Hazardous Taste:

Perceptions of Diet, Health, and the Environment
HAZARDOUS TASTE:
PERCEPTIONS OF DIET, HEALTH, AND THE ENVIRONMENT
AMONG A GROUP OF VIETNAMESE IN CANADA

By

TRACY TORCHETTI, B.A. (Hons.)

A Thesis
Submitted to the School of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree
Master of Arts

McMaster University

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MASTER OF ARTS (1998) McMaster University
(Anthropology) Hamilton, Ontario


AUTHOR: Tracy Torchetti, B.A. (University of Western Ontario)

SUPERVISOR: Professor D. Ann Herring, Ph.D.

NUMBER OF PAGES: viii, 162.
Abstract

This research presents a food ethnography of a small group of Vietnamese immigrants who live in Hamilton and Mississauga. Members of this community have previously been identified as consumers of fish and wildlife foods directly procured from the Great Lakes basin. I explore the symbolic, social, and nutritional place of fish and its relationship to perceptions of contamination, risk, and health in this group. I describe the socio-cultural, historical, and environmental context of this group of people with whom I conducted research in the summer of 1996. Ethnographic data was collected by means of participant observation during a five-week household placement with a Vietnamese family. In addition, I conducted interviews and cooking sessions among sixteen households. My findings reveal dynamic changes in Vietnamese dietary practices, including the diminished role of fish in their diet. I argue that for the Vietnamese people with whom I spoke, concerns about health and the environment are not a priority and therefore, from their perspective, they are not a risk group for Great Lakes contaminants. I show that what is accepted as risk is partly a political process and that the Vietnamese construct, negotiate, and manage risk in their own way. While the ethnography is a focused look at Vietnamese foodways and the role of fish within that context, the discussion of risk goes beyond the particular to larger issues surrounding the politics of fish consumption in this group. Finally, I make recommendations for further research and initiatives based on my findings.
Acknowledgements

Researching and writing this thesis has been a personal and professional journey. There are so many people that helped me along the way and it would be impossible to name them all.

My greatest debt is to Ann Herring. As my supervisor, she guided me through this project with sensitivity, wisdom, and unflagging support. I thank her and my other committee members, Wayne Warry and Judy Sheeshka, for their individual perspectives as well as their humour. Sometimes a fish is just a fish...

I would like to thank Christine White for introducing me to an area of study that combined my enthusiasm for anthropology and my fascination with food.

There are so many people who supported, and sometimes carried me through the last few years with assistance, affection, and humour. For this and their friendship, I would like to thank Sylvia Abonyi for helping me see “the funny parts” in my first draft; Patricia Smith for reading numerous drafts and keeping me in line; Jennifer Dawson for sharing insights and ideas over steaming bowls of Pho; Heidi Bonner for making bottomless cups of tea; Sean Gouglas for being my computer guru; and John Albanese, Jennifer Mead, Pamela Cushing, and Helen Gouglas, for helping me more than they could possibly know.

Who knew graduate school could be so much fun? I am grateful for the light-hearted spirit and professionalism the faculty, staff and students in the Anthropology department inspired in me.

The Fish and Wildlife Nutrition Project team have been so helpful in kickstarting my research by allowing me to participate in a greater project and providing structural support from which I was able to access the help I needed. In particular, I would like to thank John Eyles, Donald Cole, David Kraft, and especially Mai Pham and Jennifer Dai.
I was most closely assisted by my research assistants, Mai Nguyen and Uyen Nguyen, who were incredibly supportive, patient and insightful. I could not have conducted this research without them.

I am greatly indebted to those who were generous with their time by participating in the research by allowing me to talk and eat and share memories and experiences with them in their homes. A very warm and special thanks to the Nguyen family, who became my teachers, my friends, and my extended family and who continue to offer me their hospitality. You have forever changed my perspective on life and food. (And thanks for the dancing lessons!)

Finally, a special thanks to mom and dad, for sharing with me their experiences as newcomers to Canada, as well as instilling a passion for food and family. I am so very fortunate for their support, and that of my sister and brother, in my studies all these years with patience and love even when the path was strewn with thorns. I love you all.

This research was made possible by the generous funding of a McMaster University graduate scholarship, an Environmental Health Program Studentship, and a Fish and Wildlife Nutrition Project Student Grant.

Chuc an ngon! Good appetite!
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Introduction

Little fishes in a brook,
Father caught them on a hook,
Mother fried them in a pan,
Johnnie eats them like a man.

--Nursery Rhyme

This research presents a food ethnography of a small group of Vietnamese immigrants who live in and around the Great Lakes basin. My research also seeks to determine the dietary habits and perceptions of health among Vietnamese who catch and consume Great Lakes fish. I explore the symbolic, social, and nutritional place of fish and its relationship to perceptions of contamination, risk, and health in this group. The impetus for this study was an invitation to conduct my M.A. research in conjunction with the Fish and Wildlife Nutrition Project (FWNP), a federally-funded, multidisciplinary project co-investigated by Dr. Judy Sheeshka (Department of Family Studies, University of Guelph) and Dr. Donald Cole (Environmental Health Program, McMaster University). The FWNP aims to identify groups potentially at risk by documenting consumption.

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To ease readability and to avoid errors, diacritical marks have been omitted from Vietnamese words throughout the thesis.
patterns and procurement practices in order to accurately assess health risks and benefits associated with Great Lakes fish consumption. The Vietnamese people who reside in and around the Great Lakes have previously been identified by the Project as high consumers of fish and wildlife foods which they directly procure from the Great Lakes basin (Cavan et al. 1994). While the FWNP project focuses on fish consumption, I chose to study all foods, the principles of food selection and consumption, and perceptions of the relationship of food to health, nutrition, and the environment among the Vietnamese because studying fish alone would obscure the context within which fish consumption takes place.

The study took place in Hamilton and Mississauga where I conducted sixteen long interviews and four cooking sessions with nineteen participants of Vietnamese households. I also lived with a family in Hamilton for a period of five weeks in order to learn and observe food behaviour within a household context. Participant observation was the approach used to conduct this study.

**Goals of Research**

The main issue addressed in this thesis, namely the symbolic, social, and nutritional place of fish among Vietnamese immigrants in the Great Lakes basin, can be broken down into the following questions:
• How has their diet changed since their arrival in Canada?
  --What role does fish play in the diet?
  --What are the determinants of food intake and fish consumption?

• What self-perceived health and nutritional risks do the Vietnamese face? What does risk mean to them? If not contaminated fish, then what?

• What are their attitudes and beliefs surrounding health and the environment?

• How do these attitudes conflict with or approximate the ‘expert’ opinions? Where do the incongruities lie and what does this mean for risk assessment, management, and communication?

• Do the Vietnamese constitute a risk group for exposure to chemical contaminants from fish?

In Chapter 2, I outline the theoretical perspective that informs the research and provides the conceptual tools with which to interpret it. In Chapter 3, I explore the socio-cultural background and demographic profile of the study group and sample to appreciate the great diversity and variability that is in the category ‘Vietnamese’. In addition to this food ethnography, Chapter 3 provides a general introduction to the historical and environmental context of the people in this study.

In Chapter 4, I demonstrate the utility of participant observation for my research and its unique contribution to environmental health studies. In the process of doing my research, it became evident that the Vietnamese people with whom I spoke would rather share their knowledge about all kinds of food and not just fish, and that their immediate health concerns had little to do with contaminated fish. The incongruities of these concerns with those of the FWNP can be partly explained by how both groups think about
fish and its relationship to health and the environment. Uncovering these disparities can best be achieved by the open-ended approach offered by participant observation.

Chapter 5 presents a food ethnography based on my sixteen interviews and observations and experiences during five weeks of participant observation research while living in a Vietnamese household in Hamilton, Ontario. The three sections that make up the results attempt to address general areas of the study. The first section, Vietnamese Food and Diet in Canada, provides a fairly straightforward outline of what the Vietnamese participants in my study eat and how they eat it. It is necessary to know what people eat in order to begin to explore their motives for its consumption. The second section, Factors Affecting Food Choice, considers why and how they choose or reject certain foods, which reveals their perceptions about risk and health. Since the central focus is a potentially contaminated food source, these choices form an important means of indirectly approaching notions of risk and avoidance. The last section in Chapter 5, Perceptions of Health, Risk and the Environment, deals explicitly with perceptions of health, risk, and the environment. I discuss what the people in this study fear, what risks they accept, and why. The first section addresses specific questions about Vietnamese food practices and diet in Canada, while the second and third point to larger issues that go beyond mere culinary practices. They highlight issues about risk construction and negotiation and reveal the ways in which people order and reorder their worlds through the expression of food.
In Chapter 6, I elaborate on the results of this analysis, address the research goals, and attempt to connect to larger issues of risk. My findings reveal dynamic changes in Vietnamese dietary practices, including the diminished role of fish in the diet. I argue that for the Vietnamese people with whom I spoke, concerns about health and the environment are not a priority and therefore, from their perspective, they are not a risk group for Great Lakes contaminants. I show that what is accepted as risk is partly a political process and that the Vietnamese construct, negotiate, and manage risk in their own way.

Lastly, I present a series of recommendations for further research and initiatives based on what I have learned about this group’s receptivity to risk information and attempts at behaviour change. I highlight the importance of doing ethnography in nutrition research, especially in reference to intervention strategies. This qualitative approach is a relevant and rewarding way of studying health risks. Participant observation in particular is critical in generating results that are otherwise elusive when using quantitative methods alone. Clearly, multidisciplinary projects, like the FWNP, can only benefit from the contribution of a strong qualitative component in their research. Qualitative data not only provides meaningful information in its own right, but taken together with quantitative data, lends both context and meaning.
The Problem: Hazardous Taste?

"It is because they are ordinarily immersed in everyday practice in a material way that foods, abstracted as symbols from this material process, can condense themselves a wealth of ideological meanings" (Weismantel 1988:7-8).

"With our gastronomical growth will come, inevitably, knowledge and perception of a hundred other things, but mainly of ourselves" (M.F.K. Fisher 1954:350)

Anthropological Approaches to Food Problems

Why study food? What does the study of food tell us about an environmental health problem? There are two ways to answer this question in the context of this research project. The first is quite obvious. People are eating a potentially risky food source (fish) and I want to know as much about their consumption patterns and motives for eating as I can in order to understand the scope of the problem. The second perspective is somewhat more general. Food conveys meaning. It is everywhere and touches everything. Its acquisition, distribution, and consumption is the basis for every economy. Eating is at once social and political, spiritual and sensual. Individuals, groups, and cultures define and express themselves through food. In short, life can be studied and understood through food.
Food habits research is often traced back to Margaret Mead's work in the 1920s and 1930s with the US National Research Council Committee on Food Habits (Fieldhouse 1996:17), when she tackled the problem of how food habits could be changed if rationing became necessary in the event of war. Since then, various perspectives have demonstrated how food is integrated into all aspects of life. Two general directions have been developed over the years. The materialists attempt to define food habits in terms of biological or ecological imperatives (Harris 1979; Steward 1955). The idealists, on the other hand, are more interested in the symbolic meanings and uses of foods (Levi-Strauss 1969; Douglas 1966). This latter approach sees food as a vehicle for social communication and its habits as satisfying social needs.

Applied nutritional anthropology may be defined as,

“the application of anthropological data and methods to the solving of the cultural aspects of human nutritional problems or as the study of the interrelationship between diet and culture and their mutual influence upon one another,” (Freedman 1977:1).

The job of the anthropologist, according to Freedman, is to view a nutritional problem within the context of culture.

The semiotics of food

Food preparation and particular elements of the diet have been analysed as systems or codes that express aspects of cultural identity, social relations and the sexual division of labour. The extent to which food is imbued with symbolic properties varies among cultures and groups. Hindu food classifications have received much attention in
this area, as they mark relative prestige and social status among castes. Food transactions are also manipulated in such a way as to improve relative status (Marriott 1964, in Messer 1984:225). Within communities, variations in the observation of food regulations may signify variant interpretations of the rules, unavoidable conflicts where different rules demand different patterns of deference in giving or receiving food, or a disinclination to follow the rules (Messer 1984:224). Since food can be used subtly to communicate individual messages about social relationships and status, we can assume that ‘deviant’ acts are a part of the food code rather than just intracultural variation. A deliberate lapse in food rules thus serves as a vehicle for gastropolitics, in which one is able to express dissatisfaction with a given situation or social environment.

On the other hand, as people move away from the local communities in which these food rules and observances are given support and meaning, they are less inclined to follow them. Routine food behaviours often change, while festival patterns are retained, often as a way of maintaining ethnic identity, especially when threatened by other food forces. Ethnic cuisine is characterized by items of particular flavour or type, recipes that combine foods in particular ways, and meal formats and cycles that are organized in a predictable manner. The degree of enculturation has often been measured by determining the change in frequencies of selected ‘core’ or ‘periphery’ items in relation to changes in the food supply (such as the unavailability of a former staple), the prestige associations of certain foods, or the time constraints of the food provider (Messer 1984:226). This change is most often seen with each generation as they borrow this feature, retain that
practice, and discover or innovate others. This process has been referred to as
gastrodynamics (Rao 1986).

*Nutritional and health consequences of dietary change*

Acculturation is the term usually applied to the process of change by which
groups and individuals adapt to the lifestyles and values of a new culture. This process of
change works both ways even if one culture dominates; hence it is more appropriate to
use the term gastrodynamics than dietary acculturation. For example, most immigrants to
Canada adopt many of the food habits belonging to their new surroundings. This may be
because of availability of food items but also the accompanying change in beliefs and
attitudes and the degree to which ties to their place of origin are maintained. Newcomers
to Canada who are able to join a well-established community of people of like origins are
more likely able to retain traditional practices, whereas the first of a group to arrive are
more likely to find themselves unable to maintain such practices. According to my
informants, many Vietnamese who were sponsored in Alberta in the mid-1970s were less
likely to find and share Vietnamese food than their counterparts in the 1980s arriving to
Toronto, where a strong Asian presence and a market already supported the importation
of Asian food items. In addition, it is often the second generation that very quickly
transforms and/or abandons old foodways because of peer influence and widening social
networks.
While the impact of change in food habits may vary widely among individuals and groups, there are some well-known cases in which the nutritional effects have been detrimental to the health of entire populations. For example, in the case of many Aboriginal communities in Canada, the sudden shift from managing country foods to a high dependance on prepared store-bought foods has resulted in a shift in health profiles from one in which infectious disease predominated to one that includes high rates of chronic, non-communicable diseases such as heart disease, hypertension, obesity and diabetes (Waldram et al. 1995; Whiting and Mackenzie 1998).

Resistance to change

Although change in food habits is inevitable in all groups under all circumstances, it is also true that there is often much resistance to it. According to Fieldhouse (1996:13), whether a new idea is accepted and integrated relies on a variety of factors associated with the idea itself and the society or group in which it is introduced: First, the greater the perceived relative advantage, the more rapidly the innovation will be adopted; second, it is important that the innovation is perceived to be compatible with the existing values and needs of the group or society; third, complexity or the degree to which an idea is perceived as being difficult to use will determine its acceptability; fourth, trialability refers to the degree to which an idea may be experimented with by those who are considering it; lastly, observability is the degree to which one is able to see the results the
new practice has and this way one is more likely to adopt it permanently. It is interesting
to view fish consumption this way because many people have heard about contaminants
in fish, but very few people have been willing to change their habits among the
participants in this study. Fieldhouse’s (1996) theory is applied in Chapter 6 (p.135),
with reference to the results of this study.

Risk

As stated earlier, since fish may be a risky food source for the people in this study,
investigating food choice in general allows me to explore issues of risk because it
provides a metaphorical entrée into attitudes and ideas about risk, health and the
environment. The anthropological analysis of an environmental health concern involves a
disparate set of issues that include alternate and sometimes conflicting notions of risk.
The empirical realities of risk are set against the social experience of risk, where the
meanings and uses of the term determine and are shaped by those who use them.

We have known for centuries that the environment influences human health. How
we define the environment and how we ascribe causality and risk have transformed and
continue to be debated. According to the International Joint Commission (1994:3), the
Great Lakes and the life forms that depend on them "remain at an unacceptable level of
risk from persistent toxic substances" despite progress made over the past 20 years in

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These factors are based on Innovations Theory (Rogers and Shoemaker 1971).
cleaning up industrial and municipal pollution. Risk assessment is one of the most prevalent approaches to managing and controlling persistent toxic substances. Here the burden of responsibility is with the receivers not the source of contamination. In contemporary Western cultures, danger and uncertainty are increasingly expressed through an idiom of risk. Risk has multiple technical and colloquial usages and according to many anthropologists, is ideologically loaded. Risk and risk perceptions are sociocultural constructs.

The word 'risk' has multiple and disparate meanings. Recommendations for a formal standardization of usage and related terms have been made and critics have maintained that the language of risk is so incoherent that it is in conflict with itself (Kloman 1990, cited in Hayes 1992:403). The word risk, as used in environmental risk management, has a multi-dimensional character. It is generally viewed as a broad concept that integrates a variety of environmental problems and scientific inputs to generate a basis for comparison that essentially attempts to address the following issues: 1) what can go wrong? (hazard) 2) how likely is it to go wrong? (probability) and, 3) what are the adverse consequences? (consequence) (Kaplan and Garrick 1981, cited in Jardine and Hrudey 1996:3). These issues also imply other meanings, such as cause and illness.

Shrader-Frechette (1991) describes a philosophical dichotomy between positivists, who view risk as a purely scientific concept that relies completely on quantitative data collection for characterization and analysis, and relativists who take risk to be a purely subjective reaction to phenomena. While the former rely on 'objective' circumstances of
the physical world, the latter is a purely mental construct derived from emotional, moral
and political reactions. Shrader-Frechette argues that both frameworks are reductionistic.
Positivists naively confine risk to a 'purely scientific' reality while ignoring ethical
components. According to the positivist stance, risk evaluation is objective and value­
free so that different risks may be assessed according to the same rule (Shrader-Frechette
1991:8). For example, risks measured above or below an agreed upon level (ie. $x$ fish
meals per year) is either significant or not. On the other hand, relativists such as Mary
Douglas and Aaron Wildavsky, reduce risk to a sociological construct and dismiss its
scientific components. They believe that since risks are social constructs, there is "no
correct description of the right behavior [regarding risks]" (Douglas and Wildavsky 1982,
cited in Shrader-Frechette 1991:8), and therefore risk assessment or evaluation is wholly
relative. It is political pressures that determine what is important enough to be evaluated.
Shrader-Frechette attempts to defend a middle-ground for risk evaluators who wish to
show that risk evaluation can be objective despite value-laden components, a position
which she dubs 'scientific proceduralism'. She recognizes that risk evaluation does not
solely rely on scientific investigation, "but also a political procedure to be negotiated
among experts and the public" (1991:56).

*Risk allocation and risk focusing: a biocultural approach*

Some anthropologists have accepted and utilized the concept of risk and risk
factors, despite the problems associated with the idea. Schell (1992) suggests that
biological outcomes may be distributed among people through 'risk factors', many of which are social characteristics of individuals and groups. For example, the geographic, economic, and social placement of a group may play an important part in allocating risk. Culture determines social characteristics, which to some degree may be said to allocate risk by creating patterns of behaviour that differentially expose groups to certain environmental stresses (Schell 1992), in this case chemical contamination through the preparation and consumption of food. Unique strategies for coping with the environment (stresses that may include contaminants, food, and socio-economic status) and their consequences may produce differences in risk and therefore differences in health and/or well-being in relation to other groups.

Determining the extent to which perceptions and behaviours affect exposure to contaminants through culturally prescribed practices contributes to epidemiological studies of risk assessment. If these factors are shown to contribute a significant risk for particular segments of society, then the process of risk focusing may also play a role. Risk focusing refers to the "greater risk of exposure to stressors because of previous exposure," (Schell 1992:137), where, for instance, the high exposure to contaminants leads to adverse biological outcomes that may have an effect on a person's ability to function socially. For example, it may be found that high consumption of locally procured foods is correlated with low socioeconomic status. The bioaccumulation of these contaminants has adverse effects on occupational performance, leading to low-
paying employment positions, which in turn contributes to the cycle of dependence on directly-procured foods and resulting in additional risk of exposure.

Schell’s model emphasizes the epidemiological concept of risk in producing higher lead levels in particular socially defined groups. Emphasis on risk contrasts with most biocultural models that emphasize cultural influences structuring access to resources. According to Schell, the emphasis on risk focusing is more appropriate to anthropogenically altered environments where neurotoxins are common. Exposure to these toxins can influence behaviour, and such behaviour can then influence the risk of additional exposure and deficits. In other words, he adds 'culture as stressor' to the concept of 'culture as buffering system'. While Schell bases his model on a contaminant that has established neurotoxic effects on children who have been exposed to lead, other contaminants may not have an established health or behavioural outcome. It is difficult to analyse established risky contaminants because few are unequivocally linked to ill health.\(^2\)

For my study a biocultural model would have to rely on the assumption that the collection and consumption of Great Lakes fish is motivated by issues of food insecurity and that Vietnamese food behaviours place them at risk. In other words, culture allocates risk by prescribing group behaviours that influence health (Schell 1992:138). This model places the impetus of risk responsibility with the Vietnamese and belies the social

\(^2\) Many studies are carried out based on the one cause/one effect model that invariably is unable to establish meaningful and conclusive evidence of relationships between exposure and negative health outcomes (Hall 1990).
conditions that extend beyond a group of people to a system that places them in a potentially vulnerable position. Macrolevel conditions, such as the socio-political factors that allow the continuing contamination to take place and that effectively drive ethnic minorities to live in economically depressed neighbourhoods or prevent them from utilizing information or health resources may also increase risks to health.

*Risk perception: a cultural approach*

Douglas and Wildavsky (1982) have provided the major anthropological contribution to the field of risk research. They view risk perception as primarily a socio-cultural process affected by social organization and values that guide behaviour and affect judgements about what should be most feared and therefore considered dangerous. The cultural theory of risk perception developed by these authors sees the social environment, the selection principles, and the perceiving subject as one system. They contend that characteristics of social life, especially group power relations, elicit different responses to danger:

*How do we choose which risks to face?* We choose risks in the same package as we choose our social institutions. Since an individual cannot look in all directions at once, social life demands organization of bias. People order their universe through social bias (1982:9).

In other words, dangers are socially selected for attention, which is one step in explaining why and how people agree to ignore the potential dangers that surround them. This may
be why some groups continue to fish and eat their catch from the Great Lakes despite widespread information regarding its contamination.

Risk is also perceived by experts who are also grounded in cultural norms and values. Until recently, science was generally considered an autonomous activity and its practitioners separate from social, political and economic contexts (Nader 1996). We accept the 'real' risks constructed by scientists because they are determined objectively and scientifically, whereas the 'perceived' risks assigned to everyone else, are assumed to be irrational and misinformed. Risk perception then, is somewhat pejorative. Risk construction is probably a more accurate term. It implies that the attention to danger is negotiated and that it is based on knowledge and experience rather than perception, which can often imply misperception.

Douglas and Wildavsky state that the perception of risk is a social process, that acceptability is always a political issue and that risk itself should be seen as a joint product of knowledge about the future and consent about the most desired prospects (1982:4-5). When knowledge is certain (and it rarely is), but consent is contested, then the problem is a disagreement about values and herein lies a fundamental problem. Whose values take precedent? A tension exists between so-called 'expert' and 'lay' notions of risk.
The implications of risk

Anthropologists, such as those discussed above, have criticized the way in which risk has been constructed and reified. For instance, in epidemiology, the concept of risk or risk factor as one of the determinants of disease occurrence is usually taken to be a characteristic of the individual that increases the risk of a specific disease. Some risk factors are not proven determinants but are simply statistically associated with increased risk of disease occurrence; that is, it is important to distinguish cause from association. This approach sets the individual or the group as targets for blame in their illness, as in Schell’s model. The same could be said about contaminant risk. A closer look at the implications of these concepts is warranted, and will be elaborated on in Chapter 6 (p.134).

Hazardous Taste?

This research is one piece of a larger attempt to understand human health and behaviour in the Great Lakes region. The impetus for this research was the FWNP’s desire to understand the perceptions and behaviours of small segments of the population they identified as being ‘at risk’. I chose to look at food and risk because the fundamental risk issue investigated by the FWNP is the consumption of contaminated fish. I have organized the data in this study in such a way as to focus on food and the complex system of factors that go into food selection among Vietnamese immigrants to this region. My discussion of risk is largely theoretical but is grounded in qualitative data on food risk.
collected during my field work in the summer of 1996. Investigating food choice using ethnographic methods was an indirect means for getting at ideas about risk among those with whom I spoke. While the resultant ethnography is a focused look at Vietnamese foodways and the role of fish within that context, the discussion of risk goes beyond the particular to larger issues surrounding the politics of fish consumption in this group.

There is significant concern about the risk of toxic pollutants in the Great Lakes basin ecosystem and the implications for human health. Consumption of fish from the lakes has been identified as a major exposure pathway for persistent toxic substances and thus fish consumption is deemed 'risky behaviour'. Those who consume Great Lakes fish and wildlife then, may be at increased risk because toxic substances, such as polychlorinated biphenyls (PCBs) and dichlorodiphenyltrichloroethane (DDT) and its breakdown products, bioaccumulate in the ecosystem (Colborn et al. 1990:21). Human exposure to environmental contaminants occurs through the ingestion of food and beverages, inhalation of air, and skin contact with air, water, and soil. Total exposure analyses for the Great Lakes indicate that the majority of peoples' intake of organic chemicals comes from food (80-90%), with a lesser amount from air (5-10%) and water (<1%) (Environment Canada et al. 1991:34).

Fish consumption therefore constitutes one of the greatest potentials for contaminant exposure. As a result, fish consumption advisories are in place to limit exposure and protect health (See the Guide to Eating Ontario Sport Fish (Ministry of Environment and Energy 1995). Several sub-populations, such as sport fishers and their
families and Aboriginal communities that subsist on local resources, have been identified as being at greater risk for exposure because they consume more fish and wildlife than the general population (Environment Canada et al. 1991; Swain 1991; Kinloch et al. 1992; Dewailly et al. 1993). Infants and small children, because they consume more food per kilogram of body weight than adults, have a relatively high exposure. Nursing infants, in particular, are exposed to high concentrations of fat-soluble contaminants via breastmilk.³

**Eating fish: what are the risks?**

The risks of eating fish include the ingestion of and exposure to naturally occurring toxins, microbial contamination linked with pollution and improper handling after harvest, and environmental chemical pollutants (increased cancer risks associated with carcinogenic pollutants). The severity of the hazard and the ability of the consumer to eliminate or reduce the hazard determines the potential magnitude of these risks. For instance, simply cooking fish and shellfish eliminates most of the microbial risk that is very widespread among uncooked products (Anderson and Weiner 1995:112).

Environmental pollutants in fish range from mild to severe and the occurrence of some chemical pollutants appears to be widespread. Reducing the hazard is achieved by

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³ However, in most cases the advantages of breast-feeding far outweigh the disadvantages to the infant (Environment Canada et al. 1991:34; Kinloch et al. 1992).
avoiding certain species of fish or selected portions of fish. Unless one stops eating fish altogether, most people will likely be exposed to some level of chemical pollutants. The magnitude of risk then varies among groups and individuals, which is difficult to measure.

Although many substances are suspected of having carcinogenic effects on humans, few causal relationships have been scientifically established. A major incongruity between lay and expert opinion has largely focused on this relationship. Cancer is a great enough fear to generate public mistrust of scientific studies that are inconclusive or show acceptable levels set to what are perceived to be arbitrary guidelines. According to some scientists, the chemical-cancer relationship, applied to all cancers, is one of the greatest public misperceptions (Anderson and Weiner 1995), that is, many people assume that exposure to most or all chemicals leads to cancer.

