

DOCUMENTING TRADITIONAL FOOD SYSTEMS OF INDIGENOUS PEOPLES: INTERNATIONAL CASE STUDIES GUIDELINES FOR PROCEDURES

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APPENDIX 1: EXAMPLE OF A CINE RESEARCH AGREEMENT

(CONCLUDED BETWEEN CINE AND AN INDIGENOUS COMMUNITY IN CANADA)

(Names and places have been omitted.)

RESEARCH AGREEMENT

"VARIANCE IN FOOD USE IN COMMUNITIES"

The researchers, as named, and the community agree to conduct the above-named research project with the following understanding:

- 1. The purpose of this research project, as discussed with and understood by in the community, is:
 - to improve the understanding of how food practices convey different benefits or risks from a nutrients/contaminants point of view and also culturally and economically; and
 - to establish a baseline dietary intake against which future dietary studies could be compared to assess changes in food intake; and
 - to identify food/nutrition related concerns and potential food/nutritional problems in the community.

2. The scope of this research project (that is, what issues, events, or activities are to be involved, and the degree of participation by community residents), as discussed with and understood by in this community, is:

The issues in this project are nutritional and will be addressed through organizational meetings with community members and dietary interviews of a sample of adult men and women which will be conducted in Fall 1994 and possibly in Spring 1994 as well.

The communities participating in Spring 1994 are a subset of all communities which participate in the Fall 1994. The community can elect to participate in both series of interviews or in the Fall 1994 only.

To participate in Spring 1994, the community must select one member who will be employed as interviewer by the project and will participate in a training workshop to be held in in February 1994 (exact date to be announced).

Community members who will participate as respondents will volunteer approximately one hour to participate in the interview.

3. Methods to be used, as agreed by the researchers and the community, are:

A member of the community will be employed by the project to conduct dietary interviews of one adult man and one adult woman from each randomly selected participating household during at least one

season (Fall 1994) and possibly two seasons if the community decides to participate also in Spring 1994.

The dietary interview takes approximately one hour to administer, is confidential and voluntary. Questions are asked about the frequency of traditional food consumption, the dietary intake in the day preceding the interview, and a series of questions on the family and cultural attributes of traditional foods.

4. Community training and participation, as agreed, is to include:

One community member will attend the training workshop in February, 1994, a 2-day training session in dietary interview methodology.

The interviewer will learn techniques common to any survey methodology as well as techniques specific to this particular project.

It is also within the goals of this project to develop community capabilities to conduct and analyze their own data. Software to aid in this process will be made available to community members. Additional training on the use of this software (EpiInfo) will be offered.

The development of this project is based on sincere communication between community members and researchers. All efforts will be made to incorporate and address local concerns and recommendations at each step of the project.

At the end of the project, the researchers will participate in community meetings to discuss the results of the analysis with community members.

5. Information collected is to be shared, distributed, and stored in these agreed ways:

The data collected are confidential and no name is attached to a record. Copies will be kept at CINE where the data will be converted to an electronic form. The data will be kept on diskettes at the band office and at CINE. The researchers and CINE will be available to answer questions and assist community members should community members decide to use these data for different purposes, beyond the objectives of this particular project.

A final report will be distributed after approval from the community members.

6. Informed consent of individual participants is to be obtained in these agreed ways.

The consent form (copy attached) will be read by the interviewer to the respondent. A copy of the consent form will be left with the respondent so that the addresses of each researcher can be used at any time, should the respondent wish to contact the researchers for additional information.

7. The names of participants and the community are to be protected in these agreed ways:

As mentioned on the consent form, the interviews are confidential. In no instance will the name of a respondent be attached to a record. Since this project is being conducted in multiple communities in, and since one of the objectives is to study the variation in traditional food intake between communities, the communities will be identified by name unless decided otherwise by community members. For example, number codes might be considered.

Before distribution of the final report, each community will be consulted once again as to whether the community will be identified with its name, or whether a coding system should be used.

8. Project progress will be communicated to the community in these agreed ways:

In Summer 1994, the results of the project conducted during the preceding Spring will be presented to participating communities. The researchers will travel to the communities and hold public community meetings to this effect. Similarly, public community meetings will be held in the Summer 1995, in all participating communities, to report on the overall project results.

Each researcher will also be available during the course of the project to address particular questions that may arise.

9. Communication with the media and other parties, (including funding agencies) outside the named researchers and the community, will be handled in these agreed ways:

The funding agency organizes two meetings a year during which the project progress is summarized. In these meetings, as well as during any public communication on project progress and findings, the researchers will be aware of their responsibilities and commitments to the welfare of the communities involved.

Funding, benefits, and commitments

Funding

The main researchers have acquired funding and other forms of support for this research project from:

(*name of donor*) Contact: (*name and address*)

The funding agency has imposed the following criteria, disclosures, limitations, and reporting responsibilities on the main researchers.

No limitations have been imposed on this project. The researchers must report the project progress to the funding agency twice a year.

Benefits

The main researchers wish to use this research project for benefit in these ways (for instance, by publishing the report and articles about it):

The researchers will publish a final report to the funding agency in 1995. Scientific presentations in peer-reviewed conferences and publications will be made. The final report will be reviewed by community members prior to publication. Scientific presentations and articles engage only the responsibility of the researchers.

