

# Metabolism and weight loss: How you burn calories

You likely know your metabolism is linked to your weight. But do you know how?

Common belief holds that a slim person's metabolism is high and an overweight person's metabolism is low. But this isn't usually the case. Metabolism alone doesn't determine your weight.

Rather, weight is dependent on the balance of calories consumed versus calories burned. Take in more calories than your body needs, and you gain weight. Take in less and you lose weight. Metabolism, then, is the engine that burns these calories and is the scale that regulates your energy needs.

## Metabolism: Converting food into energy

Stated simply, metabolism is the process by which your body converts food into energy. During this biochemical process, calories — from carbohydrates, fats and proteins — are combined with oxygen to release the energy your body needs to function.

The number of calories your body burns each day is called your total energy expenditure. The following three factors make up your total energy expenditure:

**Basic needs.** Even when your body is at rest, it requires energy for the basics, such as fuel for organs, breathing, circulating blood, adjusting hormone levels, plus growing and repairing cells. Calories expended to cover these basic functions are your basal metabolic rate. Typically, a person's basal metabolic rate is the largest portion of energy use, representing two-thirds to three-quarters of the calories used each day. Energy needs for these basic functions stay fairly consistent and aren't easily changed.

**Food processing.** Digesting, absorbing, transporting and storing the food you consume also takes calories. This accounts for about 10 percent of the calories used each day. For the most part, your body's energy requirement to process food stays relatively steady and isn't easily changed.

**Physical activity.** Physical activity — such as playing tennis, walking to the store, chasing after the dog and any other movement — accounts for the remainder of calories used. You control the number of calories burned depending on the frequency, duration and intensity of your activities.

## Metabolism and your weight

It may seem logical to think that significant weight gain or being overweight is related to a low metabolism or possibly even a condition such as underactive thyroid gland (hypothyroidism). In reality, it's very uncommon for excess weight to be related to a low metabolism. And most people who are overweight don't have an underlying condition, such as hypothyroidism. However, a medical evaluation can determine whether a medical condition could be influencing your weight.

Weight gain is more likely due to an energy imbalance — consuming more calories than your body burns. To lose weight, then, you need to create an energy deficit by eating fewer calories, increasing the number of calories you burn through physical activity, or preferably both.

## Influences on your calorie needs

If you and everyone else were physically and functionally identical, it would be easy to determine the standard energy needs. But many factors influence calorie requirements, including body size and composition, age, and sex.

**Body size and composition.** To function properly, a bigger body mass requires more energy (more calories) than does a smaller body mass. Also, muscle burns more calories than fat does. So the more muscle you have in relation to fat, the higher your basal metabolic rate.

**Age.** As you get older, the amount of muscle tends to decrease and fat accounts for more of your weight. Metabolism also slows naturally with age. Together these changes reduce your calorie needs.

**Sex.** Men usually have less body fat and more muscle than do women of the same age and weight. This is why men generally have a higher basal metabolic rate and burn more calories than women do.

## **Burning more calories**

Your ability to change your basal metabolism is limited. However, you can increase daily exercise and activity to build muscle tissue and burn more calories.

Regular aerobic exercise, such as walking daily for 30 minutes or more, is an excellent way to burn calories. Strength training exercises, such as weight training, also are important because they help counteract muscle loss associated with aging. And since muscle tissue burns more calories, muscle mass is a key factor in weight loss.

Even though regularly scheduled aerobic exercise is best for weight loss, any extra movement helps burn calories. Look for ways to walk and move around a few minutes more each day. Lifestyle activities, such as gardening, washing your car and even housework, burn calories and contribute to weight loss. Taking the stairs more often and parking farther away at the store also are simple ways to burn more calories.

Your metabolism influences your energy needs, but it's your food intake and physical activity that ultimately determine your weight.