**The benefits of eating fish**

Fish are a comparatively low-fat source of high quality protein. They also provide calcium, iron and important micro-nutrients. Another study conducted among a sample of Vietnamese women in Hamilton suggests that the elimination of Great Lakes fish from

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4 Some cooking methods may also reduce risk, such as roasting fish at high temperatures to reduce dioxin levels (Science News 1988) and trimming the fat when cleaning fish and eating only the fillet (Ministry of Environment and Energy 1995).
the diet may exacerbate the risk for nutritional deficiencies, if not replaced by other high quality protein foods (Cavan et al. 1994:52).

Another benefit of eating more fish is the indirect effect that the substitution for higher-fat sources of protein has on reducing dietary intake of fat and saturated fatty acids. High intake of fat and saturated fatty acids has been associated with an increase in cardiovascular heart disease (CHD) and possibly certain cancers. The consumption of fish may also directly reduce the risk of CHD through the specific effect of fish oils on CHD risk factors. Several bio-mechanisms have been hypothesized for this relationship, all of which rely on high concentrations of omega-3 polyunsaturated fatty acids (Anderson and Wiener 1995:107). Several epidemiological studies have suggested that consumption of fish may decrease risk of CHD (Daviglus et al. 1997). Many of these studies focused on ethnic groups known to consume substantial quantities of fish and marine life, such as the Inuit and Japanese. Catching and eating fish also contribute to feelings of well-being, social as well as nutritional. There have been many studies that document the social and cultural role of country foods (Egan 1990; Usher et al. 1995).

**Weighing the risks**

According to Anderson and Wiener (1995), there is not a large enough risk in general to discourage fish consumption. Their Risk Tradeoff Analysis reveals that the elevation of cancer risk from eating fish with even high levels of contaminants is slight compared to the expected protection against coronary heart disease provided by eating
fish instead of beef. For some lower income individuals and communities, catching fish is an inexpensive, readily available and potentially substantial portion of diet as well as a source of high-quality protein (Anderson and Wiener 1995:106). If food security is an issue, then it may well be that fish consumption is an important part of a healthy diet.  

Without access to fresh fish, there may be a loss of other benefits, such as the intangible benefits one gets when enjoying a traditional meal of fresh fish. Given the benefits and risks associated with fish consumption, it is wise to take into account all factors that go into decision-making about foods.

Food security, according to the Canadian Dietetic Association, depends to a large degree on income since it is directly related to the ability to acquire adequate foods. Income must also be sufficient to maintain physiological health as well as social roles (Davis et al. 1991). The likelihood of being poor in Canada is greatest for those who are poorly educated, unemployed, on government assistance, female, or recent immigrants (Battle 1988). Given the demographic profile of this sample and their migration history, it would appear that the Vietnamese may be at greater risk of being food insecure than the general population in Canada, especially immediately following their arrival (See Chapter 2).

5 Although there is a strong association between poverty and health, with dietary factors playing a major role, this does not necessarily mean that all people of low socioeconomic status are unable to acquire adequate food (American Dietetic Association 1998:337).
Food and risk

What does the study of food contribute to the discourse on perceptions of risk and risk behaviour? While I accept the risky conditions the Vietnamese participants in this study potentially face in consuming Great Lakes fish, I also recognize the broader conditions that place them in vulnerable positions, especially their status as immigrants or refugees.

Parts of Schell’s model are worth considering, especially the idea that risks (biological or social) may be accumulative and work against the Vietnamese in ways we cannot know. While Schell’s model sheds some light on how the Vietnamese as a group may become increasingly vulnerable to risk, the relativist stance presents a compelling approach to account for the disparity between expert and lay notions of risk that have a direct bearing on risk behaviours. In addition, the data I have collected seem better able to speak to the issues raised by the relativist approach to risk. My findings, namely that neither do the Vietnamese see themselves ‘at-risk’, nor do they view fish as a risky food source, is partially explained by the relativist approach. Like Shrader-Frechette, I take a middle position by recognizing that risk does potentially exist for this group, taking into account the degree to which risks are constructed and negotiated among and between the experts and the consumers.

In any case, I contend that the best way to address the problem is to address specific nutritional and environmental concerns with an eye to how these concerns are constructed, negotiated, managed, and accepted or dismissed. While this analysis does
not pretend to speak for the experts, I have a fair idea of how the Vietnamese conceive of their connections to this environment. In other words, in this thesis, I look to fish as food, and as a potential nutritional risk problem, and then move to food as symbolic of ideas of risk.
The Study Group: The Vietnamese in Canada

_Hoa ca làng._
Blend into the village.
—Vietnamese folk saying.

In this chapter, I describe the socio-cultural, historical, and environmental context of the group of people with whom I conducted research in the summer of 1996. The group consists of a sample of people in the Great Lakes basin who identify themselves as Vietnamese or of Vietnamese ethnicity. The participants in the study are concentrated in two urban areas: Hamilton and Mississauga, Ontario. Each city lies within an ‘Area of Concern’ as designated by the International Joint Commission (IJC) and many Vietnamese are known to fish in and around these areas.\(^1\) Ultimately, this thesis is centered on a group of people who, for the most part, are connected by a rich cultural heritage, a troubled migration history, and settlement in this area of Canada.

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\(^1\) The IJC has singled out 42 particularly degraded localities as ‘Areas of Concern’ around the Great Lakes. They are the result of human wastes, toxic industrial garbage, and ecological destruction and they require particular remedial attentions (Colborn et al. 1990).
Historical Background

Vietnam experienced a violent period of war in the decade before the collapse of the Saigon government in south Vietnam to communist forces in 1975. The majority of those who fled immediately were urban, educated, and well-to-do. By and large, they had been prepared to seek passage to refuge (Zaharlick and Brainard 1987). In contrast, those departing after 1975 were mostly farmers from the war-torn countryside who fled poverty and starvation. It was this latter mass exodus of 'boat people' that captured world-wide attention and led to international efforts at resettling Vietnamese refugees in other parts of Asia and the Western world (UNHCR 1993:26).

Settlement in Canada

During the 1980's the flow of immigrants from Asia to Canada was dominated by Indochinese refugees (Simmons 1990:148). With the introduction of new immigration policy in 1968 that allowed for entry based on the point system, particular characteristics such as age, gender, and education shaped the demographic profile of immigrants arriving in Canada (Simmons 1990:141). Because post-1975 Vietnamese refugees were permitted to settle in Canada for humanitarian reasons, they differed from other immigrants in that many of them tended to be rural, less well-educated and limited in applicable job skills than required by the point system (Zaharlick and Brainard 1987:358). As of 1987, over 120,000 Indochinese immigrants had arrived in Canada. Figure 3.1 shows the dramatic rise in numbers of immigrants starting with the Fall of the Thieu government in 1975,
followed by the Canadian government’s commitment to allow larger numbers of refugees through sponsorship programs after 1978. Before the reunification of families could take place, the majority of those arriving in Canada in 1979 were young, with only 2 percent over 60 years of age, and a dependancy ratio of .72 (Lamphier 1981:121). In other words, there was a high proportion of dependents to those eligible for the work force.

**Figure 3.1: Vietnamese Immigration to Canada**

![Vietnamese Immigrants to Canada](image)


The refugee experience with its connotations of poverty, dangerous conditions, acute translocation and loss of empowerment no doubt plays an important role in the adjustment of refugees. These circumstances, along with the forced separation of families and the dissolution of households, are just a few fundamental differences between immigrants and refugees that distinguish many Vietnamese households from other migrants to Canada. A report prepared by the Social Planning and Research Council of Hamilton and District (1989) highlights many barriers to services New Canadians face. These include language barriers, difficulty in understanding rights and responsibilities, in identifying available services, adjusting to new cultural values and expectations, as well as integrating into the educational system and job market.

Many Vietnamese have witnessed decades of war in their homeland and spent time in Communist re-education camps, so they see themselves as political exiles rather than emigrants. The first wave of immigrants after 1975, the educated elite, have had the least difficulty adjusting to Canadian society as many of them already spoke English, French or both. In contrast, the next wave, mostly boat people, coincided with an economic recession, so starting a new life has been more difficult for them. For many who had previously held professional jobs, adjusting to Canada has meant working as semi-skilled labourers for low pay, a far cry from life in Vietnam.

Despite these difficulties, there has also been a popular portrayal of Vietnamese refugees as an immigrant success story, a cultural stereotype which includes a predisposition for hard work, initiative, and thrift which is believed to have enabled them
to quickly elevate themselves economically (Hume 1985, as cited in Kibria 1994:81; also see Lawlor 1996). Such cultural models have largely been rejected by scholarly analyses, however, in favour of explanations emphasizing the role of external structural conditions in shaping immigrant economic adaptation (Steinberg 1981; Starr and Roberts 1982). For instance, it was found that in better educated receiving communities with high unemployment, highly educated refugees will either be unemployed or underemployed because of the increased competition for jobs and the presence of well-qualified applicants. In this way, a refugee is more likely to feel deprived or disadvantaged relative to his or her previous position in Vietnam (Starr and Roberts 1982:608). So it is as much the characteristics of the receiving community as those of the newcomers that determine to what degree successful adjustment is achieved. Still, there are instances when household structure and family ideology play a critical role in the economic adaptation of newcomers (Kibria 1994).

Problems of Definition

There have been many terms used to describe refugees and immigrants from Vietnam and surrounding areas. Some terms such as Southeast Asian and Indochinese encompass more ethnic groups than the Vietnamese. Conversely, to speak of all those who left Vietnam as ethnically Vietnamese is also misleading. The following is meant to clarify some of these terms so that the difficulties in keeping accurate statistics and
utilising them appropriately is appreciated. In this discussion, the heterogeneity of the group is evident, posing further problems for its definition.

*Indochina* refers to three countries situated between India and China. Vietnam, Laos and Kampuchea (then Cambodia) all came under French control to some degree in the late 1800s. Vietnam itself was divided by the French into three parts: the North came to be known as Tonkin, Annam in the centre, and Cochinchina in the South. The French only ruled Cochinchina as a colony but did eventually influence all of Indochina (Wurfel 1980:101). Their presence meant colonial administrations, economic exploitation, and Roman Catholic proselytisation. Long before the French arrived, however, tensions existed between many ethnic groups within this area. The Chinese, for example, had been driven out of Vietnam after a thousand year occupation, but not without leaving behind many settlers who remained in Vietnam as culturally and often physically segregated Vietnamese citizens (Chi 1980). With the ongoing threat of the Chinese to the North and independant Vietnam creating expansionist tensions to the south and west, there continues to be mistrust and obvious divisions between various groups: North vs. South Vietnamese; Vietnamese vs. Chinese-Vietnamese; Vietnamese vs. Laotians vs. Cambodians; Christians vs. Buddhists, etc. (see Indra 1980:175). In Canada, many Vietnamese may further distinguish themselves as Viet Kieu (people who have gained citizenship) as opposed to boat people (Ellis 1995:57).

There have been at least five distinct ethnic groups arriving in Canada from Indochina. Historically, relations between the groups have been strained due to factors
ranging from economic competition to open warfare (Wurfel 1980b). The Hmuong (or Meo), ethnic Lao, the Khmer (or Cambodians, Kampucheans), ethnic Vietnamese and ethnically Chinese Vietnamese (or Sino-Vietnamese or Hoa) made up the stream of Indochinese refugees after 1975 (Wurfel 1980b:70). Some of these distinctions tend to get blurred in immigration statistics as many are recorded as originating from the country of departure or last country of residence, which in most cases were not their homes. Chinese and Vietnamese resided in all three Indochinese countries, mostly as merchants. A long history of war in the region also meant a great deal of internal displacement of peoples who oscillated between border nations.

Within Vietnam, the Chinese constituted about 4.5 percent of the population in 1979 or about one million people (Willmott 1980:69). Although many Chinese have lived there for generations and became citizens, they remained in separate communities that were further organised along kinship lines, trade unions, and other associations. The vast majority of Chinese were heavily concentrated in commerce and trade, a middle-man position reinforced by the colonial economic system. At least five ethnic Chinese groups exist, with Cantonese speakers predominating in Vietnam. Since 1978, the Chinese have been persecuted in Vietnam and more violently elsewhere in Indochina (Willmott 1980). A large part of the refugee flows to Canada were made up of ethnic Chinese from Vietnam who escaped over land to China (Willmott 1980:77).

The term 'refugee' is used to describe the common experience of all Vietnamese people (refugees, immigrants, Canadian citizens, and second-generation children) arriving
after 1975. Other scholars have approached this group the same way, taking into account
that regardless of how they arrived in Canada, they share the consequences of escaping a
country in political and economic turmoil; leaving behind a still beloved country,
community, culture and most importantly family; and having to settle in a new land, not
necessarily of their choice (Chan and Indra 1987). In fact most of what has been written
about Vietnamese in Canada is classified as 'refugee research'. This research includes
studies on psychological adjustment, refugee policy, settlement problems and cross-
cultural adaptation (Indra 1987b). Owing to the heterogeneous make-up of this group,
these experiences greatly differ among individuals according to ethnicity, class, gender
and other circumstances (Indra 1987a:2).

While it is important to recognise the heterogeneity of the Vietnamese community
in Canada, their common historical experience of translocation unites them and allows
them, for the purpose of this study, to be viewed as a single group. There is a common
sensibility among parents and children despite the very different experiences they actually
share in terms of their time in Vietnam, their memories of war, and the ways in which
they came to arrive in Canada. Many young adults in my sample speak with as much
fervor and nostalgia of their homeland as their parents do: the food, the people and the
sense of community. It is with the above discussion in mind that I hesitate to use the term
community except in the broadest sense to describe the most general phenomenon among
others in the larger population. I attempted to gain access to those outside of my sample
of participants in order to have a better sense of ‘community’. Indeed many of the people
in my sample do not describe themselves as belonging to a community since there has been little effort made thus far to unite as one. As one person told me, they have neither the money nor the resources to work together to help themselves or new immigrants, although, many people depend on family and religious networks first.

This study fills the cultural gap in community health studies, but it is not and cannot be representative of Vietnamese culture in Canada or southern Ontario. ‘Culture’ is a concept that has been criticized for being too general and vague to serve as an explanatory tool (Barrett 1996:238) and in recent years there has been a renewed criticism of the concept. Rather than attempting to capture an entire way of life of a people, the alternative approach has been to write ethnographies of the particular rather than large groups, such as ‘the Vietnamese’. So by focusing on particular individuals (a group of Vietnamese living, working and fishing in Hamilton and Mississauga) and their changing relationships (with each other, mainstream Canada, food, expert knowledge), “one would necessarily subvert the most problematic connotations of culture; homogeneity, coherence, and timelessness” (Abu-Lughod 1991:154). The Vietnamese people I came to know and work with are not segregated from their surroundings; rather, they are part of an interconnected world in which ideas, values and especially people are always shifting and transforming.
Social Organisation

Out of all the Indochinese refugees, the Vietnamese have been here the longest. About a thousand were living in Canada prior to 1975, mostly professionals living in Toronto and Montreal. It was in these cities that associations and social networks formed (Indra 1980:174).

Vietnamese society has largely been shaped by the Chinese, namely the teachings and practices of Confucianism, Taoism and Mahayana Buddhism. These ‘Three Teachings’ along with indigenous beliefs form the core of Vietnamese moral life. Historically, Confucianism, with its hierarchical model of authority, was relatively weak in the south of Vietnam. With the French, Christianity also came to be an important influence for some, but it too has been integrated into existing beliefs rather than replaced them. In almost every home I visited, an ancestor altar was present, a decidedly Confucian practice (Kibria 1993:41).

Perhaps the most enduring and significant aspects of traditional Vietnamese life can be found in the social institutions of the village and the family. Throughout Vietnam, the communal temple has been the centre of the village. It is a political and administrative centre, that also serves a spiritual need. The Council of Notables (all men) acted as representatives to the state, collected taxes, and led ceremonies to honour village guardian spirits. Ties of kinship often connected households in clusters within villages (Hickey 1964), and were an important source of mutual aid, in terms of labour, and financial loans. Despite the fact that these administrative and communal centres
deteriorated and lost legitimacy among villagers under French rule, strong kinship ties remained and these came to be an enduring source of community (Kibria 1993:43).\(^2\)

**Family life**

The strong influence of Confucianism in traditional family life has meant that the interests of the individual are subordinated to the interests of the group (Hammer 1966:23). The family was, and still is for many, the basic unit of Vietnamese life and society. Family obligations may be so strong as to extend to distant cousins and long dead ancestors. For some, ancestor worship is especially important, as an extension of filial piety, while for others ancestors are divine beings who can offer protection. Since their arrival in Canada, the ideal model of the extended family household working as a socio-economic unit has been difficult for Vietnamese immigrants to achieve. Especially in the time immediately following immigration, multi-component households of single and married young men and women were common (Indra 1980:180). Even among reunited families, however, shifts in both hierarchical and gender relationships have been acute. The status of both women and children has changed since their arrival and community support for maintaining these structures is absent. Fathers suddenly become reliant on young children who speak better English than they do, diminishing their status as heads of household. In addition, there is also the loss of control many men feel in

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\(^2\) For a more lengthy discussion of historico-political elements of Vietnamese village life, see Hickey 1964; Kibria 1993; Hammer 1966)
being unable to discipline their children in North American society where physical punishment carries the threat of outside intervention (Kibria 1993:148). This was a common problem cited by the people with whom I spoke.

Despite its Confucian characteristics, Vietnamese family patterns even before migration seemed to be fairly flexible and less hierarchical than the ideal, especially when it came to gender relationships (Kibria 1993). The refugee experience, including settlement in Southern Ontario, has had a great impact on Vietnamese family life, as others have also observed (Kibria 1993:72). The diffuse and flexible model of Vietnamese family patterns has allowed the family group to be a more inclusive entity that can and does support others, financially and emotionally. The weaker the community institutions, the more likely kin and friends turned to each other for cooperation and solidarity. This seems to be the case among the participants in my study, although, the importance of some family ideologies continues to cause tension among its members. Loss of deference and respect for elders is a major issue among younger families in my sample, where young children have been socialized here in Canada longer than in Vietnam.
The Study Group and Interview Sample

Not all Vietnamese in Hamilton and Mississauga are refugees, fishers, or fish-eaters. They do not necessarily see themselves as a community. Some have changed radically while others have clung to tradition, but almost all are proud of their ‘innate’ ability to adapt to new situations, environments and lifestyles. The study sample of people discussed here grew out of an initial focus on Vietnamese participants from Hamilton and the Mississauga area (See Figure 3.2). Both cities have attracted a fair number of Vietnamese immigrants relative to their size, share networks and proximity with Toronto, and are active distribution centres as a result of their proximity to American and consumer markets, water ports and airports with cargo facilities. Both are located on the shores of Lake Ontario and support shore located industry. While most of the participants residing in Hamilton live near Hamilton Harbour and the downtown core of the city, those in Mississauga live in a suburban area. Both groups seem to fish in similar areas around the Great Lakes and actively network with other Vietnamese people in downtown Toronto. Geographically, then, the study group can be described as living in urban areas on Lake Ontario and fishing from the Great Lakes basin.

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3 I distinguish here the use of the terms sample, group, and community. The study sample refers only to those 19 respondents in 16 households with whom I conducted formal interviews. The group refers to all the people I spoke with, including the members of the household I stayed in and other people I met and socialized with. I refer to the community only when I generalize beyond the study group and sample.
Interviews were conducted among 16 different households, with a total sample of 19 individuals (Table 3.1). All participants immigrated after 1975 and have been in Canada anywhere from 4 to 21 years. I was also able to conduct many informal interviews among Vietnamese and Chinese-Vietnamese\(^4\) in Hamilton and Toronto (Table 3.2 and 3.3).

\(^4\) The Chinese-Vietnamese I spoke with are Vietnamese speakers and identify themselves as Vietnamese.
Table 3.1: Interview Sample, Showing Household Composition

<table>
<thead>
<tr>
<th>Household ID#</th>
<th>Number of Persons</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>6</td>
<td>married couple, one son, one daughter, husband’s brother, boarder</td>
</tr>
<tr>
<td>101</td>
<td>4</td>
<td>mother, young daughter, mother’s female cousin, male friend</td>
</tr>
<tr>
<td>102</td>
<td>4</td>
<td>married couple, two sons</td>
</tr>
<tr>
<td>103</td>
<td>4</td>
<td>married couple, two adult children</td>
</tr>
<tr>
<td>104</td>
<td>4</td>
<td>married couple, two sons</td>
</tr>
<tr>
<td>105</td>
<td>4</td>
<td>married couple, two daughters</td>
</tr>
<tr>
<td>106</td>
<td>6</td>
<td>married couple, one son, two daughters, one son-in-law</td>
</tr>
<tr>
<td>107</td>
<td>4</td>
<td>married couple, two sons</td>
</tr>
<tr>
<td>108</td>
<td>4</td>
<td>married couple, one daughter, one unrelated adult</td>
</tr>
<tr>
<td>109</td>
<td>2</td>
<td>two middle-aged sisters</td>
</tr>
<tr>
<td>110</td>
<td>3</td>
<td>married couple, one daughter</td>
</tr>
<tr>
<td>111</td>
<td>2</td>
<td>elderly husband and wife</td>
</tr>
<tr>
<td>112</td>
<td>5</td>
<td>married couple, one son, two daughters</td>
</tr>
<tr>
<td>113</td>
<td>6</td>
<td>mother, her three daughters, two sons-in-law</td>
</tr>
<tr>
<td>114</td>
<td>4</td>
<td>married couple and two unmarried adult sons</td>
</tr>
<tr>
<td>115</td>
<td>4</td>
<td>married couple, one son, one daughter</td>
</tr>
</tbody>
</table>

Table 3.2: Interview Sample, Showing Language Spoken in Household

<table>
<thead>
<tr>
<th>Language(s)</th>
<th>no. of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnamese only</td>
<td>6</td>
</tr>
<tr>
<td>Vietnamese and English</td>
<td>8</td>
</tr>
<tr>
<td>Vietnamese and Chinese</td>
<td>1</td>
</tr>
<tr>
<td>Vietnamese, English and French</td>
<td>1</td>
</tr>
</tbody>
</table>

40
Table 3.3: Interview Sample, Showing Locations of Households

<table>
<thead>
<tr>
<th>Location</th>
<th>no. of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton</td>
<td>7</td>
</tr>
<tr>
<td>Mississauga</td>
<td>9</td>
</tr>
</tbody>
</table>

In Hamilton and Mississauga, the Vietnamese are relatively scattered throughout the city. Unlike Toronto, there are no visible boundaries of settlement. Many of the interview respondents in Hamilton live in small clusters in and around the downtown core where housing is more affordable. House ownership seems important to many and since this area is relatively inexpensive, many have chosen to remain in this area. There are, however, also groupings in East Hamilton and the Mountain area. My household placement, which was the focus of my field work, was on a street where there were no Vietnamese neighbours although a few contacts were within walking distance. In Mississauga, they were loosely scattered in newly established suburban areas. New large houses tended to be dominated by larger families with more employed adults who assumedly pooled their resources. The exception to this was an elderly retired couple, but they too were supported by their adult children.

In addition to the scattered residential patterns, the Vietnamese in these areas seem to lack any sort of effective political cohesion. There are numerous religious
associations, centred around both the Catholic church and the Buddhist temple.\textsuperscript{5} There were so called community leaders or contacts who would have been natural starting points for this research. These individuals turned out to be inaccessible to me for several reasons and it may be telling that I was able to reach the community with the help of a young student and a well-respected family rather than through the leaders.

This lack of community was noted by outsiders as well as insiders. A teacher I spoke with was skeptical about my working with recent refugees and was somewhat discouraging about the prospects of my research. She cited difficulties in the past with getting parents to participate at the school, as well as sending children to doctors and dentists. She attributed this to the refugee experience which left them mistrustful of others. She saw them as being generally insular but, coupled with the hardships endured getting here and their past experiences with authorities in Vietnam, the family unit was the most reliable support network and therefore of paramount importance. She considered the exigencies of survival and suspicion of others as preventing the development of a community.

The non-participatory nature of the Vietnamese families is explained by some as symptomatic of an inherent lack of trust of formal organizations, especially government; a suspicion deeply rooted in historical precedent. Other studies have also noted the widespread antipathy of Vietnamese toward political institutions (Kibria 1993; Yu and

\textsuperscript{5} There is also a strong Baptist Church contingent although none of the participants in my study belonged to this group.
Liu 1986). Indeed, I was sometimes questioned about for whom was the research being conducted, whether there were any government connections, and so on. It was only with the sanction of my Vietnamese Research Assistants (RAs) that I was granted some interviews.

Religious organizations seem to be more prevalent than any other kind. Eight households practice Roman Catholicism, only two are actively involved in church activities (Table 3.4). Six households practice Buddhism, with only one actively involved. Many openly shunned formal organizations despite their personal and familial religious activities and observances. One household observes only the ancestor cult to the exclusion of anything else. The last household’s religious affiliation remains undetermined. All but the last household kept ancestor altars.

**Table 3.4: Interview Sample, Showing Religion by Household**

<table>
<thead>
<tr>
<th>Religion</th>
<th>n=16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buddhism</td>
<td>6</td>
</tr>
<tr>
<td>Roman Catholicism</td>
<td>8</td>
</tr>
<tr>
<td>Ancestor only</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
</tr>
</tbody>
</table>

The characteristics of the group of people I interviewed cannot capture the experiences and realities of all Vietnamese in Canada or even Southern Ontario, however this group does illustrate the diversity of the Vietnamese and the problems of creating a cohesive Vietnamese community.
The interview sample

Since my study sample was not generated through a random process, there are some clear divisions in the sample that need to be noted. For example, the households themselves were diverse in their membership (Table 3.1). As Table 3.1 shows, the age range of those interviewed was anywhere between 21 and about 70 years. Although accurate occupational information was not consistently collected, it seems that the majority of women in the sample worked as seamstresses doing piecework at home. I was advised by the RAs against asking direct questions about age, education and employment.

The host family

My fieldwork was conducted while living with a Vietnamese family in a north-central location of Hamilton between the downtown area and Hamilton Harbour. The family consists of five members, including the parents (in their fifties), two daughters aged 24 and 22, and a son aged 16, all living at home except for the eldest daughter who attended school in Toronto during the week. Both daughters were enrolled in university. The family lives in a low socio-economic area but they own their home. The father is self-employed in construction and the mother is employed at home as a seamstress doing piecework. The family is Buddhist and they are involved in activities at the temple. Vietnamese is the language spoken in the household. Friends and associates are overwhelmingly Vietnamese, even amongst younger members of the family.
Entertainment and other media forms were also predominantly Vietnamese (movies, music, karaoke, newspapers).

The father arrived in Alberta from Southern Vietnam in 1984, after escaping by boat to an island for refugees near Thailand. For three to four years before his escape, he was interred in a re-education camp set up by the Communist government. After his arrival, he was able to sponsor his family and they arrived together in 1987, and quickly arranged to move to Hamilton where they knew some friends. Outside of the father's adoptive sister, all other family remains in Vietnam. Connections remain strong as the family travels back every so often and money and goods are sent to relatives on a regular basis.

The common historical and environmental experiences of those I spoke with in Hamilton and Mississauga serve to unite them for the purposes of this research. The refugee experience presents a unique set of problems that influence how the research is conducted. By exploring the socio-cultural background and demographic profile of this group, it is easy to appreciate the heterogeneous nature of the people we identify as Vietnamese and provides a necessary context for my study.
4

Methods:
Studying Diet and Risk

"She is a friendly girl, she eats everything!"  