Benefits likely to be gained by the community through this research project are:

Educational

The community researcher, who will work as interviewer, will be trained in conducting surveys. The community researcher, as well as other community members, will also be trained in the use of a specialized software which can be used to collect and analyze dietary information as well as information from other fields, as needed, within and for the community.

Informational

The community at large, by focusing on its dietary practices, will learn about the health and cultural attributes of food practices. The information generated by this project will assist individuals in making informed decisions as to their diets and food practices. The data generated by this project will be kept in the community, and may be used in the future to address new questions or compare changes in dietary practices.

Financial

The community member(s) employed as interviewer(s) will be compensated at the rate of per completed interview.

Commitments

The community's commitment to the researchers is to:

- recommend capable and reliable community members to collaborate/be employed in this project; and
- keep informed on the project progress, and help in leading the project toward meaningful results.

The researchers' main commitment to the community is to:

- inform the community on project progress in a clear, specific, and timely manner; and
- act as a resource to the community for nutrition-related questions.

The researchers agree to stop the research project under the following conditions:

- if community leaders, for example the Chief and Council, decide to withdraw participation; or
- if the researchers believe that the project will no longer benefit the community.

Date:	Date:
(Signature(s) of main researcher(s))	(Signature(s) of community contact person(s))
(Signatures of witnesses)	(Signatures of witnesses)

APPENDIX 2: EXAMPLE OF COLLECTIVE CONSENT OBTAINED FROM AN INDIGENOUS ORGANIZATION

(Names and places omitted.)

Name of IP

TERRITORIAL BOARD MEETING

Date

MOTION

WHEREAS of the rely on traditional country food in the way of caribou, moose and fish to supplement their diets and to remain in touch with the land;

AND WHEREAS recent studies, such as the *name of study* funded by, and other research, have indicated that industrial contaminants such as cadmium, mercury, organochlorines (DDT and toxaphene), and other man-made chemicals are present in virtually all parts of the food chain;

AND WHEREAS the missing gap to date in relating the scientific studies to the human health issue is the lack of dietary or consumption data for the various communities in the In other words, how much contaminated country food is being consumed;

AND WHEREAS one of the objectives of the Program is to protect the health of Canada's northern people and northern ecosystem, as related to food chain contamination by taking action to implement a focused research program which includes a commitment to responsible northern research to quantify the effects of contaminants to the arctic ecosystems and the relative risks and benefits to humans from the consumption of harvested animals which may contain contaminants in order to develop human health and environmental protection measures;

AND WHEREAS another objective of the Program is to provide timely advice to northern native people regarding benefits and potential risks of consumption of country foods in order to support their preferred way of life;

AND WHEREAS the Centre for Indigenous Peoples' Nutrition and the Environment (CINE) at McGill University is an independent research and training centre established with funding from ... to conduct community-based research and provide training on the diets, nutrition and environmental health of native people, with special emphasis on the Arctic;

AND WHEREAS the Nation is in an excellent position to propose a specific project relating to a dietary survey in the *place*;

AND THEREFORE BE IT RESOLVED that the ... Nation work with the Centre for Indigenous Peoples' Nutrition and the Environment (CINE) at McGill University to develop a research project to define the levels of consumption of fish and other traditional foods in ... and ... communities to therefore understand the extent of traditional food use in order to define contaminant and nutrient intake, so that timely advice regarding benefits and risks of food consumption can be made.

AND BE IT FURTHER RESOLVED that application for funding of the research be made to *dono*r no later than January 29, 19....

APPENDIX 3: EXAMPLE OF A FORM FOR OBTAINING INDIVIDUAL INFORMED CONSENT

(Names and places omitted).

Variance in Food Use in ... Communities

INDIVIDUAL CONSENT FORM

The purpose of our work is to find out the kinds and the amounts of food eaten by the people in communities, and in particular the use by adults and especially those who make maximum use of traditional food. This work will help to define the benefits (nutrition and other values) and risks (contaminants) from the use of wildlife food to the People in the different areas.

At the end of the study the leaders of the project will give a full report to the communities. The researchers will return to the communities for this, and will be available to discuss results from individuals, if they wish.

If you would like to participate in this interview, it will take about one hour of your time to answer questions about the food you eat. All information will be confidential and never publicly attached to your name. Number codes will be used on all forms.

This study will be done by the Centre for Indigenous Peoples' Nutrition and the Environment (CINE) in cooperation with the Nation and the Nation in Funding is provided through *name of donor*.

At any time you can refuse to answer any or all of the questions and ask us to leave. The local community interviewer or the community administrator will answer any questions you may have about this study or will refer them to the research supervisors.

Research Supervisors
1.
2. (representing the RI)
3.
4. (representing the IP)
Do we have your permission to begin? Yes No
Respondent's signature
Respondent's name
House number
Community

Interviewer, o	nce you have given a copy of the consent form to	the respondent	t, please initial this	form: (<i>your initials</i>).						
This acknowledges that you have read the consent form to the respondent in language that the respondent, to the best of your knowledge, understands, and that you have provided the respondent with a written copy in English.										
INTERVIEWER FOR COMPLET	INTERVIEWER, KEEP THIS FORM ATTACHED TO THE FIRST QUESTIONNAIRE AND USE IT TO CHECK THE RECORD FOR COMPLETENESS. THE FIELD SUPERVISOR WILL CHECK AGAIN.									
Respondent's	ID									
		CHECK WHEN	COMPLETED							
		Interviewer	Supervisor							
I.	Frequency of Traditional Food Use									
II.	Individual 24-hr recall									
.	Sociocultural Questionnaire									

