

UNDERSTANDING BEEF: HEALTH & WELLNESS

As Canadians, we are fortunate to have a variety of foods to choose from. It's important to remember that every food we eat is unique. No one food is a cure-all and each food contributes to health in its own distinct way. Healthy eating is truly a matter of variety, balance and moderation.

So just how does beef stack up nutritionally? It's important to consider the role that beef plays in a healthy diet.

THE BIG PICTURE

It's the quality of our food choices that count over time. A healthy diet is one that prioritizes whole, fresh foods: lots of fruits and vegetables, high fibre grains and lean, fresh proteins. We call these 'foundational foods'. Healthy eating means choosing foundational foods most of the time. Discretionary, or treat foods, should be occasional.

One simple way to maximize nutrition, flavour and satisfaction in a meal is to use the 'balanced plate' visual: put vegetables and/or fruit on $\frac{1}{2}$ of the plate, whole grains or other starches on $\frac{1}{4}$ of the plate, and lean fresh protein, such as beef, on the remaining $\frac{1}{4}$ of the plate.



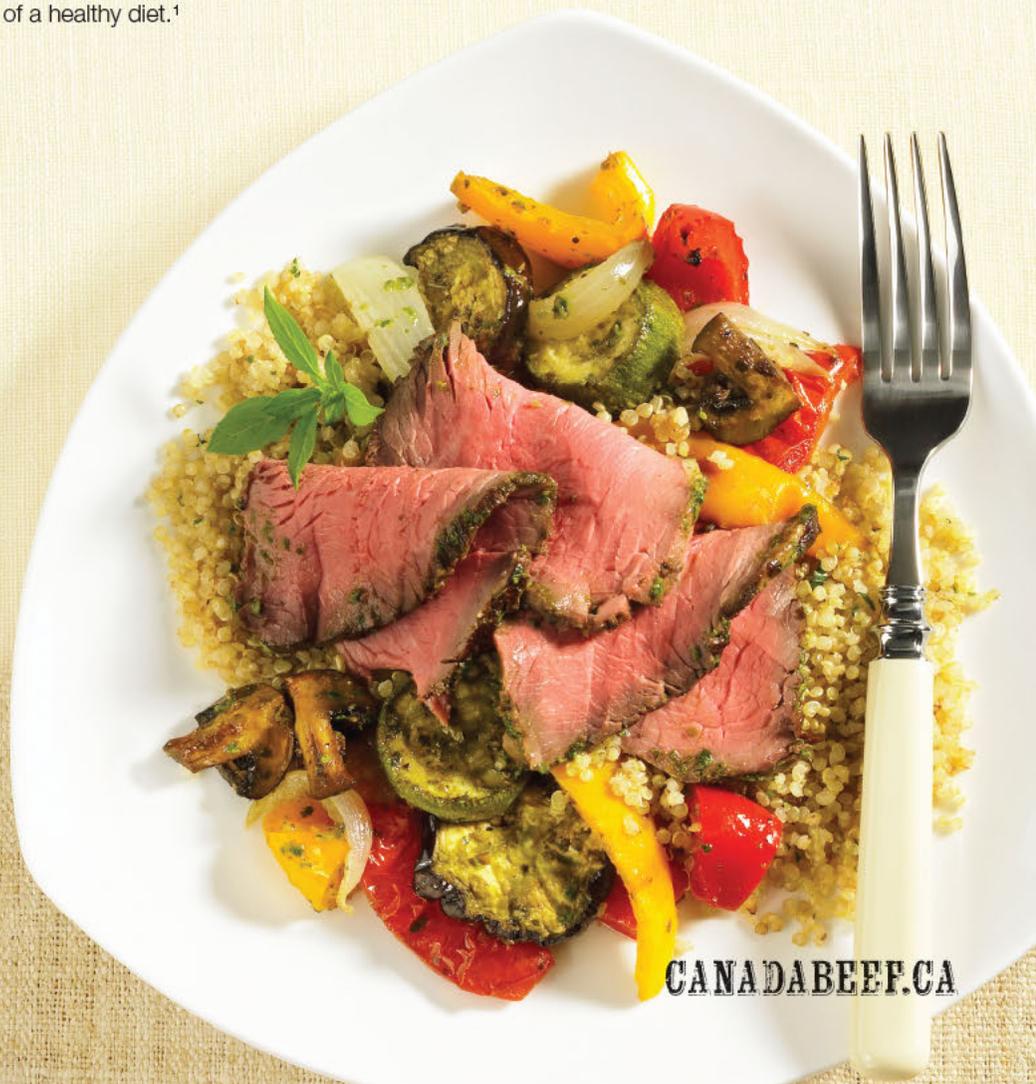
A UNIQUE NUTRIENT PACKAGE

Red meats, like beef, are nutritious and play an important role in a balanced diet. Beef offers a variety of essential nutrients that support good health. Beef is one of the best sources of high quality protein, iron, zinc and B vitamins. Canada's Food Guide includes beef and other red meats as part of a healthy diet.¹

KNOW YOUR BEEF



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Very few foods can match the nutrient density of beef. Beef is a concentrated source of nutrients providing a variety of essential vitamins and minerals for a modest number of calories. For example: one cooked serving of beef is the size of your palm (75 grams) and has as much protein as 3.5 servings of almonds - almost a full cup. For the same amount of iron in 1 serving of beef, you would need to eat 6.5 times the amount of salmon, for the same amount of vitamin B₁₂ you would need to eat 7 times the amount of chicken, and for an equivalent amount of zinc, you would need to eat 11 eggs.² When it comes to quality calories, with beef you get a great amount of nutrients for a small amount of food. Beef is a powerful nutritional package.

HOW MUCH DO WE EAT?

