



# WellnessOne Newsletter

YOUR SOURCE FOR WELLNESS INFORMATION,  
INSIGHT, AND EDUCATION.

*Published by WellnessOne of Redding*

## Why Exercising at This Time of Day is FAR Better than Any Other Time...

*Reprinted from Mercola.com | January 04 2011*

A new study suggests that exercising in the morning, before eating, can significantly lessen the ill effects of a poor holiday diet.

Researchers recruited healthy, active young men and fed them a bad diet for six weeks. A group of them that exercised before breakfast gained almost no weight and showed no signs of insulin resistance. What's more, they burned the fat they were taking in more efficiently.

According to the New York Times:

*"... [W]orking out before breakfast directly combated the two most detrimental effects of eating a high-fat, high-calorie diet. It also helped the men avoid gaining weight."*



### Sources:

- » [New York Times December 15, 2010](#)
- » [Journal of Physiology Nov 1, 2010:588\(Pt 21\):4289-302](#)

### Dr. Mercola's Comments:

#### I'm an advocate of exercising first thing in the morning for two reasons:

1. It gets done. Despite your best intentions, any number of things can happen in the afternoon and evening, making you skip exercise for "lack of time"
2. There are additional health benefits to exercising before consuming your first meal of the day.

The [study above](#) is a great illustration of how making slight changes to the order of your daily routine can dramatically improve your end results.

#### Exercising Before Breakfast Counteracts Poor Diet and Aids Weight Loss

The [study](#) in question lasted for six weeks. It included 28 healthy men between the ages of 18 and 25, divided into three groups; those who:

*It's your future... be there healthy with WellnessOne™*

1. Exercised before eating a carbohydrate-rich breakfast, and drank only water during exercise
2. Ate a carbohydrate-rich breakfast before exercising, and drank sugary drinks such as sports drinks during their workout
3. Ate an identical diet but did not exercise at all

The men who exercised, ran and cycled at a strenuous intensity four times a week.

Overall, the men had identical high-calorie, high-fat diets. The primary difference was whether—and most importantly, *when*—they exercised. The other difference was the type of beverages they drank during exercise.

At the end of the trial, the non-exercising control group had gained an average of more than six pounds, and had developed insulin resistance—the precursor to type 2 diabetes.

Those who ate breakfast prior to hitting the gym gained an average of about three pounds; half the weight gain of those who did not exercise. However, they too had developed insulin resistance...

The only group that *gained almost no weight*, and showed *no signs of insulin resistance* were those who exercised before eating breakfast, and drank only water during their workout.



I want to draw your attention to how the type of beverage consumed during exercise can also have a major impact on your weight loss and health goals.

You'll want to avoid all types of sugary drinks, including sports drinks, for up to two hours after your workout because fructose obliterates the growth hormone response. You'll find more information about that at the end of this article.

Clearly, the fasting exercise group reaped the benefits of both fasting *and* not ruining their efforts with carbohydrate-rich beverages...

[The authors concluded](#) that:

*"This study for the first time shows that fasted training is more potent than fed training to facilitate adaptations in muscle and to improve whole-body glucose tolerance and insulin sensitivity during hyper-caloric fat-rich diet."*

That's quite remarkable, considering all three groups consumed very high caloric diets. This is powerful evidence that occasional indulgences do not have to lead to excessive weight gain, which is great news for most of us, especially in light of the recent holidays.

But even beyond holiday excesses, it's quite clear that something as simple as modifying your schedule to exercise before eating your first meal of the day can have a very beneficial and protective impact on your health and weight.

*It's your future... be there healthy with WellnessOne™*

## How Fasting Forces Your Body to Shed Excess Fat, and Combats Insulin Resistance

One of the explanations for how exercising on an empty stomach can prevent weight gain and insulin resistance despite overindulgence is that your body's fat burning processes are controlled by your sympathetic nervous system (SNS), and your SNS is activated by exercise and lack of food.

The combination of fasting and exercising maximizes the impact of cellular factors and catalysts (cyclic AMP and AMP Kinases), which force the breakdown of fat and glycogen for energy.

This is why training on an empty stomach will effectively force your body to burn fat.

It's also important to realize that eating a full meal, *particularly carbohydrates*, will inhibit your sympathetic nervous system and *reduce* the fat burning effect of your exercise. Instead, eating lots of carbs activates your parasympathetic nervous system, (which promotes energy storage—the complete opposite of what you're aiming for).

This can explain why those who exercised vigorously but *ate a carbohydrate-rich breakfast first* still ended up gaining weight, albeit not as much as those who did not exercise at all.

More important, however, is the impact fasting exercise can have on your insulin regulation. The researchers concluded that those who fasted before exercise had increased levels of a certain muscle protein that plays a pivotal role in insulin sensitivity.



As I've explained in numerous articles, [insulin resistance is the root cause of most chronic disease](#), making maintaining proper insulin regulation a primary factor of good health.