This chapter describes and discusses the methods I used to conduct this research, a study that takes an ethnographic approach to explore an environmental health problem. Ethnographic research attempts to describe and understand others in their own words and from their own perspective. It basically implies the description of a culture or part of culture (Bernard 1994:16). I begin by briefly introducing this approach, which entailed a heavy emphasis on participant observation for data collection. I then describe the phases of data collection starting with my entrance into the field, sojourn in a Vietnamese household, interviews and cooking sessions. This should not suggest that either the activities or the methods used were mutually exclusive endeavours; rather, these strategies were on-going and sometimes simultaneously carried out. I also address the role of interpreters in my research as they played an important role in data collection and

1

This remark was made by my host mother to several friends of hers about me. She did a better job than I ever could have in communicating to others how sincere and enthusiastic I was to participate in and learn about Vietnamese culture and especially food. She was genuinely able to vouch for my trustworthiness since I lived with her family and, of course, ate her food!
interpretation. Finally, the limitations, biases, and strengths inherent to my methodology are addressed.

I began this project mainly because of an interest in diet and health and the risks associated with eating fish from the Great Lakes. Although the research remained focused on food and health, I decided against quantitative nutritional measures as these would be carried out by the Fish and Wildlife Nutrition Project (FWNP). Since dietary recalls were already being done, I decided to focus instead on perceptions of diet and health. Ethnography is not without practical importance for nutritional studies. In fact, ethnography can be used to improve dietary intake measurements by providing information on cultural factors that might facilitate or distort the validity of those instruments and their results (Pelto 1989:xiii). I discovered very quickly, as a case in point, that the portions of fish per person in fish meals was relatively small compared to North American notions.

**Participant Observation**

Participant observation is the hallmark of cultural anthropology and has become a standard qualitative research method for collecting ethnographic information in the field. The ‘field’ in this case is atypical of traditional anthropological notions of a suitable area of study in that it is local, urban, and geographically, a loosely bounded area of study (see Gupta and Ferguson 1996, for a discussion of the anthropological distinctions between
"field" and "home"). The study group is bounded and defined by those standards set out in Chapter 3 (p.38).

Participant observation allows the researcher to engage in activities appropriate to the social situation and simultaneously observe the activities, people and physical aspects of that situation (Spradley 1980). Its success depends on the investigator’s ability to develop rapport and establish relationships of trust with informants. Fieldnotes are the established mode of collecting a wide range of information and the data are then systematically reviewed, analysed and/or coded thematically. Results are often shared in narrative form.

Participant observation is often used as an umbrella term to describe a broad approach, as well as a specific technique. I use this term to imply both. I offer participant observation as an overall approach to my study, but I also use the term to set apart formal data collection strategies (ie. interviews) from less formal ones (ie. observing). Jorgenson summarises participant observation in the following manner:

The methodology of participant observation focuses on human interaction and meaning viewed from the insider’s viewpoint in everyday life situations and settings. It aims to generate practical and theoretical truths formulated as interpretive theories. It involves a flexible, open-ended opportunistic process and logic of inquiry through which what is studied constantly is subject to redefinition based on field experience and observation. Participation is a strategy for gaining access to otherwise inaccessible dimensions of human life and experience. Direct observation and experience are primary forms and methods of data collection, but the researcher may also conduct interviews, collect documents, and use other methods of gathering information (Jorgenson 1989:23).
Participant observation is certainly an integral part of anthropological research and is slowly gaining acceptance in other disciplines. Often the qualitative data of community-based studies tends to be assigned anecdotal status (Baxter et al.1992:209); however, this ethnographic approach to data collection is an important part of empirical studies. Bernard (1994) provides several reasons for the utility of participant observation. First, participant observation allows a researcher to collect all sorts of data. Watching someone prepare a meal is an intrusive act, as is attending a wedding. A complete stranger can hardly expect to be allowed to participate or just observe such events unnoticed. A welcome participant makes these observation events possible.

Second, participant observation reduces the problem of reactivity, that is, people’s behaviour changes when they know they are being studied. The more familiar you become to those around you, the less likely they are to be curious and interested in what you are doing as a researcher and therefore go on with their usual business. This is partially true depending on the situation. I found that although general behaviour in the household was business as usual, the foods we were preparing on a daily basis were influenced by my host’s desire to teach me a wide range of Vietnamese dishes. Consequently, we were preparing dishes that the family did not eat on a regular basis and in five weeks, we did not prepare the same dish twice.

Third, participant observation helps the researcher to formulate questions, if not in the same language, then in language that more accurately reflects the emic point of view, that is, the insider’s viewpoint. Constructing questions that are culturally appropriate was
an important part of the interview process. The questions I asked were looked over and discussed with various contacts and the interpreters.

Fourth, participant observation gives the researcher an intuitive understanding of a culture and makes it possible to make strong statements about the meaning of data. Finally, many research problems simply cannot be addressed by anything other than participant observation. For instance, a pilot study of dietary habits carried out among a sample of Vietnamese women in Hamilton was unable to elicit responses about traditional dietary principles. It seemed that a direct question within a questionnaire format was not well understood by the participants (Cavan et al. 1994:17) and so the authors recommended that this kind of question be deleted from future questionnaires. I was able to get at a number of statements regarding these principles only indirectly through open-ended questions and casual enquiries during a shared meal. Achieving a general understanding of cooking practices and principles, of eating events and attitudes to health is best achieved through participant observation. This approach allows the researcher to triangulate information, that is, use various methods of data collection to complement and corroborate each other.

The data for this research were mainly collected through long interviews and field notes that were recorded from the time in the field including the five week household placement. The various strategies I used are outlined below. Taken together, they reflect this ethnographic approach to research.
Phases/Components of Research

Entering the Field

Entering the field involves learning about the cultural and social environment of the people with whom the researcher will work so that he/she is able to fit in as much as possible. One way to do this is to start by mapping social contexts, that is by observing behaviour and social situations in a largely unobtrusive way (Bernard 1994:144; Trotter 1991:184). I attempted to map out the community by contacting various Vietnamese organizations, shops, markets, neighbourhoods, and schools. I spoke with Vietnamese students and non-Vietnamese teachers about their students. I frequented restaurants and karaoke bars to get a sense of Vietnamese social life in Hamilton. Eventually, I needed to establish direct contact with community members in order to further the research. The FWNP employed two Vietnamese RAs who were able to introduce me to some community members and find an interested family for me to live with during the summer of 1996. Establishing these RAs as go-betweens between me and the community seemed fairly straightforward. My own outreach efforts were largely unsuccessful in a community that hesitates to describe itself as such. My Vietnamese go-betweens were skeptical about my being able to participate in a household context. As a result of a diligent research assistant’s networking efforts however, I was able to secure a household placement for a period of five weeks (July 3 to August 7, 1996). Therefore, I was only able to truly ‘enter’ this community when I was accepted to become a part of a family.
household as the result of a go-between. From there, I was able to see and be seen and attempt more successfully to network myself.

**Household Placement**

The family with whom I lived was selected from among several acquaintances of a Vietnamese contact. I do not know how many individuals were originally contacted and refused. I attempted to select an English-speaking Vietnamese family known to be high consumers of Great Lakes fish, willing to let me take up paid residence for a period of one to two months and to take on a mentoring role with me. Of the three families who agreed to meet me, I only visited two. One refused because of space constraints and the other said I could stay if I could not find anyone else.

At our first meeting the participating family agreed to have me move in the next day. Although they were worried that they would not be an appropriate family because they seldom ate together, I assured them that this was acceptable. I did not know at the time whether they were consumers of Great Lakes fish. This criterion was of secondary importance in light of the fact that a position in the community was a necessary starting place for networking with the community. The placement began on July 3, 1996 and ended on August 7, 1996. The family was remunerated the equivalent of about one month's rent and expenses.

Participant observation was the main technique used. Informal interviews in the form of friendly conversations were also recorded wherever possible and cooking
sessions were conducted on a daily basis. Aside from the daily patterns of the family, I was also able to attend a number of social gatherings so that I could observe others and be a little more visible to those I might approach later.

As a household and community member, I was involved in the daily life in which behaviours and practices were observed. This allowed me the unique vantage of seeing, hearing, feeling and of course, consuming everyday Vietnamese life in Hamilton. It was an intimate position in which to simultaneously observe and be observed. This position allowed an outsider to gain an insider's view insofar as that is possible. This emic position is one in which a researcher may gain insight into the 'whys' of people's behaviour by living and working in their world.

**Interviews**

Interview format varies based on the amount of control the interviewer takes in the process. Semi-structured interviews retain the flavour of a conversation even though the interviewee is actually addressing questions which correspond to an interview guide (Bernard 1994). I used a semi-structured interview format in the long interviews because they needed to be focused but not restrictive, for which there are several reasons: It was important to maintain consistency across interviews and it became clear that many individuals would have become frustrated if it appeared that there were no purpose to the interview, as most claimed to have extremely busy schedules. So setting up multiple visits for interviews was inadvisable according to my RAs. Since I would obviously not
have the opportunity to conduct multiple interviews, semi-structured interviews were the most appropriate research tool under the circumstances.

Flexibility in the interview process became very important. I developed an interview guide but tried not to use it explicitly (see Appendix A). Some participants remained very formal and expected to be asked direct questions to which they answered in a similar fashion. Other interviews quickly developed into friendly conversations where the participant shared control over the way the interview unfolded. The long interview provided me with the opportunity to ask open-ended questions and communicate with other members of the community for a broader range of opinions and attitudes.

In order to elicit ideas and knowledge about food, nutrition, health and the environment, I asked interviewees questions regarding actual food practices and preferences (ie. where do you get fish from? how do you prepare fish? what are your favourite kinds of fish?) as well as their opinions regarding broader concerns (ie. could you tell me about some of your concerns for your family’s health? what are your concerns for the environment? how has your diet changed since you arrived in Canada?).

I conducted informal interviews on a regular basis during the household placement or following a formal interview. In other words, I just made notes of everyday conversations that I had with people. I found that I often heard very interesting thoughts and opinions while I was speaking to someone about the project or trying to make an appointment for an interview, or over a Vietnamese coffee. These encounters or 'real'
conversations often revealed important information that seemed initially to have little to do with the research at the time.

I used a non-probability sampling technique known as the snowball method in order to recruit participants. The snowball method is one in which one or more key individuals is asked to name others who would be likely candidates for the research. This technique works particularly well for relatively small populations and is well suited to community studies (Bernard 1994:97). I chose a contact from the FWNP who introduced me to other contacts and to the host family who, in turn, introduced me to virtually all the participants. The disadvantage of using a non-probability sampling technique is that it is difficult to generalize beyond the sample studied; however, any study using this kind of sampling technique is credible backed with ethnographic data (Bernard 1994:94).

Participants were contacted mainly by telephone. The interviews took place in the participants' homes in most cases and took about one to one-and-a-half hours to conduct. All were tape recorded with permission. Some items were used to aid identification of certain food items during the interviews. I was able to use a binder of Great Lakes fish photos provided by the FWNP and I also brought along several books with good quality pictures, such as "Fruit" by Davidson and Knox (1991) and Hom's "Asian Ingredients" (1996). In preparation for the interviews, I developed a Vietnamese/English glossary of food items, sources and techniques with the help of my research assistants. (see Appendix B). Some interviews led to cooking sessions, instructions, or shared meals.
of being judged or tested as to food preparation skills and knowledge. In addition the participant might have prepared elaborate meals to impress me. Since the sessions were not prearranged (most of them were impromptu events following interviews at the interviewee's invitation), I think some of the pressures of being judged were kept to a minimum.

**The Role of Research Assistants**

I employed two interpreters for the interview phase using research funding gratefully received from the FWNP. Their duties included arranging interviews and translating. An unintentional role that emerged from their involvement was that of informant and consultant. These roles will be discussed in further detail below. The first interpreter was a Hamilton community member whom I came to know during my household placement. She was able to follow up on people I had met but whom I was unable to contact because of language difficulties. She is an active member of the community and fairly well-known. Most of her contacts are Buddhist and living within the city of Hamilton, between downtown and the lakeshore areas. The second interpreter answered an ad at the McMaster Student Employment Centre. Her contacts reside mainly in Mississauga and are mostly Roman Catholic. Both assistants were born in Vietnam

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3 Funding was provided with the assistance of John Eyles (Chair, Environmental Health Program, McMaster University).
and had arrived in Canada during the previous 10 years. They are both young, university-educated women.

Each interpreter was asked to fulfill a number of roles in the research process:

1 -- translator. Each interpreter’s primary role was that of translator. All but two interviews required direct translation. The other two were conducted with occasional assistance by the interpreter. I could not have conducted any interview without them.

2 -- go-between. The interpreters’ personal connections were a natural starting point for obtaining names and numbers of people who could be approached for the study. Arranging interviews is normally something I would do myself but assuming that most people would prefer to speak with the interpreters over the phone (because of language or familiarity), I had them arrange the interview at their convenience. A contact sheet was provided to keep track of all calls to avoid inadvertently asking people twice. (see Appendix C) There are several advantages to this kind of networking:

a) low refusal rate. Very few people refused to participate in the interviews because of their relationships with the interpreter. They were comfortable and willing to talk in the presence of this person.

b) creation of a bond of trust between researcher and participant. Establishing trust, rapport and cooperation was fairly easy because of the relationship that already existed between the go-between and the participant.
c) recruitment of new contacts. I was able to recruit people independent of the FWNP and mostly outside of its sphere of participants so that there was new information and perspectives, with little overlap.

3 -- informant/consultant. Forming dyadic relationships with interpreters who were a part of the community that was being studied helped immensely. They were insiders who were willing to speak frankly to me about their culture and at the same time were able to anticipate the kind of information in which I was interested. I was able to draw upon the interpreters' expert cultural knowledge in a number of ways. First, as consultants, they shared information about the community in general and other participants in casual conversations and meetings where we would discuss strategy and method. I was also able to turn to them with problems in dealing with other Vietnamese people, for example, in matters of etiquette.

Second, I had each keep a notebook in which she would jot down impressions of each interview for an additional perspective and feedback for me. These complemented my notes and the transcribed interviews. For the most part, these notes provided very brief summaries of the interview and highlighted important dietary information, such as fish consumption. Some of their own thoughts and opinions emerged, pertaining to various issues that the interview had revealed. In this way, my RAs also became informants. In addition to the fresh perspective, it was through this medium that I sometimes learned about methodological mistakes I or the interpreter made. For instance, following a very awkward and brief interview, I read that my interpreter had set up the
interview only a half hour before we were to arrive at the participant’s house on a Sunday morning. When we arrived, most of the household was still asleep and it only dawned on me later that we had forced the participant out of bed on a weekend morning!

The interpreters’ influence on the research also presented some potential biases and problems. Interpreters had a direct impact on who participated in the project through the snowball method of gaining participants. The interpreters’ inexperience with the interview event meant that there were some inherent difficulties with technique. During some interviews, for example, they prompted interviewees and offered their own responses as well. The translation of certain words or concepts was also sometimes potentially misleading as the interpreters translated concepts so that they were understandable or acceptable to me and therefore did not necessarily reflect the flavour of the original speech event. For example, I found that the interpreter replaced the word ‘fat’ with the word ‘cholesterol’ when she translated the participant’s statement. It is difficult to know without translating all other interviews word for word, what other concepts may have been enhanced. Combined with my own inexperience as an interviewer, some questions remained unanswered. This is not to say that the interpreters’ unintended involvement did not prove fruitful in other ways. Having the interpreter

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4 One interview was fully translated after the interview was over, that is, both the participant’s and the interpreter’s words were translated from Vietnamese to English in order to see how the on-the-spot translating was working. It also served to illustrate the importance of direct translation to the interpreters for subsequent interviewing. The remaining interviews were not translated this way because it did not seem to be warranted despite a problem like this and in light of budgetary constraints.
participate in the interview partially transformed the event into a more natural conversation as they worked out a response they thought was representative of Vietnamese culture. Several examples will be discussed more thoroughly in Chapter 5.

The point here is that the interpreters fulfilled a multiplicity of roles and were not merely translators. They had a significant impact on how the research progressed. In a sense, they became collaborators in the data collection and interpretation.

Limitations and Biases

I have offered participant observation as an experiential method of approaching this study and have advanced it as a particular method well suited to the research at hand. I recognize the important role of my research assistants, informants and host family in conducting honest research. What I have not addressed directly is my own role as fieldworker. Since the fieldworker herself is the main instrument of participant observation, she must combine subjectivity and objectivity (Behar 1996; Peacock 1986:89; Dettwyler 1994). Two problems I faced in conducting participant observation were striking a balance between objectivity and subjectivity and second, in doing ethnography, generalizing by learning from the particular. These are central issues that I struggled with in conducting the research. The truths I communicate are mine as well as the participants. Although the interpretations presented in this thesis are filtered through my own perceptions and worldview, they nevertheless remain focused on the insider’s view of the issues. From there, I seek to generalize and extrapolate key themes and issues.
by highlighting the particular, not with the intention of claiming that the particular is a feature of all Vietnamese Canadians, but rather to derive insight into deeper issues. I acknowledge such tensions here in order to address the seemingly inherent biases of participant observation. I view the acceptance of subjectivity in objective endeavours to be as much a strength as it can be a limitation. The balancing act involved with PO is the subject of numerous studies (Behar 1996; Peacock 1986).

Although I have sought an emic perspective, this has been limited by my inability to speak the language so that I did not have full access to locally defined meanings and categories, those which reflect the insider’s point of view. I achieved this insofar as I was able to observe and clarify certain aspects of food classification. For example, basils and mints are not labeled herbs; rather they are considered a kind of vegetable. I was unable however to ascertain whether this was a linguistic or semantic distinction. In any case, this information is important when one is designing dietary recalls or food records. Essentially, it helps the researcher to develop the right questions.

Traditionally, most anthropological field research is done over a period of about a year, but I was only able to conduct my research over a period of about three months, five weeks of which were spent intensively in the field. As more researchers are only able to conduct short-term fieldwork because of budgetary constraints and time restrictions, they employ rapid assessment procedures (RAP) instead. RAP allows less time to develop rapport and is prepared up front to ask specific questions and collect particular kinds of data (Scrimshaw and Hurtado 1987). It is possible to carry out participant observation
successfully in a matter of days if you already know something about the phenomenon you want to study. My research falls somewhere in between these two time frames and level of involvement. Constrained by time and funding, I limited my time of field research to the summer months only and although I knew what area of research I was interested in pursuing, I was not that familiar with Vietnamese culture. My agenda, therefore, was much more open and flexible than a RAP project would have been.

Basic sociodemographic data was not rigourously collected during the interview phase because in some cases I was advised against it and I also decided they were not relevant enough to pursue during interviews when such enquiries might affect the outcome of those interviews. For example, in several households I was asked whether the government had sent me. In some cases, I was granted interviews on the understanding that I was not to ask questions regarding family members. Reasons for this kind of reticence can be partially explained by the refugee experience outlined in Chapter 3.

Conclusion

Participant observation fieldwork involves several different ways of collecting ethnographic data. I conducted interviews and cooking sessions to complement a five-week household placement. In this context I observed and learned first-hand the methods and rationale of food procurement, selection, preparation, and consumption and essentially learned something about Vietnamese culture and every day life in a part of central Canada. The household placement in Hamilton also served as a central point from
which I was able to network within the community and recruit participants for interviews. The five-week household placement was invaluable in that it provided a solid foundation that enabled me to proceed to the interview phase.

I conducted sixteen long interviews that focused on the preparation of fish and other foods and investigated issues of risk by asking open-ended questions regarding health and the environment. These informal questions were usually asked at the end of the interviews when the participants were at ease and willing to talk about larger issues. In some cases, these interviews allowed the opportunity for more participant observation in the form of cooking sessions. It became clear that the interviews were informed by the participant observation that I had conducted previously; that is, my knowledge following the participant component enriched my understanding of what interviewees told me and did not tell me. The cooking sessions provided the opportunity to observe and participate in cooking events with others outside of the household where I stayed. Together, these methods contributed to a cultural analysis of the role of food and its relationship to perceptions of well-being and risk.
In the following sections I summarize the key themes that emerged from the long interviews as well as those from the five-week household placement. My sample of sixteen long interviews are analysed individually and thematically. The results I report here are mainly compiled from the long interviews, supplemented by detailed field notes taken during the household placement and time spent with others in the community.

Cuisine is the term used to describe a style of cooking to which a group subscribes. It encompasses distinctive food items, preparation methods, and techniques of eating (Fieldhouse 1996:52). It is also meant to be representative of what is 'normal' or typical of a country or ethnic group. The emphasis is on group identity, not the individuality of various food preparers. Defining a cuisine is simply describing its most salient features but it never really captures its great variety at a regional or household level. Add to this the transposition of that cuisine to one of many places in a diaspora and the task becomes more difficult. Vietnamese cuisine in this area of Canada deserves its own investigation. After all, if one is to assess how Vietnamese food practices mediate risks posed by eating Great Lakes fish, then one has to have a sense of how everyday
practices are carried out. What do Vietnamese immigrants eat and how do they eat it? How are culinary traditions maintained, if at all, and what are the attitudes towards food, health and the environment? These questions are not only important for saying something about Vietnamese-Canadian food habits. They are meaningful because communicating messages about risk behaviour, whatever they are, are based on assumptions concerning the behaviour and practices of a particular ethnic group. The success of any kind of research carried out on behalf of or aimed towards the Vietnamese in Canada relies on culturally relevant assessments. I present an overview of the cuisine as it is practiced among a sample of Vietnamese in this part of Canada.

People choose food for a variety of reasons. While some food items are considered inedible, others are prized. Some are differentially consumed or rejected based on life stage or situation. Within the universal human practice of what we refer to as cooking, there is an almost infinite set of individual practices for preparing foods, but people do define themselves as belonging to a particular group often through the expression of these practices. In order to assess the relationship between a particular culture and its cuisine, we must determine at least, in broad terms, the acts and processes that comprise the activity of cooking and the most important features that define the cuisine.
Vietnamese Food and Diet in Canada

Fishers and fish eaters

Of the nineteen interview participants in this study, all consumed fish. At the time of interviewing, five were anglers. Nine respondents who did not fish for themselves occasionally received gifts of fish from anglers they knew from amongst their family and friends; therefore, fourteen of nineteen (73%) participants interviewed were consumers of Great Lakes fish. This consumption was fairly irregular as few were able to say how often they ate fresh-caught fish on average. Instead, most interviewees said they ate Great Lakes or market fish an average of twice a week. Many in the sample stated that they simply ate fresh fish if it was available and that this consumption took place mostly in the summer when their friends and family enjoyed fishing on the weekends. Fishing is an activity often associated with Southeast Asians in Canada because of the prevalence of this activity in everyday life in their original homeland; as such, fish is assumed to be a regular component of their diet. And while almost all the people I spoke with seemed to eat fish on a regular basis, their motives for eating fish varied and indeed many admitted that their consumption of fish had changed over time for various reasons.

1 Three interviews were conducted with couples, so there are sixteen interviews in the sample with a total of nineteen participants.

2 Although when asked, they did not really identify fish consumption as a major diet change.
Ms. Thu says,

*Fishing is a very common activity in Vietnam. There is nothing special about it. So, you don't have to really get together and go fishing for food. We work two shifts, one in the morning and then in the evening, so usually we go fishing in the summer, but it is just our inspiration to go fishing if we feel like going fishing, then we just gather and go. Plus, in the rural area in Vietnam, every house has a fish lake, and most people have a fish lake near the house so if you want to eat a fish you fish one in your own lake, you don't have to go fishing. Here, going fishing is an entertainment, the main purpose is not for eating. I wouldn't prefer eating the fish that I get from the lake, I would rather eat the fish that I buy from the market...the fish in the store is prepared or cleaned or killed by the people in the store, but if I catch a fish and fish is still alive and I have to kill it, I would hesitate doing that. I would prepare it as long as the fish is dead I will touch it.*

3 Fish are a good source of digestible protein and probably the most important protein in Vietnam where meat is scarce outside of urban areas. Considering the important role of fish in the traditional diet, it is interesting to note that meat, not fish, is more commonly eaten and prized among the participants in my study. Pork and beef are favourites. Fish most commonly eaten among the interview households (n=16) include sunfish (81%), white bass (44%), salmon (44%) and rainbow smelts (44%). The most common fish consumed from the Great Lakes include sunfish (69%) and smelts (44%). The most common market fish include salmon (31%), pickerel (25%), and ‘other’ (31%), a category which includes imported fish whose names were either not remembered or not

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3 All italicized excerpts are taken directly from the interviews I conducted. Translated statements have been placed in the first person to represent the speaker and both original and translated English statements have been edited for ease of reading. The names of participants have been changed to ensure confidentiality.
translated (Table 5.1). Table 5.2 shows the variety of species of fish consumed by source for each household.

Table 5.1: Market and Great Lakes Fish Consumed, Reported by Household

<table>
<thead>
<tr>
<th>Fish Species</th>
<th>Great Lakes fish no. Households</th>
<th>% of 16 Households</th>
<th>Market fish no. Households</th>
<th>% of 16 Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>largemouth bass</td>
<td>2</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>smallmouth bass</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>rock bass</td>
<td>5</td>
<td>31</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>white bass</td>
<td>6</td>
<td>38</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>bluegill</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>brown bullhead</td>
<td>5</td>
<td>31</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>common carp</td>
<td>2</td>
<td>13</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>channel catfish</td>
<td>3</td>
<td>19</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>crappie</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>freshwater drum</td>
<td>2</td>
<td>13</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>muskellunge</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>white perch</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>yellow perch</td>
<td>3</td>
<td>19</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>pumpkinseed</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>coho salmon</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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<td>chinook salmon</td>
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<td>salmonine (unknown)</td>
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<tr>
<td>sunfish</td>
<td>11</td>
<td>69</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Fish Species</td>
<td>Great Lakes fish no. Households</td>
<td>% of 16 Households</td>
<td>Market fish no. Households</td>
<td>% of 16 Households</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>brown trout</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>lake trout</td>
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<td>0</td>
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<td>0</td>
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<td>25</td>
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<td>lake whitefish</td>
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<td>6</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>other*</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>31</td>
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<td>0</td>
</tr>
<tr>
<td>kingfisher</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>red snapper</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>sea bass</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>grouper</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>canned salmon</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>any ocean fish</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>striped bass</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

N.B. "other" includes unidentified and/or imported fish, also commercially produced fish balls of unknown species.
- First 26 species were identified with the help of a fish binder provided by the FWNP.
- Species listed after "other" were additional species named by participants.
Table 5.2: Number of Fish Species Consumed from the Great Lakes and Market, Reported by Household

<table>
<thead>
<tr>
<th>Interview ID #</th>
<th>Great Lakes Fish no. species</th>
<th>Market Fish no. species</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>101</td>
<td>2</td>
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<td>106</td>
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<td>2</td>
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<tr>
<td>107</td>
<td>8</td>
<td>3</td>
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<tr>
<td>108</td>
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<td>109</td>
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<td>110</td>
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<tr>
<td>111</td>
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<td>3</td>
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<tr>
<td>112</td>
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<tr>
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<td>0</td>
<td>2</td>
</tr>
<tr>
<td>115</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

No. of households where Great Lakes fish are consumed = 81%
No. of households where market fish are consumed = 87.5%
All households ate fish from at least one source (GL or market)

Fish oils are rich natural sources of vitamin A and D and various minerals (Simoons 1991:349). Fish consumption may also significantly reduce the risk of coronary heart disease (Anderson and Weiner 1995). The benefits of fish consumption are thought to be physiological as well as social and cultural. The people in my study often
spoke of fish and other special foods as part of a familiar diet and a familiar way of life, to which they are accustomed. Comparisons between meat and fish are often made, with considerations of fat, cholesterol and perceived physiological effects. My survey participants speak of fish as being nutritious, yet the findings reveal that fish is not consumed as often as was expected either in quantity or frequency. Most people I spoke with consume fish about twice a week, but they also consume shellfish on a regular basis. In fact, in Vietnamese cooking it is not unusual to have a variety of meats and seafood in one dish. Portions of fish are fairly small, with two to three fish steaks serving five to six people per meal with leftovers. They are usually prepared fried, steamed, braised, poached or barbecued and sometimes minced to make cakes or balls. Whole fish is also a favourite and among my participants, prepared when there is more time or for special occasions.

