

Weight Loss Principles

Learn how many calories you need every day.

The following method of calculating daily calorie needs is from Nancy Clark, MS, RD, SportsMedicine Brookline. Please consult with a registered dietician, who will develop a personalized plan for you.

To very roughly estimate the number of calories needed to maintain your current weight—

1. Multiply your desired weight by 10. This is your resting metabolic rate (the amount of calories you need to simply lie in bed all day and breathe). For example, if your target weight is 120 pounds, your resting metabolic rate is about 1,200 calories. You burn off these calories even if you are injured or taking a rest day from exercise.
2. Add another third to half of that number for your general daily activity, excluding your specific training or exercise program. If you are active during the day (i.e., going up and down stairs, walking around, doing errands), you'll burn off more calories than if you are sitting, studying, reading, or working at a desk. For example, a 120-pound mother with three children is quite active and will need about 1,200 calories (resting metabolism) plus 600 calories (general daily activity), bringing her daily needs to 1,800 calories.
3. Next, add on calories that you burn off during your training/exercise program. Visit these web sites for calorie burn calculators:
 - www.healthstatus.com/calculate/cbc
 - www.internetfitness.com/calculators/calburncalc.htm
4. Subtract 500–1,000 calories per day from the total, to estimate the number of calories you should eat for weight loss. Small athletes (i.e., skaters, gymnasts, dancers) should subtract fewer calories than bigger athletes (i.e., football players, body builders). Otherwise, they will cut back too much, become ravenously hungry, and be at risk of “blowing the diet” *again*.

This is an estimate for your daily calorie needs. Your actual caloric intake will vary from day-to-day, so monitor your intake over the course of a week to make sure you are within your limit on average.

Know your daily food amounts by calorie level.

Now that you know your recommended daily calorie level, use the chart below to find the suggested amounts of food to consume daily to meet recommended nutrient intakes. Nutrient and energy contributions from each group are calculated according to the nutrient-dense forms of foods in each group (i.e., lean meats and fat-free milk). This information is from the U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.

Calorie level	1,200	1,400	1,600	1,800	2,000	2,200	2,400
Grains (80 calories per oz)	4 oz	5 oz	5 oz	6 oz	6 oz	7 oz	8 oz
Vegetables (25 calories per cup)	1.5 c	1.5 c	2 c	2.5 c	2.5 c	3 c	3 c
Fruit (60 calories per cup)	1 c	1.5 c	1.5 c	1.5 c	2 c	2 c	2 c
Milk Group (110 calories per cup)	2 c	2 c	3 c	3 c	3 c	3 c	3 c
Meat & Beans (75 calories per oz)	3 oz	4 oz	5 oz	5 oz	5.5 oz	6 oz	6.5 oz
Oils (45 calories per tsp)	4 tsp	4 tsp	5 tsp	5 tsp	6 tsp	6 tsp	7 tsp
Discretionary Calories*	171	171	132	195	267	290	362

*Discretionary calories are your daily allotment of extra calories in addition to those you need for good nutrition. Your discretionary calories can be spent on “luxury” version of foods in each group, such as higher fat meat or sweetened cereals. You can also spend them on sweets, sauces, or beverages, but it is wise to limit added fat, sugar, and sodium in your diet.

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Know your portion sizes.

Please note that the listings below indicate a food's "portion size," not its "serving size." Many Americans mistakenly think that whatever they are served is a "serving." This is not the case. For instance, many people think a large bagel counts as one portion of grains, when it is really four portions. Likewise, many people think a bowl of pasta is one portion of grains, when it is really anywhere from two to four (and sometimes six!) portions. Know your portion sizes. For specific food calorie information, go to www.fitday.com, www.calorie-count.com, www.calorieking.com, www.mypyramidtracker.gov, or www.myfooddiary.com. For more complete information on each of the following food groups, please go to www.mypyramid.gov and click on "Inside the Pyramid."

Grains (80 calories per oz)

Grains group includes all foods made from wheat, rice, oats, cornmeal, and barley, such as bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or ½ cup of cooked rice, pasta, or cooked cereal can be considered as 1 ounce equivalent from the grains group. At least half of all grains consumed should be whole grains.

Food.....	Equals
1 cup of ready-to-eat cereal	fist
½ cup of cooked rice, pasta, or potato.....	½ baseball

Vegetables (25 calories per cup)

Vegetable group includes all fresh, frozen, canned, and dried vegetables and vegetable juices. In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group. Some vegetables are higher in starch/carbohydrate. Corn, peas, potatoes, yams, and winter squash should be considered a grain, not a vegetable.