In a nutshell, you do that by:

1. [Exercising regularly](#)
2. [Avoiding sugar/fructose](#), and grains (including organic whole grains as they too will quickly convert to sugar in your body and lead to insulin resistance)

Based on the impressive results from the study above, you may also want to consider exercising *prior* to having your breakfast to optimize the beneficial impact of your exercise on your insulin regulation.

### Other Pro's and Con's of Exercising on an Empty Stomach

Keep in mind that the majority of the "fuel" used during most exercise is not actually coming from the food you have just eaten. If you're working out at a moderate to high intensity you're using glycogen and fat that is stored in your muscles, liver, and fat cells. Typically, your body has enough of that stored fuel to last for one to two hours of intense work, or three to four hours at moderate intensity.

Therefore, if you are consuming a high quality diet, eating every three to four hours, your body may not need anything to eat before you begin your workout.

Still, some people do have a hard time exercising without eating something first.

Typically these people are more sensitive to changes in their blood sugar levels, which can decline during the first 15-25 minutes of their workout. It is this decline in blood sugar that causes dizziness, faintness, nausea or lightheadedness. This is especially true if you exercise first thing in the morning.

Additionally, exercising on an empty stomach may not appeal to athletes as it will typically reduce overall performance. Professional athletes may also not be as concerned with fat loss.

I believe the best approach is to use some common sense and listen to your body.

A number of individual factors can play a role, such as your age, when you last ate, whether or not you're pregnant, taking medications, your medical history, level of fitness, and the type of workout you engage in.

For example, if you feel weak or nauseous while exercising on an empty stomach, you may want to at least eat a small meal before exercising.

Fortunately, there's a near perfect breakfast food that may offer the best of both worlds.

### **What to Eat Before Exercise to Really Boost Fat Burning**

Yes, there's another, perhaps even more efficient way to boost fat burning *without* fasting.



A recent [study published in the journal \*Medicine and Science in Sports & Exercise\*](#), demonstrated that consuming whey protein (20g protein / serving) 30 minutes before resistance training boosts your body's metabolism for as much as 24 hours after your workout.

It appears as though the amino acids found in high quality whey protein activate certain cellular mechanisms (mTORC-1), which in turn promote muscle protein synthesis, boost thyroid, and also protect against declining testosterone levels after exercise.

In practical terms, consuming 20 grams of whey protein before exercise and another serving afterward will most likely yield the double benefit of increasing both fat burning and muscle build-up at the same time.

Again, not everyone will need to eat something prior to exercise, but if you do, a high quality whey protein is one of your best bets. It'll curb your hunger while still optimizing fat burning.

Whey protein is also known for its ability to help your insulin work more effectively, which, again, is one of the primary benefits of fasting prior to exercise.

### **A Great Way to Start Your Morning**

*It's your future... be there healthy with WellnessOne™*

Personally, I typically exercise first thing in the morning, before eating, and then have a [whey protein shake for breakfast](#). This ensures that I get my exercises done before anything has the opportunity to derail my plans, and gives me plenty of energy for the day ahead.

It should be noted for clarity, however, that whey protein is NOT a weight loss supplement, in and of itself. Without the exercise, it will not magically help you lose weight.

### **The Most Effective Exercise for Weight Loss and Optimal Health**

Since we're talking about fat burning it's important to realize that the type of exercise you perform will also have a major impact on this process.

I recently wrote about the many [health benefits of high-intensity burst-type exercises such as Peak 8](#). Improved fat burning is just the beginning when it comes to this type of training!

Performed two or three times a week, Peak 8 exercises will boost your body's natural production of human growth hormone (HGH), and slow down telomere shortening—both of which are tied to the aging processes of your body.

During these high intensity, sprint-type exercises you raise your heart rate up to your anaerobic threshold for 30 seconds, followed by a 90 second recovery period. The cycle is then repeated for a total of eight repetitions—hence the term "Peak 8."

Another boon of Peak 8 exercises is the amount of time you save. Including a three minute warm up and two minute cool down, your total time investment is a mere 20 minutes as opposed to your regular hour-long treadmill session.

I've been doing Peak 8 exercises since April 2010 and have shed over 17 pounds of fat and three inches off my waist while gaining more than five pounds of muscle, all while dramatically reducing the time I spend in the gym.

So, to summarize the diet and health advice discussed above:

- Exercising before breakfast can help prevent weight gain and insulin resistance, even when consuming an excess amount of calories and carbs
- Quench your thirst during exercise with pure, clean water only. Sugary drinks such as sports drinks will obliterate many of the most impressive health benefits of your training
- If you can't, or don't want to exercise on an empty stomach, your ideal breakfast alternative is a high quality whey protein. It will help boost metabolism for as much as 24 hours after your workout and promote healthy insulin secretion
- Incorporate high-intensity burst-type exercises like Peak 8 into your fitness regimen to further maximize fat burning and slow down the aging process

