

High Intensity Interval Training and Intermittent Fasting—Two Winning Ways to Reach and Maintain Your Ideal Weight

If you want to alter your body composition, you cannot overlook exercise. However, some forms of exercise are clearly more effective than others in this regard.

September 26, 2014 | 164,309

views

 Disponible en Español

Most people who exercise are still focusing on slow endurance-type exercises, such as running on a treadmill, which is not only time consuming but ineffective as well—especially for weight loss.

When it comes to shedding unwanted pounds and reworking your fat-to-muscle ratio, high intensity interval training (HIIT) combined with intermittent fasting is a winning combination that I don't think can be beat.

The HIIT approach I personally use and recommend is the Peak Fitness method, which consists of 30 seconds of maximum effort followed by 90 seconds of recuperation, for a total of eight repetitions.

Super Slow strength training may even be more effective than Peak Fitness cardio. While they both are highly effective, you can generate a higher cardiac output with Super Slow training as discussed in my recent interview with Dr McGuff.

I also recommend incorporating Buteyko breathing, which involves breathing only through your nose while working out. This raises the challenge to another level.

Intermittent fasting involves cutting calories in whole or in part, either a couple of days a week, every other day, or even daily as in the case of the scheduled eating regimen I recommend for those with insulin resistance (overweight, high blood pressure, diabetes, or taking statin drugs).

When you combine these two strategies, especially if you exercise in a fasted state, it effectively forces your body to shed fat because your body's fat burning processes are activated by exercise and lack of food.

HIIT Trumps Conventional Cardio for Fat Loss, Calorie Burning, and More

The featured article in The Leader¹ discusses the many advantages of high-intensity interval training over conventional cardio, including the following five—all of which have sound scientific support:

1. **Maximized calorie burn.** As noted in the featured article, "*HIIT workouts burn more calories than traditional workouts, especially after the workout.*"

The two-hour period following a workout is referred to as EPOC (excess postexercise oxygen consumption), and it's when the body works to restore itself to pre-workout levels, in turn using more energy."

The American College of Sports Medicine² recommends 20 minutes of more vigorous activity three days per week, noting that HIIT workouts tend to burn an extra 6-15 percent more calories compared to other workouts, thanks to the calories you burn after your exercise.

2. **Optimized fat burn.** HIIT also burns more body fat in less time.
3. **Improved cardiovascular health.** Contrary to conventional thought, HIIT is actually more efficient when it comes to improving your cardiovascular and heart health compared to long and slow endurance-type cardio.

According to the featured article: *"In a recent 2014 study... vigorous HIIT-style workouts helped heart transplant patients keep their blood pressure levels in check better than moderate intensity exercise. This research suggests that high-intensity exercise might be a safe and efficient way to manage blood pressure in the long-term."*

4. **Greater endurance, speed, and performance.** While it seems reasonable to assume that improved endurance goes hand in hand with longer workouts, this actually isn't necessary. HIIT can dramatically cut the time required by engaging *both* your aerobic and anaerobic systems.

As explained in the featured article: *"During high-intensity surges, you're supposed to go all-out—until you reach that breathless, 'OMG-I-can't-take-this-anymore' feeling."*

When you feel as though your heart is about to pound out of your chest, it's a sign you've crossed over into the anaerobic zone. Pushing yourself like this can help you become stronger and fitter over time."

In one study,³ recreational cyclists were able to double their endurance capacity in just two weeks by doing three sessions of sprint interval training per week!

5. **Optimal efficiency.** One of the real boons of HIIT is the fact that you can complete an entire workout in a total of 20 minutes. And the fitter you get, the less frequently you need to do them.

High intensity exercises also cuts down on the time required to notice fitness results. According to research presented at the American College of Sports Medicine Annual Meeting in 2011, just two weeks of HIIT can improve your aerobic capacity as much as doing endurance training for six to eight weeks.

Besides these advantages, other benefits associated with high intensity interval training include:

- Improved muscle tone
- Higher energy levels
- Boosted sex drive
- Optimized production of human growth hormone (HGH), also known as "the fitness hormone," which is important for strength, health and longevity
- Increased production of testosterone

Intense Exercise Also Produces Genetic Changes That Promote Fat Loss

High intensity exercise appears to produce its benefits via a number of different mechanisms. We may not even have identified them all as of yet. For example, a study published in the journal *Cell Metabolism*⁴ in 2012, showed that when healthy but inactive people exercise intensely, even if the exercise is brief, it actually produces an immediate *change in their DNA*.

While the underlying genetic code in the muscle remains unchanged, intense exercise causes important structural and chemical changes to the DNA molecules within the muscles, and this contraction-induced gene activation leads to the genetic reprogramming of muscle for strength. Other genes affected by intense exercise are genes involved in fat metabolism. Specifically, the study suggests that when you exercise, your body nearly immediately experiences genetic activation that increases the production of fat-busting proteins.

Intermittent Fasting May Be the Best Way to Shed Excess Fat

While high intensity interval training is the best exercise to shed fat, intermittent fasting is by far the most effective way to lose weight overall. There are a few different intermittent fasting regimens, but the one I recommend for most people who are overweight, is to simply restrict your *daily* eating to a *specific window of time*—ideally a window of eight hours or less. This means no calories at all during your non-eating window. You can have water, tea, and coffee, but no milk or sugar added.

