



## **High Intensity Interval Workout Burns More Fat in Less Time**

There is no secret that it's important to combine diet, strength training, and cardio exercise to achieve your weight loss goal. You probably already spend 40 minutes per exercise session. The secret to how to achieve your goal faster or breakthrough a plateau is high intensity interval training that accelerates fat burning even after your 40 minute workout is completed.

### **What is HIIT?**

HIIT stands for *high intensity interval training*. The basic premise behind HIIT is that you work really hard for a short burst (sprint or climb) and then do moderate paced active recovery period (jog or walk). You can apply this to most forms of cardio exercise (eg. Biking, swimming, cardio machines). You would repeat this routine numerous times for optimal benefit.

### **Benefits of HIIT**

A HIIT workout offers many benefits. HIIT really ramps up fat burning. The intense exercise signals release of fat from fat cells into the bloodstream to be used as fuel. Additionally, HIIT results in increased Human Growth Hormone levels (HGH). HGH is a hormone that burns fat while preserving muscle. Finally, and most importantly, HIIT results in an after-burn effect—raises your resting metabolic rate—where you burn calories for hours after you complete your workout.

### **Drawbacks of HIIT**

The main drawback is that you should not perform HIIT everyday—every other day is ideal. Overtraining is a serious problem that can lead to injury, especially if you also perform strength training for your legs. If your muscles are tired then they need to recover and you are probably better served doing a slow paced steady state cardio routine on days between HIIT. Also don't forget core training for your midsection and strength training for your upper body. Finally, treat yourself and your muscles to a relaxing stretch afterwards.

### **Sprint Interval Length**

There are a few components of HIIT that you can vary. The first is the length of the sprint intervals. Shorter intervals of 15-30 seconds allow you to exert more effort during the sprints. This increased level of effort will result in a stronger release of HGH and more fat into the bloodstream. As your conditioning improves you need to push yourself to a higher level of intensity in the future.

Longer intervals of greater than 30 seconds require more sustained effort. These result in a greater number of calories burned. Additionally, these longer intervals deplete glycogen levels (carbs) from your muscles and liver, allowing your body to burn more fat after the completion of your workout.

### **Recovery Length**

The recovery length also impacts the effects of HIIT. This is the walking or jogging portion of the workout that allows your muscles time to actively recover. The length of recovery is relative to the sprint interval. If you recover for 60 seconds and sprint for 30 seconds, the ratio is 2:1. If you recover for 45 seconds and sprint for 15 seconds, the ratio is 3:1.



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The longer the recovery in relation to the sprint interval (2 or 3:1), the more effort you can exert in the next interval. This increased effort will again result in a stronger HGH release. Additionally, longer recovery reduces the risk of overtraining.

A short recovery relative to the sprint interval (1:1) results in lactic acid buildup in muscles, glycogen depletion, and a greater after-burn effect. However, this can lead to a greater risk of overtraining.

## The Best Cardio for Weight Loss

Perhaps the most effective cardio for weight loss combines these HIIT workout routines resulting in a strong HGH response, release of fat, glycogen depletion, and calorie burning. Efficiently in 40 minutes...

**1<sup>st</sup> Phase**  
**Short Intervals** After warming up for a few minutes of light cardio, proceed to the 1<sup>st</sup> part of the workout performing short, fast interval HIIT with a long recovery ratio. For these intervals, you sprint 15 seconds and recover (jog) for 45 seconds. This increases HGH levels and releases fat (*Migrate & Mobilize*). Do 10 sets for 10 minutes.

**2<sup>nd</sup> Phase**  
**Cruise** For the 2<sup>nd</sup> phase, perform 20 minutes of steady state cardio (light paced jog or cursing on a bike). This provides an active recovery for your muscles. More importantly you burn the fat that short interval HIIT released into the bloodstream (*Metabolize*).

**3<sup>rd</sup> Phase**  
**Long Intervals** Long interval HIIT is the 3<sup>rd</sup> phase. This depletes your body of glycogen allowing for a greater after-burn effect of fat burning continuing long after your workout is complete (*Metabolize*). Perform 1 minute sprint intervals with 1 minute of recovery (jogging). The sprint intervals for this portion are not as intense as the first phase, by necessity as your muscles will be slightly tired. Try going uphill or increasing resistance on bike or cardio machine for sprint to vary from 1<sup>st</sup> phase where focus is on speed. This final phase of 5 sets lasts 10 minutes.

## Nutrition

Any discussion of weight loss would be incomplete without guidance about nutrition. A diet is short term plan. Here are a few sound ideas to help now and after you've achieved your goals:

- Smaller portions & Eat more frequently (3 small meals with 2-3 snacks)—Keeps blood sugar and consequently insulin levels moderated that results in less fat accumulation, and even energy
- Eat slowly (put utensils down) allows fullness sensation (20 minutes for hormonal signal from gut to brain)
- A light, balanced (protein & carbs) snack an hour before and immediately after your workouts
- Drink water (hydration) during your workout & with meals
- "White is not Right"—Minimize portions of simple sugars, starches (flour, rice, potatoes)
- Track what you eat—Creates awareness of intake. Read labels. Good smart phone App is [Lose It!](#)
- [Green coffee Extract](#) (containing approximately 50% chlorogenic acids) 800mg before each meal was shown in well-designed study to significantly reduce weight and body fat loss even without changing diet or exercise. Imagine if you add this to the above healthy diet and exercise habits?



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### Conclusion

Training aids can be helpful and impart discipline with these structured workouts. A heart rate monitor is wonderful as you can train to target zones based on your age-appropriate maximum heart rate (see diagram). Perhaps the best tools are the [Gymboss®](#) iPhone App or [HIIT Timer](#) Android App for smart phones which are priceless as they allow you to enter your interval workout and then prompt you to perform it—no shortcuts.

So now you have a plan: The 40 minute HIIT workout is the most efficient exercise for weight loss. Get started and commit to get over the initial hurdle of 21 days that psychologists tell us it takes to create a new habit: A healthy lifestyle that you'll be able to continue and enjoy the benefits for a lifetime.

# Fat Burning Workout

10/20/10 HIIT



Max HR = 220 - Age