Food.....	Equals
1 cup of raw or cooked vegetables	baseball
2 cups of salad greens	2 baseballs
1 baked potato	fist

Fruit (60 calories per cup)

Fruit group includes all fresh, frozen, canned, and dried fruits and fruit juices. In general, 1 cup of fruit or 100% fruit juice, or ½ cup of dried fruit can be considered as 1 cup from the fruit group.

Food.....	Equals
1 medium fruit.....	baseball
1 cup of fresh fruit.....	baseball
½ cup of dried fruit.....	½ baseball

Milk Group (110 calories per cup)

Milk group includes all fluid milk products and foods made from milk that retain their calcium content, such as yogurt and cheese. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not part of the group. Most milk group choices should be fat-free or low-fat. In general, 1 cup of milk or yogurt, 1½ ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the milk group.

Food.....	Equals
1 cup of milk or yogurt.....	1 cup
1½ oz. cheese	4 stacked dice

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Meat & Beans (75 calories per oz)

In general, 1 ounce of lean meat, poultry, or fish, 1 egg, 1 Tbsp. peanut butter, ¼ cup cooked dry beans, or ½ ounce of nuts or seeds can be considered as 1 ounce equivalent from the meat and beans group.

Food.....	Equals
3 oz. meat, fish, and poultry	deck of cards
3 oz. grilled/baked fish	checkbook
1 Tbsp. peanut butter	½ ping pong ball

Oils (45 calories per tsp)

All fats and oils are a mixture of saturated, trans, monounsaturated, and polyunsaturated fats. These fats are all high in calories but affect the heart differently. Saturated fats, trans fats (look for the words “partially hydrogenated” in the list of ingredients), and cholesterol tend to raise “bad” (LDL) cholesterol levels in the blood, which in turn increases the risk for heart disease. Most of the fats you eat should be monounsaturated (olive, canola, and peanut oils) or polyunsaturated (soybean, corn, safflower, and sunflower oils). The monounsaturated and polyunsaturated fat found in fish, nuts, and vegetable oils do not raise LDL (“bad”) cholesterol levels in the blood. In addition to the essential fatty acids they contain, oils are the major source of vitamin E in typical American diets.

Food.....	Equals
1 tsp. margarine or spreads.....	1 dice

Eat less more often.

Many nutritionists recommend that you distribute your calories throughout your day in five to six small meals, instead of three large meals. This way you will not feel as hungry or deprived between meals because you know you are going to be eating again soon. Also, when you eat every three to four hours, your body does not go into “starvation mode” and try to hang onto calories by storing fat away. Rather, your body senses that it is going to have a steady supply of food, so it will not store as many calories. By eating more frequently, you also provide a steady amount of sugar. Eating frequent smaller meals prevents the ups and downs of your blood sugar level so you end up craving less sugar. Remember that eating more meals does not mean you should “pig out” at every meal. The key is smaller meals consisting of nutritious food that will satisfy the needs of your body.

Here are some examples of how you can divide your daily calorie intake. Please note that the discretionary calories in these plans come from extra vegetables, fruit, and whole grains. A healthy eating plan does not allow for the daily intake of sugary desserts, fatty chips, and fried foods. An occasional indulgence is okay, but overall, the food you eat should be lean, clean, and green.

1,460	Grains (80 calories per oz)	Vegetables (25 calories per cup)	Fruit (60 calories per cup)	Milk Group (110 calories per cup)	Meat & Beans (75 calories per oz)	Oils (45 calories per tsp)	Total Calories for Meal
Breakfast	2		1	1		1	375
Snack	1		1				140
Lunch	2	2			2	1	405
Snack			1	1			170
Dinner	1	2			2	2	370
Total Calories	480	100	180	220	300	180	1,460
Total Servings	6	4	3	2	4	4	

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1,640	Grains (80 calories per oz)	Vegetables (25 calories per cup)	Fruit (60 calories per cup)	Milk Group (110 calories per cup)	Meat & Beans (75 calories per oz)	Oils (45 calories per tsp)	Total Calories for Meal
Breakfast	2		1	1		1	375
Snack	1			1			190
Lunch	1	1			2	1	300
Snack	1		1	1			250
Dinner	2	2			3	2	525
Total Calories	560	75	120	330	375	180	1,640
Total Servings	7	3	2	3	5	4	

1,805	Grains (80 calories per oz)	Vegetables (25 calories per cup)	Fruit (60 calories per cup)	Milk Group (110 calories per cup)	Meat & Beans (75 calories per oz)	Oils (45 calories per tsp)	Total Calories for Meal
Breakfast	2		1	1		1	375
Snack	1			1			190
Lunch	2	2	1		2	1	465
Snack	1		1	1			250
Dinner	2	2			3	2	525
Total Calories	640	100	180	330	375	180	1,805
Total Servings	8	4	3	3	5	4	

Keep a nutrition and fitness journal.