APPENDIX 4: EXAMPLE TRADITIONAL FOOD LIST BY SEASON OF HARVEST



Harvest Calendar for K'ásho Gotine



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	ОСТ	NOV	DEC
FIGU												
										+	-	
						+	+					
GRAYLING								+				
CONNIE							+	+				
LOCHE					+	+	+	+		+	+	+
LONGNOSE SUCKER					+	+						
NORTHERN PIKE							+	+				
TROUT												
WALLEYE												
WHITEFISH							+	+	+	+		
LAND ANIMALS												
BEAR												
BEAVER				+ +	++	++					+	+
CARIBOU-BARREN	+	+	++	++					+	+	++	++
CARIBOU-WOODLAND			+	+					+	+		
			•	•				+	+			
								т	т			
MUUSE							+	++		+	+	+
MUSKRAI				+	+	+						
PORCUPINE												
RABBIT				+	+			++	++	++		
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	ОСТ	NOV	DEC
BIRDS												
BLACK DUCK									++	+		
CANADA GOOSE				+	++	+						
CANVASBACK				+	+	+						
FISH DUCK					+	+	+	+	+	+		
MALLARD					+	+	+	+	+	+		
OLD SQUAW				+	+	+						
PINIAIL						+						
PRAIRIE CHICKEN												
PTARMIGAN	+	+	+							++	++	+
SNOW GOUSE				+	++							
SPRUCE HEN	+	+	+					+	+	+	+	+
				+	+	+						
WIGEON				+	+	+						
PLANTS												
BLACK CURRANTS												
BLACKBERRIES								+				
							-					
							-	+				
CRANBERRIES								+	+			
GOOSEBERRIES-GREEN						+	+					
GOOSEBERRIES-PURPLE							+					
HIGH BLUEBERRIES								+	+			
LOW BLUEBERRIES							+					
LABRADOR TEA												
MUSHROOMS							+	+				
RED CURRANTS							-	-				
ROSEHIPS												

SASKATOON BERRIES

WILD GREENS		
WILD ONIONS	+	
WILD PEPPERMINT		
WILD RASPBERRIES	+	
WILD RHUBARB	+	+
WILD STRAWBERRIES		

+ HARVEST ++ PEAK HARVEST Centre for Indigenous Peoples' Nutrition and Environment (CINE) Macdonald Campus of McGill University 21,111 Lakeshore Ste-Anne-de-Bellevue Québec H9X 3V9 **Tel: (514) 398-7544 Fax: (514) 398-10120**

APPENDIX 5: EXAMPLE HARVEST CALENDAR SUMMARY (INUIT BIRDS-6 REGIONS)

Summary of harvest calendars -Number of months per year birds harvested in each Inuit community

Region/ Community	Fowl	Diving ducks	Geese and Swans	Seabirds	Gulls and terns	Fish- eating birds	Marsh ducks	Sandhill crane	Owl	Wading birds
INUVIALUIT										
Aklavik	5	1	3	_**	-	-	2	1	-	-
Tuktoyaktuk	9	3	4	-	0*	1	3	1	-	-
Paulatuk	9	5	3	-	-	-	4	1	-	-
Sachs Harbour	5	1	2	-	-	-	-	1	-	-
Inuvik	12	3	3	-	1	-	3	2	-	-
Bay Chimo	5	3	4	-	-	1	-	-	-	-
Holman	q	2	4	_	2	З	_	2	2	-
Kualuktuk	12	2	4	_	2	1	2	2	2	_
Cambridge Bay	12	1	5	_	_		2	7	_	_
Bathurst Inlet	2	-+ 5	2	_	_	4	5	4	_	_
Gioa Haven	2	3	2	_	_	1	_	-	_	_
Talovoak	∠ 12	3	4	-	- 2	1	-	- 5	-	-
Polly Bay	12	3	3	_	2	3	_	3	3	_
KIVALLIQ	5	5	5	-	-	5	-	5	3	-
Baker Lake	3	-	3	-	-	-	-	0	0	-
Chesterfield Inlet	4	12	3	2	-	-	-	-	0	-
Rankin Inlet	7	1	2	2	-	-	-	1	-	-
Arviat	12	12	2	0	-	-	-	0	12	-
Whale Cove	12	12	5	12	-	-	-	5	0	-
Coral Harbour	4	3	2	0	-	-	-	0	1	-
Repulse Bay BAFFIN	2	3	3	0	-	-	-	-	0	-
Resolute Bay	4	2	3	2	2	-	_	-	-	-
Pond Inlet	12	5	5	5	0	0	_	0	_	4
Ialoolik	0	4	4	2	2	4	_	0		2
Kimmirut	à	7	2	6	1	0	_	-	_	-
Oikiatariyaa	5	6	5	3	2	-	_	_	_	_
Grise Fiord	0	5	5	1	0	0	_	_	_	_
Arctic Ray	10	1	1	- 0	2	0	_	0	_	_
Clude Diver	10	4	4	0	5	4	_	0	_	_
Dangnirtung	12	4	4	0	0	4	_	_		_
Cane Dorset	7		4	1	1	0	_	0	_	-
Sanikiluan	, 0	7	- 6	- - 2	0	0	_	0		0
Hall Beach	2	4	5	0	-	0	-	0	-	-
Nain	6	5	Л	6	6	Δ	5	_	З	_
Honedale	12	12	4	5	7	+ 2	2	3	5	-
Makkovik	1 Z Q	۱ <i>۲</i> ۵	4 2	5	й Л	2 /	2	5	-	-
Pigolet	0	0	5	0	+ 0	+	0	-	+	4
Postvillo	0	9 7	ບ 2	5	3 7	Λ	9 1	-	-	Э
Inner Melville	9 7	ι Δ	3 4	2	-	4 3	4 4	-	-	-
	· ·	+	+	۷		5	+	-		-
Total	263	186	140	76	56	49	46	35	25	19

*not harvested at the time of the study but available. **not harvested in the community, not available.

