
Myths and Facts About Beef

Myth: The fat in beef is saturated fat.

Fact: Beef fat contains only about 47 percent to 49 percent saturated fatty acids. The rest is unsaturated fatty acids, including significant amounts of polyunsaturated fatty acids.

Myth: Beef contains more cholesterol than most other animal proteins.

Fact: Three ounces of beef—roasted, lean portion—contain 72 mg of cholesterol; three ounces of baked chicken—light meat without skin, 72 mg; 3 ounces of flounder, fried, 64 mg; 3 ounces of shrimp, 130 mg; 3 ounces of cheddar cheese, 90 mg; 3 ounces of pork—roasted, lean portion—contains 80 mg of cholesterol.

Myth: Prime or Choice beef contains more cholesterol than beef with less marbling.

Fact: Preliminary results of an official study of the nutrient composition of retail beef cuts show that the differences in cholesterol of uncooked lean beef of different grades are not significant. Prime had 61 milligrams of cholesterol per 100 grams of lean; Choice, 59 mg; Good, 58 mg. (These values were slightly lower than reported in previous studies.) (USDA data show that 3 ounces of roasted beef, "lean and fat" (without the separable lean removed), contains the same amount of cholesterol, 72 mg, as 3 ounces of lean roasted beef.

Myth: We now are eating considerably more meat than we were a decade ago.

Fact: Per capita meat supplies rose to about 200 lb., retail weight, in 1970, and the total has remained essentially at that level ever since. The mix of meats has changed with cyclical and shorter-term swings in supplies, but the total has shown relatively little change. When per capita beef supplies declined during the late 1970s, poultry filled the gap—primarily because of its cheaper production cost and price. Now, it appears, there may not be much change in shares of market in the "mature" meat business during the next few years. Some decrease in per capita supplies is possible because of a prolonged period of little or no profit for most livestock and poultry producers.

Myth: The average person consumes a large, possibly excessive, amount of meat.

Fact: The average per capita consumption of cooked, edible red meat per day in 1981 was 2.72 ounces—considerably less than the

two 3-ounce servings from the meat group which often are recommended. On a dry matter basis, the average American eats about 30 lb. of meat annually, compared with 100 lb. of sugar and other sweeteners.

Myth: The increase in fat consumption in the U.S. has resulted primarily from increased consumption of meat and other animal products.

Fact: Average daily consumption of animal fat in the U.S. was 105 grams in 1947-49 and 91 grams in 1978. Average consumption of vegetable fat was 36 grams in 1947-49 and 68 grams in 1978. We still consume more animal fat than vegetable fat, but the increase in total fat intake has resulted entirely from the increased use of vegetable fat. In 1980, fats and oils (including butter) contributed 43 percent of the fat in the U.S. food supply; all meats (including poultry and fish) contributed 36 percent; and all dairy products (not including butter) contributed 11 percent.

Myth: Chicken is a much "lighter" food than beef.

Fact: Three ounces of roasted beef, lean portion, contains 169 calories. If the roast beef contains "lean and fat" (as purchased from the store), without separable fat removed, three ounces contain 214 calories. Three ounces of baked chicken, dark meat, without skin, contains 174 calories. Three ounces of fried chicken, light meat, with skin, contains 209 calories.

Myth: The major nutritional value of beef is its protein.

Fact: The balanced protein in beef is a major value. But, with its high nutrient density ratio, beef also supplies substantial amounts of essential minerals and vitamins. For example, a 3-ounce serving of lean beef, roasted, supplies only 8 percent of one's daily calorie needs (in a 2,000-calorie diet) but 57 percent of the recommended daily allowance of protein, 34 percent of vitamin B-12, 32

Myths and Facts About Beef

percent of zinc, 18 percent of niacin and 12 percent of iron.

Myth: The price of beef keeps going up.

Fact: Average retail beef prices have risen little, if at all, during the past three years. The average price of 5 cuts in NCA's monthly beef price survey was \$2.43 per pound in 1980, \$2.42 in 1981 and \$2.46 in the first 11 months of 1982. Prices fluctuate with changes in the supplies of beef and other meats, but the average annual price has shown little change. Retail beef prices rose last spring, then dropped off again during the past few months.

Myth: If we did not produce beef, there would be more land available for the production of other crops and foods.

Fact: Of the 2.2 billion acres of land in the U.S., about 1 billion acres is pasture and grazing land. By far most of this land is too rough, too arid, too wet or too high, to produce cultivated crops. If it were not for grazing ruminant (four-stomach) animals like beef cattle, these 1 billion acres would have no productive use.

Myth: Most of the feed fed to cattle is grain.

Fact: A recent Texas A&M University analysis showed that 86 percent of all the

feed consumed by beef cattle (from birth to slaughter) is non-grain. It includes pasture, forage, roughage and various by-products. The grain that is fed is feed grain, generally not eaten by humans (e.g., barley, milo and corn).

Myth: Cattle could be produced more cheaply if we did not use grain.