This is one of the most aggressive intermittent fasting regimens, so you'll likely notice results far sooner than with some other eating schedules. Best of all, despite being aggressive, it's still really easy to comply with once your body has

shifted over from burning sugar to burning fat as its primary fuel. If daily fasting sounds intimidating, keep in mind that this is not a permanent eating program.

Once your insulin resistance improves and you are normal weight you can start eating more frequently, as by then you will have reestablished your body's ability to burn fat for fuel—that's the key to sustained weight management. This is what happened to me. I was losing far too much weight on one meal a day and had to increase to two meals to not lose too much weight.

Moreover, if you're hesitant to try fasting for fear you'll be ravenously hungry all the time, you'll be pleased to know that intermittent fasting will virtually *eliminate* hunger and sugar cravings. Again, it may take a few days or even weeks, but once your body shifts into burning fat for fuel rather than sugar, the sugar cravings will be a thing of the past. I'm a fellow of the American College of Nutrition and have studied nutrition for over 30 years, and I'd never personally encountered or experienced hunger cravings just disappearing like they did when I implemented intermittent fasting!

For Optimal Weight Loss Results, Also Pay Attention to *What You Eat*

In addition to paying attention to when you eat, it's also important to address the quality of the food you eat. While some intermittent fasting advocates permit you to eat just about any kind of junk you want as long as you restrict calories on certain days, I believe this is really counteractive. When fasting, optimal nutrition actually becomes *more* important, not less so. As a general rule, to lose weight, you need to:

1. **Avoid sugar, processed fructose, and grains.** This effectively means you must avoid most processed foods.
2. **Eat plenty of whole foods, ideally organic, and *replace the grain carbs* with:**
 - **Large amounts of fresh organic locally grown vegetables**
 - **Low-to-moderate amount of high-quality protein** (think organically raised, pastured animals). Most Americans eat far more protein than needed for optimal health. I believe it is the rare person who really needs more than one-half gram of protein per pound of lean body mass. Those that are aggressively exercising or competing and pregnant women should have about 25 percent more, but most people rarely need more than 40-70 grams of protein a day.

The rationale behind limiting your protein is this: when you consume protein in levels higher than recommended above, you tend to activate the mTOR (mammalian target of rapamycin) pathway, which can help you get large muscles but may also increase your risk of cancer. There is also research suggesting that the "mTOR gene" is a significant regulator of the aging process, and suppressing this gene may be linked to longer life.

To determine whether you're getting too much protein, first calculate your lean body mass by subtracting your body fat percentage from 100 (example: if you have 20 percent body fat, you have 80 percent lean body mass). Then write down everything you're eating for a few days, and calculate the amount of daily protein from all sources. Aim for one-half gram of protein per pound of lean body mass, which would place most people in the range of 40 to 70 grams of protein per day. If you're currently averaging a lot more than that, adjust downward accordingly. You could use the chart below or simply Google the food you want to know and you will quickly find the grams of protein in the food.

Red meat, pork, poultry, and seafood average 6-9 grams of protein per ounce.

An ideal amount for most people would be a 3-ounce serving of meat or seafood (not 9- or 12-ounce steaks!), which will provide about 18-27 grams of protein

Eggs contain about 6-8 grams of protein per egg. So an omelet made from two eggs would give you about 12-16 grams of protein.

If you add cheese, you need to calculate that protein in as well (check the label of your cheese)

Seeds and nuts contain on average 4-8 grams of protein per quarter cup	Cooked beans average about 7-8 grams per half cup
Cooked grains average 5-7 grams per cup	Most vegetables contain about 1-2 grams of protein per ounce

- **As much high-quality healthful fat as you want** (saturated and monounsaturated from animal and tropical oil sources). Most people need upwards of *50-85 percent* fats in their diet for optimal health—a far cry from the 10 percent currently recommended. Sources of healthful fats to add to your diet include:

Avocados	Butter made from raw grass-fed organic milk	Raw dairy	Organic pastured egg yolks
Coconuts and coconut oil	Unheated organic nut oils	Raw nuts, such as almonds, pecans, and macadamia, and seeds	Grass-fed meats

Intermittent Fasting and High Intensity Exercise Is a Winning Combo for Weight Loss

If you're like most Americans you probably have a few unnecessary pounds you'd prefer to get rid of. Intermittent fasting is by far the most effective strategy I've found for shedding excess weight, and when it comes to exercise, high intensity exercises are the most efficient. In combination, these two strategies can quite literally reshape your body and life.

My only caveat is that you also need to pay attention to the quality of the food you eat—intermittent fasting is not a ticket to eating McDonald's... Since both HIIT and intermittent fasting help shift your body from burning sugar to burning fat as its primary fuel, it's important to feed your body the right nutrients. Out with the sugar, and in with the healthy fats! Making these dietary shifts, and adding two or three weekly sessions of high intensity exercises is, I believe, a solid strategy for reaching your weight loss and fitness goals.

[+] Sources and References

[+] Comments (93)

Post your comment