Table 5.3 shows the parts of fish that were reportedly consumed or discarded by the interview participants. These answers reflect questions about fish in general and not about particular fish species. In some cases, it was stressed that the intestines and stomach were only eaten from certain species (usually imported) from market sources. Many regarded the intestines with disgust with only a few exceptions, usually because of taste, odour, and in two cases, because they were considered ‘dirty’.
Table 5.3: Parts of Fish Consumed and Discarded

<table>
<thead>
<tr>
<th>Fish Parts</th>
<th>Consumed</th>
<th>Discarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>flesh</td>
<td>✓️</td>
<td>✓️</td>
</tr>
<tr>
<td>skin</td>
<td>✓️</td>
<td>✓️</td>
</tr>
<tr>
<td>intestines</td>
<td>✓️</td>
<td>✓️</td>
</tr>
<tr>
<td>organs</td>
<td>✓️</td>
<td></td>
</tr>
<tr>
<td>stomach</td>
<td>✓️</td>
<td>✓️</td>
</tr>
<tr>
<td>head</td>
<td>✓️</td>
<td>✓️</td>
</tr>
<tr>
<td>cheek</td>
<td>✓️</td>
<td></td>
</tr>
<tr>
<td>tail</td>
<td>✓️</td>
<td>✓️</td>
</tr>
<tr>
<td>belly flesh (fatty)</td>
<td>✓️</td>
<td>✓️</td>
</tr>
<tr>
<td>scales</td>
<td>✓️</td>
<td></td>
</tr>
<tr>
<td>bones</td>
<td>✓️</td>
<td></td>
</tr>
<tr>
<td>gills</td>
<td>✓️</td>
<td></td>
</tr>
</tbody>
</table>

**Rice**

The principal component of Vietnamese diet is rice (com). All participants in my study reported eating rice and/or rice noodles daily. The most common rice used is a long grain rice variety, sometimes called Basmati, although glutinous or sticky rice is also steamed for special occasions. The rice is usually served plain and white with an accompaniment. Electric rice cookers are common and they make perfectly fluffy rice. Sticky rice is steamed, sometimes with coconut water and/or a variety of fruits.

For Vietnamese, it is important to eat rice every day to maintain health, not so much because of its intrinsic qualities, but because it is indicative of a healthy and well-
balanced diet, a traditional Vietnamese diet. One must balance rice with a variety of vegetables and meat. Mrs. Diep says,

For the Vietnamese, we have to have rice every day and for things that go with rice they have to change every day, for example vegetable, meat, chicken, these have to change every day.

Rice not only defines a meal, it has a satiating property. If you do not have rice with a meal you have to eat much more of everything else to be satisfied, implying that you have not really eaten. Rice or rice noodles are consumed daily and I was told by one man that if he were to go without rice for a few days he would “be upset”. The literal translation of the word ‘meal’ is ‘time to eat rice’. Some had difficulty expressing how they would feel without rice. Others recognized the role of rice as part of a Vietnamese identity.

Q: But if you didn't have rice around, how would you feel?
Mrs. Lien: [laughter] ahh, that's a difficult question. Like you cannot imagine not having any spaghetti.4

One man told me his nickname at work was Mr. Rice because he always had a homemade lunch that the others did not. The importance of rice is also underscored by the fact that Gao (uncooked rice) is often left as offerings on domestic Ancestor alters.

Rice noodles are popular for soups and commercially produced paper for wrapping other foods (as in Goi Chon) is also a favourite. Rice also provides flour for paper, dumplings, or pastry. Wheat, buckwheat or bean thread noodles are also

4 The respondant is commenting on her perceptions of my “Italianness”.

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sometimes used in soups. French sticks or Chinese fried bread are sometimes purchased to accompany curry stews. Table 1 in Appendix D shows a complete listing of rice and other cereals mentioned by the participants in my study.

**Meat**

The consumption of meat in Vietnam, although popular, was constrained by economics and the even more prominent role of fish in the daily diet. Most people seem to think that their personal consumption of meat has changed since arriving in Canada. According to one informant, many Asians soon develop cholesterol problems upon arriving in Canada as a result of changing their diet toward eating more meat with fat. Indeed, for some households, meat is an essential part of almost every meal with the exception of two days out of the lunar month when vegetarian meals are prepared with soy products (bean curd) that resemble meat. Some people seem to think that they eat meat less often because it is not as fresh in Canada, but they admit to eating larger portions per meal. The most common ‘meats’ people identify are pork, beef, chicken and shrimp. Mrs. Xuan replies,

*To keep healthy? If we want to be healthy, we eat beef, pork, two kinds of meat that we eat all the time. I think pork is more important. We usually eat pork more than fish. And shrimp.*

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These days vary among religious sects (mostly Buddhist) but are usually observed on the full moon day, in the middle, and at the end of each lunar month (Ellis 1995:71).
Out of nineteen participants, all ate some kind of meat. On average, those in the sample eat meat almost daily, quite often alongside fish or bean curd. The general consensus is that meat in Canada is not very good because it is too ‘soft’, but they have become used to it. This is in contrast to beef and other free-range animals in Vietnam that are very lean and fairly tough (Barer-Stein 1979:538). Beef is especially popular and Pho, a beef noodle soup, is a national dish that is eaten at any time of the day. Restaurants are devoted to it and cooks have their favourite recipes. It is also a time and labour intensive dish that most people make on the weekends or eat at restaurants. There are several ways to prepare meat, some of the more common ones include stir-frying, barbecuing, and braising, an especially important technique for tough, lean meats. Pork blood, also a favourite, is used in sausage, raw with meat or formed into squares like bean curd cakes to add to soups. Duck and duck blood are also consumed; they are considered invigorating and strengthening. Table 2 in Appendix B shows the range of animal products the respondents reported consuming.

**Eggs**

Eggs of various fowl are consumed by thirteen out of sixteen households in my survey. Chicken eggs are eaten most often but so are duck and sometimes goose eggs. Turtle eggs are no longer eaten in Canada but were a delicacy in Vietnam. Fresh eggs are used in various ways, but preserved eggs are also an important part of Vietnamese cuisine, especially salted duck eggs. They are excellent sources of protein. Incubated
eggs and unborn chicken eggs are also thought to be very nutritious and many in my study ascribe strengthening properties to them. This is consistent with the great value ascribed to eggs in Chinese medicine. However, many people limit their consumption of eggs for health reasons. Mrs. Hang says,

Well the fertilized duck egg, of course, has a chick in it by the seventeenth day, and it's kind of liquidy. It is nutritious. More than a regular egg. I don't eat them a lot now because they give me high blood pressure, but people do eat them because the taste is quite different, and they believe it's delicious and people believe it is beneficial for some conditions, some nutritious benefit, like people that have lung disease or something, they believe that when you eat these eggs it helps them. It is nutritious, and it helps but it wouldn't cure the disease or anything like that.

Miss Mai also says,

It's not easy to digest. The fertilized egg has a bird inside, so the feathers you know are difficult to digest. People eat it just because it is delicious. It's just been passed on from generation to generation so we don't know why we eat it, but it's good, so we eat it.

Eggs are often added to dishes, especially stews and curries. They are also pickled or boiled, sometimes in tea for colour. These items are included in Table 2 in Appendix D.

Soy products

My survey participants use soybeans extensively in the form of bean curd, fermented bean pastes, and fermented soy sauce. Bean curd is used in Vietnamese cooking alongside meat and fish or alone on vegetarian days. It is stuffed and steamed, stirfried or added to soups. It is also occasionally mashed with coconut milk for gruel. Soy products may add considerable protein to the diet for vegetarians. A range of soy
products are listed in Table 3 in Appendix D to illustrate the considerable role of soya in the Vietnamese diet.

**Fats**

While many Vietnamese dishes are fried or stirfried, there is a preference for lean meats and fatless soups and a general aversion to anything that tastes or feels greasy. Many people salt, soak with vinegar or ginger, and rub meats and fish to remove slime or grease. Fish and meat are also carefully trimmed. Soups are skimmed to remove fat that floats to the surface. In making chicken broth, for example, a large pot of water is heated. When the water is warm, a large number of chicken bones and scraps are added. The pot is watched carefully so that it can be taken off the stove when it starts to steam but not boil. It is then strained so that the chicken is reserved but the water is disposed of to get rid of all the scum and fat. The pot and the chicken are rinsed thoroughly and fresh water is added to the pot and the process started all over again. For beef soup, the broth is also placed in the refrigerator over night so that additional fat that has congealed can be easily removed. The only animal fat used for frying is pork fat. Vegetable, peanut, sesame, or coconut oil are also used. These are listed in Table 4 in Appendix D.

The avoidance of fat is a common practice. Much of this seems to be customary to the cuisine, although some cite health reasons for this practice. Despite this aversion, many seem to have developed a taste for ‘soft, fatty’ meats that are consumed in greater quantities than is traditional in Vietnam. This seems to be the case for many Vietnamese
in Canada who consume significantly more beef, as well as milk, eggs, butter, margarine, and potatoes than they did in the past (Dinh et al. 1990:209). The traditional avoidance of fat is interesting for the fact that avoiding these parts in fish, for example, is precisely what the experts advise because of the contaminants that accumulate in those parts of the fish. This aspect of traditional cuisine may reduce the risk of contaminant intake among Vietnamese Great Lakes fish eaters.

**Fruits and vegetables**

In Vietnam, a wide variety of wild and cultivated fruits and vegetables are abundant. With some exceptions, most are available in Asian markets in urban centres in Canada, if not fresh, some fruits and vegetables are pickled, dried or canned. Vegetables also play an important role in every Vietnamese meal. They are used in soups, stir-frys and braised dishes every day. In addition to the cooked portion of the meal, fruits and vegetables are also sliced raw and dipped in a mixture of salt, chile peppers and lime juice or *nuoc cham*. A common addition to our meals was plain sliced cucumber, a ‘cooling’ accompaniment to balance a hot meal. Fruits are often used the same way, either raw or cooked, ripe or unripe. A favourite in our household was pineapple in curry stew. Most fruits and vegetables are considered ‘cold’ or ‘cooling’ foods, an appropriate accompaniment to many hot and spicy dishes. Green leafy vegetables also predominate with water spinach, watercress, and various Asian flowering broccolis and cabbages. These were principle ingredients in watery soups to accompany rice or stirfried on their
own or with meat. Some were shredded raw for soup and vermicelli (bun) dishes. What North Americans would commonly classify as herbs, my Vietnamese friends would refer to as vegetables and they were eaten in great enough quantities to warrant that classification. These raw aromatic herbs are provided with every meal. Varieties of mints, basils, coriander and other unidentified herbs, are added to soups, bun dishes, and salad rolls. In some cases, the herbs and lettuce are even used as wrappers for barbecued pork, beef or fish. See a complete listing in Appendix D (Table 5).

**Seasonings**

Garlic, onions and scallions, ginger, and nuoc mam are all a part of Vietnamese cooking. The most distinctive and pervasive is fish sauce or nuoc mam that is made by any variety of fish fermented with the addition of salt. It, along with lemongrass, peanuts, and mounds of fresh herbs are provided with every meal. Nuoc mam is a very strong condiment that adds richness to food. It is used as a flavouring agent and as a base for dipping sauces. It is a table condiment that can be added liberally to any individual’s dish, much as salt is used. Nuoc cham, a sauce made with fish sauce, lime juice, hot peppers, etc. is also important and proportions probably vary with each cook (see recipe in Appendix E). This sauce is also used like salt to enhance the flavour of each person’s individual serving of food. In Vietnam, it was a major source of animal protein for those who did not have access to it. Depending on the quality of the sauce, it may contain
significant amounts of protein and be a good source of vitamins and minerals (Simoons 1991:348).

Chile peppers, black pepper, sugar, salt, monosodium glutamate (MSG), vinegar, coconut juice, citrus juice, and soy sauce are also important seasonings. Some spices, such as star anise, cassia or szechuan peppercorns are bought and used still for special dishes like *Pho*, a beef soup. For some it is easier to buy convenient spice mixes at the market or simply eat this popular dish at a restaurant. In Vietnam, beef soup is often served for breakfast, and since it was almost impossible to purchase sufficient amounts of beef and beef bones to make this dish, many people went to restaurants or outdoor food stalls devoted to this fare. Bean sauce and peanuts are also important parts of flavouring and garnishing meals.

Most households seem to use a fair amount of salt. On average, most use about 1.25 kg salt per month. This was calculated by asking respondents how long it took to consume a 1kg box of salt. There seems to be a preference for salty dishes, such as *Ca Chien* and *Fried Shrimp* (see Appendix E). Another source of salt comes in the form of preserved products such as the fish sauce, soy sauce, and preserved soy beans, bean curd, and duck eggs. MSG, sugar and fish sauce were used heavily. I estimated that half a bag of MSG (or 227g) was used every month; fish sauce, 1 to 1½ 682 ml bottle/month (or around a litre per month); and sugar, 2-4 kg per month. MSG, salt, sugar, and fish sauce were added to almost every dish.
There are a vast array of sweeteners used in Vietnamese cuisine, including honey, refined white sugar, rock sugar, sugar cane, cane syrup, and palm sugar. Table 6 in Appendix D lists seasonings and flavourings.

**Sweets and snacks**

Traditional items consumed for snacks include seasonal fruits and sweet sticky rice. Fruit shakes, and other sweetened beverages are also popular, especially those available in restaurants. Tapioca and rice pudding, commercially produced chips and candies and even ice cream are popular. Roasted watermelon seeds dyed red are also a household staple for snacks (*hat dua*). The general consensus is that everyone snacks often throughout the day but children seemed to develop a greater liking for commercially produced products such as chips and ice cream. Table 7 in Appendix D lists items mentioned by the interview participants.

**Milk and milk products**

Many Vietnamese share a general distaste for milk and many adults are lactose intolerant (Behnia et al. 1995:9; Dinh et al.1990:209). With the introduction of French cuisine and its influence in Vietnam, however, many children now drink milk and many adults take cream in coffee. Sweetened condensed milk is especially popular for use with *Caphe*, a dark roasted coffee that is slowly dripped in individual glasses. In the household, we often ate a homemade yoghurt made from curdled milk with sugar and
vinegar, as a snack. Cheese is generally disliked with the exception of that found on commercially made pizza. See Table 8 in Appendix D.

**Beverages**

In China, tea is considered a digestive that has the ability to dissolve fats, neutralize poisons, and remove obstructions (Simoons 1991:447), and many of the people I spoke with subscribed to this belief. One man told me that the reason we drink tea (che or tra) with food is because it “lowers cholesterol and destroys fat.” Fresh fruit juices and shakes are very popular, as are other sweetened drinks such as soda pop. Tea, coffee or beer may be consumed with the meal but it was the general consensus that only men drank alcohol regularly. See Table 9 in Appendix D.

**Food preparation: facilities, tools and techniques**

In Vietnam, kitchens are often separated from the house or cooking is done outdoors, likely to prevent fire, but this practice persists in some homes in Canada. For those fortunate enough to have a basement kitchen or a garage, cooking is done there in order to prevent strong smells from entering and lingering in the house. Cooking outside in the summer with a propane burner or barbecue is preferable to cooking indoors. People living in apartments have told me that they have learned to use less fish sauce because the smell lingers in hallways and they worry about offending their neighbours.
There are some indispensable tools that most Vietnamese households have for preparing meals. The most common include an electric rice cooker, a wok or deep pan, chopsticks for cooking, large soup pots and steamers (steam-plates). Baking is not very popular, so the oven is rarely used. Microwave ovens, on the other hand are very useful for heating leftovers for breakfast or frying oil condiments for other dishes.

There are a number of techniques used to prepare food that have developed out of a concern for fuel conservation, as well as a distaste for greasy foods. Food is often cooked quickly at high heat with small amounts of fat or oil. If they are not stir-fried, many meats are also steamed or poached. Others are quickly stir-fried and then braised for longer cooking. Braising in particular is an effective cooking method in that it requires very little fat because of the addition of a cooking liquid and it renders tough, lean meats fairly tender. The glossary in Appendix B lists various techniques used in Vietnamese cooking among those I observed and spoke with.

*Food consumption and distribution: meal patterns, customs, rules governing meal behaviour*

Many Vietnamese cooking and eating customs have been directly influenced by their Chinese neighbours. Food is served by setting out small bowls of various items from which everyone serves themselves. Unlike the Chinese, the Vietnamese use chopsticks for cooking as well as eating. Figure 5.1 and 5.2 illustrate how a communal meal is set out on a table or floor in this case. Notice the electric rice cooker
on hand for refilling rice bowls. Each person eats out of their own rice or soup bowl. Spoons are only used with large soup dishes or a particular small-grain rice dish. Figure 5.3 shows how one goes about adding various items into their own dishes. This one is a *bun* dish, a noodle dish to which is added a good deal of *nuoc cham*. The same principle applies to soups except that hot broth is added after everything else has been assembled into the bowl. Figure 5.4 illustrates the variety of ingredients available for one’s soup. A great majority of Vietnamese dishes consist of soups or other liquidy dishes such as braised dishes. During my stay in a Vietnamese home, a soup was often accompanied by at least one dry dish consisting of fish, meat or vegetables and fresh raw herbs and vegetables on the side. Whether the dish was soup or a *bun* dish, everyone assembles their own large bowl and garnishes it with sprouts, lettuce, aromatic herbs, and *nuoc cham* to their own taste. Figure 5.5 illustrates this combination. Children are also allowed the freedom to choose what they would like to eat. Rarely do all members of the family eat together. This may be due to employment demands since many people do shiftwork or own small businesses, but this pattern may also be common in Vietnam (Dinh 1995:209). Conversation is not encouraged during the meal.

Most people report eating twice a day. When asked for more detail, they would add that they consumed something in the morning, yet did not classify it as a meal unless it included rice. For those who report eating three times a day, most ate soups or rice for breakfast, and these are often leftovers from the night before. Many report drinking only warm water. And still others have coffee, eggs, and sandwiches. It seems that many
people snack during the day on fruit and candies but again, these are not really considered eating as they do not conform to the traditional pattern of rice and accompaniment. One is eating only if one is eating rice, since rice is synonymous with nourishment and a balanced diet, although it is rarely eaten alone. If there are no vegetable or meat leftovers then fish sauce or fish or shrimp paste make a suitable accompaniment to the rice.
Figure 5.1: Photograph of place settings with rice cooker.

Figure 5.2: Photograph of place settings, top view
Figure 5.1: Photograph of individual *bun* dishes being assembled.

Figure 5.2: Photograph of variety of soup ingredients and condiments ready for individual assembly.
Figure 5.1: Photograph of salmon steak dish, soup, and condiments.
Factors Affecting Food Choice

The selection of foods by any group is influenced by a variety of factors. Why people choose to eat what they do is complex. These factors can be grouped into the following categories with some obvious overlap: sensory, economic, and cultural/symbolic determinants.

Sensory/physiological characteristics of food

There are a number of sensory characteristics that affect food choice at its most basic level. Taste, smell, texture, and other physiologically perceived characteristics determine to some degree what we eat. The acceptance, preference, or rejection of these characteristics varies among and within particular populations. For the Vietnamese participants in my study ‘freshness’ is probably the most common attribute cited as being an important characteristic of food. The lack of truly fresh food is also perceived to be the biggest change in the diet since arriving in Canada.

These sensory characteristics not only aid in making decisions about preferable foods, but also in distinguishing between safe and unsafe, desirable and undesirable. Humans rely on visual and other cues to evaluate the quality, safety, and acceptability of foods. It is not surprising, for example, to hear people evaluate the freshness of fish based on the colour of eyes, the condition of skin, etc. An interesting aspect of visual inspection is that in a very empirical way, it confirms or denies suspicions about the safety of food, as in the case of fish, but also water. The quality of water is a concern
among many of the participants. The following conversation took place between an interviewee and one of my research assistants, Uyen:

Uyen: Any concern at all?
Mrs. Anh: I see in the drinking water here, people say they get stones in the gall bladder.... and I see that in the water pot, the water is clear but I can see some residue in the bottom. What is that in the water?
Uyen: The water has some chemical in it.
Mrs. Anh: I don't see anything in there.
Uyen: She is saying that every time she boils the water, even when she has finished boiling it, you can see some residue that stays on the bottom of the bottle. She thinks there must be something wrong with the water.

The interviewee could see that there was residue in the water and that this ‘tangible’ contaminant could accumulate to form gallstones but when presented with the idea that there were chemicals in the water she was doubtful because these were not visible to her. The chemicals she questions, but the presence of the residue supports her suspicions about gallstones because, as Mrs. Anh says: “in reality, we see that [residue] in the water.”

Taste is a complex phenomenon that includes many learned components and culturally mediated factors. Taste is commonly referred to as ‘flavour’ which is really a combination of taste and smell. Taste is the ultimate test for the acceptance of food (Krondl and Lau 1982). Taste, or the flavour of food, is essential to any cuisine. Quite often, strong flavours and smells of ‘ethnic’ food are judged to be ‘less civilized’ (Messer 1989:8), and therefore thought to indicate status within a community or even the degree of ‘acculturation’. Some people in this study changed their cooking habits, namely the use of fish sauce, in order to make them less conspicuous to others. For instance, one
family used less fish sauce when they lived in an apartment building so that they would not “offend their neighbours”; others no longer cooked with fish sauce, using it only in its raw state for dipping and flavouring. Still others simply dilute it so that it is less intense or pungent. Miss Phuong tells me,

_We are used to the smell, but when we go outside, our clothes still smell, we don't want that. It's kind of embarrassing._

Fish sauce is still important enough not to be abandoned. During the beginning stages of Vietnamese migration to centres that did not market Asian products such as fish sauce, Vietnamese refugees in the United States were found to have experimented with American condiments to create an acceptable substitute for their usual spices that were not available (Rozin and Schiller 1980). Even with the introduction of North American and fast foods into the diet (especially for children), many people told me that they liked to dip their hamburgers or steak in fish sauce, or add Vietnamese seasonings to spaghetti sauce. In other words, although they have changed their diet in some ways, they have actually ‘Vietnamized’ many North American foods.

Another one of the adjustments people had to make upon arriving in Canada was to the taste and smell of meat and fish. Along with texture, these elements determine the acceptability and the quality of these items. Compared to what is available in Vietnam, meat and poultry are considered to be soft and fatty. When it comes to fish, smelling it helps one to discern whether it is fresh or even safe. Many respondents avoid certain fish or parts of fish for this reason. Others relate their difficulty in adjusting their tastes to
North American fish and to other foods that smell differently to what they are accustomed. They observe that fish is sometimes soft and very smelly. It is not clear whether this is due to the unfamiliarity of species or the myriad other factors that influence the flavour of commercially grown animal products. It is not unreasonable to expect that these items should taste different from region to region. Ms. Chau states,

*In Vietnam, I usually ate more fish but now over here the fish stink, they stink more so I don’t eat that much fish. I bought the fish that are living, that are still swimming in the water or whatever, I brought it home but the smell was so bad after I cooked it and that’s why after that first experience I don’t eat it anymore. It’s not like a smell of dead fish or something but it’s just... the raw smell. It smells so strange, it’s a very uncomfortable smell and even when you boil it and then you fry it, it’s that kind of smell. I couldn’t stand it. And the meat is soft and it’s not sweet enough. It’s just different.*

Meat and fish with strong odours are always cleaned to remove the smell. For instance, pork is rubbed with salt and soaked in vinegar when it is raw to remove grease and then cooked with ginger to remove any remaining smell. Soaking with salt, vinegar, or ginger is also used for cleaning fish or chicken. In some cases, certain fish are no longer eaten because of the "strange smell" attributed to their being frozen. For Mrs. Tuyet, a fresh fish that “smelled so bad” after she had cooked it led her to abandon eating that fish ever again.

*I avoid the sea fish because they are frozen. Because of the stinky smell, the strange smell, because they are frozen.*

MSG is prevalent in Vietnamese cooking and its use is a matter of taste. While some feel that MSG could be substituted with much more salt and sugar, others describe the ‘sweetness’ it imparts as being quite distinct. MSG is also used to bring a full body to
soups with a bit of a sour quality as well as a sweetness. In the literature, the taste sensation conveyed by MSG is known as *umami*, a term coined by the Japanese. This distinctive taste is thought to fall outside the region of the four classic tastes of sweet, sour, salty and bitter. North Americans may describe the flavour as “savory, broth-like or meaty” (Fuke and Shimizu 1993; Yamaguchi 1987).

Given the bad press for MSG (Schwarz 1988), it is not surprising that some participants in my study have questioned their continued use of it. It has been claimed to cause flushing, headaches, and other symptoms. Some people continue using it because “they have always used it”; finding a substitute for it would be difficult (ie. distinctive flavour); or because they are used to it. Others have cut down or eliminated the use of MSG in their home cooking because “Canadians don’t use it, so it must be bad”; health reasons, “it is a chemical”; and the elderly because they often cut out “hot” substances or flavourings because of their “age condition”. In another conversation between an interviewee and my research assistant, Uyen,

*Mrs. Anh: And why do Canadians seldom eat monosodium?... they say if you eat much of it, you get sick. is that right?*
*Uyen: I don't think so, we've been eating it since we were small. I have an uncle, he is a chemist. I asked him that question and he said no problem.*
*Mrs. Anh: There are people who don't eat it at all, but we're used to it, we have to have that.*
*Uyen: And I think that's important too, our body has adapted to it since we were small so it should not be any problem.*
*Mrs. Anh: Some Vietnamese families don't eat it at all.*
*Uyen: She just wonders if it's bad for your health or anything, but I mean we've grown up with that and we're eating every day and there is nothing wrong with it. They think it's bad because Canadians don't eat it so they think it must be bad. But I guess it has to do with our system too.*
Some of the people I spoke with have reacted to what they perceive to be negative messages that MSG is either unsafe or morally disapproved of in Canada, leading them to change their habits.

Foods that make one feel good or are considered strengthening are often high protein items, such as eggs, meat, blood, or dishes that consist of several proteins together such as this dish prepared by Mrs. Anh:

*Sometimes I make the mint soup, containing bamboo, chicken, crabmeat, and all kinds of tonic stuff and when I eat that I feel good. It has all kinds of meat in there, crab seafood, chicken, eggs, crabmeat, shark fin, bamboo, and there's stuff that are considered very expensive to Asians. This is a very special dish. I also prepare beef with salad, fresh salad, beef steak...it's nutritious... I think sometimes people think red meat gives you more energy...*

There seems to be a high value placed on meat. Beef is especially popular. Pork consumption is universal in this sample. Meat is considered to be good for growing children and most meals will have some meat in them even if it is a small portion. Small amounts are often included in congee, an illness food. Special meat dishes are prepared for the weekends. Others, like Mrs. Lien, insist on eating meat daily:

*Everyday, I need a lot meat on menu, I have to eat...Bread, noodle, chicken eggs, with meat...meat important...If I don't have meat I feel sick, yes. Maybe I eat a lot, drink milk with breakfast, every breakfast, ah break time, I also eat, I eat maybe five, six times a day [laughter].*

It is interesting to note that most of the people I talked to think that meat is an essential part of a healthy diet, yet it is the first item to be eliminated if there is a serious health condition. There were people who immediately changed their diets to strictly vegetarian
foods when they were diagnosed with tumours. Some individuals fast for a month or longer, subsisting only on water, to remove the tumours from their bodies.

