Are You Making This "Fat Storing" Mistake Before You Exercise?

Some scientists argue that if you want to get rid of more fat, you should skip pre-workout eating.

Several studies suggest exercising while your body is low on food may be a good way to trim excess fat.

In a recent study, researchers found that cyclists who trained without eating burned significantly more fat.

According to USA Today:

"Muscles usually get their energy from carbohydrates ... if you haven't eaten before exercising, your body doesn't have many carbohydrates in reserve. That forces it to burn fat instead, scientists say."

Sources:

➤ USA Today June 4, 2010

Comments:

As you can tell from reading the USA Today article above, there's plenty of controversy on this issue. There's general agreement that exercising on an empty stomach will help burn more fat, but that's about where the general consensus ends.

Some experts believe it's a bad idea because exercising vigorously when you're blood sugar is low could lead to dizziness and poor performance. Others warn that exercising while hungry can lead to overeating afterwards.

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, and I'll address this further in just a moment.

But first, let's look at the science behind this theory.

There's actually quite a bit of evidence supporting the theory that you'll burn more fat if you don't eat prior to your workout. *USA Today* mentions several such studies.

So, how does it work?

**How Fasting Forces Your Body to Shed Excess Fat**

All fat burning processes in your body are controlled by your sympathetic nervous system (SNS).

The SNS is inherently 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.

So yes, training on an empty stomach is actually a very effective way to force your body to burn fat.

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

Keep in mind, though, that the majority of the "fuel" used during most exercise is not 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, we have enough of that stored fuel to last for one to two hours of intense to very intense work, or three to four of moderate intensity.

So having said this, 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. But, 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.

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

The flip side of fasting prior to exercise, however, is reduced performance. Fortunately, there's another, perhaps even more efficient way to boost fat burning *without* fasting.

Another 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, whey protein is one of your best bets.

**Buyer Beware: Many Protein Drinks Loaded with Toxic Metals**

There are many reasons for choosing whey protein over other commercial protein drinks, but one of the latest problems that has surfaced is the potential for many products to be contaminated with toxic metals.

*Consumer Reports* recently tested 15 different protein drinks, and discovered that some of these products were significantly contaminated with toxins such as arsenic, cadmium, lead and mercury.
Three of the products tested contained some or all of these toxins at levels that could pose a health hazard if you consume three servings a day.

Clearly, dousing your system with toxic metals will do more harm than good, so as with most other foods and food supplements, knowing what to look for is very important.

**How to Select a High Quality Whey Protein**

Whey protein is a by-product of dairy, so for starters you'll want to make sure the whey you're buying is derived from organic, grass-fed, non-hormonally treated cows.

It should also be minimally processed in order to preserve beneficial immuno components such as immunoglobins, bovine serum albomin, lactoferins, and other key amino acids and nutrients.

Most commercial whey products are derived from pasteurized dairy and processed with heat and acid, which destroys most of the whey's fragile molecular structure. Many of them also contain artificial sweeteners, which come with their own set of health hazards. And contrary to popular belief, artificial sweeteners actually sabotage your weight loss efforts by impairing your ability to regulate your appetite naturally.

In addition, you'll want to look for medium chain fatty acids (MCTs), not long chain fatty acids, as this makes the whey protein much more digestible.

**Additional Health Benefits of Whey**

In addition to raising your fat metabolism when consumed before and/or after exercise, whey protein has been linked to a variety of other health benefits, such as:

- Helping your pancreas-produced insulin work more effectively, which helps stabilize your blood sugar levels
- Promoting healthy insulin secretion
- Helping to promote your optimal intake of proteins, fats, carbohydrates, vitamins, and minerals needed for your overall wellness
- Supporting your immune system, as it contains immunoglobulins
- Maintaining blood pressure levels that are already within the normal range
A Great Way to Start Your Morning

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.

I recently shared my own breakfast recipe which took me quite a while to develop, so if you missed it, feel free to review it now. My morning shake is packed with nutrients and is perfect both as a healthful breakfast and post-work out meal.

I prefer not eating before working out, but if you feel you need to eat something before you get going, whey protein is definitely one of your best options. It'll curb your hunger while still optimizing fat burning.

You can't get anywhere near the same benefits from eating a standard American breakfast loaded with carbs...

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.

Exercise Right for Optimal Fat Burning

Last, but certainly not least, 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 coined the term "peak fitness" to highlight the importance of high intensity interval training for optimizing your overall fitness and weight loss. It's a comprehensive program that includes aerobic, strength training, core exercises and stretching, but the major addition are the peak exercises you perform once or twice a week.

These high intensity, sprint-type exercises raise your heart rate up to your anaerobic threshold for 20 to 30 seconds, followed by a 90 second recovery period. You then repeat this cycle for a total of eight repetitions.

These cycles are preceded by a three minute warm up and two minute cool down so the total time investment is about 20 minutes, as opposed to your regular hour-long treadmill session.