



DOCUMENTING TRADITIONAL FOOD SYSTEMS OF INDIGENOUS PEOPLES: INTERNATIONAL CASE STUDIES

GUIDELINES FOR PROCEDURES

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The authors alone are responsible for the views expressed in this document.

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Cover photos - Top left to right: Dalit millet, Dalit pulses, Bhil meal, Bangladesh laboratory, Karen pile sort
Bottom, left to right: Nuxalk salmon, Arctic char, Miao green
All photos in manual: © Peter and Lisa Kuhnlein (KP Studios) or Harriet V. Kuhnlein
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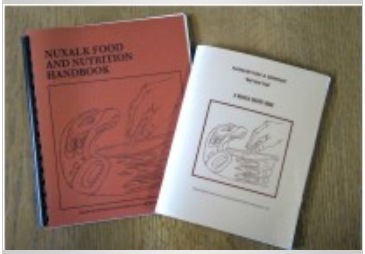
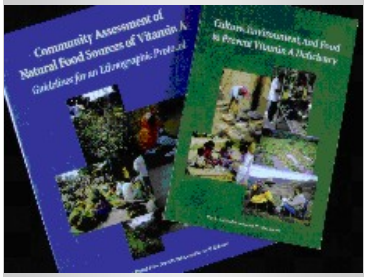
BACKGROUND AND CREDITS

This draft procedure manual was developed with contributions of many people. The initial idea for the need for such a document came from the work of the Center for Indigenous Peoples' Nutrition and Environment (CINE) at McGill University, Montreal, where several years of work have documented traditional food systems of Indigenous Peoples in Canada. CINE's methods had foundation in community nutrition studies in Western Canada, particularly with the Nuxalk Nation in Bella Coola, British Columbia, conducted in the 1980's. From 1993-2001 CINE professors and staff developed traditional food system assessment methods by working with 46 communities of Dene/Metis, Yukon First Nations, and Inuit communities in Arctic Canada, which had a foundation in the Nuxalk work. Several of the procedures included here are modifications of CINE methods, and some techniques are described from the CINE experience, particularly with regard to participatory research and research agreements. The need to expand CINE's work into the international arena of Indigenous Peoples was a priority for the CINE Executive and the Governing Board, and noted in the CINE Strategic Plan of 1999. The CINE Governing Board is comprised of 7 Aboriginal leadership organizations in Canada: the Assembly of First Nations, the Council of Yukon First Nations, the Dene Nation, the Inuit Circumpolar Conference, the Inuit Tapiriit of Canada, the Metis Nation of the Northwest Territories, and the Mohawk Council of Kahnawake. The current chair of the CINE Board is Chief Bill Erasmus of the Assembly of First Nations.

This document is a result of a project with 5 communities of Indigenous Peoples in Asia. The project was conducted from 2001-2003, and sponsored by the Food and Agriculture Organization of the United Nations, Rome, and the International Development Research Centre of Canada (IDRC). The project is part of the mandate of the current Task Force of Indigenous Peoples Food and Health of the International Union of Nutritional Sciences (IUNS), of which Harriet Kuhnlein is the chair.

A significant predecessor of this manual is a project conducted under the auspices of the IUNS Committee II-6 from 1992-1994, and published in 1997 by the International Nutrition Foundation for Developing Countries (INFDC) and the IDRC. The IUNS project was field tested in communities in China, India, Peru, Philippines and Niger, and addressed culture, environment and food to prevent vitamin A deficiency. It contained guidelines for an ethnographic protocol for the community assessment of natural food sources of vitamin A. Special acknowledgement to the collaborators in this project is given to Dr. Gretel Pelto, Dr. Bert Pelto, and Dr. Lauren Blum. In fact, the manual presented here is an adaptation of "the vitamin A procedure" to specifically address traditional food systems of Indigenous People, with a focus on nutrient composition of traditional food, and the unique environmental and cultural constraints and benefits of traditional food to address adequate nutrition of several micronutrients in communities. Several of the exercises and descriptions of methods from the earlier works (Blum et al, 1997; Kuhnlein and Pelto, 1997) are adapted for use here. Of special note are the qualitative methods for cultural definitions of food use including key-informant interviews, how to develop





CINE Building; Nuxalk Nation in British Columbia; Nuxalk books; Vitamin A books; Chief Bill at workshop; Arctic workshop.

good communications with communities, and keeping good field notes, all described in the tradition of RAP (rapid assessment procedures). The current document has expanded sections related to participatory research with Indigenous Peoples, field sampling of food for analysis, laboratory methods, dietary analysis, assessment of environmental constraints and advantages for Indigenous Peoples, and planning food-based interventions.