The best way to keep an accurate record of your caloric intake and expenditure is by keeping a daily nutrition and fitness journal. This will help you stay motivated and reach your health and fitness goals. It also serves as a record of your success. Over time, you will start to see trends in your eating patterns, the way you feel, and how your body is responding to exercise. Most journals are written out in a notebook, but many web sites offer online nutrition and fitness journals. Experiment to find out what works best for you, but do record everything you eat and all of the exercise you get (even short bursts) for at least several weeks. Numerous studies show people who keep daily food records are far more successful at weight loss than people who don't keep track of what they eat.

Burn more calories than you consume.

The best approach for healthy weight loss is to decrease caloric intake and increase energy expenditure through exercise. Studies show that gradual weight loss improves success for keeping extra weight off permanently. If you lose more than three pounds per week, it's likely to be water and muscle loss, not fat. To lose one pound of fat, you must have a deficit of 3,500 calories. If you are overweight and follow the calorie level you figured out above, you will lose weight because you are consuming calories based on your ideal weight, not on your current weight. Also, if you follow these calorie guidelines, you will learn how you should be eating when you reach your ideal weight. This will help you maintain it for life.

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Get regular physical activity.

Strive for at least 30 minutes of activity every day. The exercise doesn't have to happen all at once. Ten minutes here and there throughout your day—taking the steps, parking and walking from the far end of the grocery store parking lot—can be as effective as a traditional exercise program. Strive to be fit and healthy throughout your day, and when you exercise have fun. Reducing calories alone will not work because the body defends itself against low caloric intake by lowering its basal metabolic rate (BMR), the number of calories your body burns at rest. You will burn calories more slowly as a defense against perceived starvation. To get your BMR back up, you must be physically active, as activity raises BMR and keeps it up hours after the activity stops, and you must build muscle tissue, which burns more calories at rest than fat.

Know the volume of the food you are eating.

Studies on hunger and satiety reveal that most people eat the same weight, or volume, of foods at meals—about two to three pounds total for each day—regardless of how many calories it contains. Three pounds of high-calorie food will contain more calories than three pounds of low-calorie foods. And more calories into your body equal more weight on your body.

The concentration of calories in food is referred to as its energy or caloric density. Low-density (low-calorie, high-volume) foods will make you feel full and help you lose weight. If you eat your usual volume of food, but lower the calories in each portion, you will consume fewer calories and feel full. Water in food increases feelings of satiety—but it must be water within food, not just drinking water with food. The key is eating nutritious foods with lower caloric value.

The best examples of low density foods are those high in fiber and water, such as vegetables, fruit, and whole grains. Choosing water-rich foods will tell your body it's full with fewer calories. To calculate caloric density in food, divide the number of calories by its weight in grams. This information is on all food labels. Here are two examples.

Broccoli

Serving size: 85 grams (2/3 cup)

Calories: 25

Caloric density: $25/85 = .3$

Tostitos

Serving size: 28 grams (13 chips)

Calories: 140

Caloric density: $140/28 = 5$

Pay attention when you eat.

The stomach takes about 20 minutes to signal the brain that it is full, so get into the habit of eating until you are about 75–80 percent full. If you wait until you feel full to stop eating, you will actually have overeaten. Also pay attention to how quickly you are eating. Try to slow down so your brain has time to register how your stomach feels. Eat at a table from a nine-inch plate (not a standard 12-inch or larger plate). Do not eat directly from a package in front of the TV, reading, or driving. Remember, food is only fuel. No amount of food will satisfy an emotional need or relieve stress. Learn how to handle these issues without overeating.

Think thin.

Visualize yourself as a thinner person—the mental creation of your thinner body must come before its physical creation. Consider, too, your spirit. You need to reach deep within you to achieve long-term, sustainable weight loss. But you also must look high above you to a greater power to be successful. Once your mind and spirit are in order, your body will follow.

Make the right choices.

To lead a fit and healthy lifestyle, you need to learn how to manage food, not eliminate it. By choosing the right foods throughout your day and adding more activity, you can control your weight and enjoy a healthier lifestyle.