Metabolism is the process your body uses to burn calories for energy. Because metabolism naturally slows with age, you may need fewer daily calories as you get older. But your metabolism doesn't dictate your weight. To lose excess weight, include physical activity in your daily routine. The calories you'll burn will help promote weight loss. Second, start a strength training program. Muscle tissue burns more calories than fat tissue does, even when you're at rest. Whether you use hand-held weights, resistance tubing or another type of resistance, you'll reduce your body fat, increase your lean muscle mass and burn calories more efficiently.

## **Weight loss: 6 strategies for success**

You probably know that hundreds of different fad diets, weight-loss programs and outright scams promise quick and easy weight loss. But the foundation of every successful weight-loss program still remains a healthy diet combined with exercise. You must make permanent changes in your lifestyle and health habits to lose significant weight and keep it off.

How do you make those permanent changes? Follow these six strategies.

### **1. Make a commitment**

Permanent weight loss takes time and effort. It requires focus and a lifelong commitment. Make sure that you're ready to make permanent changes and that you do so for the right reasons.

No one else can make you lose weight. In fact, external pressure — often from people closest to you — may make matters worse. You must undertake diet and exercise changes to please yourself.

As you're planning new weight-related lifestyle changes, try to resolve any other problems in your life. It takes a lot of mental and physical energy to change your habits. So make sure you aren't distracted by other major life issues, such as marital or financial problems. Timing is key to success. Ask yourself if you're ready to take on the challenges of serious weight loss.

### **2. Get emotional support**

Only you can help yourself lose weight by taking responsibility for your own behavior. But that doesn't mean that you have to do everything alone. Seek support when needed from your partner, family and friends.

Pick people who you know want only the best for you and who will encourage you. Ideally, find people who will listen to your concerns and feelings, spend time exercising with you, and share the priority you've placed on developing a healthier lifestyle.

### **3. Set a realistic goal**

When you're considering what to expect from your new eating and exercise plan, be realistic. Healthy weight loss occurs slowly and steadily. Aim to lose 1 to 2 pounds a week. To do this, you need to burn 500 to 1,000 calories more than you consume each day through a low-calorie diet and regular exercise. Losing weight more rapidly means losing water weight or muscle tissue, rather than fat.

Make your goals "process goals," such as exercising regularly, rather than "outcome goals," such as losing 50 pounds. Changing your process — your habits — is the key to weight loss. Make sure that your process goals are realistic, specific and measurable, for example, you'll walk for 30 minutes a day, five days a week.

### **4. Enjoy healthier foods**

Adopting a new eating style that promotes weight loss must include lowering your total calorie intake. But decreasing calories need not mean giving up taste, satisfaction or even ease of meal preparation. One way you can lower your calorie intake is by eating more plant-based foods — fruits, vegetables and whole grains. Strive for variety to help you achieve your goals without giving up taste or nutrition. Cutting back on calories is easier if you focus on limiting fat.

Very low calorie diets aren't a healthy long-term strategy. Fewer than 1,200 calories a day for women and 1,400 calories for men aren't generally recommended. If your calories are too low, you run the risk of not getting all of the nutrients you need for good health.

### **5. Get active, stay active**

Dieting alone can help you lose weight. Cutting 250 calories from your daily diet can help you lose about half a pound a week: 3,500 calories equals 1 pound of fat. But add a 30-minute brisk walk four days a week, and you can double your rate of weight loss.

The goal of exercise for weight loss is to burn more calories, although exercise offers many other benefits as well. How many calories you burn depends on the frequency, duration and intensity of your activities. One of the best ways to lose body fat is through steady aerobic exercise — such as walking — for more than 30 minutes most days of the week.

Even though regularly scheduled aerobic exercise is best for losing fat, any extra movement helps burn calories. Lifestyle activities may be easier to fit into your day. Think about ways you can increase your physical activity throughout the day. For example, make several trips up and down stairs instead of using the elevator, or park at the far end of the lot.

### **6. Change your lifestyle**

It's not enough to eat healthy foods and exercise for only a few weeks or even several months. You have to include these behaviors into your life. To do that, you have to change the behaviors that helped make you overweight in the first place. Lifestyle changes start with taking an honest look at your eating habits and daily routine.