Fact: A period of feedlot finishing is necessary to make beef more economical as well as more palatable. High-energy, grain-containing feedlot rations result in faster weight gains. This means lower labor, interest and depreciation costs per pound of gain, and it results in a lower cost of beef per pound to the consumer.

Myth: It is cheaper to produce Good or non-graded leaner beef than it is Choice beef.

Fact: In the long run, through improved breeding and feeding, it will be possible for cattlemen to produce leaner beef, with less waste fat, more economically. Meanwhile, there are these two situations: (1) Most of the fed beef which does not grade Choice is fed in the same pens, in the same way, for the same length of time as cattle that qualify for Choice. Cattle vary in their ability to marble, and the beef does not grade Choice only because it does not have quite enough mar-

bling. Production costs per pound of animal are the same. (2) If cattle are fed for a shorter average feeding period, they generally will weigh less at market time. Fixed costs will have to be spread over fewer pounds. Total costs of feeding in the feedlot will be reduced, but the over-all average cost of production per pound will be virtually the same or greater.

While cattlemen's per-pound production costs are not necessarily reduced when there is less fat in a carcass, the net cost per pound of retail cuts can be reduced. That is because of a greater yield of lean meat, and less trimmable fat, per 100 lb. of carcass beef.

Myth: The lean-vs.-fat beef question has to do primarily with level of marbling.

Fact: Much of the grading controversy revolved around marbling levels, but the real question, in the view of most consumers as well as many merchandisers, is the ratio of lean to fat in the carcass and in retail cuts—not just marbling. Most persons interested in leaner beef are expressing a desire for beef with more lean meat and less trimmable fat. That is the main factor in most lean beef programs. In Canada, where the grading system was changed 10 years ago, the average fat content of beef carcasses has been reduced by about 30 percent.

Myth: Marbling is the best indicator of palatability differences in beef.

Fact: Marbling is an indicator of palatability, but, with beef from today's younger, scientifically fed animals, differences in marbling account for only 10 percent to 15 percent of differences in palatability, according to controlled taste panel studies. In most cases, tenderness in beef is more a function of age of the animal than it is of marbling. Also, there are inherent differences among animals in terms of tenderness, as well as ability to marble. Substantial differences in marbling, from least to most, may be necessary to result in significant differences in eating satisfaction.

Myth: Demand for beef is declining.

Fact: Basic demand for beef is still strong. Because of its being perceived as a "heavy" or fatty food, some persons have reduced their beef consumption. Many others have not, however. Actually, the market for beef (like the markets for other products) is segmented. Consumer research shows there are "heavy," "moderate" and "light" users. If there is any move away from beef because of health concerns, it is primarily among the "light" users.

Economic analysis shows that, primarily because of a weak economy, demand for all meat, has declined during the past two years. However, beef is still the most strongly preferred meat, by far—as evidenced by consumers purchasing larger amounts of it at a price more than three times that of chicken.

Myth: The decline in per capita use of beef during the past several years shows that demand for beef has decreased.

Fact: The decline in per capita beef supplies (and, therefore, in consumption—we always eat all that is produced, at a price) was primarily a function of the longer term cattle cycle. Per capita use in 1976 was abnormally high because of over-production, plus the herd liquidation which added to an already burdensome supply. As cattle numbers were reduced in the late 1970s, in response to a severe cost-price squeeze, supplies inevitably were reduced.

The only valid way to measure demand for any commodity is to relate per capita supplies and price. Over-all preference for beef over pork and chicken still is essentially as strong as it has been.

Myth: Fat in the diet, particularly saturated fat, causes cancer.

Fact: The National Research Council report on diet and cancer was much less positive, and had many more qualifiers than did the news release and news reports on reported fat-cancer links. Many scientists are not convinced that fat is a cause of cancer. If it were, everyone would have cancer. That is because everyone stores fat in his body, to varying degrees, and body fat is metabolized as a source of energy.

If fat is carcinogenic when it supplies 40 percent of the calories in a diet, then it must be carcinogenic when it supplies 30 percent (as recommended in the NRC report), if one accepts the no-threshold theory about cancer-causing agents. At any rate, except for lung cancer, age-adjusted cancer death rates at all sites have been leveling off or declining. If rising fat consumption were a significant factor, cancer death rates should have risen.

Myth: Dietary cholesterol has a direct effect on blood cholesterol level in most persons.

Fact: In most persons, dietary cholesterol and blood cholesterol are not closely related. In fact, in most persons, heredity and weight or amount of fatty tissue in the body are more important than diet, including dietary cholesterol, in determining blood cholesterol level. If a person keeps his weight at recommended levels, odds are that his blood cholesterol will not be above normal.

Myth: Heart disease risk can be reduced by reducing intake of saturated fat and cholesterol.

Fact: The current trend in the scientific literature is away from thinking that reducing heart disease risk is simply a matter of cutting down on foods high in saturated fatty acids and cholesterol. More scientists are now saying that more scientific answers are needed before marked changes in diets can be recommended for the general population.

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