritious. Before grabbing a high-fat, high-calorie muffin or breakfast “pastry,” try one of these simple “grab and go” breakfast ideas. All of these delicious products are available at Whole Foods, a quick walk from campus.

# Breakfast Ideas

by MERLE LEVY, LDN

## Grab & Go Breakfasts

- 1 1.1 Horizon Organic String Cheese  
10 Kashi TLC Original Whole Grain Crackers  
1 Small Organic Apple

Total Calories ..... 226 calories  
Total Fat ..... 8 grams  
Total Protein ..... 10 grams

- 2 1, 8 oz. Carton Brown Cow Nonfat Yogurt  
1/2 Organic Banana  
1 Tbsp. 365 Almond Butter

Total Calories ..... 340 calories  
Total Fat ..... 9 grams  
Total Protein ..... 12 grams

- 3 1 Cup Whole Kids Organic Morning O's  
1 Horizon Organic Reduced Fat Milk Box

Total Calories ..... 240  
Total Fat ..... 7 grams  
Total Protein ..... 12 grams

### *Are You in a Really Big Hurry?*

- 4 Grab a 365 Organic Peanut Butter Chocolate  
Nutrition Bar

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Total Calories ..... 180 calories  
Total Fat ..... 4.5 grams  
Total Protein ..... 10 grams

## Shopping List

- ☒ Horizon Organic String Cheese
- ☒ Organic Apples
- ☒ Kashi TLC Original Whole Grain Crackers
- ☒ Brown Cow Nonfat Yogurt
- ☒ Organic Bananas
- ☒ 365 Almond Butter
- ☒ Whole Kids Organic Morning O's
- ☒ Horizon Organic Reduced Fat Milk Boxes  
(6, 8 oz. cartons with straws)
- ☒ 365 Organic Peanut Butter Chocolate  
Nutrition Bars

Author of

POWER AT THE PLATE; THE SAFE & SENSIBLE GUIDE TO  
HEALTHY EATING AND WEIGHT CONTROL