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# Building a Heart-Healthy Diet with Lean Beef

## Introduction

Americans have always had a love affair with beef and a recent survey shows that whether celebrating a special occasion or enjoying an everyday meal, Americans ♥ Beef. Yet, people are often surprised to learn that lean beef can also be good for their heart. Research shows naturally nutrient-rich lean beef can be an important part of a heart-healthy diet.[i]

## SURPRISE! The Beef You Love is Good For You Too

- ♥ Heart Health Helper: A growing body of evidence shows that lean beef, trimmed of visible fat, can be a part of a balanced diet that does not increase heart disease risk factors.[ii]
  - A nine-month clinical trial suggests lean red meat can be part of a cholesterol-lowering diet.[iii]
  - A separate research study found that moderately overweight women, who exercised and consumed lean protein as part of a nutritionally balanced, reduced-calorie diet, successfully lost weight, lowered bad cholesterol, maintained good cholesterol, and reduced body fat.[iv]
- ♥ Naturally Nutrient-Rich: On average, a 3-ounce serving of lean beef is only 153 calories yet a naturally rich source of 10 essential nutrients – including protein, zinc, iron and B-vitamins – that are needed for a healthy, active lifestyle.
  - Choline, one of the 10 essential nutrients found in beef, may play a role in breaking down homocysteine, an amino acid in the blood that may be associated with increased risk of heart disease.

## 29 Lean Cuts. One Powerful Protein.

- ♥ Beef is an excellent source of protein, a powerful nutrient that helps strengthen and sustain bodies and hearts.
  - A substantial body of evidence shows protein can help in maintaining a healthy weight, building muscle and fueling physical activity – all of which play an important role in a healthful lifestyle and disease prevention.
  - Research studies have found that individuals with the highest protein intake had the lowest risk for coronary heart disease and the highest quality diets.[v]
  - Protein consumption has benefits to reducing blood pressure. Research indicates that modest substitution of carbohydrate-rich foods with protein-rich foods may lower blood pressure in people with hypertension.[vi]
  - There are 29 cuts of beef that meet government guidelines for lean, so it's easy for people to "go lean with protein" and follow the U.S. Dietary Guidelines.
    - ♥ These 29 cuts all have less than 10 grams of total fat, 4.5 grams or less of saturated fat, and less than 95 milligrams of cholesterol per serving and per 100 grams.
    - ♥ The 29 lean cuts of beef include some of America's favorite cuts like T-Bone, Tenderloin and 95 percent Lean Ground Beef.

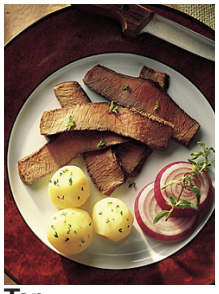
## Many of America's Favorite Cuts are Lean (3oz. cooked)

**Bottom Round Roast**

| | |
|---|---|
| Total Fat | 4.9g |
| Saturated Fat | 1.7g |
| Cholesterol | 64 mg |

**Top Round Steak**

| | |
|---|---|
| Total Fat | 4.6g |
| Saturated Fat | 1.6g |
| Cholesterol | 61 mg |



**Top Sirloin Steak**

| | |
|---|---|
| Total Fat | 4.9g |
| Saturated Fat | 1.9g |
| Cholesterol | 49 mg |

**Top Loin Steak**

| | |
|---|---|
| Total Fat | 6.0g |
| Saturated Fat | 2.3g |
| Cholesterol | 56 mg |

**T-Bone Steak**

| | |
|---|---|
| Total Fat | 8.2g |
| Saturated Fat | 3g |
| Cholesterol | 47 mg |

**95% Lean Ground Beef**

| | |
|---|---|
| Total Fat | 5.1g |
| Saturated Fat | 2.3g |
| Cholesterol | 65 mg |

Lean: Less than 10 g of total fat, 4.5g or less of saturated fat, and less than 95 mg of cholestorol per 100 grams.
Source: U.S. Department of Agriculture, Agricultural Research Service, 2009. Nutrient Database for Standard Reference, Release 22. Based on cooked servings, visible fat trimmed.

## Beef Up Your Exercise Routine with Lean Protein

- Regular physical activity or light exercise is much more effective when coupled with a protein-rich diet. Research indicates that a protein-rich diet, which falls within the Institute of Medicine's recommendation for protein intake, coupled with a moderate exercise program, increased weight loss by helping women become more toned by losing significantly more fat and maintaining more muscle mass.[vii]
- Research also indicates that increasing daily high-quality protein intake may optimize muscle strength and metabolism, and ultimately improve overall health. A growing body of evidence suggests muscle metabolism may also play a role in the prevention of many chronic diseases, such as type-2 diabetes and osteoporosis.[viii]
- Lean protein, such as lean beef, provides essential nutrients to fuel activity and also help people consume more essential nutrients in fewer calories, while balancing their food intake with physical activity.
- Because protein promotes satiety, eating a protein-rich meal or snack makes you feel full longer, and satisfies cravings faster.
- Eating lean beef as part of a balanced diet can be part of the solution to maintaining a healthy weight and being active. A substantial body of evidence shows the nutrients in lean beef, such as protein, iron and B-vitamins, help maintain a healthy weight, build muscle and fuel physical activity.

