

SPECIAL REPORT:

How to Burn Fat In Less Time

A Fairytale, Epic EPOC and MRT

Everyone seems to be looking for the secret to losing weight and there is no shortage of those trying to sell you their secret. Fat loss is a goal that most of us should have. With our limited time, making sure our exercise time is efficient should be a top priority. In other words, what should we do to burn the most fat in the least amount of time? In addition, if there were a way to dramatically increase the calories and fat you burn for up to 36 hours after the workout is over, wouldn't you want to know about it?

We will get to both of these answers shortly but first let's talk about a fairytale.

The fat burning zone, defined as cardio exercise between 60-70% of Max heart rate (50-65% in some references) has long been touted as the most efficient way to burn



calories from fat and lose weight. You see this chart plastered all over gyms and cardio equipment everywhere. According to this chart the most logical choice for exercise intensity for peak weight and fat loss is low intensity. But let's dig in a little further to see if this is true. At all times the body burns a mix of carbs and fats for fuel. The percentage of the fuel that comes from either carbs or fat depends on the intensity of the activity. At lower intensities a greater percentage comes from fat and less from carbs. As intensity goes up, less comes from fat and a greater percentage comes from carbs. In fact, in

terms of percentage of fat being burned, I bet you will never guess what the ultimate fat burning activity is. It's sleep! Yep, a good old nap will burn a greater percentage of calories from fat than anything else you can do. So, on one hand the fat burning myth is true. Low intensity activity does burn more fat. Sort of. It's like winning 80% of a lotto jackpot only to learn that the jackpot is only \$50.

The problem is that there are two ways to express energy utilization. Either as relative, which is a percentage, or as an absolute. The fat burning myth expresses it as a percentage, which can be very misleading. Here is an example.

Let's say we have two identical people. Both exercise for 20 minutes. Person A walks for 20 minutes and burns 100 calories while person B runs for 20 minutes and burns 200 calories. We use an analyzer to determine how much of each person's exercise is fueled by fat versus carbs. By the way, such an analyzer does exist. We would find that person A burned about 70% fat and about 30% carbs and person B about 40% fat and

60% carbs, which are very realistic values. You say "Aha!, there it is". The low intensity burned more fat than the high intensity. But wait, let's do some math.

Person A burned 100 calories, 70% from fat and 30% from carbs. Do the math and that is 70 calories from fat and 30 calories from carbs. Person B burned 200 calories, 40% from fat and 60% from carbs. That is 80 calories from fat and 120 calories from carbs. We see that although person A burned a higher relative or percentage of fat, person B burned a greater absolute amount of fat and a greater number of calories.

Person A



20 minutes of exercise
Walking
Burns 100 calories
70% from fat
30% from carbs
 $70\% \times 100 \text{ calories} = 70 \text{ cals of fat}$
 $30\% \times 100 \text{ calories} = 30 \text{ cals of carbs}$

Person B



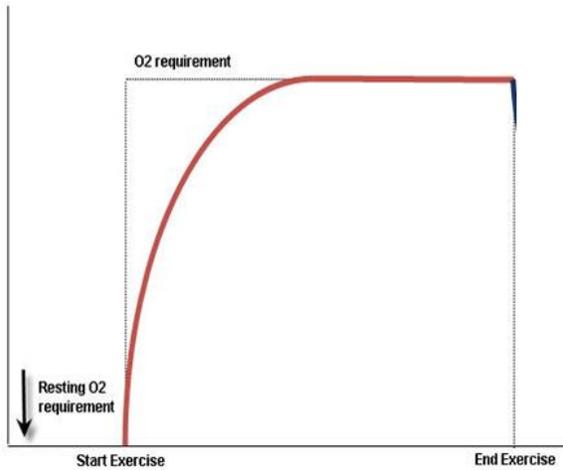
20 minutes of exercise
Running
Burns 200 calories
40% from fat
60% from carbs
 $40\% \times 200 \text{ calories} = 80 \text{ cals of fat}$
 $60\% \times 100 \text{ calories} = 120 \text{ cals of carbs}$

You get it. Exercise at a higher intensity to burn more absolute fat and more overall calories. But what about this idea of burning more fat and calories for up to 36 hours after our workouts? I promise, we will get to that soon.