APPENDIX 6: EXAMPLE OF A COMMUNITY FOOD SYSTEMS DATA TABLE ENTRY

COMMUNITY FOOD SYSTEM DATA TABLES: Green leafy vegetables for which total data exist. Foods with identifications, or nutrition composition are not listed.

Code number:

FOOD CATEGORY: LEAFY VEGETAGLES

LOCAL NAME: Avise

ENGLISH NAME: Agathi

SCIENTIFIC NAME: Sesbania grandiflora

PARTS USED: Leaf

PREPARATION: Curry with Pulses, other greens.



photo by Peter Kuhnlein

NUTRIENT NUTRIENT COMPOSITION / 100 G (EDIBLE PORTION)				
Protein	8.4	G		
Fat	1.4	G		
Minerals	3.1	G		
Fiber	2.2	G		
Carbohydrate	11.8	G		
Energy	93	Kcal		
Calcium	1130	Mg		
Phosphorous	80	Mg		
Iron	3.9	Mg		
Beta Carotene	15440	mg		
Vitamin A (RE)	2573	mg		
Vitamin A	25733	IU		
Thiamin	0.21	Mg		
Riboflavin	0.09	Mg		
Niacin	1.2	NE		
Vitamin-C	169	Mg		
Folate	-	mg		

Wild / gathered/ cultivated: WildFree / purchased: FreeSeasonal of use: Around the yearCost of production: NilImportance value to the community by age / gender: Good for eyesight - all ages and gender groupsMiscellaneous information:Reference: Nutritive Value of Indian Foods. 2003. S no 47

APPENDIX 7: EXAMPLE GUIDELINES FOR INTERVIEWERS

A. INTRODUCTION

This questionnaire takes approximately one hour to administer to each respondent: ideally one adult male and one adult female from each household and an adolescent (15-20 yrs old) if available. The questionnaire has four parts:

- I: Frequency of Traditional Food Use
- II: Individual 24-hour Recall

It is essential that each interviewer follows directions to the best of his/her abilities since differences between interviewers, if too many and too large, may ultimately make the whole project useless and a waste of time. However, it has been shown repeatedly that this type of dietary data, when collected properly, can provide valuable information for those concerned.

Interviewers are responsible persons working for decent wages, but they also must demonstrate rigor and perseverance in what is often a difficult job: it is difficult to question people, and more difficult still to obtain reliable answers. When the interviewer has a special interest in the subject of concern, the work becomes easier and more meaningful.

This particular project aims at comparing diets among Inuit. Some aspects of the project will vary according to factors that are specific to each community (such as its geographical location, its size, the different seasonal patterns, etc). It is not possible to control all these sources of variations through rigid methods of data collection. Some of the variation will be accounted for during the statistical analyses that will follow data collection.

Nevertheless, some aspects can be controlled, particularly the manner with which the questions will be asked and the answers recorded. These brief guidelines highlight some of these concerns and will hopefully contribute to data quality while making the job of the interviewer easier.

I: Frequency of traditional food use

Fill in the first line. If the respondent is a woman of reproductive age, please ask whether or not the respondent is pregnant or breastfeeding an infant.

Report the ID # and ask the respondent for age-group.

Do not forget to write your name and the date.

Then read the statement immediately following on the form. This statement defines the term traditional food the way they are being studied here. This is necessary since we are only concerned here with the food coming from the land and not other food that may be considered in another context as traditional (bannock, for example). Fill in what season your interview will refer to. This season will be the same for all respondents. Record which calendar months correspond to that season. The respondent must picture the whole past season and try to remember, on the average HOW MANY DAYS PER WEEK, or HOW MANY DAYS PER SEASON s/he has eaten the food you are going to mention. Write down the answer in terms of days per week or days per season, depending on how the respondent answers. You may reassure the respondent that this exercise is not as difficult as it first appears to be. To do so, start by presenting the first item on the list as an example.

You may want to start as follow: Let me start with the list I have and this will become clear. For example beluga, did you eat any this past ______ (season)? if the respondent answers "no" then circle No on the

form and go to the next item on the list

If the respondent answers "yes", s/he may also volunteer comments such as "oh, sure, many times...". You must be attentive to the information which is volunteered since the respondent may in other words provide you with at least part of the answer that you are expecting. However since this is the first food on the list, you may want to add: *Since you consumed beluga this _______(season),* do not hesitate to repeat the season of concern: this will become assumed after you have gone through a few items on the list, but so far the respondent may not be used to think exclusively for that season of interest. *I need to know how frequently you ate various parts of the beluga, such as the meat and organs.*

Then, go to the next item.