The function of food is sometimes believed to correspond with the physical properties of the food, so that a vegetable that behaves like some part of the human body is naturally held to affect that part of the body. For instance, some believe that silk squash and opo squash are not particularly good for one’s health especially for thyroid conditions. Ms. Thu says,

*It's not that you shouldn't eat anything, but you should reduce eating something to a certain amount because some of the food is good for maintaining your health and some of them are not good. So, for example silk squash and opo squash are not very good for your health because these kinds of vegetables can induce the soreness of the body or the vein soreness and especially people with the... lump right here... what do you call it... thyroid-kind of problem. Those with the thyroid problem shouldn't eat these kind of vegetables. Because you eat that, the lump would get bigger. The reason behind that is that for the opo squash, it absorbs the juice over night, so if you eat that kind of vegetable then the lump would grow... so my mom ask us to reduce eating these two kinds of vegetables.*

In this case, it is the absorbant properties of the squash that induce a similar effect on someone prone to swollen thyroids. This is similar in principle to the Doctrine of Signatures in humoral medicine in which the plants resemble that which is meant to be healed in the body. Another example is the avoidance of (animal) fat in winter as cold conditions may affect its state in the body. Ms. Thu continues,

> When I was young I was able to eat more, eat more of everything. Then since I came here, as I get older, I try to reduce some of the things that I think is not good

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6 The respondent might actually be referring to goiter, since I prompted the word thyroid when she was pointing at her neck.
for my health. In Vietnam, I used to eat fresh pork, boiled pork...let's say, the pig they just killed, and they cut the meat part out and they boil it and they eat it right there. Or even the meat with the fat part as well. But here I try to reduce the fat part because I am afraid of the winter here, it is not good for my health so I try not to eat the fat very much. Because the weather is cold, so with the pork fat, if you eat it in winter it is easy to clot...it is not good for your heart. I am afraid of the clotting, the fat clots the whole blood circulation system...

Similarly, parts of an animal’s body are seen as especially strengthening to their human counterparts. For example, animal blood is said to strengthen weak human blood. This is a common tenet of Chinese nutritional therapy and prevalent in Southeast Asia and elsewhere (Anderson 1996:43-45).

Finally, fat, salt and other condiments are often recognized as physiologically necessary by most peoples living on a predominantly cereal grain diet (Messer 1989:12). Indeed, salt, MSG, and fish sauce or nuoc mam seemed to be the most important ‘relishes’ or spices used in everyday cooking. In the absence of any other accompaniment, fish sauce is a sufficient and tasty relish for rice. As important as rice is, it is hardly a meal without something to help it go down.

**Economics**

Various studies have shown how income and food costs determine food selection, and often override considerations of healthfulness, social desirability, and even taste (Messer 1989:4). I found that for most of the people I spoke with, the amount of fish and the frequency of fish meals were indeed related to the cost of purchasing them. Fish was eaten more frequently in Vietnam, being widely available, tasty, abundant and
inexpensive. Unlike Vietnam, fish in Canada are relatively expensive items to purchase. Meat, on the other hand, is less expensive and more available. According to many respondents, the relative quantity consumed and frequency of (fish or meat) meals has reversed, with meat being more regularly consumed in greater quantities than fish compared to what was usual in Vietnam. Take the following examples:

Q: Would you say that fish is an important part of your diet?
Mrs. Mong: I think, but here I don't get much because of the expenses.

Q: So is that the biggest change that has happened to your diet since you arrived in Canada?
Mrs. Mong: Yea. Like we don't have much of the fresh ones like we have back home. The vegetable is not that fresh because we just go shopping once in the week so we have to get altogether for a week, and then we cannot use them all at one time so whenever on Thursday, on Tuesday on Wednesday when we get to use it, it's not fresh anymore. And it doesn't taste as good because it is not fresh.

And, Mr. Tam,

Like here, the food we eat more than in Vietnam is the beef. And the pork the same thing. The fish is low [price] over there. Because for the Vietnamese the beef is very expensive. And the fish a very low price. And the chicken and the pork, same thing. And here, here we sometimes eat these frozen. In Vietnam, they are never frozen, just fresh, fresh. Every morning my wife goes to the market, every morning. We have the fridge, we don't use it too much. Just fresh, fresh.

Then again, economics may affect food choice in other ways as in the case of one woman who assigned qualitative differences to fish that was more expensive and therefore presumably higher quality: “This expensive fish must be better, therefore I will choose this to eat.”

When it came to fishing, however, most respondents thought the idea of fishing to supplement their food supply was impractical in this country. Not only is fishing an
expensive endeavour but also a time consuming one. Most people fish only during leisure time like weekends when the family goes to the lake for the day. These are enjoyable experiences for which many respondents wished they had more time. For many, fishing back in Vietnam was a much more convenient and less expensive activity than it is in Canada.

For the most part, the participants in this study thought that issues of food security and nutrition were of minor concern in Canada. Although obtaining a job is of paramount importance, they recognize their relative safety here in Canada. Ms. Chau says,

*The living standard is better here, it's higher here compared to Vietnam. The social system here has good benefits program, health care program, family benefits and we don't have that in Vietnam...Of course it's really important because in Vietnam for example they don't have any programs like unemployment programs; if you don't have a job you stay starving, you don't get income but here you have social assistance program.*

In this sample, although most of the Hamilton members lived in a lower socioeconomic area, many were homeowners and employed. Food insecurity does not seem to be an issue among the people I interviewed, either in terms of quality and quantity of foods or their access to them.

Time available for the food provider is an important factor in determining what people eat and how they prepare it. The main food provider or preparer, usually female, has been known to calculate the amount of time that must be allocated to the preparation of foods given the conditions of household organization and resources (Messer 1989:5). In other words, meals and meal patterns are often directly related to the time available for
cooking for one or more preparers. In many households where women as sole food preparer work at shiftwork outside the home, meals are cooked before leaving home so that other members of the family can eat according to their own schedules. Also, food items such as fish or more elaborate soups or salad rolls became weekend food when there was more time to prepare the labour intensive dishes. Fish is more fancy than meat; meat is easy to cook.

*Q:* How often do you say you eat fish per week?
*Mrs. Hang:* OK, here only once a week, but when we were back home, we had it every day, we had it more regular than meat. Meat just sometimes. It's the opposite here. Well, back in Vietnam, meat is very expensive, so we eat fish more. Here we just don't eat a lot of fish because it takes a long time to prepare the dish. Meat is easily available and easy to cook.

Portions of fish have changed as a result, with less fish being shared per meal. Whole fish fried or braised is spoken of with great excitement but most people bought steaks or slices of fish for their meals.

*Q:* And when you fry the fish. Do you use the whole fish?
*Mrs. Xuan:* No, only slices. yeah, like steaks. the one you buy from the supermarket they cut the slices. yeah, because the whole fish, very expensive. A pound for 5 dollars, like that. My whole family, only one day we eat about 3 slices.

The adoption of convenience and fast foods has led to a significant increase in the consumption of carbohydrates, sugar and fat (Dinh et al., 1990:209) and possibly sodium. Oriental style instant noodle soups are particularly popular, especially for breakfast or lunch among the participants. This pattern is consistent with Vietnamese groups in other areas (Tong 1987). Asian fresh foods and vegetables may be more expensive than back
home because they are imported, but in urban areas like Hamilton and Toronto, they are readily available and not as expensive as they were 10 years ago. In sum, time, convenience and economics have a direct impact on the dishes and structuring of meal patterns.

In addition to sensory and economic characteristics, foods may also be classified according to a number of cultural factors such as hot-cold, wet-dry, dangerous for pregnant women, etc., which are culturally constructed from sensory data and other information (Messer 1989:14).

**Cultural-symbolic factors**

Many other factors that influence food choice are best relegated to a discussion of the cultural-symbolic dimension of foods and food classification. It will become obvious that many characteristics of foods are directly traced to influences of Chinese nutritional principles. These culturally constructed categories of food influence what people eat, when they eat, how they prepare it and why they eat it. These are often termed symbolic because they are not objective or measurable attributes or qualities. These dimensions are directly related to the perceived physiological effects that were mentioned briefly above and often encompass several different socio-cultural domains, such as food, health, and social relations (Messer 1989:14). I will discuss the most salient dimensions. They include the hot-cold theory and other binary dimensions (fresh-frozen, wet-dry, safe-unsafe) and health and illness (food selection and restrictions).
Am-duong

Chinese philosophy has permeated medical thinking and the use of food in Vietnam. Chinese nutritional therapy is practiced, whether subtly or overtly, among most Vietnamese in my study sample. Health is related to the life balance concept in which a harmonious balance is achieved and maintained for good health. Health, illness, and food are related to the dualistic concepts of Yin-Yang or cold-hot or the Vietnamese Am-Duong. Foods, herbs and medications are all classified as hot or cold, wet or dry, etc. By contrast, many consumers in North America believe that a good diet must provide daily adequate amounts of all known essential nutrients. For the general public, a balanced diet consists of one containing particular nutrients. Health beliefs are associated with scientific knowledge about food and nutrition. Buddhists, with whom I spent the most time, often explained their consumption of certain foods and the placement of foods within a meal in terms of their heating or cooling qualities. Raw cucumber (cooling) was often served alongside soups and stews. Bean curd (cooling) was often eaten beside meat even though they are both protein rich. Of course, it is not the protein that matters but that the beancurd “cools the body.” So does congee, an illness food. On the other hand, “fried foods are like hot foods; they make you get pimples; many people think these are hot foods.” Ginger, a strengthening food or medicine and important for maintaining health, is considered ‘hot’. Garlic is also used extensively and along with a variety of onions (hot), are considered to be too stimulating for Buddhist monks to consume. These rules held even among the Catholics in the sample, however.
There is no unanimity among the participants as to the classification of hot or cold foods. This is partially explained because the hot-cold system is actually a continuum or a rather flexible classificatory system. At the very least we can include neutral items. What I encountered were subtle differences as to the characteristics of the foods (ie. cold, cooling, hot, very hot, etc.) and what was included in those categories. Fish is considered by some to be hot, others consider it warm, neutral, and cold. This seems to be the case in many parts of the world (Simoons 1991:24). One need only look at Table 5.4 to see variations in the qualities ascribed to food items during the interviews. Chicken, for instance, is considered to be hot, warm, or neutral, while duck can be warm, neutral, or cold.

**Table 5.4: Classification of Food Items Based on Hot-Cold Theory**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Food Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot</td>
<td><em>ginger, pepper, beef, fried foods.</em> Also: meat, fish sauce, sweets, coffee, spices, garlic, onion (D: 209); chicken, pork, game, egg, ice (B)</td>
</tr>
<tr>
<td>Warm</td>
<td><em>chicken, duck, freshwater fish</em></td>
</tr>
<tr>
<td>Heating</td>
<td><em>pork's blood</em></td>
</tr>
<tr>
<td>Neutral</td>
<td><em>chicken, duck, freshwater fish</em></td>
</tr>
<tr>
<td>Cooling</td>
<td><em>bean curd, congee, dogmeat and herb tonic</em></td>
</tr>
<tr>
<td>Cool</td>
<td><em>pork</em></td>
</tr>
<tr>
<td>Cold</td>
<td><em>vinegar, sour food.</em> Also: vegetables, fruit, potatoes, fish, duck (D); most seafood, flour, tea, water (B).*</td>
</tr>
<tr>
<td>Very Cold</td>
<td><em>watercress</em></td>
</tr>
</tbody>
</table>

NB *italicized* classifications are based on interviews and fieldnotes
D: Dinh 1995
B: Behnia et al. 1995
The prescription of hot or cold food may depend on the condition of the person consuming it. For example, since many illnesses are believed to be the result of heat loss, ‘cold’ foods like fruits, vegetables, and water may be partially restricted or avoided. The opposition of qualities is essential for regaining health once it is lost by achieving the harmonious balance (Manderson 1987).

**Wet-dry**

Associated with the concept of hot-cold is that of wet-dry. The imposition of wet-dry or heavy-light dimensions may explain some of the classificatory inconsistencies found in this study. It is not as prevalent a concept as hot-cold, but there are some examples of this dimension in the interviews. Miss Phuong says,

*Vietnamese fruits, yea, like lichee, longans, we eat them but we try not to eat too much of it, even though they are fruits, right, they are not good for the health because it is too much sweet in it and it makes the body dry...usually we get dry throats and eyes. We just avoid eating too much of it. Maybe, like five fruits, like five lichees. That's good, but, don't sit there and eat the whole thing. It's easy to do...and not too much watermelon. Because, it is like longan and lichee...it makes us feel sore throats...too much sweets in it. That's how it effects us, so that's why...easy to have flu if eat three pieces of watermelon. Just like to eat something light like apple or pear or peaches or banana...I think I found that fruits here are much light, better, good for health more than the fruits back home because of the sweets, you know, the tropical fruits are more tasty, a lot of sweet content. So, not healthy. Yea, because if I eat, like, two pears, it doesn't effect me that much, like, or everyday I have a pear. If I eat longan too much, oh my god, I would have a sore throat and runny nose. Sore eyes...itchy. Yea, that's right, it makes you feel itchy. My eyes...have an allergic reaction to that. I guess it is not good to eat anything a lot...have a balanced diet.*
**Fresh-frozen**

This is not necessarily a traditional concept, but it seemed to emerge from the interviews as a way of expressing not only the physical differences between some foods but also the separation of Vietnamese and Canadian, a distinction or boundary between groups expressed through food. In some ways, the fresh-frozen dichotomy connotes differences between Vietnamese and Canadian, between healthy and unhealthy. This is an oversimplified look at the way people tend to categorize and characterize their food but the preoccupation with freshness may in fact symbolize the idealization of a country many unwillingly left behind. For instance, some people recalled wonderful foods and snacks that they bought from street vendors that were everywhere in Vietnam. There are numerous examples of this. For example, Mrs. Diep says,

_The quality of fish here is not as good as that in Vietnam because the fish here are frozen and the ones in Vietnam are fresh._

And Mrs. Anh,

_Well, here the food are frozen, food in Vietnam are fresher and chicken here is the worst, they are so soft, pork too. It is not as good as that of Vietnam...things in Vietnam are more fresh, like vegetables, chicken and meat, we can get it fresh everyday, compare to here everything is frozen. Now when I go to Chinese stores and restaurants, I usually see many Canadians buying Chinese food and Chinese tea. They ask us what tea is good, they like Chinese food and Vietnamese food better, nobody likes Canadian food anymore...Vietnamese food has less fat compare to Canadian and so it is healthier._

When I asked another participant about this, she shook her head and said that whoever said this must really miss Vietnam to romanticize it this way. She assured me that with the exception of the smell and taste of some fruits, there was no comparison in the quantity and quality of food as Vietnam is a very poor nation and _very dirty_ compared to Canada.
These binary classifications are summarized in Table 5.5 and show that Canadian food is perceived to be relatively unhealthy because it is considered to be greasy and high in fat, and often frozen. Since fresh food is considered nutritionally superior to refrigerated or frozen food, then a diet consisting of storebought Canadian foods is far from the ideal. Since time is a factor, the preference for purchasing foods daily is abandoned in favour of the Canadian habit of buying a week’s worth of food. This is a tradeoff that many of the participants accept.

Table 5.5: Binary Food Classifications, Reported by Study Participants

<table>
<thead>
<tr>
<th>Hot (warm, heating, etc.)</th>
<th>Cold (cooling, very cold, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet</td>
<td>Dry</td>
</tr>
<tr>
<td>Vietnamese food</td>
<td>Canadian food</td>
</tr>
<tr>
<td>Fresh</td>
<td>Frozen or refrigerated</td>
</tr>
<tr>
<td>Low in fat</td>
<td>Fatty, greasy</td>
</tr>
<tr>
<td>Healthy</td>
<td>Unhealthy</td>
</tr>
</tbody>
</table>

**Health and illness factors in food selection and restriction**

Culturally relative health beliefs also affect food choices. These beliefs include concepts of safe or harmless, nutritious, and tonic foods and are related to some of the theories discussed in the previous section. People are alert to maintaining the balance between **duong** and **am** for good health. Some foods are believed to be particularly nutritious or tonic. For instance, a mother’s attempt to treat her daughter’s fatigue from
studying involved preparing tonics and coining to relieve stress or release ‘bad air’ (Gio).

This process was done by Mrs. Lien on a regular basis while her daughter was enrolled in an intensive school course.

Yes, I always find out which food is good for them because I want them to be healthy...they can study good. When I am working, I talk with my friends about what they cook for their children, what is good...and I learn from them and then I cook for my children.

Strengthening or restoring foods, such as chicken in broth, are commonly high in protein and calories (Simoons 1991:25). Melanotic chickens, black-fleshed and black-boned, play a role in Chinese ritual and medicine (Simoons 1991:298). The use of black chicken also seemed to be common among my respondents. Mr. Bao describes its effect:

They cook this with the chicken, just like, ahh [feel better]... so they make stronger, it's just like a nutritious dish, but it's not to prevent anything...it's like the duck egg... very nutritious.

Some prepare black chicken with a variety of Chinese herbs as a monthly tonic for the whole family, with the exception of young children. Others, such as Mrs. Lan, use it in times of greater need for strengthening foods:

I cook the black chicken with lotus roots and just simmer in over a period of time until the water become concentrated. I cook it whenever the children have the

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8 Coining or Cao Gio is a traditional treatment used to relieve fever, chills, headaches, and muscular pain. It involves rubbing the edge of a coin or similar metal object dipped in Tiger balm against the base of the neck, chest or back. If the skin bruises, it is taken as evidence of “bad wind”. “Only when you are sick, that will happen. If you try a little bit and it doesn’t turn red, I think that’s because that is a sign of not having a cold or being sick.” This bad wind is released and the process is said to relieve the sufferer.

9 The Black chicken is small and is most often cooked for its tonic broth. Most people I spoke with did not eat the bird itself, although some people do.
exam, to make them feel better, you know much exhaustion and tired but they only
drink the broth and the lotus. The black chicken gives you better broth and the
flavour tastes better than the regular chicken and people say its good for your
health. I don’t eat that often because of the blackness of the chicken, it doesn’t
look attractive.

The use of foods to treat illness seems to be important but in an admittedly limited
way. Many people spoke of their parents’ ability to treat a wide range of ailments using
herbs gathered in the countryside in Vietnam. The most prevalent treatments include
coining and cupping. In terms of food, congee, a rice soup made with chicken broth and
sometimes containing small bits of meat is consumed. It is easily digestible and is
considered to have strengthening properties. In addition to the varieties of congee eaten,
there are tonics, lemongrass steams, herbal steams, sweetened condensed milk, and garlic.
Foods that are easy to digest are the most important to those who are sick. The elderly are
also concerned about eating easily digested food.

Nutritious food

A well-balanced moderate diet consisting of fish, meat, vegetables, fruits, rice and
eggs is considered to be the Vietnamese ideal. Milk is proscribed for some pregnant
women and children. Meat is especially energizing and important for growing children.
For instance, most people agree that black chicken is very nutritious and is often used as a

\[\text{Cupping or Giac Hoi is a traditional treatment in which a hot cup is placed on the skin until the air contracts and the skin is ‘sucked up’. There are also wooden tubes and other devices that suction the skin by pumping air out of these cups. It is also used to relieve the body of Gio: “the bad stuff is drawn out of the body” to get rid of ache and fatigue.}\]
tonic. Herbal teas and steams, drinking water daily on an empty stomach in the morning, and some vegetables broths are very important for maintaining good health. Some foods are especially beneficial for certain life stages or conditions (Table 5.6).

Table 5.6: Nutritious or Beneficial Foods Identified by Study Participants Arranged According to Life Stage or Condition

<table>
<thead>
<tr>
<th>Life Stage/Condition</th>
<th>Beneficial Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>children</td>
<td>homemade food, vegetables, meats, fruits, proteins, what they are willing to eat, more meat than adults for growing, salmon, juice.</td>
</tr>
<tr>
<td>after weaning:</td>
<td>rice pudding with milk, fish or meat, congee and soup</td>
</tr>
<tr>
<td>pregnant women</td>
<td>“no opinion”, milk, rice, meat, protein, vegetables, fruits, foods that cool system, shrimp and crab for calcium, fresh milk, cheese, shrimp and mussels, milk for nursing, coconut milk.</td>
</tr>
<tr>
<td>after delivery:</td>
<td>spicy foods, dried foods to regulate body to normal state, rice with dry braised pork</td>
</tr>
<tr>
<td>illness</td>
<td>congee with chicken, black chicken soup, toast bread, jello, bread and soya sauce (for flavour), popsicles for sugar content, soup, congee with hot black pepper for sweating out illness, lemongrass steam for colds, toasted sandwich with no meat, congee with meat, easily digestable foods, congee with fish, dillweed, chinese red apples, dried longans, tonics</td>
</tr>
<tr>
<td>elderly</td>
<td>easily digested food</td>
</tr>
</tbody>
</table>

It is also interesting that although the nutritional benefits of fish were known and expressed, it was not in direct response to questions about nutritious food. Fish are seen as healthy, low in cholesterol and easier to digest. According to several respondents, fish should be eaten more often than meat.
Food restrictions

Although there are no universal food taboos *per se* among the sample, there are some food restrictions based on life stage or condition (Table 5.7). These are not strictly observed and they are highly variable.

**Table 5.7: Food Restrictions Identified by Study Participants Arranged According to Life Stage or Condition**

<table>
<thead>
<tr>
<th>Life Stage/Condition</th>
<th>Restricted or Avoided Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>Canadian foods, fatty, cheesy foods, raw food such as beef and pork skin because digestive system not strong enough, “no restrictions as long as they eat”, not too much hot foods, fat.</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>“no restrictions, should not avoid anything”, early in pregnancy should not eat cucumber, should not eat mangoes because too hot, mint and basil can cause miscarriage, mint-like herbs, anything that is too cold or fresh, alcohol, oil, anything that makes your system hot, early in pregnancy should not eat anything that makes her system too cool because it will affect the fetus or push it out, snails and crabs because they are not easy to digest and also crabs because they eat spoiled food...fertilized eggs, mint, bananas.</td>
</tr>
<tr>
<td>Before Delivery:</td>
<td>sour fruits because they will lead to involuntary urination, bananas because they will loosen stool, spicy food and coffee.</td>
</tr>
<tr>
<td>After Birth</td>
<td>fruits and vegetables because of toxins.</td>
</tr>
<tr>
<td>Illness</td>
<td>milk, tonic with vodka and garlic.</td>
</tr>
<tr>
<td>Elderly</td>
<td>sour foods</td>
</tr>
</tbody>
</table>

There are only a handful of items that are considered “not good” or unsafe and these are not always agreed upon among respondents (Table 5.8). Notice that many items are considered ‘Canadian’ by those who describe them. These foods are not necessarily restricted.
Table 5.8: Unsafe Foods (or foods that are “not good”) Identified by the Study Participants

<table>
<thead>
<tr>
<th>Type of Food</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>canned foods in general</td>
<td>because of chemicals</td>
</tr>
<tr>
<td>fatty or greasy foods (most Canadian foods, espec. cheese, butter, milk)</td>
<td>high cholesterol, blood pressure, liver problems</td>
</tr>
<tr>
<td>frozen or refrigerated foods</td>
<td>not as good as fresh; may lead to cancer</td>
</tr>
<tr>
<td>dried/processed foods</td>
<td>chemicals</td>
</tr>
<tr>
<td>coffee</td>
<td>no explanation given</td>
</tr>
<tr>
<td>raw foods, such as beef</td>
<td>difficult to digest, bad for children</td>
</tr>
<tr>
<td>monosodium glutomate</td>
<td>chemicals, not good for the elderly</td>
</tr>
</tbody>
</table>

There is little direct information from my study on food preferences or restrictions based on age and gender. There is general agreement about the importance of meat for growing children but there are no real restrictions or special foods set aside for the young. Many older people did not seem to restrict themselves in any way unless it related to a specific health problem they had. As discussed earlier, some older people reduced elements like meat as it is difficult to digest or MSG because it is a chemical in their diets but this seems to be related to an idea of a diminished constitution in the elderly. In addition to the elderly parents of one interviewee reducing their MSG consumption, the child of another was not allowed to eat raw beef, a delicacy shared by the adults because of the difficulty in digesting raw meat.
Perceptions of Health, Risk, and the Environment

From a reading of the previous section, we have caught a glimpse of the perceptions of health in relation to food. In this section, I turn to more general perceptions of health and its relationship to the environment among the Vietnamese participants in this study. What are their notions of risk, how do they perceive themselves in relation to their environment, what are their concerns, if any and where do they obtain knowledge about health and the environment?

A young woman in the study and I had lengthy conversations about the neighbourhood and environmental problems. She had the opportunity in recent years to conduct a survey for a school project and concluded, as had many students in previous years, that awareness or lack of it was the biggest problem. People knew about Dofasco and Stelco polluting the lake but figured "if they were not affected by now, then they were ok". They appeared healthy so they did not have any real concerns. She told me,

Most people do not pay attention to pollution news. In terms of health, even educated people did not use public resources for help; they would rather go to their neighbours. I feel the same way. Who wants to go there with personal problems, especially mental problems? 11

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Although outside the scope of this thesis, there have been numerous studies that have documented the Vietnamese hesitation in seeking help for some health problems, including those of a psychological nature (Jenkins et al. 1996).
Sources of risk

Table 5.9 represents a summary of risks identified by the participants in the study:

Table 5.9: Risks: Sources, Outcome and Actions as Reported by Study Participants

<table>
<thead>
<tr>
<th>Source of Risk</th>
<th>Outcome</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR smoke</td>
<td>headaches</td>
<td>shut door in summertime</td>
</tr>
<tr>
<td>smells in neighbourhood</td>
<td>annoying smells</td>
<td>shut door in summertime</td>
</tr>
<tr>
<td>WATER residue in tap water; germs</td>
<td>gallstones, unknown risk</td>
<td>boil and/or filter water</td>
</tr>
<tr>
<td>FOOD beef</td>
<td>allergies</td>
<td>avoidance</td>
</tr>
<tr>
<td>duck</td>
<td>upset stomach</td>
<td>avoidance</td>
</tr>
<tr>
<td>fish</td>
<td>rash</td>
<td>avoidance of particular species</td>
</tr>
<tr>
<td>frozen food</td>
<td>---cancer</td>
<td>eat fresh foods, less frozen foods</td>
</tr>
<tr>
<td>canned food</td>
<td>---cancer (because of chemical additives)</td>
<td>eat fresh foods unless not available</td>
</tr>
<tr>
<td>fat</td>
<td>---high cholesterol, high blood pressure, cancer...</td>
<td>reduce fat in foods; avoid greasy foods</td>
</tr>
<tr>
<td>fish (storebought)</td>
<td>---cancer (because of chemicals fed to fish in store)</td>
<td>do not eat intestines; buy freshest fish</td>
</tr>
<tr>
<td>glutamate (msg)</td>
<td>---not good because it is a chemical</td>
<td>ok for most, reduce in elderly diets</td>
</tr>
</tbody>
</table>

Most sources of risk they identified are immediately threatening, because they are experienced and then dealt with in some manner. One such case involved a woman who said she realized the risk of eating poisoned fish after she witnessed two friends get a reaction one hour after eating fish procured from the lake. It is difficult to determine to what extent the participants were willing to take a proactive or preventative stance in the
face of perceived risks. Most food avoidances are highly individual and seemed to be the result of a particular health problem. For instance, allergic reactions, rashes and food poisoning induced people to avoid those items in the future. Most people I spoke with took steps to reduce fat intake and this is consistent with Vietnamese cuisine and eating habits in general. Complete avoidance of fat was followed by individuals who took their doctors’ advice. So it would seem that only short-term health effects had a real impact on health seeking behaviour. The threat of cancer presents an interesting problem as the threat of cancer is considered to be connected with foods not in their ‘natural state’. This conversation illustrates the point:

*Mrs. Anh*: yea, debt is the most scary thing and I heard that frozen food increase the risk of cancer.