Canadians eat beef in moderate amounts. According to the latest government nutrition survey, Canadians eat between 3 to 4 servings of fresh red meat per week or 288 grams on average² - which works out to be 3 meals - a lunch and 2 dinners for example.

This amount is well below the 500 gram per week limit for cooked fresh red meat as recommended by WCRF²⁴. Considering Canada's Food Guide advises 2 servings of meat and alternatives a day for women, and 3 servings a day for men, the amount of fresh red meat that we eat on average is well within both global and Canadian guidance. A serving of cooked beef is

75 grams, about the size of your palm. On average, fresh red meat contributes only 5% of the total calorie intake of Canadians.¹⁵

BEEF IN HEALTH RESEARCH

The relationship of beef and health has been extensively studied. Over 10 years of research has found no association between eating fresh red meat and any cause of death, including heart disease or cancer.³⁻⁴ Additionally, research over this time has uncovered some other interesting findings - namely that adults who ate red meat more often: (1) tended to eat vegetables more often;³ (2) tended to have smaller waists and lower body weights;³ and (3) eating some red meat was more beneficial for health than eating none.⁴

PROTEIN POWER

Protein is vital at every age and stage. Protein is needed to support children's healthy growth and development as well as optimal bone and muscle strength as we age.⁵⁻⁷ Plus, research shows protein can help keep you feeling full longer.⁸⁻⁹

The protein in beef and other meats is what we call 'complete', meaning it contains all the essential amino acids, whereas plant-based proteins do not. This makes meat more "efficient" at delivering the protein your body requires.

Canadians do not over-consume protein. In fact, Canadians are getting about 17% of their calories from protein.¹⁰ That is at the lower end of the recommended 10-35% of calories from protein.¹¹

One portion of beef delivers 26 g of protein and less than 200 calories.¹² Getting the same amount of protein from black beans will cost you about 400 calories, about 600 calories from hummus and about 640 calories from peanut butter.¹³ While these are all extremely healthful foods with their own distinct benefits, these comparisons demonstrate how very few other foods deliver as much protein for so few calories. The size of a beef portion is 75 grams of cooked beef - just the size of your palm.

WHAT ABOUT PROTEIN SUPPLEMENTS?

