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Surveys are conducted quarterly:  
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## **Cost of Food at Home for a Week in Alaska June 2003**

Up to three stores in each of 21 communities were surveyed during June 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 June 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.

## **Chromium**

For more than 40 years nutritionists have been aware of a chromium containing substance important in blood sugar metabolism. Chromium in the human body is not in the shiny metallic form used in industry but instead is an ion of low toxicity. The form of chromium notorious as a soil contaminant is yet another ionic form used as an industrial chemical, a form not used as a dietary supplement. A common component of dietary supplements is chromium chloride, but a popularized and somewhat more potent form is chromium picolinate. Chromium chloride has been used in human studies lasting months with no apparent ill effects when taken at 200 micrograms daily. This form of chromium is poorly absorbed however. Previous assessment of chromium requirements were based on misleading analytical values. With improvement in detection techniques it now appears that chromium intake should be reduced 5 fold from previous recommendations, a point often not mentioned by promoters of chromium supplements. For women and men 25-35 micrograms per day is now considered an adequate intake, respectively. Since chromium loss increases during pregnancy, heavy physical exercise and stress, including disease, it has been proposed that compensatory chromium

intake should be considered. Chromium deficiency, which occurs rarely, results in diabetes-like symptoms, as explained below.

The basis for sensationalizing chromium is that glucose (blood sugar) is not utilized well in the absence of chromium. Chromium appears to act in the signaling pathway of insulin, hence adequate chromium is necessary for optimal insulin sensitivity. Because insulin levels are affected by chromium intake (insulin level drops), blood lipids (cholesterol, triglycerides, HDL, LDL, VLDL) are also influenced by chromium intake (they improve). For individuals low in chromium and also exhibiting dyslipidemia (imbalance of blood lipids such as occurs in type II diabetes), supplemental chromium could be useful. The paradoxical decrease in body fat and increase in lean tissue in the presence of adequate chromium intake (insulin itself would be expected to increase body fat) is possibly explained by the compensating decrease in circulating insulin in the presence of chromium and by chromium's inhibition of fat synthesis. Taken together it would appear chromium should be high on anyone's list of food supplements. However, these responses to chromium supplementation only occur in face of a deficiency. The recommended levels of chromium intake should be adequate for normal physiological function so supplemental chromium intake would provide little or no additional benefit. Additionally, the popular (\$125 million annual industry) chromium picolinate is now recognized as a possible carcinogen in the United Kingdom ,where a ban on its use in food supplements is being considered.

Table 1 shows some good dietary sources of chromium given in micrograms per typical serving. One serving of each would total little more than what would be considered an adequate intake. Interestingly, some spices are quite high in chromium, although most foods are not. Brewer's yeast was the original food used to cure dietary chromium deficiency, and some forms of beer are still a good source of this nutrient. However, there really is no single food category that provides our dietary chromium.

Consequently a balanced and varied diet is the best means of ensuring an adequate intake of this essential nutrient.

Table 1. Dietary Sources of Chromium

<u>Source</u>	<u>Micrograms per Serving</u>
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General Mills Total	15.4
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Broccoli	11.0
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Grape Juice	3.8
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Turkey Ham	10.4
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American Cheese	0.6
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Brewer's Yeast	3.3
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Basil Leaves	1818
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#### **Sources**

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