*Q*: Why is that? Why do you think it increases the risk of cancer?

*Mrs. Anh*: Because, here you only go to the super market once a week so you have to freeze the food, where as in Vietnam, we go to the market every day, the food are fresh and (to interpreter), do you see that less people in Vietnam get cancer?

*Uyen*: Yes.

*Mrs. Anh*: More people get cancer here because I heard that frozen food effect that.

*Uyen*: She thinks mainly because the food are not fresh. We only go to the market once a week right? So you have to store the food for at least a week and she thinks the food could go bad from that, even [when] they're frozen she thinks they could go bad and plus the fact that in Vietnam, we don't have a lot of people getting cancer and here a lot of Vietnamese get cancer so she thinks it has something to do with the food here.

*Mrs. Anh*: But (to Uyen), do you think frozen food can cause it?

*Uyen*: Well, it is not proven yet but lots of people think so because the food here contain lots of fat.

*Mrs. Anh*: Oh, it is not proven yet.

*Uyen*: They haven't proved it yet...like they also said that fat of the chicken skin also increases the risk of cancer.

*Mrs. Anh*: So when they eat chicken they will leave out the skin then. And pork fat too. Nobody eats it, they use oil more often and oil without cholesterol.
Uyen: Yeah, also we're afraid of fat here that increases the risk of cancer, that's not proven yet right?

This excerpt presents many items of interest. It points to frozen foods and dietary fat as cancer-causing agents and it demonstrates a belief that many Vietnamese people have developed cancer since arriving in Canada based on their own observations and their shared belief that this can be attributed to changes in the diet. It is also interesting to note the desire to validate their beliefs by scientific proof.

In addition to the above items, canned, dried, or processed foods, and storebought fish that are not fresh are all seen as possible carcinogens. Perhaps the most glaring omission in this list is Great Lakes fish, despite the fact that the respondents were very aware that I was particularly interested in this food source.

**Environmental concerns/knowledge**

My questions about environmental concerns evoked puzzled looks. Very few people were able to offer any concerns without prompting from the interpreters. Responses included air pollution in connection to allergies, cold weather, indoor air quality (because houses are closed up all winter), and safety from harm (crime).

Environmental concerns were never broad or system based, but rather more local and individualized. They are also dealt with individually: *"When you detect the smell from Stelco, you close your door"*. Environmental issues are not a priority:
Q: What about your concerns for the environment?
Mrs. Mong: No, I don't have any idea about that. Because, we just spend most of our time to work, not much time to worry about other things.

More recently, I had the opportunity to ask a small group of participants about the toxic Plastimet fire in Hamilton, which took place very close to their residence in the summer of 1997. There was little reaction to the fire and no concerns were expressed about its possible effects. As refugees and immigrants it is easy to imagine that environmental concerns pale in comparison to worries about family, employment, and adjusting to a new country. Mrs. Thoa says,

*When I first came, I feel that everything is available, there is more... the living standard is higher. While in Vietnam, when the communist dominated Saigon the life is more difficult.*

Mr. Vu states,

*Now I think the life here look like clean? We learn and we work and we eat and I think everything is ok, no problem.*

Others expressed a concern with air quality. One respondent living in Hamilton said,

*I am just afraid of the strange smell in the air here in this area. I think that sometimes there is a strange smell that comes from the factory. Every time I feel the strange smell, I just close the door and when it is over, I open the door again. Especially in the summer. It comes and goes, sometimes there's a lot of it. I think that it follows the wind, sometimes there is a lot of it, sometimes there is not.*

**Sources of information and knowledge**

Information about contaminants and food knowledge among the participants of this study comes from talking with others, especially among women, particularly regarding the relationship between food and health. Some reiterate media-popular adages
such as the importance of milk for health and the dangers of fat and cholesterol. The former does not seem to be practiced as much as reported and the latter seems to fit into traditional notions of fat consumption. Personal physicians are also cited as reliable sources of information. Doctors are generally very well respected.

While some participants appeared to be reticent about government interventions in their personal lives, they did take seriously government information and recommendations regarding food safety. This contrasts with their lack of attention to fish advisory information. One informant shared the following with me:

*I know for myself when the government warned against eating strawberries, I did not buy strawberries. But a publication by the government in the Vietnamese newspaper [Canadian publication] said that water spinach was dangerous to health because they contained some chemical agent that caused cancer, my family did not take it serious because we continued eating water spinach. So I guess we just pick what we believe. If some food we don't know anything about it, we listen to scientific findings, but some food like water spinach, which is a part of our diet for generations and from our experience, water spinach is safe to eat.*

The advice to avoid eating contaminated strawberries was taken seriously because the health risk was represented as an absolute danger to anyone who consumed them, a fact reinforced when the product was recalled and warnings issued on television and in newspapers. Fish advisory information, on the other hand, is based on probabilities and uncertainties about some future danger for some people, some of the time. In addition, as the strawberry incident illustrates, familiar or traditional Vietnamese food items, such as water spinach, may simply be dismissed as a potential hazard because of prior safe experience with this item. This may explain why fish continues to be considered, on the
whole, a harmless food item. The Vietnamese people in my study are confident in assessing risk when it comes to fish and other foods. The general attitude is that if fish were so contaminated, then the government would have issued a complete ban for all.

It is quite clear that health, dietary, and risk information is disseminated and negotiated among family members and friends and that direct, immediate and experiential knowledge is crucial in making decisions about food safety. This is an important point because many women with whom I spoke were the main food preparers and were the members of the study with the least contact with outsiders. Some women did not work outside the home and they relied on their husbands and children a great deal if they did not know English and did not have access to alternate sources of information. Women talked with each other about what to cook for their children and this offered an opportunity to exchange information about health and risk. In fact, during one of my visits to a family that invited me to stay for dinner, one of the guests began to share her perspective of contaminated fish because she had recently been recruited by the FWNP to participate in their study. She recounted her experience with the researchers, shared what she had learned about the experts’ concerns about contaminated fish with the rest of us, and initiated a discussion about the validity of such a claim. In the next half hour, the issue had been dismissed as several present were anglers and had been eating their catch for years. They were confident about their abilities to determine the safety of fish and the obvious benefits of fresh caught fish for health. This is not to say that they were not
concerned or interested in the results of the project but the FWNP research did seem somewhat puzzling to this particular group.

**Other concerns**

Not surprisingly, many respondents seemed to voice their opinions with more emphasis when asked what their concerns were in general. Given the chance to do this, I learned how the issues that I was researching fit into their priorities. How important are changing dietary patterns or contaminated fish to them? I will leave the interpretation for the next chapter, but a brief overview of their concerns might help put this research into perspective.

Gaining employment, improving English, and adapting successfully to Canada’s lifestyle are the most important and immediate considerations for newcomers. Because so many Vietnamese people are unemployed or underemployed, there is a great deal of anxiety about finding and keeping jobs. Changing family relations, maintaining language and culture, especially for children, and loss of respect for elders by children, are also major concerns for parents. The almost immediate transformation of age and gender roles within families due to migration patterns, and the economic and social factors outlined in Chapter 2 (p.37), in combination with a weak community network, have produced considerable tension. Intercultural relations with non-Vietnamese Canadians, and the attempt to slow down the pace of their children’s adoption of non-Vietnamese values and behaviours is a source of considerable anxiety for parents but also children.
who are unsure of their expectations. For the Vietnamese, the social environment is as important as family life in instilling proper values with the young. In addition, feelings of isolation in the elderly are especially acute since they are often recently reunited with their families and have little opportunity to learn English or socialize outside of their households. Establishing a stronger Vietnamese community is a desire for many people I spoke with. Compared with Vietnam, Canadian society is closed, “you cannot just walk into someone’s house any more, you have to call first, people are busy.”

Finally, in terms of health, there is a perception that among middle-aged women in particular, there are rising rates of cancer. When I was in the process of gathering interviews, two women were diagnosed with uterine cancer and one with breast cancer. Another informant told me about two other women who were also recently diagnosed with uterine cancer in the same month in the same community. ¹² When I asked her about this she said she suspected the heavy chemicals used during the Vietnam War, such as Agent Orange and napalm. She knows that when these chemicals were used, they had immediate effects on the rural people who were exposed, such as vomiting and burns. She said all these women who have recently been diagnosed are in fact from rural areas in the south where most of the chemicals were used. This young woman wondered aloud whether this was a delayed effect from the exposure during the war twenty years ago, but

¹² Among Vietnamese women in California, breast cancer is the most common cancer and cervical cancer is the second most common. They are four times as likely to develop cervical cancer than the general population of California (McPhee et al. 1996).
admitted that none of the women she knew attributed their cancers to these events. Instead, as can be seen above, cancer is often linked to diet rather than to other environmental sources.
Discussion and Recommendations

"I live as my parents do, my feet on the ground.
Higher virtues? Let's think about those when your belly's full."
-- Paradise of the Blind by Duong Thu Huong

As set out in Chapter 1, I have developed a food ethnography of a small group of Vietnamese immigrants in the Hamilton-Mississauga area in order to explore their diet and examine the relationships of food to perceptions of health, risk and the environment with a special focus on fish consumption. Much of the fundamental data are described in Chapter 5. I now turn my attention to highlighting some of the more pertinent issues raised in order to discuss why this group accepts or rejects food risks. Finally, I make recommendations for further research and initiatives based on my findings.

The Gastrodynamics of Vietnamese Food and Diet in Canada

A traditional Vietnamese diet is characterized by the central role of rice as a staple, the prominent place of fruits, vegetables, fish, and shellfish, and its distinctive use of nuoc mam, a fermented fish sauce. Meat is usually eaten in small quantities, mostly pork, beef, or chicken, and very little milk is consumed because of widespread lactose intolerance in the population (Dinh et al. 1990:209). Foods are generally classified
according to the hot-cold theory, in which a balance between these properties in the body is achieved by more or less eating a balanced diet. Fat content is extremely low in the traditional diet. While many foods are fried or stir-fried, there is a general dislike for greasy-tasting foods. Great care is taken in removing fat from foods (Behnia et al. 1995; Barer-Stein 1979).

Food habits change as the relationships around them do. For Vietnamese migrating to Southern Ontario, as for many other groups, not only do the food stuffs themselves change because of availability, but their uses, status, meanings, and relations change as well. Despite its importance in the traditional diet, fish consumption has decreased and meat consumption has increased among the participants in this study. This change is due largely to economics but also reflects matters of status and prestige, taste, and smell. Another change can be seen within one generation as children of newcomers are more likely to try and prefer Canadian foods, especially fast food. This variation may be due to their exposure to mainstream messages and non-Vietnamese peers to a much greater degree than their parents, and is partly a result of the great freedom given them by their parents to choose foods for themselves.

Dietary change does not necessarily mean abandoning Vietnamese food practices altogether. There is a resiliency to eating patterns and essential Vietnamese food items and practices that remain, if not transformed. As we can see from the results, *nuoc mam* is a very stable food item that itself has the power to transform non-Vietnamese food into an acceptable food. New vegetables find themselves integrated into traditional dishes,
traditional meats are eaten in a new form, such as steak, and the use of some items such as MSG, are negotiated in the new food order.

The role of fish in Vietnamese diet

Perhaps the most significant change in the post-emigration diet from the standpoint of contaminant risks is the diminished role of fish in the diet and its replacement with meat. While fish remains a greater component of the diet compared to the average Canadian diet, both the quantity and frequency of its consumption has decreased for this sample of Vietnamese people since their arrival in Canada, which is consistent with dietary changes reported in studies conducted among other Vietnamese migrants (Crane and Green 1980:592).

There is a general assumption that most Vietnamese refugees and immigrants catch fish for food because of their socioeconomic situation, that is, they are relatively poor and need to supplement their desire to eat fish by fishing from the Great Lakes, which is not true for this sample. It costs more time and money to get fishing-gear together than it does to simply buy fish. People see fishing as a relaxing activity for the family on weekends, but very few continued to fish as they did when they first arrived. I was unable to determine whether people fished to supplement their food supply when they first arrived or whether they had more time to fish then. In any case, no one I spoke to fished regularly and ate their catch, although several people received gifts of fish.
It is not clear in this sample exactly how much fish is consumed from the Great Lakes; however, what can be said with certainty is that eating fish is not considered risky by those who do consume it. Most people in the sample who do not eat Great Lakes fish cite reasons for not eating them other than concerns about contaminants.

Many of the respondents indicated that freshness was an important quality of fish that they desired and preferred. This preference for fresh fish is consistent with their concerns for fresh foods in general. One of my informants offers an interesting explanation:

*Just to add a little bit of my own opinion about fish. To me low cholesterol level is not really the reason for them to eat fish because when we were in Vietnam we didn't really have the concept of health or how certain foods can affect our health directly. It has something to do more with the living standard in Vietnam. Most people's income is very low there and they have to choose the cheaper food. Fish happen to be cheaper than meat so they eat fish frequently. In other words, people eat more fish not only because they perceive it is better for their health but also it is a habit and the familiar flavour that they cannot leave out.*

This person states that everyone knows fish is good for you but that this is not the main reason for its consumption. She seems to provide an economic explanation and an argument for the overriding consideration of taste instead.

There are a few practices surrounding fish consumption that need to be highlighted vis à vis contaminant issues. First, portions of fish may be smaller than the standard North American portions. For instance, two salmon steaks may feed a family of six Vietnamese who share them along with many other food items as opposed to the
North American practice of serving a steak per person. Therefore, determining and reporting the number of fish meals per person or family must reflect this practice.

Second, the aversion to fat may reduce contaminant risks in several ways. With few exceptions, fatty portions of fish may be discarded. In addition, the constant removal of fat from dishes may mean that the contaminants that accumulate in fat are being eliminated during the preparation and cooking process. This may also depend on the actual cooking method and the nature of the contaminant. Among this sample of people, the intestines of fish are always discarded. This is an important step in eliminating contaminant risk because persistent toxic substances accumulate in the intestines.

The case of MSG

The use of MSG is undergoing change in Vietnamese cuisine in Canada. All respondents admit to using MSG on a regular basis but they did express their concerns over its use. The exchange between one of the participants and the interpreter in Chapter 5 (p.93-94) seems to typify many people’s attitudes towards this food additive, “we’ve grown up with that and we’re eating everyday and there is nothing wrong with it.” While concern about the possible health effects of MSG is growing, people continue to practice an important part of their cuisine because they intuitively accept something that has exhibited no harmful effects up until now. The case of MSG is telling because it demonstrates very well how people negotiate their fears. Both participants in this conversation posed the question, gathered the facts, consulted with one another and with
an expert they could trust, provided empirical evidence based on their own experiences of its use, and agreed to its legitimacy. In the end, they decided that MSG was acceptable for them without having to repudiate outsiders' claims.

MSG is interesting for another reason, as it is sometimes used as a way of judging peoples' skills, and their level of social knowledge, and 'civilization' by others. This is very similar to outsiders' views of "those immigrants who will eat anything out of the Great Lakes." As much as Vietnamese separate themselves from other Canadians, Canadians might use MSG and fish as ways of distinguishing the Other. Their persistent use of MSG then, may be an attempt to cling to a distinguishing feature of traditional Vietnamese food and thus Vietnamese identity.

_Fresh vs frozen: A Vietnamese-Canadian dichotomy of identity_

The symbolic notion of freshness is probably the most important aspect of food choice and quality among the participants in this study. It is considered to be an expression of quality as well as the superiority of Vietnamese or traditional foods and food practices. As I mentioned in Chapter 5, the Vietnamese people I spoke with often defined Canadian food as fatty, greasy, and 'not fresh' and classified it in opposition to Vietnamese food that was fresh and healthy. They attributed rising cancer rates to a poor diet that had strayed from the traditional Vietnamese pattern to one that resembled Canadian lifestyles: fast food, frozen food, and fatty meats. Despite the desire for fresh fish, this does not seem to provide people with the motivation to fish or eat their catch on a regular basis.
The role of food in maintaining good health

I have already noted that Chinese nutritional principles play an important role in shaping Vietnamese food choice and patterns of consumption (p.102). Balancing hot and cold food items in order to maintain or regain a healthy balance of these elements in the body is a common practice among those with whom I spoke. The maintenance of this balance was not necessarily a daily goal but there is an awareness that overindulgence in certain items could be considered dangerous or that ill health was the result of the neglect of these concerns.

On the other hand, absolute food avoidance does not seem to be an acceptable concept. Moderation rather than complete restriction is the preferred practice. This unwillingness to completely avoid certain foods might be a problem if, as in the case of some other communities, there was a complete ban on fish. If anything, the willingness of many Vietnamese to add new food items allows a certain flexibility in the diet without a complete loss of traditional items and identity. Theoretically, this flexibility should allow innovations to be accepted if presented in a culturally appropriate way. If fish were completely abandoned in the diet, not only would an essential part of the traditional diet be lost, but contaminant risk might be replaced by the countervailing risks outlined in Chapter 2, such as an increased risk in CHD or cancer. According to some informants, they have already begun to see the effect of this change shortly after their arrival when

\[1\]
With the exception of vegetarianism and temporary fasting for acute health problems.

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they began to suffer from high blood pressure, cholesterol problems, and some cancers, which they attribute to increased meat and fat consumption.

Food Restrictions

It is interesting to note the apparent lack of systematic food restrictions among the participants, with the exception of vegetarianism among very few Buddhist followers. Some authors have suggested that the lack of food taboos among contemporary Chinese in some regions may be the result of famines long ago that virtually eliminated such practices (Anderson 1977:363, cited in Simoons 1991:31). It could be possible that the experience from war, famine, and refugee camps have had a similar impact on Vietnamese food practices, especially in the absence of a strong community that would lend support to the continuation of traditional rules. There were, however, ideas of moderation rather than avoidance. I was corrected several times about my enquiries into food avoidances. “It is not very correct to say that we shouldn’t eat anything, but rather you should reduce eating something.” This may be tied to notions of balance and moderation, ideals that are extolled in Chinese nutritional therapy.

Both food classifications (hot-cold) and the unacceptable concept of food avoidance have implications for dietary assessments and interventions. This research has revealed that the former is a highly variable system that should be incorporated in any food advice and attempts at nutritional intervention. It suggests that simply providing substitutions for food items that are considered risky may not be enough to discourage consumption if this were deemed necessary. Instead, promoting ideas about further
moderation may be more acceptable, as is the case with MSG. Individuals concerned about its effects on their health and have accepted it as a risk have reduced their consumption rather than remove it from the diet.

**Relationship of Foods to Perceptions of Risk, Health, and the Environment**

*Attitudes regarding health and the environment*

The people I spoke with seemed genuinely concerned about their health and that of their families, yet their knowledge about the environment is diffuse and therefore the links between human health and the environment are weak at best. In response to my direct queries about environmental concerns, interviewees noted employment and lack of time spent with family. When it comes to food, risk is largely dependant on individual, immediate and direct experiences (The exception to this is cancer). So, for instance, as I outlined in Table 5.6, rashes and upset stomachs are often managed case by case and in some instances the foods responsible are avoided in the future only by the individual who experienced it. What emerged from the interviews in general was a fear of cancer attributed to fatty and frozen foods. The fear of cancer is a general, long-term, negative health potential compared to what are mostly individual, experience-based food avoidances that are based in the short-term. This pattern is consistent with what others have attributed to the Vietnamese as a ‘crisis orientation’ rather than a ‘preventative orientation’ to health and health care (Hoang and Erickson 1985).

Long-term health effects from eating fish or breathing smelly air from Stelco are rejected because in their experience they seem to manifest no negative health outcomes,
yet there is a long term fear of cancer. Cancer as it is used here might represent the actual medical risk of cancer or it is an idiom representing unknown risks. The preoccupation with cancer in reference to the foods identified in this study, aside from fish, was somewhat unexpected. However, other studies conducted among Vietnamese refugees have shown that there are knowledge gaps concerning cancer and associated risk factors. For instance, Jenkins et al. (1990:36) found that nearly one-third of those they surveyed thought cancer was contagious, while another third were unsure of the relationships between cigarette smoking or diet and cancer.

Douglas and Wildavsky (1982) state that people choose their risks. Environmental pollution and the consequent contamination of food sources may not be a priority because of other factors that affect immigrant and refugee lives. Employment and family relations were two major concerns that were consistently brought to my attention, even when the question asked was directed toward the environment. For the Vietnamese people in this study, environmental problems meant outside social relationships such as dealing with employers, government and school officials, and the myriad influences affecting their children.

Contaminants in Context

It has been suggested that there may be other potential environmental risks the Vietnamese face because of the location of their homes, specifically those residing in the downtown area of Hamilton. In this area, there are a number of abandoned industrial sites resulting from past economic recessions within a neighbourhood that is comprised of
low to middle income residential areas, largely made up of recent and more established immigrant populations (George et al. 1996:10). Despite the fact that there was a mercury scare in September of 1993 (Hamilton Spectator 1993a,b), and a toxic fire in July of 1997 (Hamilton Spectator 1997), during and after which there was considerable media attention and public health intervention, there remains little awareness of or concern for environmental hazards by those I interviewed in this area. Instead, these concerns are set aside for more immediate needs regarding family, employment, and the desire to succeed in Canadian society.

Summary of results:

• The post-emigration diet has seen a shift in the nutritional place of fish and its partial replacement with meat. Fish is eaten less often and in smaller quantities than in Vietnam. In its place, meat and eggs have come to dominate the diet.

• Fish are not associated with contaminant risk and therefore the Vietnamese do not see their consumption of fish as risky behaviour nor do they see themselves as a group at risk. Instead, they fear cancer associated with the consumption of some foods. A greater concern is stable employment and changing family relationships.

• Health means balancing the hot and cold properties of food, and practicing moderation in food consumption. Food risk in general, is determined in an immediate, individual, and experiential manner. The value placed on prevention is not necessarily familiar to many of the people in the sample.

• Environmental awareness is diffuse and therefore environmental concerns are not a priority. Since there is no agreement about risk, this does not bode well for any attempts at behaviour change.

• Risk avoidance is generally not acceptable for undetermined, long-term, uncertain risks. Prudent moderation is preferred.
Dietary change is dynamic. The second generation shows more change in tastes and practices than their older counterparts. A movement away from a traditional diet is seen by some as moving away from Vietnamese ways and perhaps even having some real unhealthy consequences, such as high cholesterol and cancer.

The government is trusted when it comes to general information about health risks. When it comes to targeted initiatives, there is some fear and suspicion. Family, friends, physicians, and the media are all reliable sources of information in varying degrees.

**Conflict with expert opinion**

One obvious barrier to behaviour change is agreement about what constitutes a problem. If the problem is not recognized, then logically, it is not addressed. The most striking example of an incongruity between ‘expert’ knowledge and that of the participants in this study again centres around fish. First, Great Lakes fish are not considered risky food sources in terms of contaminant exposure. Second, storebought fish are feared for their contaminants because they are believed to be “fed chemicals”, or because they are frozen, and fatty, not because of their source (environment). Despite this difference in risk association, the solution is consistent with one of the expert recommendations to reduce risk, namely, to avoid eating the intestines where contaminants accumulate.

This research clearly demonstrates that what constitutes risk for the Vietnamese people in this study is fundamentally different from what the experts think. What constitutes risk is constructed through personal experience and negotiated among and with trusted sources of information like family and friends first, then outside expert
sources. In cases such as this, Vietnamese conceptions of risk are at odds with expert opinion because of differing perceptions and priorities.

_Safety is just danger out of place_

Douglas and Wildavsky (1982) suggest that risks are chosen and that what is accepted is a social and political process. As such, it is not surprising that incongruities arise between what the experts and lay people (Vietnamese) consider risky; namely, the potential contaminants in fish. From their point of view, the Vietnamese people in this study are not part of a group at risk; therefore, any attempts to change fish consumption levels among them will be largely ineffective. As a group, there are people who are aware of risk information, indeed many people knew friends who were recruited for the FWNP project, and chose after some deliberation to dismiss the claims based on a communal understanding of the safety of eating fish: “It has been safe up until now, why should we change our practices.” If there were further attempts at intervention, then a consideration of how new ideas are accepted or rejected into existing food rules and beliefs would be appropriate.

The conspicuous absence of a perception of fish as a risky food source for the participants in the study may be problematic if it is found that they are indeed at risk for exposure to contaminants. If it is the case that moderate fish consumption levels are considered safe by the experts, then there may be no need for further research in this area for this group of people. Given the attention to fish as a contaminated food source, and the lack of acceptance of this belief by the Vietnamese, it is nevertheless important to
investigate what some of the barriers to communication might be. This may also have a bearing on the dissemination of information regarding other health issues. If it is not an issue of being unaware of the risks, there may be some other consistent and logical reasons for rejecting risk.

The implications for risk assessment, management and communication

Although it is not the intention of my study to conduct an assessment of risk communication efforts or to necessarily construct a behaviour-change model, the ethnography does shed some light on conceptual barriers to communication about fish risk that have implications for further outreach efforts in health promotions or advisories. Below, I apply the five characteristics associated with acceptance of new ideas outlined in Chapter 2 (p.10), which illustrate the difficulty of achieving behaviour change. Whether a fish advisory, that is, a restriction of fish consumption, is accepted or integrated into existing food practices among Southern Ontario Vietnamese people depends on the following factors, taken from Fieldhouse (1996):

1] The greater the perceived relative advantage, the more rapidly the innovation will be adopted.

If contaminant risks associated with Great Lakes fish consumption are accepted by the Vietnamese, it would not be difficult to convince them of the advantages of reducing their consumption of this food source. In other words, the risk must be acknowledged.
Taken one step further, there must be agreement about that risk both by the Vietnamese and the experts. At the time of this study, this did not appear to be the case.

2] The perceived compatibility with existing values and needs of the group or society are crucial.

In the case of reducing intake of fat from Great Lakes fish, this FWNP recommendation would fit very well with traditional notions of fat avoidance among Vietnamese people. Promoting further moderation rather than avoidance would also be compatible. Avoidance of fat and fish intestines would be more readily accepted because these are already practiced to some degree or at least agreed upon as appropriate dietary practice (see p. 78). In the case of fish consumption, avoidance of a Great Lakes fish species is less likely to meet with acceptance than a reduction in consumption.

3] Complexity is the degree to which an idea is perceived as being difficult to use. New practices that require little effort will be more readily acceptable than those which require new tools and techniques.

It was found elsewhere that the attempt to teach filleting methods to Vietnamese women to reduce contaminant levels (see Cavan et al. 1994b) was not readily accepted by food preparers. Fillets are rarely if ever used in Vietnamese recipes, rather the fish is served whole, in steak form, or ground into cakes or balls. Not only would recipes have to be modified, but filleting is a technique that requires practice. These two extra steps would discourage many of those in the sample who complain of little time to cook already. It has also been suggested that fish advisory guides are too difficult or
inconvenient to understand and follow and therefore seldom utilized. Studying this technical guide in English is not attractive to occasional fishers.