After assessing your personal challenges to weight loss, try working out a strategy to gradually change habits and attitudes that have sabotaged your past efforts. Simply admitting your own challenges won't get you past them entirely. But it helps in planning how you'll deal with them and whether you're going to succeed in losing weight once and for all.

You likely will have an occasional setback. But instead of giving up entirely, simply start fresh the next day. Remember that you're planning to change your life. It won't happen all at once, but stick to your healthy lifestyle and the results will be worth it.

Think you know your stuff when it comes to losing weight? These pesky myths seem to get the best of many of us. Let's set the record straight before they sabotage your weight loss success.

### **1. The best way to lose weight is to avoid eating carbs.**

Not exactly. The best way to lose weight is to eat fewer calories while enjoying a nutritious diet that includes a variety of foods. No one particular food group must be avoided to achieve a healthy weight as long as you keep your caloric intake in check. While it's smart to avoid refined carbohydrates as often as possible, foods like bread, rice, pasta, cereal, and fruit, can all be part of a healthful, balanced diet. Just try to pick complex carbs, such as whole grains and beans, over-processed foods (such as white bread) whenever possible.

### **2. Genetics ultimately determine your weight.**

While research has shown that biological relatives tend to have a similar body weight, that doesn't seal your fate if your parents or grandparents are obese. Those with a family history of obesity may be more likely to gain weight than those with a slimmer family tree, but that doesn't mean a healthy diet and exercise are less effective for you. No matter what, the most important factors affecting your weight are how many calories you eat and how much physical activity you get. So don't use genetics as an excuse to give up.

### **3. It's OK to switch from diet to diet.**

Well, you may have to go on (and off) a diet or two before you find the right one. That said, yo-yo dieting -- or, weight cycling (meaning you repeatedly lose and then gain back weight) -- definitely isn't a good idea. Weight cycling may lead to certain health issues, such as gallbladder problems, and it's also likely to cause you to feel depressed. Avoid "crash diets" that cause a sudden weight loss; a slow and steady loss of one to two pounds a week is much healthier and far more likely to be permanent.

### **4. Fat is to be avoided.**

On the contrary, some fats can actually help you with your weight-loss efforts. Of course, eating too much fat overall is linked to disease risk, such as cancer, but we all actually need a little fat in our diets to be healthy. Fat helps the body to absorb important nutrients and to feel fuller longer, which will help you eat less. Trans fat and saturated fat should be avoided, but unsaturated fats are actually good for you. Enjoy foods like fish, nuts, and olive oil, and a fat "fix" can actually do your weight and your health good.

### **5. Skipping meals is a good way to cut calories.**

Meal skipping can actually cause you to gain weight since it slows down your metabolism. In fact, meal skippers tend to weigh more than people who eat regular meals. This may be due to meal

skippers' tendency to overeat later in the day to compensate for skipping breakfast or lunch. Rather than cutting out entire meals, shave off a few calories from each meal by controlling portions and finding lower-calorie alternatives to the high-calorie foods that you eat most often.

## **6. Switching to reduced-fat or fat-free foods is a sure-fire way to lose weight.**

Not necessarily. Even if you have a pantry full of fat-free and low-fat foods -- such as salad dressing, crackers, and cookies -- that does not mean you can eat them to your heart's content. As with all other foods, portion control is the key to losing weight with reduced-fat foods. Even though light versions have less fat than their regular counterparts, they often have as many -- or more -- calories (some diet foods contain more sugar than the regular versions). Always read and compare nutrition labels when making selections.

## **7. Following a strict diet will speed up your metabolism.**

You can't change your metabolism by following a particular diet plan; what will actually cause an increase in your metabolism is exercise. Following a too-strict diet can make exercising more difficult, if not impossible. In order to have energy to exercise, you must give your body the fuel it needs. Food is that fuel, and when you follow a fad diet that provides too few calories, you're simply not filling up your tank -- you will be too weak to exercise effectively and in the end, your metabolism will stall.