

## Cost of Food at Home for a Week in Alaska: December 2000

### 20 Communities Surveyed

Up to three stores in each of 20 communities were surveyed during March 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 March 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 18 through 22 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.

## **Thiamin**

The original naming of vitamins (A, B1, etc.) roughly follows their order of discovery although the list is discontinuous because many 'vitamins' were eventually dropped from the list that did not meet the definition. The use of vitamin letter names is slowly diminishing, for instance thiamin was first designated as B<sub>1</sub>, which was replaced by 'thiamine', the conjunction of terms referring to sulfur and nitrogen containing, and finally the 'e' was dropped (although FDA and many authors continue with the original spelling). Dropping the 'e' is consistent with the term 'vitamin', itself a conjunction of 'vital' and 'amine'.

Thiamin's most important role is in carbohydrate breakdown. Specifically, glucose is first split in half, then each part has a carbon dioxide removed. Removal of the carbon dioxide requires a thiamin dependent enzyme. A dietary shortage of thiamin results in symptoms related to disruption of glucose (carbohydrate) metabolism such as apathy and often includes weakness and pain

in the calf muscles. The chronic low intake of thiamin, as occurs from a diet high in polished, unfortified rice, results in the disease 'beriberi', which translates literally to 'I can't I can't', referring to muscle weakness. Progress of beriberi may lead to enlargement of the heart and edema, thus the term 'wet beriberi.' Alcohol intake results in destruction of thiamin, essentially all reports of thiamin deficiency in the U.S. are related to chronic alcohol intake. Symptoms of thiamin deficiency will appear in as little as ten days in a thiamin-free diet. There are no known effects of excess thiamin intake though excessive intake is not known to be safe.

Thiamin is very sensitive to food storage and cooking procedures, it is often used as a quality indicator. Cooking in alkaline conditions, for instance in the presence of sodium bicarbonate, is particularly damaging. Fortunately thiamin is widely available in foods, pork and pork products are a particularly good source. The largest source of thiamin in the U.S. food supply is fortified grain products such as breads and cereals. Alaskan foods with reasonable thiamin content (greater than 0.1 mg per 100 g) include black bear, caribou, deer and goose meats, beluga blubber, pilot bread and dried salmon.

Sources:

Nobmann, B. 1993. *Nutrient Value of Alaska Native Foods*. DHSS, Indian Health Service.

Wardlaw, G. M. and P. M. Insel. 1993. *Perspectives in Nutrition*, 2d ed. Mosby, St. Louis.

*Dietary Reference Intakes For Thiamin, Riboflavin, Niacin, Vitamin B<sub>6</sub>, Folate, Vitamin B<sub>12</sub>, Pantothenic Acid, Biotin, and Choline*. 1998. National Academy Press, Washington, D.C.

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