4] Trialability refers to the degree to which an idea may be experimented with by those who are considering it.

This seems to be the most promising criteria for changing fish consumption behaviours among Southern Ontario Vietnamese people because alternative species may be substituted for some dishes or market fish may be substituted for fresh-caught fish. There is no permanent commitment made on the part of the consumer to agree to change their consumption behaviour, so there is little to lose if the preparer is willing to try alternative species or sizes of fish, at least temporarily.

5] Observability is the degree to which one is able to see the results the new practice has and this way it is more likely to be adopted permanently.

This is perhaps the greatest obstacle considering what has been learned about Vietnamese attitudes towards risk and health in Chapter 5. Since individual, immediate, and experiential knowledge is crucial in making decisions about food safety, and prevention is not a widely familiar concept, it is difficult to convince people to make short-term changes for long-term, uncertain gain. As mentioned earlier, the links between contaminants and ill health are difficult to establish in the first place. Since observation is
an important part of the decision-making process for changing behaviour, it is difficult to suggest a way to overcome this difficulty.  

The politics of fish

The general approach at managing and controlling risk has meant that the onus of responsibility lies with the receivers of contamination rather than the source. By continuing to support this model of managing risk, the problems will persist. These are bandaid solutions at best. To use the medical metaphor so often used to describe the environment (see Hall 1990), we continue to treat the symptoms rather than the disease. Until we are able to accomplish risk reduction from the source, we will continue to make efforts to protect consumers and 'special groups'. In doing so, we must be aware of what risk means to them.

The fear of cancer may affect people's reactions to risk messages about fish in two ways. First, warnings feed fear and may irrevocably prevent people from consuming fresh-caught fish, an important part of a healthy diet, and source of well-being. Second, the bombardment of risk and cancer messages have led to some people adopting a defeatist attitude: “cancer is everywhere so why should I change my eating habits?” For fish-dependent groups or communities, either route potentially places them in a position of vulnerability. Even if benefits are found to outweigh the risks, these choices suggest that there remains a bias in the distribution of controllable environmental hazards.

2 This attitude is not uncommon and is a major obstacle in the attempt to change risky behaviours such as cigarette-smoking and unprotected sex, for lung cancer and AIDS respectively.
Improving the value placed on fresh fish will not only lend support to clean-up initiatives for the Great Lakes, but perhaps with time, increase pressure for more drastic control measures at the source, perhaps the most subversive aspect of promoting healthy fish consumption for all.

**Implications of risk**

The reification of 'risk' and 'risk groups' and the state of being at risk places the burden of responsibility with the individual or targeted group. Anthropologists have examined these issues most effectively in AIDS research. Some epidemiological approaches postulate that ignorance of risk-enhancing behaviour is the main cause of disease. Consequently, education campaigns targeted at individuals to raise awareness of risks are implemented. Anthropologists counter that culture influences risk behaviours in a wide variety of settings. Social, cultural, political, and economic conditions place groups in positions more vulnerable to disease and that education is therefore a necessary but not sufficient component of successful behaviour-change campaigns (Trostle and Sommerfield 1996:260-1; see also Frankenberg 1993).

Defining risk groups is also problematic in that they tend to be characterized by modal behaviours, leading often to binary separations such as healthy and not healthy that are often misleading. Taken a step further, being at risk is almost equivalent to being not healthy. For instance, Gifford's (1986:214) study of breast cancer and the meaning of lumps suggests that the language of risk is about scientific uncertainty concerning causal relationships, and clinical and lay uncertainty concerning the prediction and control of...
unhealthy outcomes. The term risk is used to convey a constellation of meanings, some intended, many largely unconscious. Gifford distinguishes between technical, objective, or scientific dimension of risk and a socially experienced or lived dimension. Since lay assessment and evaluation of risk is a social process, not a scientific or technical one, risk is fraught with uncertainties and ambiguities, and a new state of being is created somewhere between health and disease that results in the medicalization of a woman’s life (1986:217). Since many environmental health risks can only be based on probabilities, the implications of being at risk affect more than physical health. The problem is that the concept of risk replaces the concept of cause. To be at risk is as good as being sick, which for many people, means the certainty and/or the inevitability of cancer when it comes to chemicals in the environment.

Such dichotomous risk categories, such as fish eaters vs. non fish eaters and more than 26 fish meals/year vs. below, obscure the real truth about environmental hazards. Except for extreme cases, contaminant exposure risks are incremental rather than binary and multi-factorial rather than one cause=one effect (see Hall 1990; Birkett and Rapport 1994 for a full discussion of the medicalization of the environment). These categories may mislead those potentially at risk into believing that they are immune to a disease or negative health outcome because they do not fall into an identified risk group. Clearly, the people in my sample do not identify themselves as such. For instance, education efforts at reducing risk are largely aimed at fish consumers who catch their own fish. Little at this time is known about the relative safety of market fish, and recently concerns
have been raised regarding farm fish because of their elevation in the food chain and greater bioaccumulation of contaminants through the animal offal fed to them.

Other consequences of risk perception and discourse in general are their political and moral functions (Lupton 1993). Lupton maintains that the concept of risk is ideologically loaded and often serves to blame the individual, displace the real reasons for ill health upon the individual, and express outrage at behaviour deemed socially unacceptable, thereby asserting control over the body politic as well as the body corporeal. For example, some of the public reactions Vietnamese anglers receive on the shoreline and indeed some of the comments Jennifer Dawson (anthropologist, FWNP) and I have heard about “those immigrant fishers that eat anything” or “do not know how to catch and release” assume power in the discussion.

Implications for risk communication – Risk promotion or health promotion?

In communicating about safe fish consumption, a closer look at how the messages are framed is important. The benefits of fish consumption should be taken into account when warning people of the dangers of contaminated fish consumption (nutrition, cultural, spiritual). Second, these benefits of fish consumption should be communicated alongside risk information, making sure that information provided is about specific species, parts, and/or stages of life of the eater. Likewise, the promotion of fish consumption in general should include caveats like limiting exposure to contaminated fish, that is, rather than discourage the consumption of fresh fish, one should promote safe fish consumption. The following recommendations develop these ideas further.
They are aimed towards further research into diet and health as well as future efforts at communicating health and risk information among Vietnamese people in Southern Ontario and other high consumers of fish.

**Recommendations**

- Integrate participant observation and other qualitative methods with quantitative research approaches. Dietary instruments should be developed to include food classifications, and other knowledge derived through qualitative research and especially participant observation.

- Promote moderation as a healthy behaviour rather than avoidance of risky foods when developing fish advisory information.

- Develop and promote a complete, clear, and consistent message about safe fish consumption. Fish consumption is often promoted and discouraged in separate messages. For example, anglers are told in special publications to reduce their consumption of fish. National nutritional messages promote fish consumption for good health. These targeted messages are not necessarily effective when it seems that one is exposed to conflicting information rather than complimentary information.

- Communicate strong, consistent messages to all Canadians. Communicating consistent information about the benefits and risks of fish consumption that are not just geared towards special groups, but to *all* Canadians is more likely to make an impact on attitudes to this information. Providing special information in Vietnamese media and language is still important but the message should not fundamentally differ or be perceived to differ from mainstream messages.

- Reach key individuals who are more likely make an impact on actual behaviour. It is important to utilize Vietnamese media but it is equally important to communicate with food preparers in the home as well as anglers, physicians, and other well-respected Vietnamese people that can play an important role in promoting safe fish consumption.
• Communicate effectively by targeting appropriate media for risk communication. Based on my observations, traditional Vietnamese media such as newspapers but also supermarket calendars and especially Vietnamese movie rentals, that might include health commercials, may be especially effective in disseminating information. These ideas have been tested in other studies (Chen et al. 1991:308), and the importance of movie rentals in the promotion of Vietnamese values to counteract popular media have also been recognized (Nash 1988).

• Assist and fund community-building initiatives so that structures are in place for Vietnamese to collaborate with researchers for their own concerns and disseminate important information. Enjoyable activities that bring people together could include karaoke and ballroom dancing contests, concerts, and fish-fry picnics. These particular activities seem to attract all ages among those with whom I socialised.

• Promote research in other areas of concern identified by the Vietnamese such as family services and child health and cancer.

• Develop culturally appropriate nutrition messages that integrate messages about safe fish. The development of alternative food wheels has been utilized with many different cultural groups (Ikeda et al.1991; Stowers 1992). Utilizing what has been learned about meal patterns, important food items and attitudes toward food restriction, the food wheel can integrate these ideas with a simple message, following the example set out by Ikeda et al.(1991), developed for the Hmong in California.

Contributions of the research

The application of anthropological data and methods to the solving of human nutritional problems is the job of the nutritional anthropologist. This qualitative analysis takes an ethnographic approach to an area of study that traditionally has not utilised this research method. Although long accepted in anthropology, ethnographic research, and participant observation as a technique in particular, is a fairly recent addition to environmental health studies. By taking a closer look at the lives of the people we wish to help, one gains a better understanding of how people have changed and are always
changing. By virtue of being immigrants and refugees, their lives and habits have been and still are in flux. We must be careful in the assumptions made about lifestyle, food habits, attitudes, and beliefs. This is best achieved through participant observation and is most important in nutrition research especially where dietary interventions are intended.

I was able to gain information not accessible by quantitative methods. I was able to determine, for example, that portions of fish were much smaller than was originally assumed to be the case and this information was passed onto the dieticians in the FWNP. Second, I was able to learn more about the construction and meaning of food categories, such as am-duong, than was previously achieved in the pilot study (Cavan et al. 1994).

The main result of my study, that contaminants in Great Lakes fish is not a concern for this group, has an impact on how further phases of the FWNP are carried out and I have tried in my recommendations to suggest how to reduce communication barriers, an essential step in promoting community involvement. Even as a case study for the FWNP, this research provides rich information about the motives and ideas surrounding food and fish consumption that simply is not captured in questionnaires. It is both an independent, indepth study and a means to triangulate the findings of the FWNP's dietary and contaminant risk assessments. Placing a perceived environmental and nutritional problem in a larger social context and at the same time providing a richness of detail that has implications for the development of culturally appropriate instruments and interventions is a major contribution this type of study can make to health projects like the FWNP.
Are the Vietnamese a risk group? In their own words, no. Are they at all vulnerable? Yes, but not to health problems stemming from fish consumption. They recognize that they currently lack the political will to effectively organize and protect their interests and perhaps this is one of the reasons why it has been so difficult to disseminate information. Without this internal organisation, it is difficult for them to be both the receivers of information and the initiators of research for specific concerns regarding their health and well-being.

The ability to adapt to a Canadian way of life, to elevate themselves financially and retain their Vietnamese culture is a source of pride and self-esteem. These values for the time being are the most important aspects to Vietnamese life among this sample. There is a sense that these endeavours are weighed against other interests in the short-term for long-term benefits, a kind of risk/risk tradeoff, with a hope that the next generation will be better able to deal with the new realities of Canadian life. Mr. Vu eloquently summarized this sentiment:

*Now I think the life here look like clean? We learn and we work and we eat and I think everything is ok, no problem. We learn lots from Canadian people but we are proud too. We know Canada and we must protect Canada. Our children were born here so this generation, they will know Canada better than me.*
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### Interview Guide

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<th>More Specific/ Follow-up Questions</th>
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<td>Food Source(s)</td>
<td>Where do you get your food?</td>
<td>Do you fish or grow your own food?</td>
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<td>Where do you purchase your food?</td>
<td>Where do you purchase your food?</td>
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<td>Do you receive gifts of food from friends and relatives? What kinds of gifts do you</td>
<td>Do you receive gifts of food from friends and relatives? What kinds of gifts do you receive?</td>
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<td></td>
<td>Where do you get your fish?</td>
<td>Where do you prefer to get your fish from;</td>
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<td>Where do you get your fish from; the market or directly from the lakes yourself?</td>
<td>the market or directly from the lakes yourself?</td>
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<td>Who is responsible for getting food?</td>
<td>Who shops for food?</td>
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<td>Who shops for food?</td>
<td>Who fishes or grows the food?</td>
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<td>Who fishes or grows the food?</td>
<td>Who decides what food is needed?</td>
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<td>Who decides what food is needed?</td>
<td>Who gives you food gifts? When do they give them to you?</td>
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<td>Who gives you food gifts? When do they give them to you?</td>
<td>What do you look for when you shop for food? Do you prefer some kinds of food?</td>
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<td>What do you look for when you shop for food? Do you prefer some kinds of food?</td>
<td>Do you avoid other kinds of food?</td>
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<td>Do you avoid other kinds of food?</td>
<td>How do you choose fish? What are the best kinds of fish and why?</td>
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<td>How do you choose fish? What are the best kinds of fish and why?</td>
<td>What do you like about fish you catch yourself? What don’t you like about it?</td>
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<td></td>
<td>What do you like about fish you catch yourself? What don’t you like about it?</td>
<td>How do you decide whether a fish is good to eat?</td>
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<tr>
<td>Food Preparation</td>
<td>Who prepares the food?</td>
<td>Who does not prepare the food?</td>
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<td>Who does not prepare the food?</td>
<td>Are there some things that should only be prepared by a particular person?</td>
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<td></td>
<td>Are there some things that should only be prepared by a particular person?</td>
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<td></td>
<td>How do you prepare fish?</td>
<td>What parts of the fish are removed when you prepare it? why?</td>
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<td></td>
<td>What parts of the fish are removed when you prepare it? why?</td>
<td>What are the best parts of a fish? why?</td>
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<td></td>
<td>What are the best parts of a fish? why?</td>
<td>What should a healthy fish look like? smell like? taste like? feel like?</td>
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<tr>
<td></td>
<td>What should a healthy fish look like? smell like? taste like? feel like?</td>
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<tr>
<td>Food Distribution and Consumption</td>
<td>Diet and Health</td>
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<tr>
<td>Who eats together?</td>
<td>Could you describe the kind of food your family eats most of the time?</td>
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<tr>
<td>Does everyone eat the same kinds of food?</td>
<td>Tell me about the foods you traditionally serve at a celebration. How are these foods different from everyday foods?</td>
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<tr>
<td>Do adults and children eat different kinds of food? what about pregnant women?</td>
<td>Is fish an important part of your diet? what else is important?</td>
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<tr>
<td>Do you like to give food as gifts to friends and relatives? when do you do this?</td>
<td>Have you made any changes to your eating habits over the years? or food preparation? since coming to Canada?</td>
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<td></td>
<td>Can you tell me what foods are good for you? Are certain foods good for some people and not for others?</td>
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<td></td>
<td>What makes food healthy? unhealthy?</td>
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<td></td>
<td>When do you feel really good about the food you eat? when do you not feel good?</td>
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</tbody>
</table>

- How did you learn to prepare fish? Do you do anything differently now?
- Are there other wild foods that you like to prepare? ie. birds, turtles, snails, etc.
- Do you prepare things that you bought from the store differently than what you get yourself?
- Is food prepared differently for different people? ie. adults vs. children, men vs. women?
Appendix B
English-Vietnamese Glossary of Food Terms
APPENDIX B

English - Vietnamese Glossary of Food Terms
prepared by T. Torchetti, M.Nguyen, U.Nguyen, 1996

**Cooking Terms**

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<thead>
<tr>
<th>English</th>
<th>Vietnamese</th>
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<tbody>
<tr>
<td>boiling</td>
<td>luoc</td>
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<tr>
<td>steaming</td>
<td>hap</td>
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<tr>
<td>simmering</td>
<td>luoc lua nho</td>
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<td>roasting</td>
<td>quay</td>
</tr>
<tr>
<td>broiling</td>
<td>nuong</td>
</tr>
<tr>
<td>blanching</td>
<td>bo food vao nuoc soi ron / lay ra lien</td>
</tr>
<tr>
<td>poaching</td>
<td>nau trong nc soi truce roi bo vac / nau voi cai khac</td>
</tr>
<tr>
<td>deep frying</td>
<td>chien don</td>
</tr>
<tr>
<td>shallow-frying</td>
<td>chien so qua</td>
</tr>
<tr>
<td>baking</td>
<td>nuong</td>
</tr>
<tr>
<td>BBQ</td>
<td>uop</td>
</tr>
<tr>
<td>marinating</td>
<td>cat ra tung mieng</td>
</tr>
<tr>
<td>slicing</td>
<td>xe nho</td>
</tr>
<tr>
<td>shredding</td>
<td>bam nhuyen</td>
</tr>
<tr>
<td>mincing</td>
<td>cat nho</td>
</tr>
<tr>
<td>chopping</td>
<td>cat lo nho cho de chin</td>
</tr>
<tr>
<td>scoring</td>
<td></td>
</tr>
<tr>
<td>braising:</td>
<td></td>
</tr>
<tr>
<td>to cook with brine</td>
<td>kho</td>
</tr>
<tr>
<td>to cook fish with fish sauce</td>
<td>kho ca</td>
</tr>
<tr>
<td>scum (fat)</td>
<td>bot canh (vot bo)</td>
</tr>
</tbody>
</table>

**Fruits and Vegetables**

<table>
<thead>
<tr>
<th>English</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>yam bean (jicama)</td>
<td>cu san</td>
</tr>
<tr>
<td>asian pear (chinese pear)</td>
<td>le tau</td>
</tr>
<tr>
<td>atemoya (sugar apple)</td>
<td>mang cau na</td>
</tr>
<tr>
<td>bok choy (chinese white cabbage)</td>
<td>cai be trang</td>
</tr>
<tr>
<td>white mushroom</td>
<td>nam trang</td>
</tr>
<tr>
<td>black mushroom (fungus, wood ear)</td>
<td>nam meo</td>
</tr>
<tr>
<td>sweet potatoes</td>
<td>khoai lang</td>
</tr>
</tbody>
</table>
carambola (star fruit)
chayote (xuxu)
soursop
chile-pepper (hot pepper)
chinese cabbage (napa) (chinese broccoli)
cilantro (coriander)
clementine
eggplant (chinese, japanese eggplant)
guava
kohlrabi
lemongrass
longan
chy chee (lychee?)
malanga
mango
mustard greens
okra (lady's finger)
onions
papaya
persimmon (kaki)
plantain
flower of banana tree
pomegranate
radish (white radish, daikon)
sugar pea (snow pea)
taro, dasheen
water chestnut
winged bean
yam
long bean
yuca (manioc)
amaranth
bamboo shoots
bitter melon
chinese broccoli
chinese celery
chinese chives
chinese flowering cabbage
chinese leek (bulk)
mustard cabbage
garlic
ginger
lotus root
scallions (green onions)
shallots
shanghai bok choy
silk squash
water spinach
bean sprouts (mung bean)
fussy squash
opo squash
watercress
duku
mangosteen
durian
chinese water chestnut
cinnamon basil
sweet basil (?)
mint	
tamarind	pineapple
tomatoes
carrots
leaf lettuce
cucumber
rambutan
avocado
parsley

Other
salt
glutamate (monosodium)
black pepper
sugar
white pepper
vinegar
oil
fish sauce
soy sauce
gung
go sen (cu sen)
hanh ia
cu hanh do
cai tau (xao mi)
muop
rau muong
gia
bi xanh
bau
xa-lach-xon
bon bon
mang cuc
sau rieng
cu au	
tia to
rau que
vap ca
ngo gai
ngo om
hung cay (?)
me
thom
tia
ca
ca-rot
xa-lach
dua leo
chom chom
Bo
ngo tay

muoi
bot ngot
tieu
duong
tieu so
dam
dau
nuoc mam
nuoc tuong
bean sauce  
shrimp paste  
rice flour  
tapioca  
peanuts  
rice  
coconut water (juice)  
coconut milk  

bean curd (tofu)  
soy-bean drink  
dried mushroom (shitaki)  
dried shrimp  
chinese sausage  
potatoes  
bean thread noodles (glass)  
rice noodles  
egg noodles  
rice paper  
black bean sauce  
five-spice powder  
hoisin sauce  
oyster sauce  
lily buds  
plum sauce  
sticky rice  
sesame oil  
sesame seed  
star anise  
rock or lump yellow sugar  
rock sugar  
wheat gluten  
wonton wrappers  
cinnamon  

chicken  
pork  
beef  
lamb  
rabbit  
duck  
tuong (an pho)  
mam ruot  
bot gao  
bot nang  
dau tong  
gao  
uoc dua  
uoc cot dua  
tau hu  
sua dau nanh  
nam dong co  
tom kho  
lap xuong  
koai tay  
bun tau  
hu tieu  
mi  
banh trang / banh canh  
tuong den  
ngu vi huong  
tuong ngot  
dauf hao  
tuong chua ngot  
nep  
daum me  
not me  
(nau to)?  
duong the  
duong ten  
mi-can  
bot goi hoanh thanh  
que (bark)  
ga  
heo  
bo  
de  
Tho  
vit
duck's egg  hot vit
young duck, chicken egg  trung non
frogs  coo
turtles  rua
turtle egg  trung rua
slugs
snails  oo
duck  tep
shrimp  cua
crab  gan mussels
scallop  chem chep
mussels  hao
oyster  hot vit muoi
preserved duck egg  not vit bach thai
Thousand-Year-Old egg  huyet heo
pork blood  huyet vit
duck blood  la-xach
beef tripe  chao
fermented bean curd  da heo
pork skin  vi-ca
shark fin
Appendix C
Telephone Contact Sheet
CONTACT SHEET

Name: ________________________________________________

Phone Number: ________________ ________________ □ male □ female

*Introduce yourself and the project. Ask them if they would like to participate. Assure confidentiality.

------------------------------------------------------------------------------------------------------------------------

IF NO...

~Do you mind telling me why you do not want to participate?

☐ busy/do not want to be disturbed ☐ not interested
☐ not comfortable ☐ no point in study
☐ other __________________________________________________________________________

~Do you know anyone else who might be willing to participate? Is it ok if we give your name as a reference when we contact him or her?

Name: ___________________________ Tel: ___________________________

Name: ___________________________ Tel: ___________________________

~Thank you for your time.

------------------------------------------------------------------------------------------------------------------------

IF YES... THANK YOU!

Address ___________________________

City ___________ Postal Code ___________

Directions: __________________________________________________________________________

Language Spoken in the Household

☐ Vietnamese only ☐ Vietnamese and English
☐ Other (combination) ___________________________________________
## Keeping Track

### First Call Record

<table>
<thead>
<tr>
<th>Call No.</th>
<th>Date (dd/mm)</th>
<th>Time</th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
<th>Sa</th>
<th>Su</th>
<th>Code</th>
<th>To Call Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Codes:**
- **NA:** no answer (try again)
- **BUSY:** busy after 2nd try
- **NH:** eligible respondent not home
- **AC:** accepted/appointment scheduled
- **ANM:** answering machine (left message)
- **REF:** refused/give reason (other page)
- **DISC:** number disconnected/wrong number

### Visit #1

**Appointment (time and place):**

Rescheduled to:

### Visit #2

**Appointment (time and place):**

Rescheduled to:

### Comments:
Appendix D
Food Inventories

161
# APPENDIX D
## FOOD INVENTORIES

### Table 1: Inventory of Rice and Other Cereals

<table>
<thead>
<tr>
<th>Food</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rice gao</td>
<td>long grain white/basmati</td>
</tr>
<tr>
<td>sticky rice</td>
<td>nep</td>
</tr>
<tr>
<td>short grain white rice</td>
<td></td>
</tr>
<tr>
<td>noodles</td>
<td>hu tieu</td>
</tr>
<tr>
<td>sticks</td>
<td>vermicelli</td>
</tr>
<tr>
<td>roasted</td>
<td></td>
</tr>
<tr>
<td>paper</td>
<td>banh trang or banh canh</td>
</tr>
<tr>
<td>flour</td>
<td>bot gao</td>
</tr>
<tr>
<td>wheat</td>
<td>noodles</td>
</tr>
<tr>
<td>bread</td>
<td>french stick</td>
</tr>
<tr>
<td></td>
<td>chinese fried bread</td>
</tr>
<tr>
<td>tapioca?</td>
<td>flour</td>
</tr>
</tbody>
</table>

### Table 2: Inventory of Meat and Other Animal Products.

<table>
<thead>
<tr>
<th>Source</th>
<th>Parts</th>
<th>processed items?</th>
<th>recipes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pork heo</td>
<td>ribs</td>
<td></td>
<td>soup</td>
</tr>
<tr>
<td></td>
<td>legs</td>
<td></td>
<td>braised</td>
</tr>
<tr>
<td></td>
<td>heart</td>
<td></td>
<td>barbecued</td>
</tr>
<tr>
<td></td>
<td>kidney</td>
<td></td>
<td>fresh boiled</td>
</tr>
<tr>
<td></td>
<td>tongue</td>
<td></td>
<td>steamed (pie)</td>
</tr>
<tr>
<td></td>
<td>skin da heo</td>
<td></td>
<td>congee</td>
</tr>
<tr>
<td></td>
<td>stomach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Parts</td>
<td>processed items?</td>
<td>recipes</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------</td>
<td>------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>liver</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ear</td>
<td></td>
<td>pickled</td>
<td></td>
</tr>
<tr>
<td>ground meat</td>
<td></td>
<td>cured sausage</td>
<td></td>
</tr>
<tr>
<td>blood</td>
<td>huyet heo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intestines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beef bo</td>
<td>brisket (breast meat)</td>
<td></td>
<td>soup / Pho bo</td>
</tr>
<tr>
<td></td>
<td>tendons</td>
<td></td>
<td>Hotpot</td>
</tr>
<tr>
<td></td>
<td>steak</td>
<td>fried</td>
<td>stew / 5-spice stew</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sauteed strips</td>
<td>congee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>raw slivers</td>
<td>Sa Te</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dried strips</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ground meat</td>
<td>hamburger</td>
<td>com tam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>fried patty</td>
<td>bun rieu</td>
</tr>
<tr>
<td></td>
<td>bones</td>
<td>soup</td>
<td>beef ball soup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>steamed pie</td>
</tr>
<tr>
<td>tripe la-xach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken ga</td>
<td>whole</td>
<td></td>
<td>soup and canned soup</td>
</tr>
<tr>
<td></td>
<td>legs</td>
<td></td>
<td>congee</td>
</tr>
<tr>
<td></td>
<td>chicken claws/feet</td>
<td></td>
<td>steamed</td>
</tr>
<tr>
<td></td>
<td>bones</td>
<td></td>
<td>braised</td>
</tr>
<tr>
<td></td>
<td>liver</td>
<td></td>
<td>salad</td>
</tr>
<tr>
<td></td>
<td>heart</td>
<td></td>
<td>curry</td>
</tr>
<tr>
<td></td>
<td>blood</td>
<td></td>
<td>Kentucky Fried</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chicken</td>
</tr>
<tr>
<td></td>
<td>eggs</td>
<td>fresh</td>
<td>McDonald's</td>
</tr>
<tr>
<td></td>
<td></td>
<td>preserved</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Parts</td>
<td>processed items?</td>
<td>recipes</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------</td>
<td>------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>unborn</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>fertilized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>black</td>
<td>tonic broth</td>
</tr>
<tr>
<td>Other Animal Products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>turkey</td>
<td>whole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>quail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>duck vit</td>
<td>blood huyet vit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>meat</td>
<td></td>
<td>curry stew</td>
</tr>
<tr>
<td></td>
<td>eggs hot vit</td>
<td></td>
<td>fresh</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>preserved hot vit muoi</td>
</tr>
<tr>
<td>goose</td>
<td>meat</td>
<td></td>
<td>soup, stew</td>
</tr>
<tr>
<td></td>
<td>eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>turtle rua</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frog coo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>snails oo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seafood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>shrimp tep</td>
<td>fresh</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>dried</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prawns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>crab cua</td>
<td>meat</td>
<td></td>
<td>paste</td>
</tr>
<tr>
<td>squid</td>
<td>fresh</td>
<td></td>
<td>dried</td>
</tr>
<tr>
<td>mussels chem chep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>oyster hao</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>scallop gan mussels?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>shark fin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fish ca</td>
<td></td>
<td></td>
<td>see table 5.1 for species and table 5.2 for parts consumed</td>
</tr>
</tbody>
</table>
Table 3: Soy Products Reportedly Consumed by Interview Participants.