Within the United Nations agencies, the Food and Agriculture Organization documented the need for development of this procedure and its application to Indigenous Peoples at the Workshop on Food Insecurity and Vulnerability Information Mapping Systems (FIVIMS) held in Bangkok in November, 2000. As well, the World Health Organization expressed interest through its Health of Indigenous Peoples section, as part of activities during the Decade for Indigenous Peoples. Interest was also expressed from United Nations conventions on Human Rights and Biological Diversity.

The need for case studies to apply the procedure was obvious. Therefore, case study teams were developed for representative Indigenous People in one regional area, Asia, where there are many indigenous cultural groups in diverse environmental settings. Case study teams met in a workshop to discuss methods in Salaya, Thailand, March 12-16, 2001, which resulted in this draft.

Case studies which developed were:

1. the Karen of Thailand, with team members lead by Dr. Suttilak Smitasiri, Dr. Prapasri Puwastein, Mr. Solot Sirisai, and Dr. Lakana Daoratanahong;
2. the Miao of Sichuan, China, with team members led by Dr. Li Dan and Dr. Fengying Zhai;
3. the Bhils of Gujarat, India, with team members led by Dr. Gopa Kothari and Dr. Lalita Bhattacharjee
4. Nayakrishi farmers, including the Mogh of Makeshkhali Island, Bangladesh, with team members led by Ms. Farida Akhter and Dr. Salek Ahmed; and
5. Dalit farmers of Zaheerabad area, Medak district of Andhra Pradesh, South India, with team members led by P.V. Satheesh and Ms. Salome Yesudas.

The Salaya workshop was directed by Dr. Harriet Kuhnlein, with logistical support from Dr. Suttilak Smitasiri and the Institute of Language and Culture for Rural Development, and the Institute of Nutrition at Mahidol University. Funding was provided by the Food and Agriculture Organization of the United Nations (Regional Area of Asia and the Pacific), the International Development Research Centre (Canada), and CINE. Two visits to the Karen area were made in conjunction with the workshop: one to witness a special ceremony to celebrate the forest in which the Karen of Sanepong and other communities live; and a second to introduce Chief Bill Erasmus (National Chief of the Dene Nation at that time and Chair of the CINE Governing Board) to Karen leaders in Sanepong and Kanchanaburi, Thailand.

Salaya workshop participants; Salaya workshop; Bhil community; Mogh community; Miao participants.

In addition to those noted above, special thanks are given to the following major contributors who developed the plan and the procedures during the Salaya workshop: Dr. Biplab Nandi (FAO Regional Office for Asia and the Pacific in Bangkok), Dr. Lakana Daoratanahong (Institute of Language and Culture for Rural Development, Mahidol University), Dr. Pongtorn Sungpuag (Institute of Nutrition, Mahidol University (INMU)), Mrs. Orapin Bangong (INMU), Ms. Sopa Tamaehotipang (INMU), Mr. Jaray Sadakorn (Bangkok Herbarium), Dr. Opart Panya (Faculty of Environment, Mahidol University), Mr. Alongkot Chukaew (Wildlife conservation specialist), Ms. Siri Damman (International Program for the Right to Food in Development, University of Oslo), Ms. Benjamas Chumvorratayee (Sanepong Village), Mr. Sompop Sungklachalatarn (Karen leader, Sanepong Village), Mr. Bundid Grivijitr (Education specialist, Sanepong Village), (Ms. Sinee Chotiboriboon (INMU) and Ms. Prapa Kongpunya (INMU), Dr. Emorn Wasantwisut (INMU), Dr. Sakorn Dhanamitta (INMU) and staff of the Division of Communication and Behavioral Sciences at INMU.

We also thank those contributing to final preparation of this document. In particular, Kristin Rindress and Helen Rimmer of McGill University are thanked for work on the final draft. We also acknowledge those contributing revisions at the workshop held in Rome, 2002.

The procedures are suitable for application to other case studies in the global environment, including North America, Africa, South America, Australia, and other Asian areas. It is anticipated that further refinements will be developed to improve this version.