## Beef's Heart Healthy Fatty Acids

People are often surprised to learn that much of the fatty acid in lean beef has positive benefits for the heart. For example, half of the fatty acids in beef are monounsaturated – the same heart-healthy type of fat found in olive oil. In fact, beef is one of the top sources of monounsaturated fatty acids in the food supply. Beef is also a natural source of the polyunsaturated fatty acid conjugated linoleic acid (CLA). Although the research on CLA is still evolving, evidence suggest this fatty acid may have positive effects on cardiovascular disease, body composition, insulin resistance, immune function and bone health. ix Finally, one-third of the saturated fat in beef comes in the form of stearic acid, the same fat recognized as beneficial in chocolate for its neutral effect on blood cholesterol levels.

Visit **BeefNutrition.org** for more helpful nutrition advice and **BeefItsWhatsforDinner.com** for recipes and tips for including lean beef as an important part of a heart-healthy diet.

## Grilled Beef Steaks with Ancho Chili Rub

**Total recipe time: 30 minutes** **Makes 4 servings**

2 beef round (sirloin) tip center steaks, cut 1 inch thick (about 8 ounces each)
salt as desired
black pepper as desired

**Ancho Chili Rub:**

1 tablespoon ground ancho chili powder
3 cloves garlic, minced
1½ teaspoons dried oregano leaves, crushed
1 teaspoon unsweetened cocoa powder
1 teaspoon freshly grated orange peel
½ teaspoon ground cinnamon

**Steps:**

1. Combine rub ingredients; press evenly onto beef steaks.
2. Place steaks on grid over medium, ash-covered coals. Grill round (sirloin) tip center steaks, covered, 11 to 13 minutes for medium rare doneness, turning once; do not overcook. (Grill top loin steaks, uncovered, 15 to 18 minutes for medium rare to medium doneness, turning occasionally.) Season with salt and pepper, as desired.

***Nutrition information per serving, using round (sirloin) tip center:*** *159 calories; 6 g fat (2 g saturated fat; 2 g monounsaturated fat); 65 mg cholesterol; 45 mg sodium; 2 g carbohydrate; 0.6 g fiber; 23 g protein; 4.5 mg niacin; 0.5 mg vitamin B6; 2.8 mcg vitamin B12; 2.6 mg iron; 33.5 mcg selenium; 5.9 mg zinc.*

*This recipe is an excellent source of protein, niacin, vitamin B6, vitamin B12, selenium and zinc; and a good source of iron.*


[i] *Survey conducted by Pelegrin Research Group on behalf of The Beef Checkoff Program.*

[ii] *Li D, Siriamornpun S, Wahlqvist ML, Mann NJ, Sinclair AJ. Lean meat and heart health. Asia Pacific Journal of Clinical Nutrition. 2005;14(2):113-119.*

[iii] *Truswell A S. Cardiovascular diseases and red meat. Nutrition & Dietetics 2007; 64 (Suppl. 4): S162–S168*

[iv] *Melanson K, Gootman J, Myrdal A, Kline G, Rippe J. Weight loss and total lipid profile changes in overweight women consuming beef or chicken as the primary protein source. Nutrition. 2003; 19(5):409-414.*

[v] *Layman D, Clifton P, Gannon M, Krauss R, Nuttall F. Protein in optimal health: heart disease and type 2 diabetes. American Journal of Clinical Nutrition. 2008. 87 (suppl): 1571S-5S.*

[vi] *Hodgson J, Burke V, Beilin L, Puddey I. Partial substitution of carbohydrate intake with protein intake from lean red meat lowers blood pressure in hypertensive persons. American Journal of Clinical Nutrition. 2006;83:780–7.*

[vii] *Noakes M, Keogh JB, Foster PR, Clifton PM. Effect of an energy-restricted, high-protein, low-fat diet relative to a conventional high-carbohydrate, low-fat diet on weight loss, body composition, nutritional status, and markers of cardiovascular health in obese women. American Journal of Clinical Nutrition. 2005; 81(6): 1298-1306.*

[viii] *Wolfe, R. The underappreciated role of muscle in health and disease. American Journal of Clinical Nutrition. 2006; 84:475-82.*

[ix] *Bhattacharya A, Banu J, Rahman M, et al. Biological effects of conjugated linoleic acid in health and disease. Journal of Nutritional Biochemistry. 2006; 17:789-810.*