<table>
<thead>
<tr>
<th>Soy Products</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>soya sauce <em>nuoc tuong</em></td>
<td></td>
</tr>
<tr>
<td>bean curd (tofu) <em>tau hu</em></td>
<td>fresh and fermented (<em>chau</em>)</td>
</tr>
<tr>
<td>soy-bean drink <em>sua dau nanh</em></td>
<td></td>
</tr>
<tr>
<td>mock meat soy products (to resemble chicken or beef)</td>
<td></td>
</tr>
<tr>
<td>soybean paste</td>
<td></td>
</tr>
<tr>
<td>bean sauce <em>tuong (an pho)</em></td>
<td>yellow or brown, hoisin sauce</td>
</tr>
</tbody>
</table>

Table 4: Fats and Oils.

<table>
<thead>
<tr>
<th>Fats and Oils</th>
</tr>
</thead>
<tbody>
<tr>
<td>pork fat</td>
</tr>
<tr>
<td>vegetable</td>
</tr>
<tr>
<td>peanut</td>
</tr>
<tr>
<td>sesame <em>dau me</em></td>
</tr>
<tr>
<td>coconut</td>
</tr>
<tr>
<td>chile</td>
</tr>
<tr>
<td>corn</td>
</tr>
<tr>
<td>butter</td>
</tr>
</tbody>
</table>

Table 5: Inventory of Fruits and Vegetables as Reported by Interview Respondants

<table>
<thead>
<tr>
<th>Type (or family)</th>
<th>common name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables consisting of starchy roots,</td>
<td>white potato <em>khoai tay</em></td>
</tr>
<tr>
<td>tubers and fruits</td>
<td></td>
</tr>
<tr>
<td>sweet potato <em>khoai lang</em></td>
<td></td>
</tr>
<tr>
<td>yam <em>khoai</em></td>
<td></td>
</tr>
<tr>
<td>taro <em>khoai mo</em></td>
<td></td>
</tr>
<tr>
<td>cassava (manioc, tapioca) <em>khoai mi</em></td>
<td></td>
</tr>
<tr>
<td>banana</td>
<td></td>
</tr>
<tr>
<td>banana flower (terminal male bud) <em>bap chuo</em></td>
<td></td>
</tr>
<tr>
<td>Type (or family)</td>
<td>common name</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td><strong>Vegetables consisting of succulent roots, bulbs, leaves and fruits</strong></td>
<td></td>
</tr>
<tr>
<td>Alliums</td>
<td>Onion</td>
</tr>
<tr>
<td></td>
<td>shallots  <em>cu hanh do</em></td>
</tr>
<tr>
<td></td>
<td>scallions (green onions) <em>hanh la</em></td>
</tr>
<tr>
<td></td>
<td>Chinese leek <em>cu kieu</em></td>
</tr>
<tr>
<td></td>
<td>chives</td>
</tr>
<tr>
<td></td>
<td>Chinese chives <em>he</em></td>
</tr>
<tr>
<td></td>
<td>garlic</td>
</tr>
<tr>
<td>Leafy Vegetables</td>
<td>Romainelettuce</td>
</tr>
<tr>
<td></td>
<td>loose leaf lettuce <em>sa-lach</em></td>
</tr>
<tr>
<td></td>
<td>Chinese flowering cabbage <em>cai ngot</em></td>
</tr>
<tr>
<td></td>
<td>Chinese green cabbage</td>
</tr>
<tr>
<td></td>
<td>Chinese broccoli (Chinese kale)</td>
</tr>
<tr>
<td></td>
<td>broccoli</td>
</tr>
<tr>
<td></td>
<td>Chinese white cabbage (bok choy) <em>cai be tran</em></td>
</tr>
<tr>
<td></td>
<td>Chinese mustard cabbage <em>cai xanh</em></td>
</tr>
<tr>
<td></td>
<td>nappa cabbage <em>bap cai (tran)</em></td>
</tr>
<tr>
<td></td>
<td>spinach</td>
</tr>
<tr>
<td></td>
<td>amaranth <em>rau din</em></td>
</tr>
<tr>
<td></td>
<td>coriander (chinese parsley)</td>
</tr>
<tr>
<td></td>
<td>chinese celery <em>can muoc</em></td>
</tr>
<tr>
<td></td>
<td>dill</td>
</tr>
<tr>
<td></td>
<td>water spinach <em>rau muong</em></td>
</tr>
<tr>
<td></td>
<td>watercress <em>xa-lach-xon</em></td>
</tr>
<tr>
<td>peas, beans and other vegetable legumes</td>
<td>peanut (groundnut) <em>dau tong</em></td>
</tr>
<tr>
<td></td>
<td>soybean (soya)</td>
</tr>
</tbody>
</table>

D5
<table>
<thead>
<tr>
<th>Type (or family)</th>
<th>common name</th>
</tr>
</thead>
<tbody>
<tr>
<td>yam bean (jicama)</td>
<td><em>cu san</em></td>
</tr>
<tr>
<td>mung bean (sprouts <em>gia</em>)</td>
<td></td>
</tr>
<tr>
<td>green peas</td>
<td></td>
</tr>
<tr>
<td>tamarind <em>me</em></td>
<td></td>
</tr>
<tr>
<td><strong>Cucurbits</strong></td>
<td>watermelon</td>
</tr>
<tr>
<td></td>
<td>cucumber <em>dua leo</em></td>
</tr>
<tr>
<td></td>
<td>bitter melon <em>hu-qua</em></td>
</tr>
<tr>
<td></td>
<td>chayote <em>xu-hao</em></td>
</tr>
<tr>
<td></td>
<td>pumpkin</td>
</tr>
<tr>
<td></td>
<td>silk squash (angular loofah or <em>muop</em>)</td>
</tr>
<tr>
<td></td>
<td>opo squash (wax gourd?) <em>bau</em></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>spinach beets</td>
</tr>
<tr>
<td></td>
<td>Chinese winter radish (daikon)</td>
</tr>
<tr>
<td></td>
<td>celery</td>
</tr>
<tr>
<td></td>
<td>carrot <em>ca-rot</em></td>
</tr>
<tr>
<td></td>
<td>kohlrabi <em>cai-xu?</em></td>
</tr>
<tr>
<td></td>
<td>tomato <em>ca (tomat)</em></td>
</tr>
<tr>
<td></td>
<td>peppers (chiles) <em>ot hiem</em></td>
</tr>
<tr>
<td></td>
<td>green sweet peppers</td>
</tr>
<tr>
<td></td>
<td>bamboo (shoots) <em>mang</em></td>
</tr>
<tr>
<td></td>
<td>ginger</td>
</tr>
<tr>
<td></td>
<td>ginseng</td>
</tr>
<tr>
<td></td>
<td>Chinese water chestnut <em>cu au</em></td>
</tr>
<tr>
<td></td>
<td>lotus root ngo sen (<em>cu sen</em>)</td>
</tr>
<tr>
<td></td>
<td>water chestnut</td>
</tr>
<tr>
<td></td>
<td>algae (seaweed) --various</td>
</tr>
<tr>
<td></td>
<td>wood ear (black fungus) <em>nam meo</em></td>
</tr>
<tr>
<td>Type (or family)</td>
<td>common name</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>sugar cane</td>
<td></td>
</tr>
<tr>
<td>lily buds</td>
<td></td>
</tr>
<tr>
<td>basil <em>rau que, vap ca, ngo gai, ngo om,</em></td>
<td></td>
</tr>
<tr>
<td>cinnamon basil <em>tia to</em></td>
<td></td>
</tr>
<tr>
<td>mint</td>
<td></td>
</tr>
<tr>
<td>Herbs and spices</td>
<td>basil, celery, chili, chives, oriander, dill, garlic, ginger, lemon grass, mint, sesame, star anise, tamarind, cloves, nutmeg, cassia, cinnamon basil</td>
</tr>
<tr>
<td>Fruit</td>
<td></td>
</tr>
<tr>
<td>lemon</td>
<td></td>
</tr>
<tr>
<td>lime</td>
<td></td>
</tr>
<tr>
<td>longans (fresh and dried) nhan</td>
<td></td>
</tr>
<tr>
<td>Chinese red apples</td>
<td></td>
</tr>
<tr>
<td>oranges</td>
<td></td>
</tr>
<tr>
<td>apples</td>
<td></td>
</tr>
<tr>
<td>plums</td>
<td></td>
</tr>
<tr>
<td>pears</td>
<td></td>
</tr>
<tr>
<td>papaya <em>du du</em></td>
<td></td>
</tr>
<tr>
<td>mango <em>xoai</em></td>
<td></td>
</tr>
<tr>
<td>jackfruit</td>
<td></td>
</tr>
<tr>
<td>soursop mang cau xien</td>
<td></td>
</tr>
<tr>
<td>grapefruit</td>
<td></td>
</tr>
<tr>
<td>lichee</td>
<td></td>
</tr>
<tr>
<td>cantaloupe</td>
<td></td>
</tr>
<tr>
<td>avocado</td>
<td></td>
</tr>
<tr>
<td>kiwi</td>
<td></td>
</tr>
<tr>
<td>durians</td>
<td></td>
</tr>
<tr>
<td>kumquat</td>
<td></td>
</tr>
<tr>
<td>pineapple <em>thom</em></td>
<td></td>
</tr>
</tbody>
</table>
Table 6: Inventory of Seasonings and Flavourings as Reported by Interview Respondants.

<table>
<thead>
<tr>
<th>Item</th>
<th>Varieties or parts used</th>
</tr>
</thead>
<tbody>
<tr>
<td>fish sauce <em>nuoc mam</em></td>
<td></td>
</tr>
<tr>
<td>sugar <em>duong</em></td>
<td>white refined</td>
</tr>
<tr>
<td></td>
<td>sugar cane</td>
</tr>
<tr>
<td></td>
<td>rock or yellow lump <em>duong ten</em> or <em>duong the</em></td>
</tr>
<tr>
<td></td>
<td>fried sugar</td>
</tr>
<tr>
<td>salt <em>muoi</em></td>
<td></td>
</tr>
<tr>
<td>MSG <em>bot ngot</em></td>
<td></td>
</tr>
<tr>
<td>pepper</td>
<td>szechuan peppercorns</td>
</tr>
<tr>
<td></td>
<td>black pepper <em>tieu</em></td>
</tr>
<tr>
<td></td>
<td>white pepper <em>tieu so</em></td>
</tr>
<tr>
<td>garlic <em>toi</em></td>
<td></td>
</tr>
<tr>
<td>ginger <em>gung</em></td>
<td></td>
</tr>
<tr>
<td>onion <em>cu hanh trang</em></td>
<td>scallions (green) <em>hanh la</em></td>
</tr>
<tr>
<td></td>
<td>shallots <em>cu hanh do</em></td>
</tr>
<tr>
<td></td>
<td>chinese leeks</td>
</tr>
<tr>
<td></td>
<td>cooking</td>
</tr>
<tr>
<td></td>
<td>chinese chives</td>
</tr>
<tr>
<td></td>
<td>dried, fried</td>
</tr>
<tr>
<td>lemongrass <em>xa</em></td>
<td>fresh</td>
</tr>
<tr>
<td></td>
<td>dried</td>
</tr>
<tr>
<td></td>
<td>paste</td>
</tr>
<tr>
<td>coriander <em>ngo</em></td>
<td>leaves</td>
</tr>
<tr>
<td>mint <em>hung cay?</em></td>
<td></td>
</tr>
<tr>
<td>basil <em>rau que</em>, <em>vap ca</em>, <em>ngo gai</em>, <em>ngo om</em></td>
<td>purple/opal/thai?</td>
</tr>
<tr>
<td>Item</td>
<td>Varieties or parts used</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>lemon</td>
<td>lemon</td>
</tr>
<tr>
<td>cinnamon <em>tia to</em></td>
<td></td>
</tr>
<tr>
<td>chiles <em>ot hiem</em></td>
<td>fresh</td>
</tr>
<tr>
<td></td>
<td>dried</td>
</tr>
<tr>
<td></td>
<td>red chile sauce</td>
</tr>
<tr>
<td></td>
<td>powder</td>
</tr>
<tr>
<td>lemon</td>
<td></td>
</tr>
<tr>
<td>lime</td>
<td></td>
</tr>
<tr>
<td><em>vinegar dam</em></td>
<td>white</td>
</tr>
<tr>
<td></td>
<td>rice</td>
</tr>
<tr>
<td><em>soya nuoc tuong</em></td>
<td>sauce (light or dark)</td>
</tr>
<tr>
<td></td>
<td>paste</td>
</tr>
<tr>
<td><em>bean tuong (an pho)</em></td>
<td>sauce (yellow or black <em>tuong den</em>)</td>
</tr>
<tr>
<td></td>
<td>paste</td>
</tr>
<tr>
<td></td>
<td>hoisin <em>tuong ngot</em></td>
</tr>
<tr>
<td>hot chile garlic sauce</td>
<td></td>
</tr>
<tr>
<td>oyster sauce <em>dau hao</em></td>
<td></td>
</tr>
<tr>
<td><em>cinnamon bark (cassia) que</em></td>
<td></td>
</tr>
<tr>
<td><em>curry</em></td>
<td>paste</td>
</tr>
<tr>
<td></td>
<td>powder</td>
</tr>
<tr>
<td><em>5 spice powder ngu vi huong</em></td>
<td>(star anise, sichuan peppercorn, fennel, clove, cinnamon)</td>
</tr>
<tr>
<td><em>star anise nau to?</em></td>
<td></td>
</tr>
<tr>
<td><em>peanuts</em></td>
<td>fresh</td>
</tr>
<tr>
<td></td>
<td>roasted</td>
</tr>
<tr>
<td></td>
<td>oil</td>
</tr>
<tr>
<td><em>tamarind me</em></td>
<td>powder</td>
</tr>
<tr>
<td><em>coconut</em></td>
<td>water/juice</td>
</tr>
</tbody>
</table>

D9
<table>
<thead>
<tr>
<th>Item</th>
<th>Varieties or parts used</th>
</tr>
</thead>
<tbody>
<tr>
<td>milk</td>
<td></td>
</tr>
<tr>
<td>chinese celery</td>
<td></td>
</tr>
<tr>
<td>rice wine</td>
<td></td>
</tr>
<tr>
<td>tapioca starch</td>
<td></td>
</tr>
<tr>
<td>vegetable oil</td>
<td></td>
</tr>
<tr>
<td>turmeric</td>
<td></td>
</tr>
<tr>
<td>cumin</td>
<td></td>
</tr>
<tr>
<td>tea</td>
<td>dried leaves</td>
</tr>
<tr>
<td>dill</td>
<td></td>
</tr>
<tr>
<td>fish paste</td>
<td>anchovy</td>
</tr>
<tr>
<td>annatto beans</td>
<td>(For colour?)</td>
</tr>
</tbody>
</table>

Table 7: Inventory of Sweets and Snacks as Reported by Interview Participants.
Table 8: Inventory of Milk and milk Products as reported by Interview respondants.

<table>
<thead>
<tr>
<th>Item</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>milk</td>
<td>fresh</td>
</tr>
<tr>
<td></td>
<td>condensed</td>
</tr>
<tr>
<td>yoghurt</td>
<td></td>
</tr>
<tr>
<td>cheese</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Inventory of Beverages as reported by Interview respondants.

<table>
<thead>
<tr>
<th>Beverage</th>
<th>Type or variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>boiled or &quot;cooked&quot;</td>
</tr>
<tr>
<td></td>
<td>cold</td>
</tr>
<tr>
<td>tea <em>che</em> or <em>tra</em></td>
<td>Vietnamese green</td>
</tr>
<tr>
<td></td>
<td>black</td>
</tr>
<tr>
<td>coffee</td>
<td><em>caphe</em> (french roast with sweetened condensed milk)</td>
</tr>
<tr>
<td></td>
<td>instant</td>
</tr>
<tr>
<td>hot chocolate</td>
<td>instant</td>
</tr>
<tr>
<td>beer</td>
<td></td>
</tr>
<tr>
<td>soda pop</td>
<td>(cola, gingerale, orange drink, etc.)</td>
</tr>
<tr>
<td>wine</td>
<td>rice</td>
</tr>
<tr>
<td></td>
<td>grape</td>
</tr>
<tr>
<td>fruit juices/shakes</td>
<td>coconut, mango, durian, orange, soursop, lemonade, etc.</td>
</tr>
<tr>
<td>milk</td>
<td>fresh</td>
</tr>
<tr>
<td></td>
<td>condensed</td>
</tr>
<tr>
<td>coconut milk <em>nuoc dua</em></td>
<td></td>
</tr>
<tr>
<td>tonic</td>
<td>chicken broth, herbals, etc.</td>
</tr>
</tbody>
</table>
Appendix E
Selection of Vietnamese Recipes

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Appendix E
Selection of Vietnamese Recipes

Fried Sin-Qua with shrimp and meat (common food for Vietnamese who live in the village)
Cut garlic into slices and fry them with hot oil to reduce any bad smells from the shrimp and meat. Add some onion leaves.
Add meat and shrimp.
Add seasoning: salt, glutamate, a bit of sugar.
Add sin-qua (have been cut into pieces)
Fry for about 10 min. Until sin-qua is cooked (soft).
Taste and add some more seasoning as above if necessary.

Yu-choy soup
(vegetable soup--Chinese flowering cabbage)
Boil the water
Add dried shrimp
and meat or shrimp
Wait for about 5-10 min
Put the Yu-choy in.

Fried Ribs
Add salt, glutamate, sugar, pepper to the ribs, let the seasoning be absorbed.
Fry garlic in hot oil.
Fry the rib.

All above to be eaten with rice.
Rau-den soup
In pot, heat vegetable oil.
Add finely chopped and crushed shrimp, seasoned with pepper, salt and glutamate.
Fry quickly on high heat.
Add hot water, bring to boil and season to taste.
Then add rau-den (young leaves only)
bring to boil
add dried fried onion
remove from heat.

Ca chien - Fried fish (kingfisher)
ca=fish, chien=fried

Cut fish into steaks
soak in cold water and white vinegar (equal parts) to remove slime
scrape skin with sharp knife for the same reason
then quickly soak in clean cold water with ¼ lime-crushed and crushed ginger-about 2
inch piece-crush with knife
quickly remove and squeeze water out of them.

Variation #1
pat fish dry and fry in vegetable oil at high heat until very brown and crisp
to serve, cover with nuoc cham

Variation #2
coat fish with crushed garlic, salt, glutamate and pepper
fry the same way (skin is eaten)
serve as is.

Serve all above with rice, shredded green mango - raw
**Canh Bau** (Vegetable soup)
canh=soup
bau=vegetable

heat vegetable oil.
Add green onion (fresh or frozen)- saute
add dried shrimp, add hot water, salt, glutamate, sugar
add vegetable (julienned opo squash
season to taste, add dried fried onion.
Remove from heat once vegetable is cooked.

**Ta Hu Chien** (Fried Bean Curd)
*Ta hu=* bean curd
*Chien=* fried

boil soft bean curd steaks to firm them; cool.
Once cool, cover in salt, glutamate and finely minced lemon grass. Score an x on each side of the steak first.
Heat vegetable oil in skillet, fry until well browned on all sides.

**Thit Kho** (pork stew?)
*Thit=* meat pork implied
*Kho=* stew, fish sauce

Season pork with salt and glutamate.
Boil water, drop chunks of pork in for a few minutes, then strain and rinse, disposing of water.
In separate skillet, fry vegetable oil with about a ½ cup of sugar, until brown and bubbly, stirring constantly. This will be used to brown the pork.
Pour over pork in a pot and fry. Add whole hard-boiled eggs in the pot also, Simmer for a while, then add some hot water and continue to simmer.

Serve above with rice.
Canh Salach Son (Watercress Soup) you can find plenty of this at Websters Falls. *Canh*=soup, *Salach son*=watercress

Season ground pork with green onion (green part only), salt, glutamate and pepper. Mix together and form long oval patty.
Boil water, spoon small portions of the patty and drop into the boiling water. Skim off fat with slotted spoon.
Add salt to taste.
Add at least a pound of watercress.
Add more green onion fried in vegetable oil to the soup. Add chunks of bean curd, stir and remove from heat.

Hot Vit Muoi Chung (Duck eggs pie)
*Hot vit muoi*=salted duck egg, *chung*=steamed

Mix in bowl:
ground pork
chopped green onion-green parts only
salt, pepper, glutamate, dried fried onion
chopped duck eggs and liquid whites
mix well and top with more black pepper.
Place in pie plate and place on stand in large pot with some water in the bottom. Cover and steam until no liquid is released when punctured with a fork.

Serve all above with rice.

Cari Ga (Curry chicken)
cari=curry, Ga=chicken

cut up whole chicken
add salt, glutamate, sugar, curry spices (package) and cook in pot.
Add and fry chicken.
Add 5-6 stalks minced lemon grass to chicken while frying.
Add coconut water (about ½ can or more) and more water when chicken is almost done.
Fry sweet potato, potato and onion in separate frying pan, then add to chicken pot.
Squeeze juice out of fresh orange.
Optional= add little chicken eggs until cooked (a couple of minutes)

Serve with rice and/or fresh bread.
Canh Muop
*canh* = soup, *muop* = squash (same as *sin-qua* which is not a Vietnamese word)

Boil water.
Add teaspoon of ground pork and shrimp, ground together with salt, pepper, glutamate, green onion.
Skim off fat.
Add cut and peeled silk squash (round cut).
Add dried fried onion.
Season to taste.
Add bean thread noodles (made of green bean, broad bean and peas)
remove from heat.

Ta Hu Sot Ca
*ta hu* = bean curd, *sot* = stew, *ca* = tomato

Take fried bean curd and cut into triangles.
Cut partially like a sandwich and stuff with ground pork, seasoned with salt, pepper, glutamate, and green onion.
Fry in hot vegetable oil on all sides and remove and drain.
Add to hot oil in pan, minced garlic (1 large clove), diced tomato (to fill the pan), fried dried onion, some broth from above soup (2 ladles) and fry well.
Add fried bean curd and simmer on high for a minute or two, then remove from heat.

Ta Hu Chung or Ta Hu Hap
*Ta Hu* = bean curd, *chung/hap* = steamed

Take 4 large bean curd steaks and cut into quarters and place in pie dish.
Add ground pork on top and season top with black pepper, fried dried onion and juliened ginger (1 inch piece) and soya sauce.
Place in large pot on metal stand in water in bottom to steam cook until done.
**Canh Chua** (soup)
(usually made with 2 kinds of fish in Vietnam, sometimes shrimp or chicken.)
boil pot of water.
Add 3 large salmon steaks, skim off fat.
Add vegetables--tomato wedges, peppermint stalk? (Light green, from backyard), bean sprouts and cooked water spinach.
Add most of package of tamarind soup mix (Knorr)
In small bowl, mix chopped green leafy vegetable, about 1 cup of fish sauce, 5-6 tablespoons sugar, add to soup.
Also add oil that has been fried with garlic.
Season--I counted almost 10 spoons of sugar all together by the end and more fish sauce and tamarind--a truly sweet and sour soup.
Remove from heat.
Fish out salmon steaks when serving in separate dish.

**Rau Muong Xao** (Fried Water Spinach)
*rau muong* = water spinach, *xao* = fried

add lots of chopped fresh garlic (3-4 cloves) to hot vegetable oil and stirfry partially cooked water spinach.

Serve all above with rice.

~~~
Canh - soup
boil pot of water.
Add one large piece of ginger halved and crushed with knife.
Add fish paste (fish paste that has been firmed with a spoon); add by breaking off
spoonfuls and dropping into water. Season with salt and glutamate.
Add green vegetable (leafy-like Chinese flowering cabbage)
Add dried fried onions and remove from heat.
Can also add tofu chunks

Fried Fish
Take the rest of the firmed fish paste and drop into skillet with oil and fry, remove.

Steamed Fish
2 steaks (mackerel)
Place in pie plate, cover with ground seasoned pork and top with more black pepper and
finely julienned ginger (lots)
Place in large pot on stand in water and steam cook.

Soup - special occasion soup
Blanch cabbage leaves and green onions (green leafy portion), just enough to soften.
Drain and set aside.
Mix ground pork with salt, pepper, glutamate and finely chopped green onion (white
portion), about 3 stalks.
Take cabbage leaf, spoon meat mixture, roll and tie with green onion.
Boil fresh pot of water, spoon leftover meat and skim top off, then add cabbage rolls and
season to taste.

Ginger chicken
Take about 6 chicken legs, chopped into large chunks (cut into 3 and discard meatless
end); season chicken.
Add julienned ginger (about 2-3") to wok with oil. Fry, then add chicken until browned
well.
Then add coconut water, almost covering chicken. You could use hot water but coconut
water is more flavourful. Coconut water comes in beverage can and sometimes has small
chunks of coconut meat in it.
Serve above with rice, cucumber, tomato, etc.
conversations often revealed important information that seemed initially to have little to do with the research at the time.

I used a non-probability sampling technique known as the snowball method in order to recruit participants. The snowball method is one in which one or more key individuals is asked to name others who would be likely candidates for the research. This technique works particularly well for relatively small populations and is well suited to community studies (Bernard 1994:97). I chose a contact from the FWNP who introduced me to other contacts and to the host family who, in turn, introduced me to virtually all the participants. The disadvantage of using a non-probability sampling technique is that it is difficult to generalize beyond the sample studied; however, any study using this kind of sampling technique is credible backed with ethnographic data (Bernard 1994:94).

Participants were contacted mainly by telephone. The interviews took place in the participants' homes in most cases and took about one to one-and-a-half hours to conduct. All were tape recorded with permission. Some items were used to aid identification of certain food items during the interviews. I was able to use a binder of Great Lakes fish photos provided by the FWNP and I also brought along several books with good quality pictures, such as "Fruit" by Davidson and Knox (1991) and Hom's "Asian Ingredients" (1996). In preparation for the interviews, I developed a Vietnamese/English glossary of food items, sources and techniques with the help of my research assistants. (see Appendix B). Some interviews led to cooking sessions, instructions, or shared meals.
Cooking Sessions

A cooking session is a research method I developed that combines the above methods, but also allows the researcher to observe and participate in a cooking event with the understanding that the purpose of the session is to learn about food. For many of those in the study willing to do this, it was an opportunity for them to demonstrate a particular expertise in food handling or a special dish that they could share with me. I decided to add this research method because of my experiences preparing meals in the kitchen of my host family. There are several advantages to conducting a cooking session. Participating in the preparation of the food provides the opportunity for hands-on learning, a means of observing real behaviour rather than just the ideal that is related during an interview. I was also able to pick up on informal cues, and let the interview unfold naturally, at the participant’s pace. The food preparer was also in the comfort of his/her own kitchen. I found it to be the most relaxing and rewarding way to gather information about food and attitudes to food. This event allowed a greater shift in power in favour of the expert food preparer.

This method is not without limitations and only four sessions were conducted outside of those with the host family but it became another way to learn about Vietnamese food and culture.² The potential disadvantages/problems with conducting cooking sessions involve the possibility of generating feelings of invasion of privacy, and

² Four cooking sessions took place immediately following the interviews. Three were with women and one was with an elderly man. I was led through some people’s kitchens and gardens as well.