Now, beluga liver, did you eat any this ______(season) if the answer is "no" then record "0" (do not leave any blanks) and go to the next item, if the answer is "yes" then ask: *how frequently, that is how many days a week, did you eat beluga liver this* ______(season) and you hopefully get an answer in a format that you can record. If not, you must re-phrase your question, or ask for precision.

Use probes when the participant is not sure about the exact number of times a part was eaten. For example, ask if the food was eaten less than or greater than once per month? Less than or greater than once per week? If it was eaten every week, would the participant agree that he/she ate the food about 12 times that season? Was the food eaten every other day? (This would translate to 3.5 days per week or 42 times during the season).

Then go to the next item:

Did you eat the kidney? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga kidney this* ______ (season) and you hopefully get an answer in a format that you can record.

Then go to the next item:

Did you eat the heart? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga heart this* ______ (season) and you hopefully get an answer in a format that you can record.

Then go to the next item:

Did you eat the lungs? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga lungs* at this stage, you may not need to mention the season any longer since this may become already clear in the respondent's mind. The expected format of the answer may also be clear. If not, you need to repeat your probing

Then go to the next item:

Did you eat the tongue? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga tongue?*

Then go to the next item:

Did you eat the eyes? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga eyes?*

Then go to the next item:

Did you eat the flippers? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga flippers?*

Then go to the next item:

Did you eat the muktuk? if the answer is "no" then record "0" and go to the next item, if the answer is "yes"

then ask if the blubber was eaten with the muktuk or not. Then ask: *how frequently, how many days a week did you eat beluga muktuk?* Record the number in the right category.

Then go to the next item:

Did you eat the blubber by itself? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga blubber?* This frequency may be the same as for the muktuk, unless the kauk is eaten separately.

Then go to the next item:

Did you eat the oil? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga oil?*

Then go to the next item:

Did you drink the soup or broth? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask which the participant drank, (soup or broth) and circle the answer. Then ask if the soup or broth was made with bones or without bones and circle the answer. Then ask: *how frequently, how many days a week did you eat beluga oil?*

Then go to the next item:

Did you eat the meat? if the answer is "no" then record "0" and go to the next item, if the answer is "yes" then ask: *how frequently, how many days a week did you eat beluga meat?*

Finally ask whether any other beluga parts or organs were consumed. Write in the corresponding name for the part or organ not previously listed. The corresponding frequency of consumption for other parts not previously listed is not necessary to obtain.

Then go to the next food: *This ______ (season), did you eat bowhead*? and follow a similar questioning pattern as previously.

The questioning pattern is obviously repetitive and the quality of the answers will be related to the ability of the interviewer to maintain the respondent's interest, and keep the questions flowing without too many interruptions. The sooner during the interview, the respondent accepts the format of the expected answers, the easier this process will be.

For seals, when the entire head is eaten, ask about the parts separately, i.e. eyes, brain. The meat on the head will be counted under the meat category.

For land mammals, the meat on the ribs and head will be counted under the meat category.

For fish, if the head is eaten, ask which parts are eaten and circle the corresponding parts.

The questionnaire (I) takes approximately 20 minutes to administer. (For identification of a particular food species, consult the Illustrated Guide.)

II. Individual 24-hour recall

You start by completing the questions identifying the respondent as previously done in the "Frequency of Traditional Food Use".

Then you explain the goal of this questionnaire: In this questionnaire I would like you to recall as exactly as possible what you ate yesterday, from the time you first woke up. You may want to tell me first all the food

you ate then we may go back over each food to define how each food was prepared and how much of it you exactly ate. To help in recording the serving size, I have one cup (CINE cup), one bowl, spoons of various sizes and a card with drawings representing a small, a medium and a large bannock. You may want to use any of these models to tell me the serving size of the food you ate, selecting the one you think is the best to describe the amount of food you ate: for example, to record your drinks, we may use the cup. The bowl would be more appropriate for soups, stews, cereals etc. Depending on the way you ate fish for example you may use the bowl or the bannock card to help identifying the serving size you ate. It is very important in this exercise that we record as exactly as possible not only the type of food, but also the quantity of each food consumed. What is the first food you ate after waking up yesterday? at what time did you eat ______ (food name). What did you eat then...

FOOD NAME

Name the food, the particular type or part used in the dish (eg. caribou stew, meat only). To help the respondent remember all the food s/he ate the day before, you may use probes. However remember to use neutral probes, meaning questions that do not suggest the answer but help the respondent to remember all the details of the food eaten the previous day. For example you would ask: "Did you eat the bread plain?" and not "Did you put butter on the bread?" Other examples would be:

DO NOT ASK: What did you eat for breakfast?	DO ASK: What was the first thing you ate when you first woke up yesterday? At what time was it?
Did you drink sodas or eat popcorn while watching TV?	Did you drink or eat anything while watching TV?
Did you have dessert at lunch?	Did you eat or drink anything after your sandwich?
Did you have cookies at your friend's house?	Did you have anything to eat or drink at your friend's house?

HOW PREPARED/INGREDIENTS

When you have listed all the food eaten during the day, inform the respondent that you are now going to get over the list again, recording **as many details as possible** and what was the exact amount eaten. For example, in the case of a "caribou stew", you would list each ingredient: lard, flour, potato, carrot, salt, caribou (meat, backstrap), water.

