

An analysis of large population medical-assessment data comparing body mass index and percentage of body fat suggests the average American female now has about 40% body fat. Female body-fat percentages over about 30% start to carry with them increased risks for morbidity and mortality.

Negative emotions tied to accumulating excess body weight and fat make women easy prey for gurus, gadgets and gimmicks promising “overnight” results with little-to-no effort. While some find short-term success with these diet and exercise fads, most are unable to sustain the novelty of the “hot” new trend in their life. Body fat and frustration repeatedly return with a vengeance.

While the recommended interventions for fat loss for both men and women are fairly similar, it's important to understand a few unique aspects of female physiology and how to overcome the commonly accepted mistruths and misunderstandings associated with fat loss and women.

Women and Fat Metabolism

While it appears that women rely more on fat for fuel during exercise (compared to men, they have a greater amount of type 1 “slow twitch” muscle fibers), they burn far less fat during rest. This is most likely due to having less lean muscle mass than males. A majority of daily caloric expenditure is due to basal metabolic rate, which is largely determined by the amount of lean muscle mass we each have.

Women's fat metabolism is also greatly impacted by hormone levels. Factors such as age, menstrual cycle, pregnancy and other natural phenomena all have an affect on women's fat-burning hormone profiles. While men naturally produce relatively large amounts of muscle-building, fat-burning testosterone, women produce larger amounts of estrogen and progesterone. These hormones tend to increase the storage of fat, which has been linked to the essential process of childbearing.

While it's well established that sustained fat loss is a product of sensible nutrition, exercise and lifestyle habits for both men and women, common societal misbeliefs confuse and misdirect many women's attempted interventions for losing fat. These can prove to be one of the largest obstacles to women experiencing long-term success with losing fat.

Here are four “forever fat loss” strategies for women to maximize their physiology, hone their psychology and end frustration forever:

1. Prioritize resistance training.

As mentioned, women are at an evolutionary disadvantage for losing fat partly due to lower amounts of lean muscle mass, which results in a lower caloric expenditure during rest. Furthermore, it appears women lose lean muscle mass at a faster rate as they age.

Resistance training has consistently been shown to increase amounts of lean muscle mass in both men and women. Given that this is associated with an increase in resting caloric expenditure, it's clear that resistance training should be paramount in women's exercise programs.

Performing exercises that use large muscle groups at an intensity that allows for eight to 12 repetitions before failure, two or more days per week, can “convince” the body to increase the amount of calorie-burning muscle. Consider progressively cycling weekly from 12 repetitions per exercise, to 10, to eight and then returning to 12, adding more resistance each week.

A common myth associated with females and resistance training is that women will accrue “too much” muscle and end up appearing masculine. In reality, however, women lack the necessary amount of anabolic hormones (testosterone, growth hormone, etc.) necessary to build large amounts of lean muscle mass.

Even with high training intensities and volumes, it can be difficult for women to substantially increase lean muscle mass.

As a general rule for resistance training, prioritize strength vs. elevating the heart rate. While there are various resistance-training protocols that can aid in fat loss, the primary benefits from resistance training and increasing lean muscle mass come from a focus on increasing overall strength. Don't be afraid to recover between sets.

2. Utilize high-intensity interval training.

The low-intensity "fat-burning zone" was touted as an aerobic exercise intensity that would prioritize the burning of fat. While there is some truth to low-intensity exercises preferentially burning fat, the "bigger picture" tells a different story.

During high-intensity exercise (exercise that brings the heart rate above 70% of one's maximum heart rate), glycogen is used at a much higher rate than fat to fuel movement. However, after the exercise bout is over, the body continues to use oxygen at a higher rate, which means the body is continuing to burn more calories, even while at rest. Furthermore, hormones released during the high-intensity bout stick around in the blood stream for up to 48 hours after exercise is done. Many of these hormones are those that increase metabolism and rates of fat utilization.

To sustain an intensity of exercise that would have this physiological effect, "intervals" of high intensity and rest are recommended. For example, perform a high-intensity sprint on a treadmill for 30 seconds, walk for 60 seconds and then repeat 10-12 times.

As with anything, there can be "too much" of a good thing. Relentless daily exercise intensity can increase the likelihood of injury and actually suppress fat-burning, muscle-building hormones. High-intensity interval training performed one to three days a week, in addition to lower-intensity exercise, allows for the proper rest/recovery ratios necessary to prolong the fat burning effect long term.

3. Don't starve yourself.

Diet trends are a billion dollar industry, so there is always one right around the corner promising a short-term solution to a long-term problem. Many of these diets focus on severely restricting calories. When calories intake is reduced, body weight decreases. However, the body also thinks it's going into a time of starvation. When caloric restriction is prolonged, lean muscle mass is decreased. The body believes there will now be limited calories, so it gets rid of its biggest calorie burner: muscle.

Under starvation conditions, additional calories are stored as fat very quickly. It appears that women are even more sensitive to fluctuations in caloric intake, storing fat quicker after meals. When food was scarce and physical activity was frequent, this storage process kept us alive. In this time of abundance, we have a physiological system designed for scarcity.

Without opening Pandora's box of inconsistent research on which diet is the "best" for women, the most effective nutritional approach for long-term fat loss is to reestablish a connection between the foods and the amounts of these foods we need to optimize health and performance. Consider the following tips to fuel your body with the right amounts of healthy foods to promote forever fat loss.

- Consider the size of your hands (hand size is often associated with overall body size). For most grains and starches, one to two handfuls is most likely an appropriate serving size. For proteins, match the size and thickness of your palm. For added fat, look at the size of your thumb.
- Make green, leafy vegetables a feature of as many meals as possible.
- To ensure lean muscle maintenance, include protein in every meal.
- Whole, unprocessed food doesn't have the added flavor and texture enhancers that tend to make us eat more. Sticking to whole, unprocessed food can help decrease the likelihood of overeating.
- Limit alcohol and be aware of how much sugar is in the foods you eat. Both sugar and alcohol can add substantial calories to a diet without nutritional benefits.

4. Smash your scale.

Scale weight can tell you very little about the amount of body fat you have. Because muscle gives your body its form, function and metabolic drive, focusing on your ratio of fat to muscle is far more important than scale weight, for both health and aesthetic reasons.

For women in particular, scale weight can fluctuate significantly due to water retention during the menstrual cycle. Furthermore, muscle tissue is much more dense than fat tissue and weighs more for the amount of space it occupies.

Improvements in lean muscle mass and, consequently, body composition, often renders no change or a slight increase in scale weight. Find an accessible way to monitor your body fat. Hand-held body-fat assessment tools and other devices have small margins of error, but are generally effective for highlighting trends. And even simpler approach is to monitor how your clothes fit—looser around the mid-section means you're making progress.

Knowledge is power. By understanding the unique elements of women's physiology and applying specific exercise strategies to overcome obstacles, women can get off the roller coaster of frustration and lose fat forever.