

Balancing “Calories In” and “Calories Out”

Have you ever heard people say they are “counting calories” or that “calories count”? A **calorie** is a unit of energy supplied by food. Because a calorie is a standard unit, each calorie supplies the same amount of energy, whether it is from a protein, carbohydrate (grains, sugars, etc.), or fat.

Maintaining a healthy weight and staying in good condition involves balancing the number of calories you take in (what you eat) with the number of calories your body uses (or “burns off”) in body functions and physical activities. If you eat roughly the same number of calories that you burn off, your weight should remain about the same.

Many people eat more calories than they burn off, and they store the extra calories in the form of fat. The U.S. Surgeon General reported that less than half of adults in the U.S. get enough physical activity each day. This puts them at their risk of developing chronic diseases, including diabetes, cancer, heart disease or lung disease. Sadly, only about one quarter of teens in high school get enough physical activity each day.

When it comes to getting in shape and regaining a healthier weight, exercise is very important part of the equation. However, studies indicate that people might want to pay more attention to the “calories in” side of things. Although you certainly can’t leave physical activity out, research suggests that decreasing the amount of calories consumed is far more important than exercising more.

A person wanting to lose weight would need to consume about 3,500 fewer calories than he or she burns off to lose a pound of body fat.¹ That means reducing the number of calories eaten by 500-1,000 calories per day to lose about 1 to 2 pounds in a week.²

Tools to Help Estimate Calories In and Calories Out

Are you balancing your calories? To estimate how many calories you eat and how many you burn off, start by writing down the foods you eat. Don’t forget to include beverages—many of them are loaded with calories! Keep track of your physical activity each day and the length of time you do each activity. Even going shopping or cleaning your room counts! There are some fun online tools to help estimate how many calories are in the foods they eat and how many calories they burn off through various activities. Remember that these tools are based on average serving sizes and body types; each food item will vary somewhat, and each individual’s body uses calories a bit differently.

Food and Activity Diaries

The U.S. Centers for Disease Control provide worksheets for recording what you eat and do each day at https://www.cdc.gov/healthyweight/pdf/food_diary_cdc.pdf and https://www.cdc.gov/healthyweight/pdf/physical_activity_diary_cdc.pdf.

Physical Activity Calorie Counter

Available through the American Council on Exercise at acefitness.org available under “Healthy Living” Plug in your body weight and time spent on an activity, and you get an estimate of calories burned.



MyPlate

At MyPlate.gov, individuals can enter their height, weight, age, and gender and receive a food plan for maintaining their current weight. Another MyPlate tool is the “Supertracker.” It can help you plan what and how much to eat; record your intake, physical activities, and weight; and set your own goals. Other tools include a body mass index (BMI) calculator, daily checklists, portion reminders, and quizzes.

Go to: <https://www.choosemyplate.gov/supertracker-other-tools>.

Eat and Move-O-Matic

This free app developed by New Mexico State University engages youth and adults in learning about the relationship between nutrition and exercise in a simple and fun way. Choose a food item on one wheel and an activity on the other. The app will estimate how many minutes of that activity are needed to burn off the calories in the selected food. Users are sometimes surprised about the number of calories in their favorite foods and find interesting ways to add physical activity to their day.

Eat & Move-O-Matic has three sections:

1. “If you eat...” – lets you choose an item from a list of foods and beverages, and provides the number of calories in a standard serving.
2. “You can burn it by...” – lets you choose an activity and shows how many calories are burned per minute doing that activity at a certain intensity level.
3. “For ___ minutes” – calculates how long (in minutes) you would need to engage in that activity to burn off the food or beverage you selected. As you scroll through food or beverage items, the calorie estimate changes, resulting in a change in number of minutes to burn off each option. Likewise, as you scroll through physical activities, the calories per minute estimate changes, also resulting in a change in number of minutes of activity to maintain.

The app provides suggestions for healthier swaps, so users can make improvements to their meals and snacks and to their activity level. For example, the app indicates that it would take 1 hour and 6 minutes of light walking to burn off a 12-ounce energy drink (166 calories). It also shows that only about one minute of light walking is needed to burn off the 2 calories in a plain coffee that has no added flavors or sweeteners. Alternately, it indicates that 28 minutes of fast walking to burn off the 166 calories from the energy drink. The app’s “Pro Tip” encourages users to avoid excessive sugar and caffeine by drinking water and taking a brisk walk.

Download the mobile version of Eat and Move-O-Matic from the Apple store for free! The app is available for iPhone, iPod Touch and iPad.

References

U.S. Department of Health & Human Services,

¹*A Healthier You*, p. 19. Available online:

<http://www.health.gov/dietaryguidelines/dga2005/healthieryou/html/chapter5.html>

²AIM for a Healthy Weight, page 5. Available online:

http://www.nhlbi.nih.gov/health/public/heart/obesity/aim_hwt.pdf

Centers for Disease Control and Prevention

<https://www.cdc.gov/healthyweight/calories/index.html>

<https://www.cdc.gov/physicalactivity>

Filipic, M., & Smathers, C. (2/1/2016). *Chow Line: Exercise important, but calories count more*. Available from: <http://cfaes.osu.edu/news/articles/chowlineexerciseimportantcaloriescountmore>

New Mexico State University, Eat & Move-O-Matic <http://mediaproductions.nmsu.edu/eatmove/>

U.S. Department of Agriculture, <https://www.choosemyplate.gov/supertracker-other-tools>