In probing for a complete list and a complete description of each food eaten, you may use any of the following questions:

General questions:

- What kind or what is the brand name?
- Did you have anything with it?
- If a package or mix, did you follow the directions exactly? What did you change?
- Did you eat everything or was some left on your plate?
- Is there anything else you ate? you drank? at someone else's house? at the store? From the bush?

Particular probes:

Milk: Kind/brand name? Was it powdered? Evaporated? Whole? 2%? Did you add any water? How much?

Coffee/tea: How much? Did you add anything? Sugar? Coffeemate? Honey? Milk? If milk, what kind?

<u>Juice:</u> What kind/brand? (eg. Tang?_____) Flavour? (eg. cherry) How much? Was it powdered? Carton? Frozen? Canned? Did you follow directions? Did you add sugar? How much?

<u>Cereal:</u> What kind? Was it cooked? In what? How much? Did you add milk? What kind? Did you add sugar? How much?

Bread: Homemade or store-bought? White or brown? How many slices? Size of slices (typical slice in a package is 25 g). If homemade, how? Recipe? Anything on the bread?

Bannock: What do you put in your bannock? Brown or white flour? How do you cook it? baked? fried? In oil or lard? Was it light or heavy in texture? Could you show me how big and thick were the pieces you ate? (use the "bannock card"). Do you add anything to your bannock? Raisins? Bacon? Skim milk powder?

Butter: How much? Butter/margarine or lard?

Fruits and vegetables: How much? Fresh? Frozen? Canned?

Sweets/Snacks: Fruit pastry? Pie? Cake? Tarts? Candy bar? What kind? Chips? What kind?

Alcohol: How much? What kind?

<u>Meat and fat:</u> What kind of meat (or fish)? What part of the animal? How prepared? Did you add any fat in cooking or dipping? If meat was boiled, did you have the broth? Thick or thin broth? Added soup mix? What kind?

<u>Stew:</u> Homemade or store-bought? Recipe? Kind of meat? Which part of the animal? Vegetables? Broth? Soup mix? How much eaten?

In case market food were prepared without following the directions, ask how they were prepared.

Adequate probing is the key to this interview since even the most cooperative respondent will not volunteer all the details you are after, details necessary to later code and to calculate the individual diets. WRITE DOWN AS MUCH INFORMATION AS YOU CAN.

AMOUNT

To obtain the serving sizes, use the measuring cups/bowl/spoons and drawings, alone or in combination. For meat and fish, the CINE cup may be the most useful guides. For fish for example, the respondent may tell you that s/he ate 1/4 of the arctic char. You would then write "1/4 arctic char" and ask for precision: *comparing the amount of flesh (without bones or internal organs) to this cup or any other models you think appropriate, how much do you think you ate.* After writing the answer (eg.1 2 cups), you would ask for the corresponding serving size for the internal organs. In that case the serving spoons would become handy.

Ultimately, the amount must be recorded in either cups, spoons or grams or in terms of number when the food comes in defined units (eg. 1 apple - medium). Your project coordinator will check your records and help you in recording the food into appropriate serving sizes.

When the respondent seems to think that the recall is completed, go over the record and read the whole record inviting the respondent to add any comments. When reading the diet record to the respondent make sure that all information is legible, that each food type has a time attached to it and a corresponding serving size.

In this final review of the 24-hour recall you may remember that the respondent mentioned in the previous questionnaire (I) eating some particular food every day. Double check these entries to ascertain whether they were recorded accurately, especially if they were not reported in the 24-hour recall. This way, cross-checking the questionnaires (I) and (II) may increase the reliability of the information.

Finally ask the respondent questions 1 and 2.

For question 1, you may want to ask to see the bottle if the respondent does not remember exactly the name of the supplement.

For question 2, yesterday's diet may have differed significantly from the usual diet for any number of possible reasons, such as participation in a wedding or presence of illness. Please list any such circumstance in question 2.

Question 3 records the respondent's height (cm), weight (kg). If the person does not want to answer, do not insist, just make a note. Ask then whether the person wouldn't=t mind being weighed, then check that your scale is well calibrated (O-mark), and record the weight again (without shoes), even if different from the weight previously reported. Measure height accordingly.

The questionnaire (II) takes approximately 20-25 minutes to administer.

APPENDIX 8: EXAMPLE FOOD FREQUENCY DATA

A. Frequency of traditional fish consumption as percentage of the Inuit population consuming each fish and average weekly frequency of consumption (number of days/week) for consumers only, by region, for summer and winter combined

