

## Super Healthy Milk

By Jo Robinson

**M**ost cartons of milk in the supermarket show a picture of cows contentedly grazing on grass. Unfortunately, 85 to 95 percent of the cows in the United States are now being raised in confinement, not on pasture. The only grass they eat comes in the form of hay, and the ground that they stand on is a blend of dirt and manure.

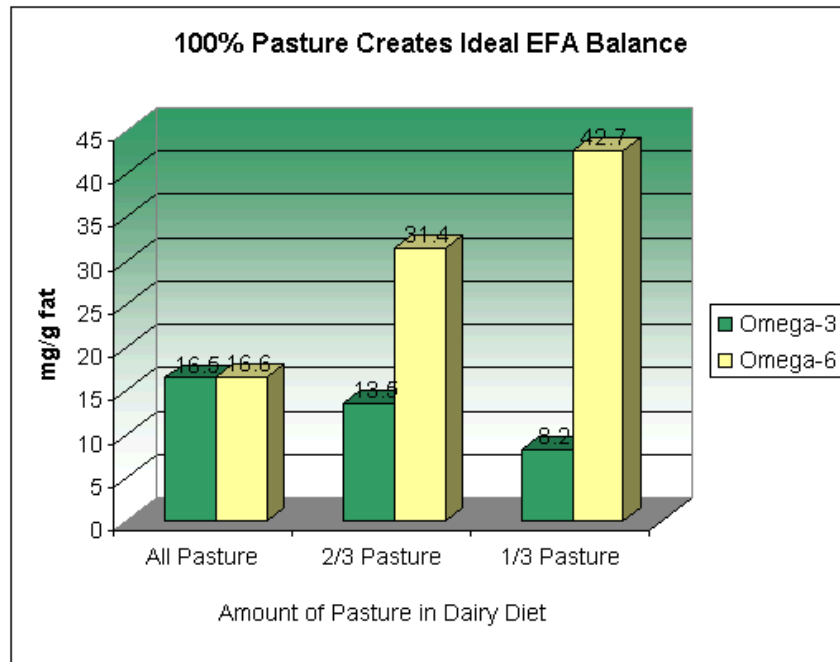
The reason for confining our cows in feedlots and feeding them grain rather than grass is that they produce more milk—especially when injected with bi-weekly hormones. Today's grain fed cows produce three times as much milk as the old family cow of days gone by.

With the current emphasis on quantity, the quality of our milk has suffered. One of the biggest losses has been in its CLA content. CLA or "conjugated linoleic acid" is a type of fat that may prove to be one of our most potent cancer fighters. Milk from a pastured cow can have five times as much CLA as milk from a grain-fed animal. To date, most of the proof of the health benefits of CLA has come from test tube or animal studies. But a few recent human studies have produced encouraging results. For example, French researchers compared CLA levels in the breast tissues of 360 women. The women with the most CLA in their tissue (and thus the most CLA in their diets) had a 74 percent lower risk of breast cancer than the women with the least CLA.<sup>1</sup> If an American woman were to switch from grain-fed to grass-fed dairy products, she would have levels of CLA similar to those with the lowest risk of cancer. Got CLA milk?

Milk from pastured cows also contains an ideal ratio of essential fatty acids or EFAs. There are two families of EFAs—omega-6 and omega-3 fatty acids. Studies suggest that if your diet contains roughly equal amounts of these two fats, you will have a lower risk of cancer, cardiovascular disease, autoimmune disorders, allergies, obesity, diabetes, dementia, and some mental disorders.<sup>2</sup>

Take a few moments to study the chart below showing EFA levels in milk from cows fed varying amounts of grass and grain.<sup>3</sup> The green bars represent omega-3 fatty acids in the milk, and the yellow bars represent omega-6 fatty acids. As you can see, when a cow is raised on pasture (the two bars on the far left), her milk has an ideal ratio of omega-6 to omega-3 fatty acids. If you take away one third of the grass and replace it with grain or other supplements (the two bars in the middle) the omega-3 fatty acid content of the milk goes down while the omega-6 fatty acid content goes up, upsetting an essential balance. Replace two-thirds of the pasture with a grain-based diet (the two bars on the far right) and the milk will have a very top-heavy ratio of omega-6 to omega-3 fatty acids—a ratio that has been linked with an increased risk of a wide variety of conditions, including obesity, diabetes, depression, and cancer. Much of the milk you buy in the supermarket has an even more lopsided because the cows get no pasture whatsoever.

Milk from pastured cows offers additional health benefits. (I'm beginning to sound like a TV infomercial: "But wait! There's more!") Besides giving you five times more CLA and an ideal balance of EFAs, milk from grass-fed cows is higher in beta-carotene, vitamin A, and vitamin E. This vitamin bonus comes, in part, from the fact that fresh pasture has more of these nutrients than grain or hay. (When grass is dried and turned into hay, it loses a significant amount of its vitamin content.) These extra helpings of vitamins are then transferred to the cow's milk.



There's another factor involved as well. A grazing cow produces less milk than a cow fed a grain-based diet. This turns out to be a bane for the farmer but a blessing for the consumer. The less milk a cow produces, the more vitamins in her milk.<sup>4</sup> This is because a cow has a set amount of vitamins to transfer to her milk, and if she's bred, fed, and injected to be a Super Producer, her milk has fewer vitamins per glass. It's a watered down version of the real thing.

Oh, I almost forgot the best part of all. Dairy products from grass-fed cows taste delicious. Their bright yellow color is visible proof of their bonus supply of carotenes. Serve cheese or butter from a grass-based dairy, and everyone will notice the difference. Also, your cookies and cakes will have that rich buttery color that hasn't been seen since Grandma's day. (You *do* bake, don't you?)

So where can you find milk from pastured cows? All of the dairies listed on [www.eatwild.com](http://www.eatwild.com) keep their cows outdoors on grass whenever possible. Some farmers supplement the cows with small amounts of grain. If so, their listing will detail the type and amount. To find a local producer, go to our list of grass-fed suppliers (link) and click on your state. We also have a special section devoted to farmers who feed their cows 100 percent forage-based diets (<http://www.eatwild.com/products/allgrassdairies.html>).

Can you find grass-fed milk in the supermarkets? Unfortunately, an organic label is no guarantee that the cows are raised outdoors on grass. If the label does not mention pasture-feeding, you can assume that the cows were raised in confinement and fed a high-grain diet supplemented with hay. Two large organic brands make a point of contracting with grass-based dairy farmers—Organic Valley, a national brand, and Natural by Nature, which is sold in select stores around. (Go to their website to find a local distributor: <http://www.natural-by-nature.com>)

<sup>1</sup> Bognoux, *et al*, Inform, 10:S43, 1999.

<sup>2</sup> For more information about essential fatty acid balance, read [The Omega Diet](#), a book I co-authored with Artemis Simopoulos, M.D., a world authority of essential fatty acids.

<sup>3</sup> The data comes from: Dhiman, T. R., G. R. Anand, *et al.* (1999). "Conjugated linoleic acid content of milk from cows fed different diets." J Dairy Sci 82(10): 2146-56.

<sup>4</sup> Jensen, S. K., A. K. Johannsen, *et al.* (1999). "Quantitative secretion and maximal secretion capacity of retinol, beta-carotene and alpha-tocopherol into cows' milk." J Dairy Res 66(4): 511-22.