

Dates of Publication

Surveys are conducted quarterly:

March, June, September, December

Cost of Food at Home for a Week in Alaska

December 1999

21 Communities Surveyed

Up to three stores in each of 21 communities were surveyed during December of 1999 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. Since Wasilla and Palmer were combined in this census, their differing sales taxes were averaged when calculating food costs.

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 November, 1999. 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. Note that the dollar value of the U.S. Average is not included in this survey since the methodology is not equivalent.

Winter brings a shift in diet from fresh foods to stored foods, especially in rural areas with infrequent food deliveries. Fresh fruits and vegetables are one of the most common seasonal casualties, and if available, are often of indifferent quality. There are many dietary reasons to maintain a substantial intake of fruits and vegetables including intake of vitamins, minerals, antioxidants and dietary fiber. The following dialog will draw attention to vitamin C.

The Nobel Prize winning discovery of vitamin C (ascorbic acid or ascorbate) resulted from a search for the cause of scurvy, a connective tissue disorder. Essentially, the connective tissue protein collagen in part utilizes hydroxylated proline and lysine, which are enzymatically derived in the presence of ascorbate. As it happens, a daily dose of no more than 60 mg of vitamin C (the current RDA) will essentially prevent the occurrence of this disease. The efficacy of much higher doses of this vitamin has been argued for more than 50 years and is still the topic of considerable current research. Interestingly, few animals other than man and other primates lack the ability to form ascorbate endogenously from glucose (in other words, it is not a vitamin for most animals). In fact we still retain the gene but it contains too many mutations to function. It has been estimated that the paleolithic human diet may have provided ascorbate levels about six

fold higher than the current RDA.

What are some of the physiological roles of vitamin C beyond the formation of hydroxy proline? The physiological nature of ascorbate is reductive, which is to say it is an electron donor, or more simply and 'antioxidant' (loss of electrons is a form of oxidation). Not surprisingly ascorbate is involved in the body chemistry of metals such as copper and iron, two minerals that readily gain and lose electrons (the oxidation of iron is rusting, perhaps if we don't eat our fruits and vegetables we will get rusted out?). Vitamin C appears to be protective against cataracts, which is the oxidative damage of the lens of the eye. It is possible that vitamin C helps sustain elasticity in diseased arteries by way of promoting the release of the vessel dilating compound nitric oxide. Ascorbate is known to reduce circulating levels of stress hormones (corticosteroids) and promote immune function (IgG levels). On the other hand, cancer cells have the ability to hoard ascorbic acid which effectively protects them from oxidative chemotherapy treatments. In other words, high intake of vitamin C might be counterproductive in individuals undergoing chemotherapy.

Where does vitamin C occur in the Alaskan diet? Fruits, vegetables and meat are known sources of vitamin C. Surprisingly, highbush salmonberries are very low in vitamin C, but all other berries are quite high. Indeed, blueberries are an excellent source, it has been demonstrated that wild blueberries are higher in this nutrient than domestic strains and that naturally ripened berries have a higher content than berries picked prematurely for shipment. Animal models show that antioxidants in general and blueberries in particular are effective in reversing age related loss of memory and motor skills. The winter leaves of Alaskan willow species, moose liver, rose hips, fireweed and seaweed are known to have a considerable ascorbate content as well.

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