

The Fat-Burning Myth

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If your goal is to lose body fat, you probably already know that exercise can help. Since the 1980's, the fitness industry has beaten the fat-burning concept to death. They talk about it, write about it and market it as if it's the only thing that ever mattered.

Unfortunately, the concept of burning fat has kept Americans misguided for decades now. The dirty little secret when it comes to burning fat is that it just doesn't matter. Yes, it's true. The fitness industry had taken consumers down a long, complicated path that has not led to the promised land.

How It Started

In the 1980's health officials began noticing a growing trend of obesity. In response to this trend, the government set national health objectives aimed at reducing the incidence of obesity.

With these health objectives firmly in place, the fitness industry made its move. Marketers from every major manufacturer jumped on the bandwagon and started designing fat-burning equipment, programs and devices. All this stuff was designed to help America burn fat and lose weight.

A Flawed Concept

Technically speaking, our bodies burn fat all day, every day. In fact there's never a time that we aren't burning fat. Our bodies meet their need for energy by burning both fat and carbohydrate throughout the day. As we become more active, our bodies burn more fat and carbohydrate to support the need for more energy.

The major flaw with the fat-burning concept is that it ignores science. The laws of physics tell us that our bodyweight is a function of both calories in and calories out. To lose weight, you must create a calorie shortage. Scientists call this a negative energy balance. Without achieving a negative energy balance, it doesn't matter how much fat you burn, you will never lose weight.

The Research

Over the years many scientists have put the fat-burning concept to the test. Evidence that burning fat doesn't matter first showed up about 25 years ago. In a study published in the

journal of the *American College of Sports Medicine* (Medicine and Science in Sports and Exercise; 1984: 16:269), researchers placed college men on two different exercise programs. One group exercised on a fat-burning program (lower intensity) while the other group exercised on a non-fat-burning program (higher intensity). Both groups burned off approximately 300 calories per exercise session. At the end of 18 weeks, the researchers found that the two groups had lost equivalent amounts of body fat.

Another study that looked at this issue was published in the *American Journal of Clinical Nutrition* (Volume 51, pp. 142-146, 1990). Twenty-seven obese women were randomly assigned to either a fat-burning program or a non-fat-burning program. Both groups exercised 3 days per week for 8 weeks. The researchers concluded that the two groups had similar reductions in body fat regardless of the type of exercise program they followed.

In a study conducted at Georgia State University, researchers had two groups of women follow exercise programs that burned the same number of calories, but were different in intensity. One group walked slowly (at a fat-burning pace), while the other group walked fast (at a non-fat-burning pace). After three months both groups lost equal amounts of fat.

Other scientists have also spoken out against the fat-burning concept. In the October, 1995, issue of Tuft's University Health & Nutrition Letter, exercise physiologist Jeffrey Rupp, PhD, is quoted as saying, "The idea that you cannot lose fat unless you burn fat while you exercise, has absolutely no scientific support." In her highly acclaimed book, *Fitness for Dummies*, author Liz Neporent directs readers to ignore the fat-burning concept, stating that it is misleading.

What Really Matters

If you're serious about reaching your weight management goals, focus on what really matters. Burning calories matters because it helps you achieve a negative energy balance. Being preoccupied with fat-burning heart rates is unnecessary.

Some of the best evidence on physical activity and weight management comes from the National Weight Control Registry (NWCR). This ongoing study has tracked the habits of successful dieters for many years. Data from the NWCR indicates that burning at least 2000 calories per week significantly increases your chances of losing weight and keeping it off.

Steps for Success

- Set a goal for how many calories you will burn this week (and write it down). If you are just getting started, it may take several weeks to work up to 2000 per week.
- Break your activity into short, calorie-burning bouts, if needed. These short, calorie-burning bouts (such as a brisk, 10-minute walk) will make burning calories much more doable.
- Complete two, full-body, strength workouts per week. The U.S. Department of Health and Human Services recommends that all adults engage in muscle-strengthening exercises twice a week. Muscle helps you to burn calories by keeping you strong and active.

According to Dr. Wayne Westcott, Director of Fitness and Research at the South Shore YMCA in Quincy, MA, adults who do not strength train lose from 5 to 7 pounds of muscle per decade. Muscle loss of this magnitude makes being active much more difficult. It also increases your risk of injury because muscle protects your body.

The bottom line is simple. Make a commitment to burning calories and building muscle. You will be on your way to successful weight management.