

## GRASS-FED OR GRAIN-FINISHED BEEF?

### WHAT'S the difference?

Beef cattle that are fed only grass or forages (e.g. alfalfa, clover) during their entire lives are called **grass-fed**.

**Grain-finished cattle** are raised on grass or forages for most of their lives, then finished on grain. **Finishing** refers to feeding beef cattle an energy-rich diet prior to going to market for sale as meat. During the finishing stage, beef cattle are fed grains such as barley (in western Canada) or corn (in eastern Canada).

Grain-finished beef is the primary type of beef available in Canada.

Most beef cattle in Canada are born on a **cow-calf** farm or ranch. After calves are weaned, they may go to a **backgrounding** ranch or farm where they are fed grass or forages until they grow to a certain weight. Then, cattle are sold to a **feedlot** and finished on grain until they reach their desired weight and are sold as meat to grocery stores or restaurants.



### WHICH IS BETTER NUTRITIONALLY?

Canadians sometimes choose to purchase grass-fed beef rather than grain-finished beef, believing it is nutritionally superior. However, taking into consideration an individual's entire diet, most studies agree that there is little nutritional difference between the two types.

### GRASS-FED ≠ ORGANIC

Organic beef can be grass-fed or grain-finished. To raise and market "organic beef," farmers must be certified under Canada's *Organic Products Regulations*.<sup>1</sup> Whether grass-fed or grain-finished, beef that is raised organically must be fed only organically produced feed from organically produced crops. Also, beef cattle cannot be sold as "organic beef" if antibiotics or growth promoting hormones have been used at any time during the animal's life.

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### Zinc, iron and protein



Both grass-fed and grain-finished beef contribute similar amounts of essential nutrients, such as zinc, iron and protein, to our diets. It is important to note that the “heme” iron in all beef is in a form that the human body absorbs more readily than the “non-heme” iron found in eggs or plant foods (e.g., spinach, cereals, legumes).<sup>2</sup>

### Fatty acids

Omega-6 and omega-3 fatty acids have been demonstrated to help prevent heart disease and stroke, and may protect the body from diseases such as cancer. Most omega-3s in our diet come from oil, such as canola oil. Both grass-fed and grain-finished beef contribute omega-3 fatty acids to our diet; however, the level of omega-3 fatty acids found in all beef is small in comparison to levels found in, for example, seafood.<sup>3</sup>



### Fat

Because grain-finished cattle grow and fatten more quickly, their meat may contain more fat. Research shows that grass-fed beef can be leaner than grain-finished beef by 2-4 g per 100 g of trimmed meat.<sup>4</sup> Given that our recommended total daily fat consumption is about 60 g or more, the differences are really not significant, though better marbling of grain-finished beef can make the meat more flavourful and tender.

No differences in cholesterol levels were found in the majority of studies.<sup>5</sup>

### Other nutrients

Research shows some differences in levels of vitamin B, calcium and potassium between grass-fed and grain-finished beef, but these differences are not meaningful in the context of a total diet.<sup>6</sup>

! Beef from both grass-fed and grain-finished cattle contributes a wide variety of important nutrients to our diet.

