



Beaverdale

24/7 X-Press Newsletter

Fitness

February 2009

Pilates

Beaverdale 24/7 X-Press Marks One Year Anniversary!

Martin Luther King Day marked the one year anniversary for the Beaverdale 24/7 X-Press Fitness center and Pilates Studio. We thank you for your business which has allowed us to complete a successful first year!

Q & A: To burn the most fat, I should be exercising in the 'fat burning zone', correct?

First, let's define the 'fat burning zone'. The body uses two main sources of energy when you exercise. At lower intensities the majority of energy comes from burning fat. As you increase the intensity of exercise, the body shifts to burning sugar, which is a quicker source of energy. The fat is used from your cells and the sugar used is glycogen, which is in your blood and also stored in muscles and the liver. Because of the fact that a higher proportion of fat is burned at low intensity exercise, this has led many to believe that to burn the most fat, they need to keep exercise intensity low to maximize the amount of fat burned during exercise. However, this is not actually true.

To burn the most fat you need to burn the most calories, period. The more calories you burn, regardless of whether they come from fat or sugars, the more fat you will lose, as long as you keep your eating in check. Here's the reason. It has to do with 'proportion' versus 'absolute' energy expenditure. At lower exercise intensities, you may obtain 70% or more of energy from stored fat. At higher intensities this shifts to more sugar. When exercising at maximum intensity, 90% or more of your energy is coming from sugars. However, here's the deal. At lower intensities you are also burning less total calories. At higher intensities you are burning more calories per time unit, both from fat and from sugar.

Let's look at two scenarios: Low intensity exercise burning 200 calories per hour and 70% of the energy coming from fat vs. High intensity burning 600 calories per hour with 30% of the calories coming from fat.

Low Intensity: $200 \text{ calories} \times 0.7 = 140 \text{ calories per hour coming from fat}$

High Intensity: $600 \text{ calories} \times 0.3 = 180 \text{ calories per hour coming from fat}$

You are burning more fat at the high intensity than at the low intensity because your absolute calorie burn is higher even though the proportion of fat use is lower. If you take this to the extreme, you burn the highest proportion of calories from fat while you sleep. If exercising in the fat burning zone burned more fat, then we should all be skinny! But we know it doesn't burn a lot of fat because we are only using 60-80 calories per hour when we sleep.

Still don't believe that intense exercise can burn fat? Have you ever seen a fat sprinter? Track and Field athletes, especially sprinters don't do long hours of training at low intensities but rather a lot of short, hard running and they are extremely lean. Intense exercise is a blast furnace that consumes a lot of calories quickly, mostly from sugar.

After exercise, if the body has used its sugar reserves, then the food you eat goes into replenishing your sugar reserves and your body uses fat for most of its energy needs during non-exercising time.

So how does this apply to you? Instead of doing cardio exercise at a slow to moderate pace for long periods of time (30 min or more), mix up your exercise routine by throwing in some short but harder efforts. This will increase your rate of calorie consumption and bump up your metabolism so you burn more calories even after you are done exercising – think of it as a bonus! Instead of burning 300 calories, you could burn 400-500 calories in the same amount of time.

Try something like this when on the treadmill, bike or elliptical machine: Warm up for 10 minutes at an easy to moderate pace. Then increase the speed, incline or resistance for one minute and work harder. You should notice your heart rate and breathing increases. After one minute, back down to your warm up pace for one minute. Repeat this one-minute-on, one-minute-off pattern throughout your workout. Cool down 5 minutes at the end. This is called interval training and it's what athletes do to increase their aerobic fitness and keeps them lean. There's no reason you shouldn't do it as well – it will have the same result on you.

Word of caution – if you have a history of heart disease or high blood pressure, or if you haven't been doing a strenuous exercise program, be sure to check with your physician before starting a more vigorous exercise program.

Quick Fit Tip of the Month: It's been well established that exercise will help us live longer. But that's not why most of us do it. Not only do we live longer with exercise, but more importantly, the years we live will be of higher quality. We feel better, sleep better, age more gracefully and may avoid many of the chronic diseases of western civilization such as cancer, heart disease, and diabetes. **No other activity provides so much benefit for the time invested as does exercise!**

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We thoroughly enjoy the opportunity to serve you!