

## **Cost of Food at Home for a Week in Alaska Quarter 1: March 2004**

Up to three stores in each of 19 communities were surveyed during March 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 March 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:** The Price of Dietary Advice: Fruits & Vegetables in Alaska

**Authors:** Bret Luick<sup>1</sup> & Andrea Bersamin<sup>1,2</sup>

**Background:** The cost implications of dietary advice to eat several servings of fruits and vegetables has not been evaluated for purchases in Alaska. Fresh fruits and vegetables are often less available than canned goods in many areas.

**Objective:** We calculated the average cost per serving of both fresh and canned fruits and vegetables included in the Alaska Food Cost Survey to estimate the added cost of consuming the recommended 5 A Day from fresh vs canned vegetables.

**Design:** Fruits and vegetables were categorized as fresh or canned. The serving size in grams for the fruits and vegetables included in the Alaska Food Cost Survey were taken from the can label for canned goods or from the Centers for Disease Control website for fresh goods. The cost of each food from the current survey, uncorrected for fluid content for canned goods, or for trim loss for fresh goods, was multiplied by the serving weight. The resulting prices were averaged for each category for both fruits and vegetables.

**Results:** The survey had eight fresh (potatoes, cabbage, carrots, celery, cucumbers, lettuce, onions and tomatoes) and five canned (corn, green beans, dark green leafy vegetable taken as spinach, peas and tomatoes) vegetables, and four each of fresh (apples, bananas, grapefruit, oranges) and canned (applesauce, fruit cocktail, peaches and pears) fruits. The relative price of each of these categories between communities is reflected in the general results of the current survey. Figures 1 (vegetables) and 2 (fruit) display the relative cost of a serving of each category, by location. The upper segment of each bar shows the relative cost of the canned product whereas the lower segment shows fresh.

If the bars were to meet at the 50% mark, the cost of a serving of the canned good would equal the cost of the fresh. A longer segment within a bar indicates a greater relative cost per serving.

**Conclusions:** A common perception exists that fresh fruits and vegetables are relatively more costly when compared to canned goods. The evidence presented in figures 1 and 2 disputes the idea that fresh produce is unduly expensive. In fact, the relative cost of a serving of canned vegetables exceeded the cost of fresh vegetables in almost every community. The relative cost of servings of canned and fresh fruits were about equal across communities. It is possible that the results were an artifact of the fruits and vegetables chosen since it was not the same set of foods being compared on the fresh and canned basis. To an extent that criticism seems insurmountable because not all foods are amenable to the same preservation methods (canned bananas anyone?). Additionally, dietary advice recommends consuming a variety of fruits and vegetables and that variety must come from the selection on hand in each community. That canned vegetables are consistently more expensive per serving than fresh cannot be explained by the cost of the can alone since the same argument does not hold for fruit. In general, Alaskan consumers should exploit the similarity in cost between fresh and canned goods by purchasing fresh goods when available at reasonable cost and when shelf life is not an issue, while considering nutrient content. The benefit of consuming a combination of fresh and canned produce may be felt both in the pocketbook and family health.

Submitted by:

Bret R. Luick

Foods & Nutrition Specialist

<sup>1</sup>University of Alaska Fairbanks, <sup>2</sup>University of California, Davis