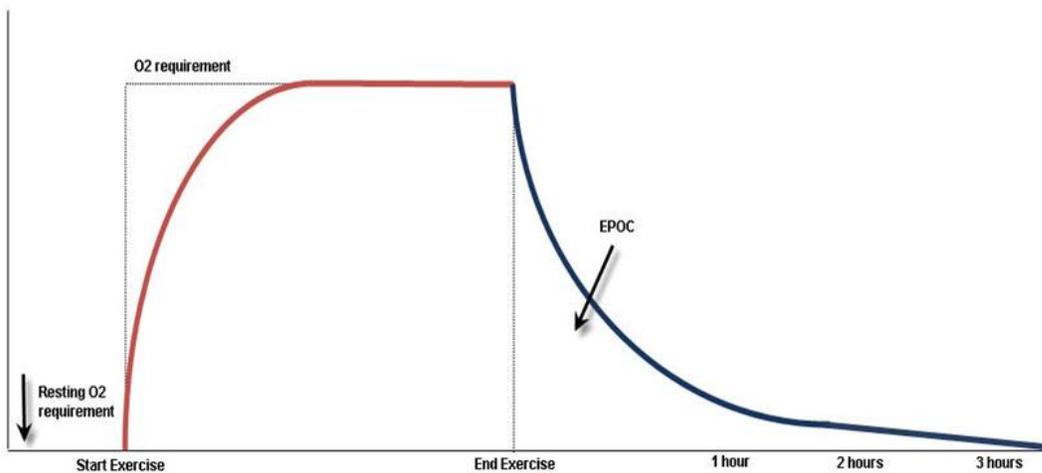
High intensity exercise does present a problem. Few of us can maintain high intensity exercise for very long. For example, if we start running as fast as we can it will only be about 10-15 seconds before fatigue sets in and we are forced to slow down or even stop. That's not a very long workout. The higher the intensity, the shorter the duration has to be.

This is where interval training and the Epic EPOC comes in.

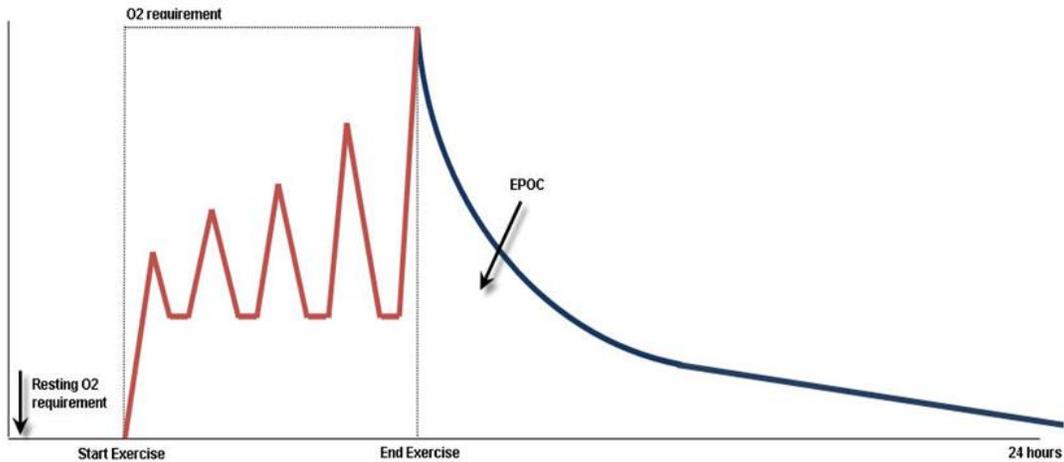
Most of us are probably accustomed to what is called steady state exercise. Steady state exercise is where we get to a certain exercise intensity and then for the most part, maintain that same level for the entire time. For example, we go for a run and mostly maintain the same speed the whole way. As we begin to exercise our need for more oxygen goes up. To meet this need the heart beats faster to pump more blood. As the demand for oxygen is met, then during the exercise the demand for oxygen plateaus. If we were to graph this it would look much like this.



Once we finish the exercise the demand for oxygen begins going down but does not immediately go back down to base line levels. In fact, it takes several hours to get back to baseline levels.

