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DIETARY SELF-TREATMENT PRACTICES AND ATTITUDES
AMONG A GROUP OF MICHIGAN FINNISH-AMERICANS

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Mary Anne Burke

has been accepted towards fulfillment
of the requirements for

M.S. degree in Human Nutrition

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DIETARY SELF-TREATMENT PRACTICES AND ATTITUDES AMONG A GROUP OF MICHIGAN FINNISH-AMERICANS

By

Mary Anne Burke

A THESIS

Submitted to
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ABSTRACT

DIETARY SELF-TREATMENT PRACTICES AND ATTITUDES
AMONG A GROUP OF MICHIGAN FINNISH-AMERICANS

By

Mary Anne Burke

Selected demographic and dietary self-treatment data were collected from a non-random sample of 30 elderly, first- and second-generation Finnish-Americans in Michigan's Keweenaw Peninsula. Proper diet was the health maintenance practice most frequently mentioned by the sample. Reported dietary practices involved traditional and modern food usage for health maintenance and certain acute and chronic conditions. Viilia was currently used by 72% of the sample for health maintenance. Treatment for acute ailments included old family remedies. Non-traditional practices included vitamin and herbal remedies. Seventy-seven percent of the sample reported using vitamin/mineral supplements for health maintenance with 57% mentioning vitamin C. Modern arthritis remedies, reported by 83% of the sample, most commonly involved aloe vera juice and vitamin C. Thirty percent of the sample mentioned using harmless herbal remedies and diet modifications to treat hypertension. The sample indicated a positive attitude toward self-treatment for less serious health problems.

6120579

To my loved ones

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INTRODUCTION

Self-treatment practices involving food are widespread among ethnic subcultures in the United States, but they differ from group to group (Hand, 1976: Hill, 1973; Everett, 1971). The Finnish-Americans represent an ethnic group whose traditional food-related self-treatment practices have been described anecdotally (Lunden, 1979; Vachon, 1973).

Kleinman (1980) and Bradshaw (1977) have noted that the prevalence of home self-treatment remains relatively constant over time, even though some practices modify or change. For example, it has been suggested that 70 to 90 percent of all illness occurrences in the United States are self-treated exclusively within the home (Hulka et al., 1972; Zola, 1972, 1973). Thus, it is likely that Finnish-Americans continue to use food for health maintenance and in treatment of illness currently. In addition, since acculturation is an inevitable process, it is reasonable to expect that this group's current health beliefs and behaviors involving food include a mixture of ethnically traditional and "American" practices (Kolasa, 1978).

Knowledge of an ethnic group's current self-treatment practices is an important part of a community's nutrition assessment. Once practices are known, health and education interventions can be developed which emphasize positive, overlook neutral, and minimize or change negative practices in a culturally sensitive way.

Thus, this study was designed to document the current practices and

beliefs regarding the preventive and therapeutic uses of food within a specific Finnish-American population in Michigan's Upper Peninsula. The primary objective of the study was to determine food-related practices for health maintenance and for self-treatment of selected ailments and conditions. Secondary objectives were to describe food-related self-treatment practices that have changed over time and current attitudes toward self-care.

REVIEW OF THE LITERATURE

A number of comparative studies concerning the health beliefs and practices of different ethnic subcultures within the United States have been reported in the past decade (Bullough and Bullough, 1972; Spicer, 1977). These researchers and others, such as Bauwens (1977) and Snow (1974), have shown that ethnic subcultures differ both in their conception of well-bing and in their health maintenance practices. Similarly, American ethnic groups such as low-income blacks, southern whites, Puerto Ricans, and Mexican-Americans, among others, were likely to arrive for professional health-care after self-treating or "doctoring" themselves first (Snow, 1974; Bauwens, 1977). The terms self-treatment and self-care are used interchangeably in this paper to mean the various ways in which individuals and families take care of themselves, usually in the home, during illness and in health.

Because self-treatment usually takes place at home, health-care professionals are most often unaware of the extent to which it occurs (Bradshaw, 1977; Bauwens, 1977; Kleinman, 1980). Hulka et al. (1972) and Zola (1972, 1973) suggested that 70 to 90 percent of illness occurrences in the United States are managed exclusively at home, usually without the involvement of health-care professionals. Low-income whites in the American southwest commonly treated themselves with food (Bauwens, 1977). For example, they treated coughs with honey and lemon, or with an onion boiled in sugar and salt; they treated colds by drinking horseradish tea or by taking large doses of vitamins; and they stimulated laxation by eating stewed rhubarb.