INTRODUCTION

Intended readers

This procedure is intended for all who have particular interest in the food, nutrition and health of Indigenous Peoples. The text and various elements of the procedure appropriate for study of traditional food systems of all Indigenous Peoples, with special relevance to Indigenous Peoples in the Americas and Asia, from where contributing experts have been drawn.

The intended users of the procedure are expected to be experienced health professionals, with interests and experience in food-based strategies for nutrition promotion programs.

The assessment described here has the purpose to provide essential information for developing better micronutrient nutrition in communities of Indigenous Peoples, and to lead to appropriate food-based interventions where they may be needed. The case study areas were selected with recognition that the natural environment, if still basically intact, is capable of contributing a complete diet within the traditions of the people living in it. Knowledge derived from these assessments can therefore be applied to other communities of Indigenous People within the same culture and environment context of those described here. The procedures can be broadly applied.

This assessment is not intended to generate information for industrial exploitation of natural environments within which Indigenous Peoples live. Rather, it is a procedure blending traditional knowledge and laboratory science information which can most appropriately be applied by Indigenous Peoples themselves to their own circumstances to improve community nutrition and health using traditional food resources.

Who are Indigenous Peoples?

A succinct working definition of Indigenous Peoples for the purposes of this project is: 'Indigenous people' refers to a cultural group in a particular ecological area that developed a successful subsistance base from the natural resources available. The plural form, ' Indigenous Peoples', refers to more than one cultural group. Under International Law, and by United Nations bodies, Indigenous Peoples are distinguished by

- residence within or attachment to geographically distinct traditional habitats, ancestral territories, and natural resources in these habitats and territories;
- maintenance of cultural and social identities, and social, economic, cultural and political institutions separate from mainstream or dominant societies and cultures;
- descent from population groups present in a given area, most frequently before modern states or territories were created and current borders defined;
- self-identification as being part of a distinct indigenous cultural group, and the display of desire to preserve that cultural identity.

Bhil women; Bhil samples collected; Miao participants; Nayakrishi home, Bangladesh; Nuxalk salmon barbeque.

Self-identification as indigenous or tribal is usually regarded as a fundamental criterion for determining indigenous or tribal groups, sometimes in combination with other variables such as language spoken and geographic location or concentration. (UNDP, 2000)

Why have a procedure targeted to Indigenous Peoples?

Universally, within communities of Indigenous Peoples, there is the knowledge of the natural resources that make up the food environment. Capacity-building to use this knowledge for contemporary nutrition and health promotion of these people is well-received. At the same time, Indigenous Peoples face potential loss of this knowledge due to lack of use by younger members of the society and to gradual loss of elder members who know the most about the resources. Thus, it is important to implement use of this knowledge soon. Additionally, Indigenous Peoples are often the most disenfranchised and poorest members of the larger society or nation, and they are targeted by most governments for health improvement and development. However, it has been shown that development often leads to trends in dietary change that lead to increasing risk of chronic disease such as obesity and diabetes. This unfortunate consequence of development can be moderated with increased attention to the principles of diet and health already contained within the culture, and with recognition of the nutrient properties of traditional food resources, these local foods can be used to their best advantage for health promotion.

Concerns with environmental protection of food biodiversity also lead to understanding the need for close work with Indigenous Peoples. Many species of both plants and animals are threatened with extinction due to environmental deterioration of their habitats in forests and other fragile ecosystems. Indigenous cultures around the world are being disrupted and destroyed for the same reasons, especially since economic agricultural and health/nutritional conditions of these people depend on their local food resources. In fact, native peoples have been the stewards of 99% of the world's genetic resources, and the inextricable link between cultural and biological diversity which cannot be ignored can lead to protection of these food resources for all humankind.

What is unique about community nutrition work with Indigenous Peoples?

Community nutritionists who work with Indigenous People, and who are not part of the local indigenous culture, always face the requirement to work cross-culturally. Not only are the targeted people usually from another culture, but they face issues of assimilation by a larger culture. Understanding and sensitivity to these issues and maintaining knowledge and respect for local traditions and lifestyles is paramount to success in health promotion efforts with Indigenous Peoples. Issues in environmental protection, and availability of land for food purposes are often politically sensitive areas of which health professionals must be appraised, and which affect knowledge areas key to the procedure, but which are better addressed through different channels. Finally, there are important and fascinating lessons to be learned about unique food species and their place

in a traditional food system.

