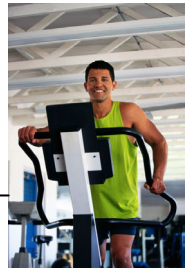


Spike Your Metabolism with “Spike” Training

The Cardio Program that Cranks Out the Calories in as Little as 12 Minutes!!!

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Cardio Misconceptions

In talking with gym members about their fitness programs and goals, I always hear the same common theme:

“I do the exercise machines to get *tone* and then I do 30 minutes of cardio because I want to *lose weight*.” It’s a simple formula, but unfortunately it doesn’t always deliver the results that are expected.

The Burning Question

Many individuals are fixated on how many calories they are burning when they are exercising and which exercises are going to burn the most calories in the least amount of time. Blinking LED displays attempt to tell you how much energy you are expending, but they are taking a guess at best, because how many calories you burn performing any particular activity is dependent on your fitness level, weight, hormonal state, stress levels, time of day, etc.

So how do you burn the most? Well, what we first need to look at is not how to burn the most just while you are exercising, but how to burn the most *all day long*. Research has shown that the more intense the challenge, the more cellular adaptations our physiology must undergo in response to recuperate and prepare for subsequent bouts of work. With traditional low intensity cardio training (Same set speed and watch the “Today” show), your metabolic rate begins to drop back to pre-exercise levels within 30 minutes to 2 hours after training. However, it has been shown that after resistance training, your metabolism can be cranked up for up to 16 hours after exercising, causing you to burn more all day.

The Key Variable : Intensity

With such positive effects on our metabolism, it is evident the importance of strength training in any successful fat loss program. The next step is to mimic some of the elements of strength training and incorporate that in to your cardiovascular workouts as well. Since weight training is simply challenging your body for brief repetitive bouts of effort followed by a short recovery, there is no reason that these principles can’t be applied to being on a treadmill, elliptical machine, stationary bike, or even with a jump rope or running track.

Many of the markers for fat loss are mediated internally by our endocrine system and hormones, with the key hormone being Growth Hormone. According to top exercise physiologist Dr. Stephen Fleck of the US Olympic Training Center, he has seen the greatest natural elevations of growth hormone to be produced by repeated bouts of approximately one minute of intense work followed by two minutes or less of rest.

PRE – One of the ways that you can most easily gage the intensity of any activity is to score its *Perceived Rate of Exertion or PRE*. Using a scale of 1 to 10, a 1 would represent a minimal challenge and a 10 would indicate all-out effort. Since intensity in true exercise science terms is measured by how long or for how many repetitions you can sustain an activity, an effort of 10 could only be performed for around 20 seconds before failure, with the time to exhaustion going up as the PRE score went down.



Putting it All Together : How to Build Your Personal “Spike” Program

“Spike” Training is a method of combining short bouts of high effort (PRE of 8-10) for 20 to 60 seconds, followed by a complete recovery at a low intensity (PRE of 2-5) and then repeated. Since PRE is relative to each individual, this type of training is generally safe for anyone with some level of exercise experience. *(As with any exercise program, it is always prudent to check with your physician first.)* The beauty of the program is that as you become more fit, your PRE changes because you can handle more intense work, allowing you to *infinitely progress!!!* (More on this in a minute.)

So here’s how it works: After a proper flexibility warm-up, start with 3-5 minutes of low to moderate level work at a PRE of 2-5. When you feel you are ready, you will now go in to your first sprint or “Spike” by increasing the challenge to a PRE level that you perceive to be between 8 and 10 that you can only sustain for :20 to :60. This can be done by increasing your speed, incline and/or resistance on most cardio machines. If you were walking down the street or around a track, you would simply break out in to a max effort run.

Mark the time at which you gave out and had to cease the “Spike”, and return back to your original slow pace. At this point you should be breathing heavy and have your heart pounding. Do your best to take deep diaphragmatic breaths until it feels like you have returned back to your original state and PRE prior to your “Spike”. If you are measuring your heart rate, you want to watch your heart rate normalize within about 5 beats. You should now be ready to go into your next “Spike”.

If you were only able to do your last burst for less than 20 seconds, you need to cut back on the intensity to a point where you can do at least that. If you did it for longer than one minute, you need to increase the effort. As stated before, what will happen over time is that a level of work that used to feel like a PRE of 10 will soon become 8, then 6 and so on, allowing you to work at higher levels of speed, resistance, etc. What will also occur is that you will see your recovery times drop (which many regard as the best measure of cardiovascular fitness), allowing you to be ready to “Spike” again sooner, therefore putting more “Spike” elevations in your workout.

Program Notes:

-The intensity of your “Spikes” needs to be commensurate with your structural capabilities. Do not work at a pace that your heart and lungs can sustain, but yet punishes your ankles, knees, hips, low back, etc.

-Because of this type of training can be very taxing if you have never done anything like this, start with no more than 12 minutes of total training time and increase by 2 minutes per week as your conditioning improves.

-This is very different from traditional cross-training or interval programs found on many cardio training machines. These pre-programmed routines generally alternate between low mid-range to high mid-range intensities, never really getting too high or low. These programs also do not adapt as your conditioning improves, leaving you with programs that are generally too difficult initially and eventually far too easy.

Conclusion

All of the clients that I have introduced to “Spike” Training have found a renewed enjoyment in their cardio training. The excitement of seeing your fitness improve from session to session not only eliminates a lot of the boredom that is often associated with cardio, but it creates a challenging element that brings out the inner athlete that many of us have. The efficiency of being able to get more calories burned in as little as 12 minutes also is a major benefit to those constantly in a time crunch. Most of all, people are much happier with how their jeans and tee shirts fit after 6-12 weeks!!!

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