

Nutritional Value of Meat



Dietary guidance is designed to change lifestyle and eating behaviors to maximize health. With the increase of obesity and chronic disease rates rising, most Americans are aware that they need to eat a variety of foods, moderate their fat intake, and increase physical activity. Meat is a major source of several essential nutrients. Let's see how meat can fit into a varied diet.

PROTEINS serve as building materials for the growth and repair of body tissues. Proteins function as components of enzymes and hormones, help regulate fluid and electrolyte balance, maintain the acid-base balance, and are an integral part of the immune system. Proteins can even be used for energy. Meat is high in both protein quality and quantity. Protein is made up of amino acids. The nine essential amino acids, or the amino acids that the body cannot make and must get from food, are found in meat, making it a complete protein. Few plant sources are complete proteins.

FAT is a concentrated source of energy for the body, providing 9 calories per gram. It is generally recommended that no more than 30 percent of the total calories consumed come from fat. The fat in food provides flavor, aroma, and texture as well as increasing the feeling of satisfaction after a meal.

CHOLESTEROL is a waxy, fat-like substance needed for cell building, manufacturing hormones and vitamin D, and other functions. If no cholesterol is eaten, the body can make all the cholesterol it needs. Blood cholesterol levels are affected by several factors, including heredity, age, sex, and to varying degrees by the amount of cholesterol eaten in foods. No more than 200 mg of cholesterol per day should be consumed.

IRON is part of the protein hemoglobin, which carries oxygen in the blood, and part of the protein myoglobin in muscles, which makes oxygen available for muscle contraction. Iron is also important for energy metabolism. Iron is a nutrient that is often lacking in the American diet, especially among young children experiencing rapid growth, teenagers, and pregnant women. Nursing mothers, premenopausal women, and athletes have an increased need for iron. Dietary iron occurs in two forms — *heme* and *nonheme*. Heme iron is found bound to hemoglobin in blood and myoglobin in muscle tissue. Heme iron is found only in meat, fish, and poultry and is more easily absorbed by the body than nonheme iron. About 40 percent of the iron found in meat is heme iron. Nonheme iron sources include fruits, vegetables, grains, eggs, and dairy products. Vitamin C increases the absorption of iron. Foods that inhibit iron absorption include coffee, tea, red wine, whole grains, bran, chocolate, and legumes.

ZINC is a component of insulin and many enzymes. Growth and reproduction, appetite, taste, night vision, and the immune system are a few of the physiological functions that are dependent on an adequate supply of zinc. Meat, shellfish, whole grains, and legumes are good sources of zinc.

PHOSPHORUS is involved in metabolism of carbohydrates, proteins, and fats. In combination with calcium and vitamin D, phosphorus builds strong bones and teeth. Phosphorus is present in nearly all foods, but protein-rich foods, such as meat, poultry, fish, and dairy products, are good sources.

THIAMIN, RIBOFLAVIN, NIACIN, VITAMIN B₆ (PYRIDOXINE) AND VITAMIN B₁₂ are found in substantial quantities in meat. Thiamin, riboflavin, and niacin are a part of a coenzyme used in energy metabolism. Thiamin supports normal appetite and nervous system function. Riboflavin supports normal vision and skin health. Riboflavin is widely distributed in animal protein, such as meat, poultry, and fish. Vitamin B₆ is part of a coenzyme used in amino acid and fatty acid metabolism. It helps convert tryptophan to niacin and helps make red blood cells. Pork is an excellent source of thiamin and vitamin B₆. Niacin supports the health of skin, the nervous system, and the digestive system. Vitamin B₁₂ is found only in animal foods. However, the body can store excess amounts.

GETTING THE MOST NUTRIENTS

Dietary balance, variety, and moderation are the keys to healthful eating. *Dietary balance* is consuming the right proportions and amounts of nutrients. *Variety* in food choices provides the intake of 40+ essential nutrients for good health. *Moderation* simply means avoiding extremes in the diet. The total diet is more important than one meal or one food. MyPyramid.gov recommends consuming two to three servings per day from the Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group. Two to three ounces of cooked lean meat, poultry, or fish is considered a serving. Visually, this is the size of a deck of cards.

Follow these guidelines in order to control fat and calories in meat selection:

- ★ Choose lean meat cuts. As a rule, beef cuts with *loin or round* in the name and pork, veal, and lamb cuts with *loin or leg* in the name are the leanest choices.
- ★ Use cooking methods that reduce rather than add fat. Broil and roast on a rack, pan-broil, grill, or microwave.
- ★ Tenderize lean cuts by cooking slowly with moist heat, cooking in liquid, or marinating. Pounding, grinding, and slicing also helps.
- ★ Remove fat from soups, stews, and casseroles by chilling them and skimming the hardened fat from the top.
- ★ Trim all visible fat from meat before cooking and eating.
- ★ Choose ground meat products that are 85 to 90 percent lean. Rinse cooked, crumbled ground meat to reduce up to 50 percent more of the fat.
- ★ Buy lean deli meats.

By choosing lean cuts of meat and practicing moderation, variety, and balance in the total diet, meats can and should have a place in your diet.

Comparison of Meat, Poultry, & Seafood Recommended 3 oz. Serving (Skinless, Lean, Trimmed and Broiled or Roasted)			
Food	Calories (kcal)	Fat (g)	Cholesterol (mg)
Pink Salmon	127	4	57
Chicken Breast	142	3	73
Pork Tenderloin	159	5	80
Beef Sirloin	171	7	76
75% lean ground Beef	235	15	75
95% Lean Sirloin	144	4	39
95% Lean Hamburger	171	7	76

Reference: USDA National Nutrient Database for Standard References (2006). Release 19.

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Sandra Bastin, PhD, RD, LD, CCE
 Extension Specialist for Food and Nutrition

June 1998; revised August 2007; revised March 2011

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