

## How Many Calories Does Your Body Need?

by: Jennifer Edwins, BS, CPT,  
CSN, CGFI, CYI, CPI, LZI,  
CSFS, CKFS



Most of us understand that weight management depends upon the energy balance equation; the amount of energy you put into your body (food calories) versus the amount of energy you expend (activity). But how do you know how many calories *your* body needs to reach or maintain a certain weight?

Understanding your body's energy requirements can help guide you when making nutritional choices. We'll show you two ways to determine your energy requirements, the accurate way and the easy way.

### The Accurate Way

There are three primary components that make up your body's energy expenditure. Adding these three components together, *basal metabolic rate, energy expended during physical activity, and the thermic effect of food* is the most accurate way of determining how many calories your body requires each day.

- **Basal Metabolic Rate (BMR):** Most of the body's energy, about 60-70%, goes to supporting the ongoing metabolic work of the body's cells. This includes such activities as heart beat, respiration and maintaining body temperature. To determine your BMR:

**For adult males** - Multiply the body weight by 10; add double the body weight to this value.

*[i.e., for a 150 lb male,  $1,500 + (2 \times 150) = 1,800$  cal/day BMR]*

**For adult females** - Multiply body weight by 10; add the body weight to this value.

*[i.e., for a 120 lb female,  $1,200 + 120 = 1,320$  cal/day BMR]*

- **Energy Expended During Physical Activity:** The second component of the equation depends upon your level of physical activity. Physical activity has a profound effect on human energy expenditure and contributes 20-30% to the body's total energy output. One of the most reliable methods in calculating calories burned during physical activity is the Metabolic Energy (MET) Method.
- **Thermic Effect of Food:** The last component to calculate has to do with your body's management of food. The increase in energy required to digest food is referred to as the thermic effect of food (TEF) and it's simple to determine:

(See page 2)

TEF = total kcals consumed x 10%

*[i.e., 2,000 kcals consumed/day x 0.10 = 200 kcals expended for TEF]*

### **The Easy Way**

If all of those calculations seem too confusing or tedious, you can roughly estimate your daily calorie requirements using this simple formula:

**For sedentary people:** Weight x 14 = estimated cal/day

**For moderately active people:** Weight x 17 = estimated cal/day

**For active people:** Weight x 20 = estimated cal/day