



BEEF NUTRIENTS THAT WORK AS HARD AS YOU DO

Beef contains a power pack of nutrients including zinc, iron, protein and B-vitamins — nutrients that work as hard as you do every day!

Eating right plays an integral role in keeping you healthy and active. And when it comes to nutrition, some foods have just a little more to offer.

Beef — A Nutrient Power Pack

ZINC may not be a nutrient you think about a lot, but your body needs it for many essential functions such as growth and development, maintenance of the body's immune system, wound healing and appetite control. Beef is the number one source of zinc in the American diet. **A 3-ounce serving of beef provides 39% of the zinc most people need in a day!** In addition to containing a high level of absorbable zinc,² meat also increases the absorption of zinc from other foods when eaten at the same meal.



IRON is a mineral that plays a vital role in many biological functions. It helps carry oxygen to body cells and tissues, assists in making new red blood cells, aids in brain development and supports the immune system — all to keep you healthy. Research has shown even mild, short-term iron deficiency can impair your ability to function at peak productivity. And yet, iron deficiency is the most common nutritional deficiency in the United States.³



Beef is the number three source of iron in the American diet following iron-enriched breads and cereals. However, the iron in red meat is more completely absorbed by the body than the iron found in bread, cereal and other plant products. Two factors can increase the absorption of iron from plant foods — meat and vitamin C. Meat consumption at a meal has been shown to increase the absorption of plant iron two- to four-fold. This enhancing effect is known as the "meat factor." Eat a variety of foods and pair iron-enhancing foods with iron-rich foods to increase iron absorption. Try sirloin strips with a spinach salad for a delicious high-iron meal.



PROTEIN plays many roles that help keep you energized and support your body functions.

- Proteins are part of all your body's tissues, including muscles, organs and bones.
- Proteins make up the hormones and enzymes that regulate body processes.
- Proteins work with the immune system to protect you from disease.
- Proteins can even serve as an energy source.



You need to eat enough protein daily to support growth and maintenance of tissues, and to replace proteins that are broken down by the body.

All foods contain some protein, but the amount and quality of the protein vary greatly. Meat, fish, poultry, legumes, eggs, nuts, soy and dairy products are considered high-protein foods. Proteins from animal sources, such as beef, are high-quality or complete proteins. Vegetables and grains also contain protein, but in lesser amounts.



An easy way to make sure you get the protein you need each day is to follow the Food Guide Pyramid. The foods highest in protein are in the upper section of the pyramid. The pyramid recommends 2-3 servings per day from the milk, yogurt and cheese group, and 2-3 servings per day from the meat, poultry, fish, dry bean, egg and nut group. **One 3-ounce serving of beef provides 50% of the protein recommended daily!** All this high quality protein comes in the same delicious package with zinc, iron and B-vitamins! That's a great fuel to help power you through the day.



B-VITAMINS work to promote growth and maintain health. You need essential

B-vitamins to "unleash" the energy in food. Calorie for calorie beef is one of the best sources of many essential B-vitamins.

A balanced diet that includes beef can help give you the energy you need to tackle your busy days.

FAT is an essential nutrient. It provides for the absorption of fat-soluble vitamins and the formation of hormones, and it can be used as an energy source. But remember, don't overdo it. To choose a diet moderate in fat, select lean cuts of meat, skinless poultry and lowfat dairy products. Balance lowfat and high fat options over time.

Half of the fatty acids in beef are monounsaturated, the same type of fatty acids found in olive oil and championed for their heart-healthy properties. In addition, approximately one-third of the saturated fat in beef is stearic acid. Studies have shown that stearic acid does not raise blood cholesterol levels like other saturated fatty acids do.⁴

Lean beef fits easily into lowfat meal plans designed to decrease blood cholesterol levels. Research shows that Americans can eat six ounces of lean red meat five or more days a week as part of a cholesterol-lowering diet. Further, both red and white meat produce the same favorable changes in blood cholesterol levels.

In other words, **lean beef is just as effective as skinless chicken when it comes to lowering blood cholesterol levels.**⁵



There are eight cuts of beef classified as lean according to USDA labeling guidelines—

- Eye Round
- Top Round
- Round Tip
- Top Sirloin
- Bottom Round
- Top Loin
- Tenderloin
- Flank Steak

When it Comes to Nutrition, Beef has a Competitive Advantage.