Certain conditions appear to be commonly treated at home cross-culturally. They are generally minor and self-limiting problems less addressed by professional medicine (Harwood, 1981). Both Harwood (1981) and Bauwens (1977) noted similar common symptoms and conditions that were routinely self-treated. Among them were digestive problems, cold symptoms, sinus trouble, minor upper respiratory infections, arthritis, occasional headaches, trivial burns and cuts, and muscular aches.

Although much of the literature focused on the illnesses that are self-treated, Kleinman (1980) emphasized that most of the lay sector is not preoccupied with sickness and its care but rather with health maintenance. For example, in the Chinese culture Kleinman (1975) studied in Taiwan and among low-income whites in the American southwest (Bauwens, 1977), health maintenance was viewed as a process that must be worked at continuously, taking more of a family's time and energy than sickness beliefs and practices.

The Finnish-American Example

The Finnish-Americans of Michigan's Upper Peninsula provide an example of an ethnic group whose beliefs and practices involving food and health have not been formally assessed. The purpose of this section is to describe their immigration history as well as some traditional health beliefs and food-related self-treatment practices.

Finnish immigration into Michigan's Upper Peninsula peaked in the early 1900's (Hoglund, 1960; Jalkanen, 1969). The Finnish immigrants were largely from the rural uneducated classes of western Finland, and many returned to farming in this country (Nelson, 1975). Because of their relatively recent arrival and resumption of semi-agricultural

lifestyles, the acculturation process moved rather slowly. Thus, many customs and traits persisted intact, at least among the first generation Finnish-Americans (Armstrong, 1976).

Anecdotal reports indicated that traditional health beliefs and practices persisted among Finnish-American immigrants (Lunden, 1979; Vachon, 1973). The "sauna", which is a small building or room heated up to as much as 200 degrees Fahrenheit to promote sweating, has an ancient history among the Finnish and was a cultural focus of strongly held beliefs about health among immigrants (Armstrong, 1976). Besides keeping one clean, the sauna was reported to have beneficial psychological effects (Viherjuuri, 1965). Other traditional uses of the sauna were carried from the Old Country to the new. It was the gathering place for family and friends and served the purpose of stabilizing social networks (Viherjuuri, 1965). In addition, the sauna was a place for healing the sick, giving birth, and preparing the dead (Armstrong, 1976).

The cultural attribute of "sisu" also influenced health-related behavior and attitudes. An individual who persevered through an illness stolidly and without complaint demonstrated "sisu" (Lunden, 1979). This kind of endurance was a highly-valued characteristic among Finnish immigrants (Viherjuuri, 1965).

Resourcefulness and self-sufficiency were often required of the early immigrant homsteaders. Family members often assumed roles as "bonesetters", midwives, and eye specialists (Lunden, 1979). Minor ailments were treated with resources and food items at hand. Headaches were treated by placing a row of raw potato slices across the forehead, covered by a folded towel. Boils and infections were brought to a head

by a poultice of masticated rye bread and bandaged with a clean fragment of dish towel. Thick cream was used to soothe chapped legs, and for any undiagnosed ailment, homemade wild raspberry sauce was administered (Lunden, 1979).

Traditional Finnish Diet and Eating Pattern

Because ethnic subcultures retain at least some ethnically traditional food practices and beliefs as acculturation proceeds (Kolasa, 1978), it is appropriate to describe the traditional Finnish diet and eating pattern. Most Finnish-American in the northern United States emigrated from rural, western Finland (Hoglund, 1960). The traditional diet of that region was dependent primarily on dairy products, grains, and potatoes (Pelto et al., 1981), with salt fish and meat holding positions of lesser but consistent importance (Kolehmainen, 1968). The core grains of the traditional diet were rye, barley, and oats. The core dairy products consisted of fluid milk, cheese, fermented milk, and butter. Sugar, salt, coffee, rice for desserts, and a few spices had to be purchased (Pelto et al., 1981).

The recent work of Pelto et al. (1981), concerning modern and traditional food use in western Finland, characterized the traditional diet as high-protein and high calorie, with few fruits and leafy vegetables. The researchers also noted that by World War II the Finnish considered sugar, coffee, and Finnish coffee bread (pullaa) as part of the traditional diet. Modern additions to their dietary pattern were commercially prepared sausage and a great variety of fruits and vegetables.

The traditional meal pattern in rural Finland among the tenant farmers was to eat three "square" meals a day, one upon rising early in the morning, with the noon and evening meal being of equal importance. In addition, from the turn of the century onward, coffee and coffee bread were served at mid-morning and mid-afternoon, although a pot of warm coffee was usually available throughout the day (Ojakangas, 1964).

