



Weight Gain

To gain weight in the form of muscle, both a regular program of resistance training and an increase in caloric intake is necessary. Adding an extra 300 to 500 calories per day can lead to an increase of 1/2 to 1 pound of muscle weight per week.

In addition to increasing caloric intake, resistance training is beneficial for building muscle mass and performing cardiovascular exercise for 20-30 minutes

at least 3 days per week is important for good health. Make sure to balance out any exercise with food intake so weight is not lost in the process.

The focus should be on energy- and nutrient-dense foods, or foods that are high in calories as well as high in vitamins and minerals. Additional calorie needs should be consumed by increasing one's serving needs from each of the five food groups.

Nutrient Needs

Carbohydrates

Carbohydrates are the body's main source of energy and are found mostly in grains like cereals, bread, rice and pasta, as well as fruits and vegetables. In addition to providing energy, carbohydrates fuel the brain and nervous system, preserve protein, aid in fat metabolism and provide fiber. About 50 - 60% of your daily intake should come from carbohydrates.

Fat

Fat is important because it provides energy, gives a feeling of fullness, provides the body with essential fatty acids, and is needed for various processes in the body like making hormones and cholesterol, absorption of fat soluble vitamins A, D, E, and K, and padding the internal organs. About 20 - 30% of your daily calories should come from fat.

Protein

Protein helps to build and repair muscle tissue, produce hormones, boost the immune system, and replace blood cells. Good sources of protein include meat, poultry, beans, milk, eggs, nuts and soy. About 15-20% of daily calories should come from protein. The recommendation for protein intake according to the RDA is 0.8 gm/kg of body weight for a normal diet. For intense strength training, the goal for protein intake should increase to 1.2 to 1.6 gm/kg of body weight. Too much protein in the diet can lead to osteoporosis due to calcium excretion in the urine with excess protein, strain on the liver, kidney stones, increased fat storage and dehydration.



Supplemental Caution



In many cases dietary supplements are unnecessary with a healthy diet. They can also be expensive and cause possible harmful side effects. Remember that the term "natural" does not always imply safe. Look to see if the supplement has the label "USP" which indicates that the supplement meets standards of the U.S. Pharmacopeia for strength, purity, disintegration, and dissolution. Avoid supplements that provide "megadoses" of more than 100% the Daily Value. Store vitamin and mineral supplements in a dry, cool place and discard them once they've passed their expiration date. Also keep in mind that most herbs and supplements are not evaluated by the Food and Drug Administration, so it is important to research the product's ingredients before consuming.



Gaining Weight the Healthy Way

Calculating Protein Needs

To calculate protein needs, take your weight in pounds (lb) and convert it to kilograms (kg) by dividing by 2.2 and multiplying your weight in kilograms by one of the factors below, according to your goal.

Activity Group	Amount of protein (gm/kg)
Healthy adult	0.8
Strength-train, maintenance	1.2-1.4
Strength-train, gain muscle mass	1.5-1.8
Endurance	1.1-1.4
Intermittent, high-intensity training	1.4-1.7
Weight-restricted	1.4-1.8

Ex. 160 pounds ÷ 2.2 lb/kg = 73 kg × 0.8 g/kg = 58 grams of protein

Tips for Adding Extra Calories

- Keep a daily food and exercise log to determine how many calories you are consuming and expending.
- Plan meals and snacks ahead of time or schedule them in a calendar rather than eat sporadically throughout the day.
- Increase the portion size of meals and snacks, eat more frequently throughout the day, or switch to foods and beverages with more fat and calories.
- Drink beverages that supply calories such as sport drinks, juice, milk, and smoothies. Supplements such as Boost, Ensure or Carnation Instant Breakfast are also good ways to increase calorie consumption.
- Withhold drinking beverages until the end of a meal.

Meal Ideas

- Add butter, peanut butter or jelly to bread products (i.e. toast, pancakes, bagel, etc.)
- Add sugar, whole milk or creamer to your coffee
- Use fuller fat dairy products like 2% or whole milk, regular cheese and yogurt
- Use powdered or evaporated milk in casseroles to increase calories, calcium and protein
- Use 2% or whole milk in soups, sauces, and cereals
- Add cheese, avocado, bacon regular fat condiments or salad dressings to sandwiches
- Add cheese, croutons, egg, avocado, nuts or meat to salads
- Add cheese and regular-fat condiments to sandwiches
- Add powdered milk to beverages and soups
- Add grated cheese and plain Greek yogurt to soups
- Drink 2% or whole milk, 100% juice, fruit smoothies, sports drinks, nutrition supplements (i.e. Boost, Ensure), hot chocolate with 2% or whole milk

Snack Ideas

- Crackers with cheese or peanut butter
- Peanut butter with apple, banana, or pretzels
- Hummus with pretzels or chopped veggies
- Yogurt with granola and berries
- Buttered popcorn with nuts
- Trail mix with nuts, dried fruit and chocolate chips
- String cheese and dried fruit
- Half peanut butter and banana sandwich
- Peanut butter and banana smoothies with vanilla yogurt
- Guacamole with tortilla chips
- Hummus with pita chips or veggies
- Cottage cheese and pineapple