

## **Cost of Food at Home for a Week in Alaska Quarter 4: December 2004**

Up to three stores in each of 21 communities were surveyed during December of 2004 for the cost of a specific set of food and non-food items. The 104 food items selected were taken, with some modification, from the USDA Low-cost Food Plan which is itself based on a nationwide survey of eating habits of Americans, conducted in 1977-78. In addition, the costs of such items as water, propane and electricity were collected. All costs were adjusted to reflect local sales tax where applicable.

The estimated prices of unavailable food items in various communities were calculated as the expected cost as judged from the prices of all available items relative to the price of those items in Anchorage. The percent of foods unavailable in each community are shown in the survey.

Weekly food consumption rates for a family of 4, children 6 - 11 years, form the basis of the expressed food costs. All other costs are ratios of that cost as calculated from the USDA Cost of Food at Home survey issued December 2004. The cost for this family of 4 can be calculated from the table by summing the individual members. For smaller families such a sum would be too low and should be adjusted up by 20%, 10% or 5% for families of 1, 2 or 3 persons respectively. Similarly, the sum for larger families would be too high and downward adjustments of 5% and 10% are suggested for 6 and 7 or more member families. These adjustments reflect that some economies may be realized when preparing foods for larger families.

Rows 19 through 23 represent historical food costs. The Anchorage column is a comparison of present to previous

Anchorage costs. Similarly the U.S. Average column represents changes in U.S. average prices. A one (1) appearing in the Anchorage column indicates that the current Anchorage cost is 1% higher now than at that date. Therefore, rising food costs are indicated by positive values. The remaining columns are each community's cost relative to Anchorage at that date. For instance, a cell containing a one (1) indicates a community that was experiencing a food cost 1% higher than Anchorage at that date.

**Title:** Omega 3 & Omega 6 Fats

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**Introduction.** New dietary guidelines were jointly released by the USDA and the Department of Health and Human Services in January 2005. These guidelines and much commentary are available from the Center for Nutrition Policy Promotion at <http://www.cnpp.usda.gov>. Among the many suggestions is the advice to “Keep total fat intake between 20 to 35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils”. This is great advice for Alaskans because we have fish and the fishing season is soon upon us. In this article we will review why it is that fish oils are a healthy component of the diet.

**What are essential fats?** Essential fats are substances that we require in the diet because the body does not synthesize them. Linoleic acid is the basis of the omega-6 family of essential fats, and alpha-linolenic acid is the basis of the omega-3 family of essential fats. The body cannot interconvert these fats. These dietary fats are the starting points for a variety of compounds the body uses in a variety of ways.

**The effects of essential fats.** Omega-6 and omega-3 fats have very different effects in the body and largely come from different dietary sources. Before the advent of the agriculturally based

vegetable oils, the human diet had about equal amounts of omega-6 and omega-3 fatty acids. The current typical American diet has about 30 times more omega-6 fatty acid than omega-3 with the result that we substantially under consume omega-3 fats (and often over consume omega-6 fats). It is not surprising that we consume quite a bit of omega-6 fats because they are the primary component of corn and sunflower oils, as well as many other vegetable oils. Some omega-6 fat in the diet is good because it lowers total cholesterol and LDL cholesterol (bad cholesterol) in the blood. However, very little is required to have this effect and additional omega-6 fat confers no additional blood cholesterol benefit. The primary dietary sources of omega-3 fats are canola oil, nut oils and fish oils. Particularly active forms of omega-3 fats are known (for short) as DHA and EPA. Whereas omega-6 fats are known for their ability to improve blood cholesterol levels, DHA and EPA work directly on the heart and blood by suppressing heart arrhythmias, moderating inflammation (which can lead to hardening of the arteries) and reducing thrombosis (blood clotting). Fish, including salmon, have high levels of DHA and EPA, and have very little omega-6 fats.

**How much fish should I eat?** For all dietary fats taken together the recommended intake falls within 20 – 35% of total calories, or about 60 grams (2 ounces) of fat. For linoleic acid, the suggested intake is about 17g per day (2 tablespoons equivalent of corn oil) to take advantage of its ability to reduce blood cholesterol levels. About three grams per day of omega-3 fats are recommended, which could be found in 3 ounces of red salmon which would more than meet the current recommendation for fish intake of at least two servings per week.

### **Sources**

Ensminger, A.H., M.E. Ensminger, J.E. Konlande and J.R.K. Robson. 1993. Food and Nutrition Encyclopedia, 2<sup>nd</sup> Ed. CRC Press, Boca Raton.

Hu, FB, L Bronner, WC Willett, MJ Stampfer, KM Rexrode, CM Albert, D Hunter, JE Manson. 2002. **Fish and Omega-3 Fatty Acid Intake and Risk of Coronary Heart Disease in Women.** *JAMA* 287:1815-1821.

Simopououlos, A.P. 1999. Essential fatty acids in health and chronic disease. *AJCN* 70:560S-569S.

Wijendran, V. and K.C. Hayes. 2004. Dietary n-6 and n-3 fatty acid balance and cardiovascular health. *Annu. Rev. Nutr.* 24:597-615.

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