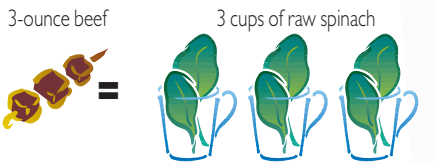
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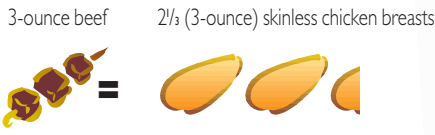
B₁₂



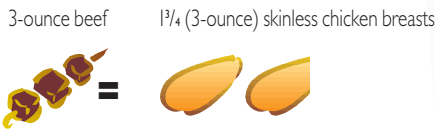
IRON



RIBOFLAVIN



THIAMIN



Beef — Nutrients to Fuel Active Bodies

Physical activity is also important to a healthy lifestyle. You do not need to spend hours in the gym to reap the benefits of exercise; simply aim for thirty minutes of activity each day. Small changes in your daily routine can help you get there. Yard work, housekeeping, playing with the kids—anything that gets you moving counts! Beef, as part of a balanced diet, can help give you the energy you need to meet your activity goals. **Zinc** is involved in energy metabolism during exercise and plays a role in muscle recovery. **Iron** helps deliver oxygen to muscles and is required for energy metabolism. **Protein** is essential to repair body tissue and, along with zinc, aids in muscle recovery after exercise. Beef is full of the vitamins, minerals and protein you need to live a dynamic, healthy life.

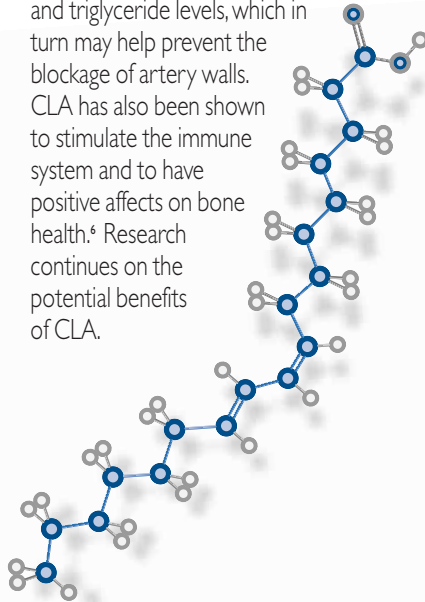
BEEF

NUTRIENTS THAT WORK AS HARD AS YOU DO

Beef — An Extra Nutrient Boost

Now you know about beef as a good source of “traditional nutrients.” But beef has more benefits than that! Scientists are just learning about other nutrients in beef that can give you the extra boost you need.

Conjugated Linoleic Acid, or CLA, is a fatty acid found naturally in beef and dairy products. Recent research indicates CLA may play a role in cancer prevention by inhibiting tumor growth and development, and can affect body composition by decreasing body fat and increasing lean muscle mass. CLA may help normalize blood glucose levels and prevent diabetes. It may contribute to heart health by helping lower serum cholesterol and triglyceride levels, which in turn may help prevent the blockage of artery walls. CLA has also been shown to stimulate the immune system and to have positive affects on bone health.⁶ Research continues on the potential benefits of CLA.



Selenium is a trace mineral occurring naturally in many food sources. Seafood and other meats tend to contain more selenium than plant foods. Selenium is an antioxidant that works with vitamin E to help prevent damage to your body's cells. Recent studies have found adequate intake of selenium may reduce the risk of heart disease and certain types of cancers.⁷ Beef is an excellent source of this nutrient.

A 3-ounce serving of beef provides 31% of the selenium you need daily.¹

Choline, an essential nutrient for humans, plays a vital role in cognition and long- and short-term memory functions. Does that mean what you eat can help make you smarter? The answer is “yes.” Along with its many other nutrients, beef contains a significant amount of choline.



Beef Kabobs & Parmesan Orzo

Total preparation and cooking time: 30 minutes

- 1 pound boneless beef top sirloin steak, cut 1 inch thick
- 1 tablespoon chopped fresh basil or 1 teaspoon dried basil leaves, crushed
- 1 tablespoon prepared Italian dressing
- 2 large cloves garlic, minced
- 2 red or yellow bell peppers, cut into 1-inch pieces

Parmesan Orzo:

- 1 cup uncooked orzo pasta
- 2 to 3 tablespoons chopped fresh basil or parsley
- 2 tablespoons shredded Parmesan cheese
- 2 teaspoons olive oil

1. Soak eight 8-inch bamboo skewers in water 10 minutes; drain.
2. Cut beef steak into 1-1/4-inch pieces. Combine 1 tablespoon basil, dressing and garlic in large bowl. Add beef and bell peppers; toss to coat.
3. Cook orzo according to package directions; drain. Toss with basil, cheese and oil; keep warm.
4. Alternately thread beef and peppers evenly onto bamboo skewers. Place on grid over medium, ash-covered coals. Grill, uncovered, 8 to 10 minutes for medium rare to medium doneness, turning occasionally. Serve on orzo.

Makes 4 servings.

Nutrition information per serving:
381 calories; 33 g protein; 35 g carbohydrate;
12 g fat; 135 mg sodium; 78 mg cholesterol;
6.1 mg niacin; 5 mg vitamin B₆;
2.5 mcg vitamin B₁₂; 4.5 mg iron; 6.2 mg zinc.
 (Complete nutritional information available on request.)

This recipe is an excellent source of protein, iron, zinc, niacin and vitamins B₆ and B₁₂.

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