

The Milkweed Tests Organic Milk for CLAs & Omega-3s

by Pete Hardin

By mid-June, all dairy cows on “honest” organic dairy farms should be belly-deep in grass – nature’s verdant bounty.

In mid-June, *The Milkweed* collected retail samples of organic whole milk, from stores located in Minnesota, Wisconsin and Texas. Ten different marketers’ organic raw milk were tested; although some samples were processed in common fluid milk plants.

In late June, the 10 samples were submitted to a world-class laboratory, where analyses of those samples’ milk fat “profiles” were conducted (at a rate of several hundred dollars apiece, we might add). Cows’ milk fat contains at least two dozen distinct “fatty acids.” Key focus in this testing was devoted to two critical fatty acids: Conjugated Linoleic Acids (CLAs) and Omega-3s. CLAs and Omega-3s are widely recognized as key “nutraceuticals” – i.e., beneficial nutrients – contained in cows’ milk fat.

The winner: Cedar Summit Farm, based in New Prague, Minnesota, a producer-handler whose milk cows eat an all-grass diet, year-round.

The loser: a Wal-Mart milk sample processed by Aurora Organic Dairy of Colorado.

(CLAs, for example, are currently recognized as THE leading, cancer-fighting natural substance. CLAs’ role in preventing and fighting cancers was originally established, more than a decade ago, in research headed by Dr. Michael Pariza, chairman of the Food Science Department at the University of Wisconsin-Madison.)

Importantly, content of CLAs and Omega-3s in cow’s milk correlates directly with access to pasture – i.e., how much quality fresh grass those milk cows’ are eating. Higher CLAs and Omega-3s correlate directly with other food products derived from grass-fed beef, poultry and pork. Several universities are conducting research to seeking to boost CLA content in milk by adjusting cows’ feed intake.

CLAs/Omega-3s: Important measure of organic integrity

Content of CLAs and Omega-3s is a critical measure of the integrity of organic milk, in two ways: compliance with USDA’s rules for pasture access and meeting consumers’ perceived expectations about higher nutritional attributes of organic milk.

ORGANIC RULES SPECIFY DAILY PASTURE ACCESS

USDA rules require that milk cows on dairy farms certified as “organic” must have adequate daily access to pasture. Specifically: milk cows must have access to adequate pasture for a minimum of 120 days per year. USDA’s rules do not detail exactly how much pasture must be consumed on a daily basis. Simply put: higher levels of fresh grass in the dairy herd’s daily diet will register as higher levels of CLAs and Omega-3s in the milk.

The organic dairy sector is currently torn by controversy over USDA’s failure to enforce standards mandating daily access to fresh pasture for milk cows on some so-called “organic” dairy farms. Critics puzzle how “factory” organic dairy farms can physically comply with USDA’s rules for adequate daily pasture access. It’s physically impossible for dairy cows in mega-dairies to get out to “adequate” pasture on a daily basis. The thousands of cows on “organic” factory farms simply can’t get out to “adequate” grass and return for twice-daily milkings ... or so it seems to critics of USDA’s failing organic oversight.

USDA’s guidelines – issued by the agency’s board that establishes national



The BEST organic milk! Cedar Summit Farm of New Prague, Minnesota scored highest in content for both CLAs and Omega-3s, in laboratory testing conducted recently by *The Milkweed*. The Minar family’s milking herd at Cedar Summit Farm eats 100% grass rations. That’s why this organic producer-handler’s milk scores so high in CLAs and Omega-3s.



The WORST organic milk. Small wonder that this Wal-Mart (“Great Value”) organic milk scored lowest for both CLA and Omega-3 content in testing conducted by *The Milkweed*. This milk is from Aurora Organic Dairy in Colorado -- a mega-dairy where fresh grass is scarce for the

organic standards – are vague, perhaps intentionally so. USDA’s oversight of organic foods, originally mandated by Congress in the early 1990s, has regularly come down on the side of corporate, factory farms.

CLA & Omega-3 Content of Retail Organic Whole Milk Product Samples • June 2008

Marketer	Plant #/ID	UHT*	CLA%**	Omega-3%**
Wal-Mart’s Great Value	08-29 Aurora Organic Dairy	Yes	0.203 (10)	0.025 (9)
“365” Whole Foods	27-421	?	0.298 (7)	0.028 (5)
Horizon	55-1224	Yes	0.211 (9)	0.027 (6)
Old Home	27-512	?	0.425 (2)	0.032 (4)
Stonyfield Farms	27-995	Yes	0.327 (5)	0.026 (7)
Farmers All-Natural Creamery	36-5631	No	0.373 (3)	0.036 (2)
Castle Rock	27-974	No	0.301 (6)	0.031 (3)
Organic Valley	19-888	?	0.260 (8)	0.028 (5)
Cedar Summit	27-995	No	1.230 (1)	0.055 (1)
Lunds & Byerleys	27-421	Yes	0.371(4)	0.025 (9)

* UHT = Ultra High Temperature Pasteurization.

** Levels of Conjugated Linoleic Acids (CLAs) and Omega-3s are expressed as a percentage of total milkfat content for the samples. Example: the CLA content of Cedar Summit Farm’s milk – 1.23% -- means that CLAs constituted 1.23% of all milkfat in the sample.

Numbers in parentheses () show rankings of samples in this survey.

Organic products presumed superior

Many consumers buying organic milk (and other organic foods) presume that the “organic” label guarantees nutritional superiority. These consumers shell out big bucks for organic products, presuming both nutritional superiority and production practices for such foods that comply with USDA’s organic rules, while also avoiding synthetic hormones, genetically-modified crops, pesticides and chemicals, etc. Today’s organic food consumers are a nutritionally savvy bunch.

Organic consumers pay top-shelf prices for dairy foods that they believe contain nutritionally superior benefits – such as CLAs and Omega-3s. They expect the superior flavor of milk from grass-fed herds.

Thus, when and where certain brands of organic milk register “low-end” scores for CLAs and Omega-3s, one can argue that organic consumers are being short-changed, in a nutritional sense.

Statistical limitations of this research!!!

Single samples of products form a very limited basis any claims. Legitimate statistical process would require numerous samples – say, at minimum, a dozen each – to begin to draw any significant differences.

This research funded by *The Milkweed* is designed to raise more questions than it answers. Results from single samples of different brands must be viewed with reservation. However ...when the CLA content of the brand at the top end of CLA-content tests (Cedar Summit Farm – New Prague, Minnesota) is about 6X higher than the low-ender (Aurora Organic Dairy of Colorado) ... legitimate questions start to arise!