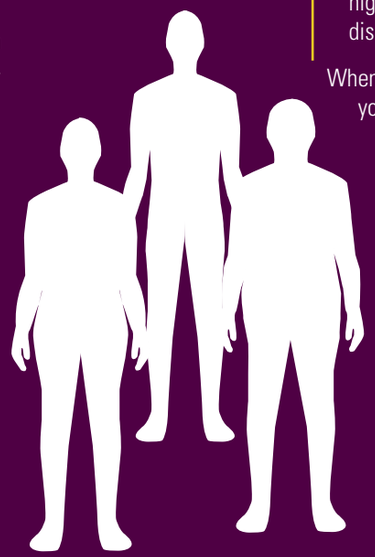
Be it broccoli and beans or bacon and eggs, the food choices you make now have a lifetime of effects. Although health, good or poor, is not related to one single event, four of the 10 leading causes of death in the United States, are associated directly with nutrition choices that you make over a lifetime![1] Knowing your needs for energy and nutrients can lead to habits with a pay off of good health, a healthy body size, and longevity.

Sizing Up the Basics

Maintaining a healthy weight reduces risk for disease, but what is a healthy weight? It is not necessarily the lowest weight you have ever been and determining a healthy body weight is not as simple as looking at a height weight chart. Each person has a healthy weight that is personally comfortable, but it varies even within groups of similar age, gender and height ranges. Use these common sense tips to assess your current body weight.

- Where is your body fat stored? Look at yourself over from head to toe. If you carry a few extra pounds around the waist your shape is like an apple. "Apples" are at higher risk than the "pears" who carry those pounds in the hips. Being a pear or an apple is determined by your genetics; however, controlling your weight can control most risk associated with being an apple.
- How much of your weight is fat versus lean body weight. Tests, such as hydrostatic weighing and skin folds, can measure body composition but you can get the hint with a simple pinch test. Pinch a fold of skin on the back of your arm. . .more than an inch and your likely over-fat.
- What, if any, other risks do you have? If you are comfortable and are physically active, weight is not the single most important factor in determining a healthy body size.



If you want a more concrete answer about your healthy body size, consider you body mass index (BMI). BMI is a tool for assessing body weight that is a predictor of body fatness. People with a higher BMI generally carry more body fat, increasing risk for health problems.
Calculate your BMI:

1. Convert your current body weight to kilograms

   Body weight (pounds)÷ 2.2 = weight kg
   ex. 135 pounds ÷ 2.2 = 61.36 kg
   ___ pounds ÷ 2.2 = ____ kg

2. Convert your height to meters

   Height (inches) ÷ 39.37 = height meters
   ex. 65 inches ÷ 39.37 = 1.65 meters
   __ inches ÷ 39.37 = ___ meters

3. Calculate your body mass index

   your weight (kg) ÷ your height $(m)^2$ = BMI
   ex. 61.36 kg ÷ (1.65 m) x (1.65 m) = 22.56
   _____kg ÷ (___ m) x (____ m) = ____

4. Check your BMI to the predicted risk of health problems related to body weight. If your BMI is in the moderate, high or very high-risk category, consider taking steps to reduce body weight. Those in the low risk category will want to prevent weight gain and consider reducing body weight if they have 2 other risk factors for health problems such as high blood pressure, cholesterol or strong family history of diseases such as heart attack or stroke.

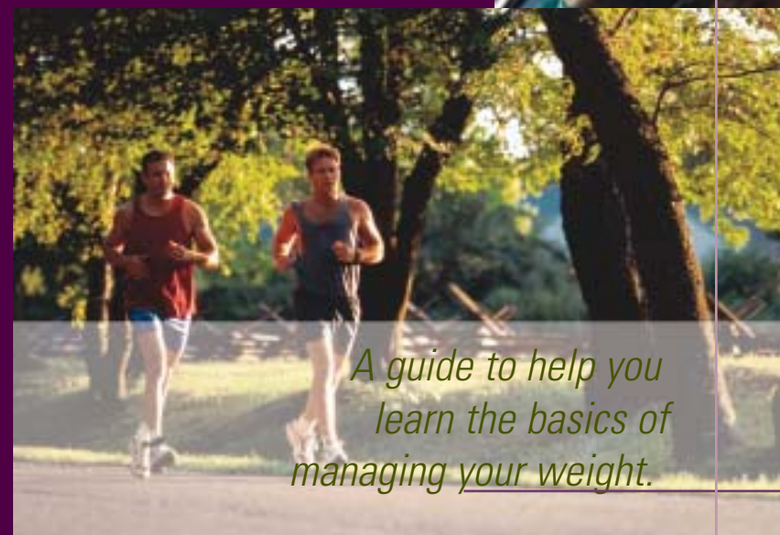
When it comes to BMI, lower is not always better. In fact, if your BMI is 17 or less, it could be a symptom of a more serious health problem. Please consult your physician and consider taking steps to increase body weight in a healthy way!