			Inuit Communities										
Species	Part	Inuv (n=	rialuit 409)	Kitik (n=	(meot :322)	Kiv (n:	valliq =355)	No Bat (n=	orth ffin ¹ 302)	So Bat (n=	uth ffin ² 232)	Lab (n=	rador =420)
			Percentage of population consuming the food (%) days/week										
Trout	liver	9	0.7	21	0.7	2	0.7	<1	0.2	<1	0.1	1	0.5
	fishpipe/ stomach	9	0.6	17	0.8	1	0.2	0	-	0	-	<1	0.3
	bones	4	0.3	5	0.9	3	0.9	<1	0.1	<1	0.1	6	0.6
	skin	22	0.6	30	0.9	13	0.6	4	0.2	2	0.3	41	1
	head	22	0.6	42	0.7	24	0.6	3	0.2	1	0.5	34	0.7
	fat	12	0.4	26	0.7	11	0.8	3	0.2	<1	0.2	23	1.2
	soup/broth	17	0.8	43	0.8	17	0.6	3	0.2	2	0.4	49	0.6
	meat	40	0.6	56	0.7	39	0.5	6	0.2	2	0.4	71	0.9
	eggs/roe	11	0.6	26	0.6	9	0.7	<1	0.4	0	-	6	0.3
Whitefish	liver	8	0.7	12	0.3	<1	0.1	0	-	0	-	0	-
	fishpipe/ stomach	16	0.7	12	0.7	1	0.3	<1	0.3	0	-	0	-
	bones	2	1.2	2	0.5	1	0.2	<1	0.2	0	-	0	-
	skin	7	1.2	6	0.3	4	0.2	1	0.2	<1	0.2	1	0.2
	head	11	0.7	14	0.6	9	0.2	0	-	0	-	<1	0.3
	fat	12	0.5	17	0.6	2	0.3	1	0.2	<1	0.2	1	0.2
	soup/broth	9	0.4	21	0.6	7	0.2	<1	0.3	<1	0.2	0	-
	meat	49	0.6	43	0.6	18	0.2	3	0.2	1	0.1	2	0.2
	eggs/roe	19	0.9	21	0.5	3	0.2	0	-	0	-	0	-
Char	liver	19	0.9	37	1.1	9	0.6	3	0.2	17	0.8	3	0.8
	fishpipe/ stomach	16	0.8	31	1	2	0.6	2	0.5	6	0.6	<1	0.2
	bones	4	1.5	8	1.3	3	1	5	0.4	5	0.8	6	0.9
	skin	28	1.1	58	1.1	33	0.8	51	1	54	1.0	37	0.6
	head	27	0.9	65	0.9	40	0.8	41	0.6	35	0.8	33	0.6
	fat	18	1	38	1	32	0.9	34	0.9	37	1.2	25	0.8
	soup/broth	34	1	76	1	33	0.8	37	0.6	56	0.8	33	0.4
	meat	68	0.9	87	1.1	72	0.7	88	1	71	1.0	60	0.5
	eggs/roe	18	0.8	41	0.8	16	0.9	9	0.3	6	0.5	5	0.7
Other:	cartilage, flip	opers, fl	ipper fat	t, gills									

APPENDIX 9: INDIVIDUAL 24-HOUR RECALL

Community		Respondent's gender (1=Adult Female, 2=Adu 3=Adolescent Female, 4	House ult Male, =Adolescent Male)	hold number
For women or Pregn Breas	nly, please ask (a nant: Yes No tfeeding an infar	and circle) whether: nt: Yes No		
Respondent's	ID #			
Self-identificat	tion: Inuit_	Other	(specify)	
Age-group:	15-20 if	you are between 15 and 2	0, please give exact ag	e years old.
	21-40	41-60	Over 60	
Interviewer's	name		Date	(day/month/year)
Interviewer Please, recall from the time TIME	, please read to as exactly as pos you first woke u FOOD NAME	b the respondent: ssible what you ate yesterc up. HOW PREPARED/IN	lay, GREDIENTS	(write which day of the week), AMOUNT

Continued...

TIME	FOOD NAME	HOW PREPARED/INGREDIENTS	AMOUNT

Interviewer, did you remember to check about:

the lard, butter, salad dressing, the milk/creamer/sugar in the beverages, any juice, alcohol, jam/honey...? Any snacks, beverages, or foods consumed outside the home?

1. Did you take any vitamin/mineral supplements yesterday?

Yes____ No____ If yes, what brand name?_____

- 2. Was yesterday, a "usual day"?
 - Yes ______ No _____ (please explain) ______
- 3. Do you know your height? ______ your weight? ______

 (if not known, write Ank@)

 Do you want to have your height and weight measured now?

 Yes _____

 If yes, please record the

 measured height ______

 measured weight ______

APPENDIX 10: EXAMPLE FOOD COMPOSITION TABLE

Nutritive values of Dalit (Zaheerabad, AP) uncultivated green vegetables as determined by the National Institute of Nutrition (Hyderabad, India) *

