

Huge Loss Comes in Short Bursts

Right » Mike Cairns in 2006

Bottom » Cairns racing the 2012 Muskoka 5150 in Huntsville, Ont.

by a period of recovery. It's what one Australian article has shown to help those like Martin who are significantly overweight. In the study, published in the *Journal of Obesity*, participants sprinted for eight seconds, raising their heart rate to between 80 and 90 per cent of their maximum rate, followed by 12 seconds at a slower speed. Results indicate that short bursts, or speed intervals, followed by periods of recovery, burn more fat than running or cycling at lower speeds for the same duration of time.

In fact, scientists in Sydney reported that sprint training for one hour a week burned the same amount of body fat in men as it did in those jogging for seven hours a week. Lead researcher Steve Boutcher, an exercise physiologist and associate professor at the University of New South Wales, notes that previous studies revealed similar results for women. "Bringing my heart to that rate," Martin says, "then bringing it back down – it really gave me the extra cardio boost that I needed for weight loss.

"The calorie burn was so much greater than if I was running for the same amount of time at the same consistent [and slower] speed. You're burning more because of the intensity," Martin adds. Researchers in the Australian study found that fast sprinting caused the body to release high levels of a hormone group called catecholamines, which help burn fat.

Boutcher says scientists don't know why, but "moving limbs very fast generates high levels of catecholamine."

Dr. Jamie Burr, professor of exercise physiology at the University of Prince Edward Island, agrees with the study's basic findings. "The exerciser who is working at a higher intensity will burn more calories," he says. "And the exerciser who burns more calories will lose more fat." Burr also says another advantage of High-Intensity Interval Training (HIIT) is that it's time efficient. "Someone may find it easier to motivate themselves to work hard for six one-minute bursts during a 30-minute workout as opposed to working moderately hard for 30 to 40 minutes straight," he says.

High-intensity training is also effective at building aerobic fitness. "In this regard, it is possible that those who are the most out of shape may benefit to an even greater extent initially, but HIIT training is effective for everyone, including elite athletes," Burr says.