BMI	Risk for weight related health problems
20-25	Very low
26-30	Low risk
31-35	Moderate risk
36-40	High risk
40+	Very high

1. National Center for Health Statistics, U.S.Department of Health and Human Services, 1995.
2. Poehlman ET, Horton ES. Energy needs: Assessment and requirements in humans. In: Modern Nutrition and Health and Disease. Baltimore, MD: Williams & Wilkins, 1988).
3. Adapted from Food and Nutrition Board, National Research Council, National Academy of Sciences. Recommended Dietary Allowances, 10th ed. Washington, DC: National Academy Press, 1989.

BON APPÉTIT

Nutrition and your Weight



A guide to help you learn the basics of managing your weight.

Energy Needs and Your Body

No matter your body size, weight loss, maintenance or gain is related to energy balance. When the energy you take in through food, beverages and alcohol and the energy you expend on basic body functions, activities of daily living and exercise are similar, your body weight remains stable.

The trick is to find the right balance of intake and expenditure to allow you to achieve and maintain a healthy body weight. There are a number of factors including age, body size and composition, gender, genetics, and activity that influence your total energy needs.

Energy is measured in calories. Nutritionally, calories are the units of energy used to describe the amount of energy contained in the carbohydrates, proteins, fats and alcohol in our food. All foods and beverages consist of a combination of these four basic sources of energy.

Sorting Out Your Personal Energy Needs

What is a CALORIE?

A calorie is a unit of energy. One calorie is equivalent to increasing 1 gram of water up 1 degree Celsius. Therefore, calories do not only apply to food, they can be used to describe anything containing energy.

We relate calories to food, such as a slice of bread has 100 calories, when actually the calories on food packaging are kilocalories and 1,000 calories equals 1 kilocalorie.

Calories can be burned while exercising. Although, the same applies to exercise as to food, calories are in fact kilocalories.

*information obtained from www.howstuff works.com/calorie.htm article by Julia Layton

The human body needs energy to perform 3 basic functions:

- Resting energy expenditure (REE), also referred to as Resting Metabolic Rate (RMR) energy needed for normal body functions such as breathing, maintaining body temperature, fuel for the heart, brain, kidneys and other organs as well as maintaining body tissue.
- Thermic effect of food (TEF), energy needed to digest and absorb food.
- Physical activity (PA), energy needed for any movement of the body, no matter how big or small. Includes basic activities of daily living such as walking to the mailbox as well as more formal exercises such as running or aerobics.

Follow these steps to calculate your personal energy needs.

1. Convert your current body weight to kilograms

   Body weight (pounds) ÷ 2.2 = weight kg

2. Find your age range and plug in your results from step one to calculate your RMR[3].

Age Males		Age Females	
18-30	[15.3 x ___ weight (kg)] + 679 = _____	18-30	[14.7 x ___ weight (kg)] + 496 = _____
30-60	[11.6 x ___ weight (kg)] + 879 = _____	30-60	[8.7 x ___ weight (kg)] + 829 = _____
>60	[13.5 x ___ weight (kg)] + 487 = _____	>60	[10.5 x ___ weight (kg)] + 596 = _____

3. Figure 10% for digesting food (TEF)

   RMR_____x .10 = _____

4. Figure your energy needs for activity (PA) using the guidelines by checking the category below that best describes your lifestyle:

   _____ My day is mainly sitting, lying down, sleeping, driving a car, typing, reading, standing=sedentary

   _____ I do some light activity such as walking up to 2 hours each day=light activity.

   _____ My day includes moderate activity such as housework, gardening, walking and very little sitting=moderate activity

   _____ I am involved in active sports 5 or more days/week and/or a labor intensive job such as construction for several hours or more each day=heavy activity.

Sedentary	PA=RMR x .20=_____
Light activity	PA=RMR x .30=_____
Moderate activity	PA=RMR x .40=_____
Heavy activity	PA=RMR x .50=_____

5. Now calculate your total energy needs each day by adding all three.

   Total energy needs=___(RMR)+___(TEF)+___(PA)=_____

Managing Your Weight a Way that Works!

Now that you know your energy needs, keep these needs in mind as you make choices about your diet and exercise!

Yo-Yo DIETING

"Yo-yo" dieting is a term used describe the repeated loss and regain of body weight. "Yo-yo" dieting can increase risks for some health problems, such as high cholesterol, gallbladder disease, and high blood pressure.

To maintain a healthy weight, individuals should make a long-term commitment to healthy eating and regular exercise.

*information obtained from www.niddk.nih.gov/health/nutri/pubs/wcycling.htm