Local name	Scientific name	Moisture	Protein	Fat	Minerals	Crude fiber	Carbo- hydrate	Energy
		G%	G%	G%	G%	G%	G%	Kcal
Sannapayala	Portulaca sp	92.1	1.4*	0.4	1.4	1.1*	3.6*	24*
Tangedu puvvu	Cassia ariculata	76.7	2.5	2.2	1.3*	3.7	13.6	84
Adavi soyakura	Aurthum graveolus wild	78.3	2.9	0.8	2.1	2.4	13.5	73
Athelli	Lactuca runcinata	85.1	4.0	1.1	3.0	1.7	5.1	46
Pittakura	Acalypha malavarica	69.7	5.4	1.0	4.4	3.0	16.5	97
Bankantikura	Corchorus olitorius	72.5	5.0	0.8	3.7	2.8	15.2	88
Chennagi	Lagerstoeemia parviflora	67.4	8.5	1.3	3.6	3.3	15.9	109
Yennadri	Commelina venghalensis	87.4	2.3	0.4	2.4	1.9	5.6	35
Uttareni	Achranthes aspera	81.3	3.3	0.3*	3.5	3.3	8.3	65
Gunugu	Celosia argentia	83.1	3.9	0.3	3.0	2.1	7.6	49
Buddakashe	Physalis minima	79.4	6.0	0.8	3.8	1.5	8.5	65
Gorumadi	Enicostema hyssopifolium	53.2	7.0	0.7	8.4	4.2	26.5	140
Tellagarjala	Trianthema decandra	85.2	2.9	0.4	3.8	1.9	5.8	38
Thadakadobbudu	Merremia tridentatavar. Hastata	44.6	12.5	3.9	5.9	5.3	27.8	196
Jonnachamcheli	Digera arvensis	33.3*	9.3	1.6	14.2	8.8	32.8	183
Adavi Pullakura	Oxlis corniculata	72.6	6.0	2.5	4.0	4.1	10.8	90
Tagarancha	Cassia tora	72.7	6.8	0.7	3.7	2.7	13.8	87
Yelakachevulakura	Merremial emarginata	40.0	14.3	1.5	6.0	5.4	32.8	202
Angibingi	NI	75.9	6.2	1.1	4.7	2.1	10.0	75
Pappukura	Phyllanthus maderaspatensis	60.9	3.0	2.6	5.2	4.2	24.1	132
Adavimenthum kura	Trigonella foemumgraecum	74.4	2.7	1.9	1.6	3.4	16.0	92
Tummikura	Lucas aspera	65.1	3.7	1.2	4.3	4.5	21.2	51
Gurumashi	Mirabilis jalapa	83.4	4.9	0.7	3.2	1.6	6.2	51
Adaviponnaganti aalam	Alternanthera lenella	80.8	4.6	0.7	4.6	2.2	7.1	53
Nalla kashe	Solanum nigrum	81.4	4.6	1.7	2.8	2.4	7.1	62
Doosari	Coculus hirsutus	44.4	9.1	1.9	3.2	7.6	33.8	189

Local name	Scientific name	Calcium	Iron	Copper	Zinc	Mag- nesium	Manga- nese	Phos- phorus	Beta- Carotene
		mg/100g	mg/100g	mg/100g	mg/100g	mg/100g	mg/100g	mg/100g	mg/100g
Sannapayala	Portulaca sp	124	25.3	0.1	0.3	113	0.6	25	
Tangedu puvvu	Cassia ariculata	167	12.7	0.2	0.6	58	0.6	42	
Adavi soyakura	Aurthum graveolus wild	412	26.6	0.4	1.1	134	4.0	48	
Athelli	Lactuca runcinata	320	13.6	0.4	1.0	130	2.7	152	
Pittakura	Acalypha malavarica	1342	40.7	0.4	1.0	130	2.7	152	
Bankantikura	Corchorus olitorius	366	15.4	0.2	0.5	82	1.3	77	2.5
Chennagi	Lagerstoeemia parviflora	882	10.7	0.4	1.1	258	3.0	125	11.9
Yennadri	Commelina venghalensis	243	17.0	0.1	0.4	67	1.6	47	
Uttareni	Achranthes aspera	417	12.5	0.2	0.6	188	3.6	68	10.49
Gunugu	Celosia argentia	398	20.9	0.3	0.8	291	2.5	78	1.2
Buddakashe	Physalis minima	424	24.5	0.7	1.6	177	101	96	
Gorumadi	Enicostema hyssopifolium	1641	49.9	0.6	1.4	384	10.1	81	
Tellagarjala	Trianthema decandra	219	20.7	0.2	0.5	79	3.4	45	0.68
Thadakadobbudu	Merremia tridentatavar. Hastata	556	49.1	0.7	1.6	250	4.2	140	
Jonnachamcheli	Digera arvensis	3237*	111.3*	0.7	2.7*	520*	21.3*	154*	6.94
llakura	Oxlis corniculata	331	139	0.5	1.1	116	3.4	98	6.83
Tagarancha	Cassia tora	869	9.7	0.3	1.2	94	1.3	108	5.29
Yelakachevulakura	Merremial emarginata	1350	97	0.9*	1.7	479	70	166	
Angibingi	NI	554	16.7	0.2	0.8	158	1.6	112	
Pappukura	Phyllanthus maderaspatensis	767	59.4	0.3	1.0	205	5.7	91	
Adavimenthum kura	Trigonella foemumgraecum	171	34.9	0.2	0.8	84	1.7	33	
Tummikura	Lucas aspera	719	81.6	0.5	1.1	64	5.8	46	4.1
Gurumashi	Mirabilis jalapa	344	11.5	0.4	0.4	227	1.2	30	
Adaviponnaganti aalam	Alternanthera lenella	535	11.2	0.2	0.3	122	3.1	41	
Nalla kashe	Solanum nigrum	367	7.1	0.4	0.7	87	1.4	79	14.05
Doosari	Coculus hirsutus	1152	10.7	0.6	1.4	161	2.8	107	

*Table 38-2 from Dalit report. Yesudas, Satheesh and Kuhnlein, 2003. Analyses conduced by laboratory of Dr. Bapu Rao, NIN.

N=1; analyses in duplicate or triplicate

Appendix 11: Example of Process Indicator Form

Process Indicator Form

Date: Name of Person Reporting:					
Community: Program and Place: Event/Activity: (attach agenda, announcement or other hard copy, if applicable)					
Time Taken (hours, days or weeks):					
Leader and Assistants:					
Number of Participants: (attach list of participants, if available)					
Outcome (if measurable):					
Positive Aspects:					
Negative Aspects, if any:					
What to Consider for Next Time:					
Other Relevant Information:					