



Q: Dear Coach: I have heard a lot about caloric needs and I know that they differ for different people, but how do I work out how many calories I need for my body? - "Calorie Counter"

A: Dear Counter: To calculate your average daily energy requirements you should consider a number of combined determinants.

The Harris-Benedict Formula offers a method to calculate gross basal metabolic rate (BMR) with an added consideration of estimated activity level. BMR is the amount of energy expended while at rest in a neutral, temperate environment, to perform normal body functions - digestion, circulation, respiration, temperature regulation, cell construction, and similar metabolic processes. BMR accounts for the most significant amount of calorie expenditure, approximately 2/3 of your total daily needs. BMR decreases with age and with loss of lean body mass. Increasing muscle mass, or lean body composition (more muscle to fat) increase BMR requirements. Illness, consumption of food and beverage, environmental temperature, and stress levels can affect overall energy expenditure. Another common and closely related measurement is one's resting metabolic rate (RMR).

The Harris-Benedict formula equates variables of height, weight, age, and gender to calculate an estimated BMR, then adds a factor for estimated average activity levels.

The Harris-Benedict equations are only approximate. The Harris-Benedict is a decent equation to use in all but the very muscular, pregnant or lactating female, or obese population. Also, it does not serve as a guide for those wishing to gain lean muscle mass or lose weight.

There are some on-line calculations you may try:

<http://www.weightloss.com.au/weight-loss-tools/energy-needs-calculator.htm>

Using this equation, with the Harris-Benedict formulae, a 38 year old female weighing 64kg, and 1750mm height, with a moderately active lifestyle, would require 2,178 calories per day for basic daily living with no change to her weight or body composition.

Another calculation often used among athletes and trainers is to estimate daily calorie needs of the athlete by gender and activity level. For the moderately active female, approximately 37 calories are required per kilogram of weight, to maintain existing weight. In our example of the 38 year old female, weighing 64kg with moderate activity, this would equate to: 2368 calories per day; similar but not exact to the previous equation.

Gross gender estimates often quote the average male requiring approximately 2800 calories per day, and the average female requiring approximately 2000 calories per day.

As you can see, these calculations are inexact, but serve as a guide. If you wish to have a more specific guideline, we recommend working directly with a skilled nutritionist or dietician for an individualized assessment.

Good luck with the counting! Note also that there is a decent Australian guide to help you calculate the calories contained in the foods that you consume - "The Australian Calorie Counter" by Nutrition Australia (2nd Ed), 2006, by Penguin Books.



Guest response - Sara Pazell, director of L'Amour Yoga Institute Pty Ltd, is a strength and conditioning coach, occupational therapist, personal trainer and group fitness instructor. She is a fellow Paradise Training trainer with Coach Tim.