Dates of Publication Surveys are conducted quarterly: March, June, September and December

# Cost of Food at Home for a Week in Alaska September 2001

# 25 Communities Surveyed

Up to three stores in each of 25 communities were surveyed during September of 2001 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 August 2001. 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.

### **Niacin**

Niacin was recognized as a substance in 1867 but its role as a vitamin was not recognized until 1937. Niacin was the central player in the controversial disease pellagra, first described in Spain and Italy in the 17th century, but which reached epidemic proportions in the United States in the early 1900's. Briefly, for those who largely ate corn or sorghum, which were the very poor of the South, a disease arose from the deficiency of niacin in connection with inadequate intake of the essential amino acid tryptophan, corn being very short in both niacin and tryptophan. Tryptophan can be converted internally to niacin with varying efficiency, a ratio of 60:1 on a weight basis being widely used but which improves greatly during pregnancy and which can be compromised with dietary deficiency of other B vitamins and iron. One could say that adequate intake of tryptophan spares the need for niacin.

Niacin is readily absorbed, undergoes modifications in the liver and is distributed throughout the body by the blood. Niacin functions in both catabolic (breakdown) and anabolic (synthetic) reactions of the body. For instance, the use of sugar for energy and the conversion of sugar to fat occur via systems dependent on niacin derivatives. Storage of niacin occurs in a small way, deficiency symptoms occur (symmetric pigmented rash on skin exposed to sunlight) in about 50 days if niacin is excluded from the diet.

Current research with niacin involves heart disease, diabetes and cancer. It has been found that large doses of the nicotinic acid form of the vitamin, besides causing a benign flush of prickly heat, lower total and LDL, and raise HDL serum cholesterol. There are serious side effects including possible liver damage. Niacin has been found to increase the sensitivity of tumors to radiation therapy and to reduce the carcinogenic effects of ultraviolet light.

Dietary niacin is readily available from baker's and brewer's yeast, lean meats, poultry, fish, nuts and fortified cereals. Both niacin and tryptophan are resistant to cooking. The daily requirement for men and women 19 years and older is 16 and 14 mg respectively, or the equivalent amount of tryptophan. The average American diet contains at least this much niacin.

#### Sources:

Am J. Clin. Nutr. 2000; 72:476-83

Nutr. Rev., 2000; 58:278-281

Gensler, H. L. Oral Niacin presents photocarcinogenesis and photoimmunosuppression in mice. Nutrition and cancer. 1999. v. 34 (1): 34-41 Selhub, J. and M.E. Swendseid. 1996. Vitamin E. *In Present Knowledge in Nutrition*, 2<sup>nd</sup> ed. ILSI Press, Washington, D.C.

Spallholz, J.E., L.M. Boylan and J.A. Driskell. 1999. *Nutrition: chemistry and biology*, 2<sup>nd</sup> ed. CRC Press, Boca Raton.

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