How many calories are you really burning on the treadmill?

Ever wonder how a machine knows how many calories you are burning? We've all seen it on the treadmills, bikes, and elliptical trainers that litter the gym floor. We finish our workout and voila – on the screen we see a summary of our workout results including 'total calories burned'. Really?

Here's the truth...Counting calories is not a good way to measure productivity or progress at the gym – nor is it accurate.

The actual amount of calories you are burning may be significantly more or less than what the machine has predicted for you. This is purely an estimate based on mathematical equations programmed into the machine's tiny computer system.

The actual number of calories expended depends on a multitude of factors including gender, age, and weight (which can sometimes be entered into the machine for a slightly more accurate energy expenditure reading) but also body composition and current fitness level (of which the machine has no idea and can therefore not factor into its estimation of calories burned).

Furthermore, your body weight is simply a number and is not necessarily an accurate indicator of health or body composition. When inputting your body weight into the cardio machine, your muscle mass and fat mass are not differentiated.

Consequently, two women of the same age and weight could both be working on the treadmill at the exact same intensity level and, due to differing body compositions, expend very different amounts of energy – yet the machine will read that they burned the same number of calories. A person with higher muscle mass burns more calories overall as muscle requires more energy to maintain than fat. It is therefore impossible for the treadmill or any other cardio equipment to measure energy expenditure accurately.

So, rather than putting any stock into the 'calories burned' reading, pick a range of time (for example 25-35 minutes) and monitor your intensity level or heart rate to ensure that you are being productive with your training.



Kathryn McKenzie (B.H.Kin, B.Ed) is the Head Trainer and owner of Surefire Fitness in Winnipeg. She can often be found at the gym ignoring the readings on the treadmill and training for the amount of time that feels right for her on that day. For more information on Personal Training, Sport Conditioning & Group Fitness, visit www.surefirefitness.ca.