Protein supplements are manufactured from isolated components of whole foods. These are highly processed, refined products. Stated simply, they lack the naturally occurring benefits that come standard with whole foods. When you eat meat, fish, poultry or other protein-dense real foods, you benefit from high-quality, complete-protein, as well as the plentiful vitamins and minerals that come naturally with them - a nutritional 'buy-one-get-one free' scenario of sorts. And all this with a 'clean' ingredient label: nothing added.

WHAT ABOUT SATURATED FAT?

The most recent studies have found no association between heart disease and saturated fat.¹⁴ The contribution beef makes to the fat/saturated fat intake of Canadians is often a topic of discussion. Here are some surprising facts that should be part of the conversation:

- More than half of the fat in beef is *unsaturated*. Most of the unsaturated fat in beef is oleic acid, the same type of healthy fat found in olive oil.¹²
- A typical 75 gram portion of cooked beef contains only 3 grams of saturated fat.¹² That is the same amount of saturated fat you would find in an equal portion of roasted chicken thigh.¹⁶
- One unique property of beef is that much of the fat can be seen and trimmed prior to eating. Once trimmed, most cuts of beef are lean.
- On average, fresh red meat accounts for just 7% of the calories from fat on average in the Canadian diet.¹⁵



WHAT ABOUT 'PLANT-BASED' DIETS?

Most of us don't eat enough fruits, vegetables or fibre, and eating more of plant foods may provide health benefits. But a plant-based diet is not the same as one that excludes meat.

Animal based foods like meat, fish and poultry provide high quality protein, easily-absorbed iron and zinc and an impressive range of B vitamins - nutrients that are difficult to get enough of from plant foods. And you don't need to eat a large amount of animal protein to reap the benefits. A serving of meat, fish or poultry is only about the size of your palm or a deck of cards.

Meat also helps the body to better absorb certain nutrients from plant-based foods. For example, in the presence of meat, the iron absorbed from a plant food increases by 150%.¹⁷ Without the presence of meat in their diets, vegetarians need almost 2 times more iron in their diets than meat eaters.¹⁸ We call this synergistic relationship the 'meat factor' and it demonstrates why

eating whole foods together may be more beneficial than eating them separately. The benefits are not additive, they are compounded. 'Plant-based' diets work best when accompanied with moderate amounts of animal-based proteins.

FLAWED FOOD PATTERNS

Many Canadians are undernourished yet overfed. Dietary trends show that obesity rates have doubled since the late 1970's²⁰ while the percent of energy from foods naturally rich in high quality protein such as beef, milk and eggs fell in the same period of time.²¹ Meanwhile, an increasing percentage of energy from highly processed ready-to-eat foods has replaced energy from more nutritious protein-rich food choices.²²

Like several animal based foods, red meat consumption is down; according to Statistics Canada data, red meat consumption declined 14 grams per day between 2004 and 2015.¹⁹ In contrast, consumption of highly processed ready-to-eat foods is increasing and now accounts for almost

50% of our daily calorie (energy) intake.²² Results from the most recent nutrition survey on diet quality in Canada show that the majority of our calories come from pre-prepared, ready-to-eat dishes such as pizza, and sweetened drinks.²² These foods are typically calorie dense and nutritionally poor, and they displace nutrient-rich, whole foods in our diets.

BEEF BELONGS

Beef delivers quality calories. Beef is a single ingredient food that satisfies the appetite and is loaded with vital nutrients, all for a moderate number of calories. Beef is a cornerstone to balanced meals as it is usually served with other nutrient-rich, foundational foods such as vegetables and grains to round out the plate. It fosters the healthy eating pattern of eating at the table versus eating on the run. These high quality staple foods are precisely the types of foods people need to eat most often for health and wellness. As an efficient, concentrated and nutritious protein source, beef belongs in the diet of Canadians.

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Canada Beef strives to present the facts around nutrition, culinary and farming practices based on the most current scientific research and tests at hand. As research on these topics is ever changing, we monitor and update these topics as necessary. Recognizing that a healthy discussion is the best way for us all to gain knowledge and understanding, we welcome your comments and conversation.



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