

# **Cooperative Extension Service University of Alaska Fairbanks**

## **Cost of Food at Home for a Week in Alaska December 2003**

Up to three stores in each of 19 communities were surveyed during December of 2003 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 2003. 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.

## **Food Prices of the Yukon Kuskokwim Delta**

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Alaska Natives (AN), including the Yup'ik Eskimos of the Yukon-Kuskokwim (YK) Delta, are currently undergoing a nutrition transition characterized by a shift from a traditional subsistence diet towards an increasingly Western one. Historically, the Yup'ik diet derived a large proportion of its calories from fat whereas a typical Western diet incorporates a large amount of carbohydrates. Previous work suggests that the typical diet in the YK region does not meet the USDA recommendations for fruit and vegetable consumption. Fruits and vegetables play a particularly important role in any diet because of epidemiological evidence suggesting an inverse association between fruit and vegetable consumption rates and certain chronic diseases. Dietary selections are driven by local dietary practices, nutrition knowledge, and economic considerations which, when combined, affect the prevalence of chronic diseases such as diabetes, heart disease and some forms of cancer. This report examines the perceived and actual cost of fruits and vegetables

in the YK.

Table 1 includes the past 6 years of average annual results from the quarterly Food Cost Survey and recent YK Village observations. Included in the table are the regional hubs of western Alaska (Bethel, Dillingham, Nome), Alaska's economic center (Anchorage) and Portland, OR, as a representative community of the lower 48 states. The historic values are included as a means of evaluating price stability in recent years. The averaged weekly cost of food for a family of four with school aged children in the YK villages was 305% higher than in Portland, Oregon and 250% higher than in Anchorage, Alaska. Over the past 5 years prices have been increasing more rapidly in the YK region than other regions; Bethel has increased at \$7.18 per year in comparison to Anchorage at \$1.11 per year. On average, 73% of the 104 survey items and 46% of the 12 fresh fruits and vegetables could be found in the village stores.

Surprisingly, in village stores the perishable and non-perishable items were priced at the same percentage increase over Anchorage with the probable explanation that shipping cost, which is largely via bypass mail to villages, is distributed equally over the food items with little regard for perishability. Since fruits and vegetables are not readily available in some areas of the YK and therefore likely comprise only a small proportion of the diet, their percentage of total food cost is a more important factor in consumer perceptions than absolute price. However, if these foods were consumed at rates suggested by USDA the absolute price may become a critical issue in food selection.

The promotion of the traditional diet is desirable to maintain both the integrity of the Yup'ik culture and self sustainability, yet it is important to recognize the pressures to Westernize and the consequent need to encourage healthful selection of store bought foods. Food costs may appear to be extraordinarily high

in the YK Delta of Alaska, however, several factors are at work which ameliorate these costs, including subsidies and subsistence lifestyle. Nonetheless, food costs remain an issue for the large majority of the survey population. It will be important to evaluate the actual food selections made in this population, and, if found wanting in nutrient composition, careful consideration must be given to dietary advice such that suggested food substitutions are economically realistic.

**Table 1. The annual averaged cost of food in dollars for a family of four with school age children aged 6-11 years for a week in Alaskan communities.**

Item	Anchorage <sup>1</sup>	Bethel	Dillingham	Nome	YK Villages	Portland, OR
1998	98.28	154.54	168.76	165.11	-	75.97
1999	100.48	162.29	172.61	160.45	-	78.55
2000	100.7	163.36	179.98	157.66	-	80.68
2001	104.01	179.4	186.29	173.31	-	88.03
2002	101.65	189.43	194.54	176.99	-	87.92
2003	104.66	185.31	191.62	175.69	254.23	89.31
Av.	101.63	172.	182.3	168.	254.23	83.41

		39		2		
%	100	170	179	166	239	82
Slop						
e <sup>2</sup>	1.11	7.18	5.33	3.38	-	2.92
Fit <sup>3</sup>	0.76	0.87	0.93	0.59	-	0.92

1. Anchorage used as the reference community for calculating missing values. 2. Regression slope of Cost on Date (\$/y).3. Fit = R<sup>2</sup>.

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