How Much Energy Does Your Body Use?

Basal energy expenditure is the amount of energy or calories used in 24 hours by a person who is lying quietly. We can measure this directly using a small medical device called the Indirect Calorimeter.

Basal energy needs vary with each individual and are affected by age, activity level, and physical condition.

How to estimate your energy needs

1) To estimate your own Basal Metabolic Rate, calculate the following:

If you are of normal stature and weight, multiply your weight x 10 calories for females and 11 calories for males.

Example:

125 lbs. x 10 calories = 1,250 calories

A 125 lb., normal weight, female would burn about 1,250 calories at rest.

A 200 lb., normal weight, male would burn 2,200 calories at rest.

[If you are overweight, multiply your weight x 8.]

Any variation from the estimated value can be accounted for by everything from genetics to the number of times you've dieted, using caloric restriction.

2) Next, multiply by the activity:

Activity factor:

Highly active	1.6+
Active	1.5
Moderately active	1.3
Lightly active	1.2
Sedentary	1.0

Example:

1,250 x 1.3 = 1,625 calories a day
1,250 x 1.6 = 2,000 calories a day

This is the simplest way to ESTIMATE energy needs!

Total Daily Calorie or Energy Needs

60-65% Basal metabolism
25-30% Physical activity
5-10% Digestion and absorption of nutrients

How to Judge Serving Size

Some foods are weighed in ounces. Some are measured in spoons or cups. Others, like fruits, are based on an average, or medium size. Below are some serving sizes and tips to help you judge just what ONE serving looks like.

Food Type	Standard Serving	Visual Equivalent	Calories
Bread, Cereal, Rice and Pasta	½ Cup of cooked cereal, pasta, or rice	1 Cupcake wrapper or ½ tennis ball	110
	1 Cup Dry Cereal	Baseball	100-200
	1 Small Bagel	Hockey Puck	120
	1 Oz. Pretzels	1 cupped hand	110
Fruits and Vegetables	1 Medium apple/orange	Tennis Ball	60-80
	1 Cup Chopped Fruit	Fist	60-80
	¼ Cup Raisins	½ cupped hand	110
	1 Cup Vegetables (raw/cooked)	1 cupped hand	25-40
	1 Medium Potato	Computer mouse	160
Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts	3 Oz. Chicken, pork, or beef	Deck of cards	175-250
	4 Oz. Fin Fish/shell fish	Check Book	100-150
	½ Cup cooked beans	Light bulb	115
	1 Oz. Nuts	20 Peanuts/10 amonds	90
	1 Egg		60-70
Fats, Oils and Sweets	2 Tbsp. peanut butter	Ping pong ball	190-200
	1 Tbsp. salad dressing	Thumb (tip to 1st joint)	45
	1 Tsp. butter/ margarine or oil	Dime	45
	½ Cup ice cream	½ Tennis ball	160

3 ounces is about the size and tickness of a deck of cards.

1 ounce of cheese is about the size of a domino.

2 tablespoons is about the size of a walnut.

A tablespoon is about the size of a quarter.

A teaspoon is about the size of a penny.

1/2 cup is about the size of an ice cream scoop.

3/4 cup is the size of a standard Styrofoam cup.

1 cup is about the size of an 8-ounce carton of yogurt.

A medium-sized fruit is about the size of a small fist.

A 2-inch slice of melon is about the width of 3 fingers.

Food Breakdown

Ranges:

20-30% Protein
20-30% Fat
40-60% Carb

Frequency: Goal – eat every 3-4 hours (breakfast, mid-morning, lunch, mid-afternoon, dinner) and consume 70% of your daily calories by the end of the mid-afternoon snack.

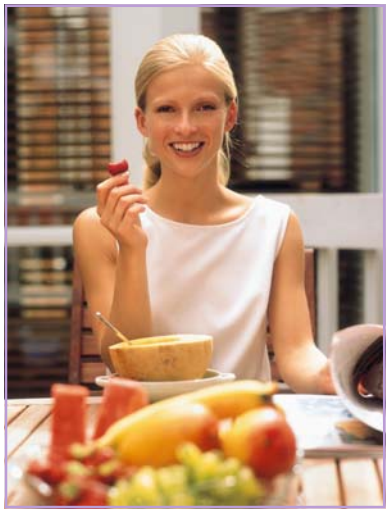
Timing: Try to finish dinner no later than 8-8:30 pm. If you feel you need something before you go to bed, eat a piece of fruit, a yogurt or, if you feel you won't binge, one serving of a non-fat or reduced-fat dessert item of 100 calories or less.

Guidelines: ***GOOD CARBS:*** predominantly veggies, fruits and whole grains, no processed sugars or starches. Eliminate or minimize the ***JUNK CARBS***: any processed (white) sugars: table sugar, white starches (bread, pasta, rice, potato). ***IF IT'S WHITE, IT'S NOT RIGHT!***

►Prioritize the **SMART CARBS**: unlimited non-starchy vegetables all day, 4-5 servings of fruit throughout the day, and 2-4 servings of whole grain (oatmeal, multi-grain bread or cereal)

►Lean **PROTEIN**: low-fat/non-fat dairy, poultry, fish, lean red meat, vegetarian combos – is essential. A 3-4 oz. portion should be eaten with all meals, and 1-2 oz. with all or most snacks (low-fat string cheese, reduced fat peanut butter, yogurt, cottage cheese, nuts such as about 10 almonds).

►**SMART FATS**: Olive oil, canola oil, oil from nuts and omega fatty acids from fish. Yet, be careful with amounts: A mere 1 Tbsp. packs a whopping 120 calories.



Tips for Success

❶Plan ahead.

❷Don't skip meals.

❸Be honest. If the drive to eat is clearly exceeding the body's need for nutrition, seek appropriate therapy.

❹Work activity into your day, every day. It's non-negotiable.

Eat slowly, chew longer and really appreciate the meal – its flavors, textures, colors.

❺Pace your fluid intake: 3 quarts for women, 4 quarts for men, every day. Even more when you're active in hot weather.

Instead . . . .

. . . . Instead of eating carelessly and hurriedly, in the midst of noise, agitation, and arguments, and then going off to do yoga exercises, wouldn't it be much better to understand that meals give you the perfect opportunity every day, two or three times a day, to practice relaxation, concentration, and the harmonization of all the cells of your body?"

Omraam Mikhael Aivanhov

Golden Rules for Everyday Life