

Dietary Benefits and Risks in Alaskan Villages

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The project, “Dietary Benefits and Risks in Alaskan Villages”, addresses dietary questions raised by native people living in villages throughout Alaska. *What are the risks associated with environmental contaminants bio-accumulating in traditional foods, and how do they compare with the health, social, economic and cultural consequences which could result from a shift to alternative, market-based diets?* This project establishes a model for addressing traditional food concerns and demonstrates methods for increasing village-based leadership and cooperation between communities, researchers, and government agencies.

The intent of this research is to combine data on dietary risks and benefits, contaminants, and documented, village-specific health conditions. The study design will also provide a model for data evaluation and the development of practical community-based health recommendations. The Aleut community is starting at the grassroots level. They want their communities to have the opportunity to share in the process of making dietary decisions. They anticipate being able to engage in the process of interpreting the research findings and make their own decisions about the foods that they will feed to their families.

There are five specific aims to be accomplished over a four-year research period. Each phase will be coordinated by the Aleutian/Pribilof Islands Association, Inc.(A/PIA), a regional health consortium, and supplemented by the support and assistance of local village coordinators, village advisory groups and a technical team of experts. The project will result in new data which will be compared with existing village-specific data to better understand and communicate the benefits and risks associated with traditional and store-bought. A summary of the five aims is as follows:

- To develop, utilize, and evaluate a model for combining a variety of village specific data streams including diet, epidemiological effects and contaminant levels in animal tissue, human blood, traditional foods, and store-bought foods for the purpose of providing a risk/benefit analysis.
- To document the diets of two Alaskan villages including types, quantities and methods of preparation, for the purpose of guiding contaminant research and providing a model for long-term tracking of traditional and store-bought food consumption trends.
- To collect preliminary data on nutritional value, as well as levels of persistent organics, radionucleides, and heavy metals in traditional foods for tracking of contaminant trends.
- To provide a balanced assessment of both the risks associated with environmental contaminants and the nutritional, cultural, and physical benefits of a traditional and store-bought diet.
- To develop, utilize and evaluate a model which requires greater community responsibility, involvement, guidance and participation with researchers and government agencies, and increase community awareness by providing culturally appropriate information and training.

Through this project, a cooperative, community driven model for understanding the risks and benefits of a rural diet is demonstrated. At the local level, the project seeks to empower Alaska Natives to actively participate in the evaluation of their diet and the protection of health, community and culture. At the regional level it provides a model for development of a process for increasing cooperation between state, federal and tribal governments. Internationally, it encourages environmental health data which can be compared with native diets in other Arctic countries. This supports U.S. commitments under the Arctic Monitoring and Assessment Program (AMAP), of the Arctic Council.