

Colder climate grass results in more than twice the CLA

**Latitude and altitude —
hidden factors that influence omega-3 and CLA levels in milk.**

The amount of beneficial CLA and omega-3 fatty acids in a cow's milk is influenced by a host of factors in addition to diet, including her breed, individual genetics, age, and even the time of year. Now one more factor has been added to the list: prevailing temperatures. Milk and cheese from alpine grazers or cows raised in colder climates appear to have the omega-3 and CLA edge.

The reason? It has to do with plant antifreeze. Omega-3 fatty acids stay fluid at colder temperatures than other, more saturated fats. A plant that has to withstand the cold needs more of this natural antifreeze to keep its cell membranes fluid. Cows that graze on this cold climate grass ingest more omega-3s, which they then convert to another good fat—CLA. In a recent study, cows that grazed in alpine meadows had more than twice the amount of CLA in their milk as similar cows that grazed down in the valley.

("Composition of milk fat and correlation with fodder plants"

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