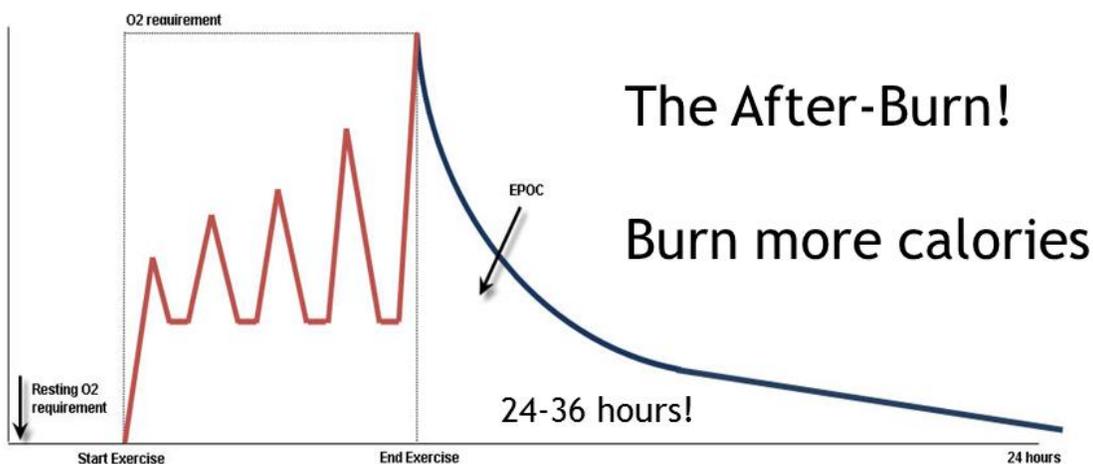


Interval training is a type of exercise that involves a series of low to high intensity exercise interspersed with rest or relief periods. The high intensity periods are typically pretty challenging while the recovery periods may involve either activities of low intensity or complete rest. In other words, interval training can be described as short periods of exercise followed by periods of rest, that are repeated multiple times. As you now know intervals would not be considered as steady state because these short bursts of high intensity exercise followed by periods of rest or recovery will make the oxygen demand go up and down. A series of intervals may look like this.



The demand for oxygen and therefore heart rate will go up dramatically during the burst of high intensity then come back down during the recovery period. We will repeat this multiple times during the workout.

So why is it such a great mode of exercise? It has to do with that period of time right after the exercise is over. Remember that the demand for oxygen, as well as heart rate, don't return to baseline for a while. In steady state exercise this takes 2-3 hours. But when we use intervals this elevated oxygen demand and heart rate remain elevated for an epic 24 to 36 hours after the exercise is over. The official name of this is called Excessive Post Exercise Oxygen Consumption, or EPOC for short. That is just a fancy name that makes us exercise physiologists feel smart. Let's just call it the afterburn effect.



And just to make it clear, elevated oxygen demand equals elevated caloric burn. Yes, we are burning more calories during this period than we would be at rest. In fact, interval training is great at burning calories and especially fat. Many scientific studies have validated this. One from Australia compared two groups. One group did steady state exercise for 40 minutes 3 days per week. The other group did just 20 minutes of

intervals 3 days per week. After 15 weeks the steady state group had not lost any weight. The interval group lost an average of 6 pounds without changing their diet.



Before you go crazy trying to do intervals all the time there are a few more things to think about. More is definitely not better in this case. If you are not accustomed to higher intensity exercise, you need to build up your physical capacity to do intervals. It's not something to just jump into unprepared. So, spend a few weeks building your overall fitness and your bodies tolerance to general exercise. Then start with a small number of intervals and progressively add. Start with 1-2 non-consecutive days each week. Keep the workouts short, like 10-20 minutes, and gradually increase the duration. Keep your exercise to recovery ratio somewhere in the 1:3 to 1:5 range. In other words, if your exercise interval is 15 seconds, then your recovery interval would be 45 seconds for a 1:3 ratio. Gradually decrease this ratio to 1:1 as your fitness improves.

There is no wrong or right when it comes to intervals. You can structure them any way you want with any type of exercise.

Here are two examples for you to try. One is a simple run/walk interval workout and the other uses stairs. But remember, you can apply these principles to any exercise type.

[PACE MAKER](#)

[MAKE 'EM STAIR](#)

Let's finish up with MRT and how it can be used to melt fat.

Many of us know the value of strength training. Moving with resistance such as barbells, dumbbells, kettlebells, machines, bands, and even our own body weight help increase strength, improve joint stability and develop muscle mass. This is a great way to begin attacking fat because as muscle mass increases, metabolism also speeds up.

When considering how to spend your valuable time here is how you should prioritize your exercise time to burn the most fat.

Make sure you get in 2-3 intervals workouts each week. Add in 2-3 strength training workouts. Fill in the rest of your available time with traditional cardiovascular training.

But that is a lot to fit in and get it all done. You can actually combine them into a single workout, get all the benefits of each, spend less time working out and it will be the most effective fat burning approach available.

We call this metabolic resistance training or MRT for short. It's really easy to put a workout like this together.

Simply pick a few strength type exercises that will go well together and will work most of the major muscle groups. Then determine the sequence you will do the exercises in and the level of resistance that is right for you for each exercise.

Now, determine how many reps you will do of each exercise. Finally, decide how many rounds you will do.

Essentially you will be doing intervals with weights. But you will also be raising your heart rate significantly due to moving quickly from exercise to exercise, which will give you a great cardio workout at the same time. Feel free to sprinkle in a number of cardio oriented exercises in between the strength exercises to make sure your heart rate stays elevated.

How about some examples. Here are 2 workout videos you can try. One uses only bodyweight and the other uses some basic equipment.

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[NOW I FEEL YA](#)

See how affective these can be? They really do work and should be at the top of your fat burning hierarchy.