Procedures to compensate Indigenous Peoples for the utilization of their knowledge of their biological food resources are expected to be unique. Often, the most salient compensation is development of education and action programs for the youth of these communities so they may have future access to these resources. In addition, most Indigenous Peoples welcome the opportunity to alert the global community to the value of indigenous knowledge. Local knowledge regarding conservation, management and sustainable utilization of food resources should be recorded and duly recognized.

Short term targets, medium term objectives, and long term goals

The **short term** target addressed in this book is development of a useable procedure for understanding and documenting the traditional food system of Indigenous People, and publishing this under the auspices of the FAO and IDRC. Cases studies in the Asian region were selected to build a model, understanding parameters of the food diversity within a broad geographical region, and also so that the case studies could assist each other and make use of existing nutrient data in neighboring areas. The most significant **medium term** objectives for which this procedure is specifically intended is to derive from the knowledge gained a successful food-based intervention that improves health of Indigenous People within the same culture and environmental setting. **Long term** goals are to expand this procedure and health promotion efforts using traditional food to many communities of Indigenous Peoples worldwide.

How to use this procedure

The steps in this manual lead to achieving interrelated milestones toward the short term and medium term targets and objectives; that is, to build the knowledge of food as consumed in communities of Indigenous People that will lead to a successful food-based health promotion strategy. The five component parts are:

1. Prepare the interdisciplinary research team, gather background data and develop good participatory technique with communities of Indigenous Peoples.
2. Gather food list data, including seasonality, preparations, suitability for children, etc.
3. Gather the scientific parameters of traditional food, including taxonomic identifications, laboratory evaluation and compilation of nutrient composition.
4. Understand dietary food use and nutrient intake patterns and cultural context in the community of Indigenous People, particularly for infants, children, mothers and elders.

5. Plan for food-based intervention to improve community micronutrient status within the environmental and cultural context of the community, and document success.

This manual assists with identification of the research questions, and how to collect the data to address them. Please see the Table of Contents to find specific procedures for each component step. Descriptions of data gathering tools and examples of data presentation are given at the end of the document.

QUESTIONS ADDRESSED WITH THIS PROCEDURE

Main questions: Can the traditional food system be used to improve micronutrient status of the community? Can the negative effects of the nutrition transition (obesity, poor quality diet) be prevented or reversed?

1. What foods are contained in the complete traditional food list of the cultural group under study? How are these identified by local names and scientific nomenclature, including listing of varieties of food frequently used.
2. What is the seasonality and frequency of use of each food? How are the most often used foods ranked for year round quantity of consumption by the community as a whole?
3. What are the 25-30 key foods that are likely to provide micronutrients? What are the best foods in the community that prevent protein-energy malnutrition?
4. What are the cultural attributes and environmental constraints to using these foods? What adjustments can be made to improve micronutrient nutrition of the community?
5. How and in what forms are these foods harvested, stored and prepared for consumption by children and mothers?
6. What new data are needed for nutrient contents of the important foods used by children and mothers?
7. What are the new laboratory data derived?
8. What are the current dietary and nutrient intake patterns of infants, children, mothers, and elders? What traditional foods are regularly incorporated? What is the need, and the potential, for incorporating other micronutrient-rich food items?
9. What food-based strategies are planned, conducted and documented to successfully improve micronutrient status of children and mothers using items contained in the traditional food system?
10. What strategies can prevent or reverse the nutrition transition to nutrient poor foods and increasing obesity?

OVERVIEW OF TIMELINE AND REPORTING

Data-gathering in the community and food sampling can be conducted within a full time period of 8 weeks with a research manager and 2 field assistants, however seasonality of the food items to be sampled may stretch this out over the seasonal year. The time required by the nutrient composition laboratory is variable, depending on other responsibilities in the organization; however, approximately 60 days are expected to meet time needs for the suite of nutrients under consideration in this report for approximately 30 unique foods. Time for planning and implementation of food-based strategies to improve micronutrient nutrition are quite variable, and depend on the specific local situation.

PROTOCOL TIMETABLE

This timeframe is a guideline. A second season identified for interviewing and food sampling would have a similar framework.

	Week							
	1	2	3	4	5	6	7	8
Set-up and Background Data	■	■						
Community Food System Data Tables	■	■	■	■	■	■	■	■
Key-informant Interviews/Focus Groups	■	■		■	■		■	■
Community Traditional Food List	■	■						
Market Survey			■	■				
Food Sampling and Laboratory Analysis			■	■	■	■	■	■
Community Discussions	■							■
Interpretation and Report							■	■
Planning to Conduct Intervention								■