



# Calorie Need Estimates

The energy content of food is measured in calories. The number of calories, or energy, an athlete needs to maintain weight depends upon: age, body weight, gender, Resting Energy Expenditure (REE) and physical Activity Energy Expenditure (AEE) levels. Calorie needs are based upon Total Energy Expenditure (TEE), which includes two major parts:

1. Resting Energy Expenditure (REE): the amount of calories needed to maintain basic body systems and body temperature at rest.
2. Activity Energy Expenditure (AEE): the amount of calories used during activity.

Maintenance or change in body weight is summarized in the formulas below:

- **Weight maintenance**                      Calorie intake = TEE
- **Weight gain**                                Calorie intake > TEE
- **Weight loss**                                Calorie intake < TEE.

**Alert! For weight loss, total calorie intake should not be less than REE, unless a physician is supervising weight loss.**

## Calculating Total Daily Calorie Needs

The number of calories needed to maintain a certain body weight can be estimated by multiplying a person's REE times an appropriate Activity Factor (AF). Choose one of the formulas in Table 1 to calculate REE and then use the information from Table 2 to choose an appropriate AF. Formula 2 gives a slightly more accurate estimate of your calorie needs than Formula 1.

**Table 1: Formulas for Estimating Calorie Needs for Resting Energy Expenditure (REE)†**

**Formula 1:**

Males REE Calories = 11 x body weight in pounds

Females: REE Calories = 10 x body weight in pounds

**Formula 2:**

Males: REE Calories = 66.47 + 13.75 (weight, kg) + 5 (height, cm) – 6.76 (age, yr)

Females REE Calories = 655.1 + 9.65 (weight, kg) + 1.84 (height, cm) – 4.68 (age, yr)

Key: kg = kilograms (pound/ 2.2), cm = centimeters (inches x 2.54), age = age (years), †Equations are for healthy people.