The elements of the traditional Finnish diet were easily transferred to the new environment by the Finnish immigrants, many of whom chose to settle in environments and adopt lifestyles similar to the agrarian life left behind in western Finland (Nelson, 1975). Both Lunden (1979) and Kolehmainen (1968) noted widespread reliance on traditional foods and meal patterns among the Finnish immigrants in Michigan and Minnesota, especially among those who resumed the agricultural lifestyle typical of rural Finland.

Some Implications of Self-Treatment

Health-care professionals in the United States are noting a widespread activity in home health-maintenance and self-management of illness (Harwood, 1981). One concern for health professionals is that patient compliance with standard medical regimens may be compromised. For example, those individuals who have developed confidence in their ability to treat themselves are more likely to disregard the advice of health professionals (Bauwens, 1977). In addition, patients generally do not tell physicians the components of their self-care, because they are aware that modern medicine often discredits the value of "home remedies" (Bauwens, 1977). When a patient also has specific expectations of a

consultation's coutcome which does not come about, the treatment tends to suffer also (Wadsworth, 1974). Health beliefs and practices are usually based in culture (Harwood, 1981), and an ethnic patient's compliance is often compromised because the beliefs and practices of scientific medicine are at odds with his own set of beliefs (Snow, 1974).

A second issue of some importance in lay self-treatment is that it will go on in spite of what the doctor says. Therefore, it should be asked if there is any evidence of specific ill-judged or dangerous self-treatment practices being used (Bradshaw, 1977).

A third issue, which may become increasingly important in the United States is overcrowding of health-care services. Considered a fact of life in England, it has been suggested (Morrell and Wale, 1976) that, of the complaints presently managed in the lay sector, even a minor shift from lay management to doctor care could make intolerable demands on England's National Health Service. Therefore, in England, at least, it is clear that self-treatment of illness is, in a crucial sense, appropriate, since the alternative would almost certainly be grossly inadequate health care (Bradshaw, 1977).

Thus, for a number of reasons it is advisable for health-care professionals to learn to work with lay health practices and beliefs as they inevitably exist among their clientele. A step to developing this kind of awareness is to acquire knowledge of the ways in which individuals and ethnic groups treat themselves in health and illness.

METHODS

The methods employed in researching the dietary self-treatment practices and attitudes of a group of Finnish-Americans in Michigan's Keweenaw Peninsula are described in this section. Criteria for inclusion in the sample and protection of subject's rights are given. The field research methods chosen for this study are also discussed. They involved: 1) notification of local civil authorities in the study area of the researcher's presence and project; 2) use of ethnographic techniques; 3) subject selection by referral sampling ; and 4) use of a structured interview schedule. In addition, data analysis methods are described.

The Sample -- Criteria and Definitions

The sample group was defined by the following criteria:

> an immigrant, first- or second-generation Finnish-American, either male or female, claiming at least one parent of Finnish ethnicity, living in Michigan's Keweenaw Peninsula, including and bounded on the south by the city of Houghton and its rural environs, and on the north, west and east by Lake Superior.

An immigrant Finnish-American was defined as one who emigrated from Finland, settled in this country and became a United States citizen. First generation Finnish-Americans were defined as being born in this country of at least one immigrant Finnish-American parent. The second generation Finnish-Americans were defined as those born in this country and having at least one set of immigrant Finnish-American grandparents.

The concept of Finnish ethnicity followed Schermerhorn's definition of an ethnic group. He stated that:

> ...an ethnic group is...a collectivity within a larger society having a real or putative common ancestry, memories of a shared historical past, and a cultural focus on one or more symbolic elements defined as the epitome of their peoplehood....A necessary accompaniment is some consciousness of kind among members of the group (1978:12).

Protection of Subjects

The field study proposal was submitted to the Michigan State University Committee on Research Involving Human Subjects (UCRIHS). Approval was granted before initial contact with participants was made. All respondents signed the UCRIHS-approved consent form (Appendix A).

Ethnographic Techniques

The ethnographic techniques employed in the field were: 1) participant observation; 2) "networking" into the community; 3) identification of key informants; and 4) the use of a field diary. These techniques were used in the study area for a two month period prior to actual data collection. This period was assigned to allow the researcher time to refine impressions of the people and area and to establish the necessary community contacts, while working within the limitations of time and budget.

Participant Observation

Participant observation was accomplished by direct involvement in community life, observing and talking with people to learn from them their view of reality (Agar, 1980). Participant observation also assisted the primary researcher, a non-Finnish-American, in developing the final data collection instrument and interviewing style most likely to elicit accurate information from the Finnish-Americans interviewed.

"Networking In"

"Networking in" (Agar, 1980) was used to establish the researcher's presence in the community and to help identify potential subjects for inclusion in the study. The process involved locating well-respected people or institutions within the study area to facilitate the researcher's entrance and acceptance into the community.

Key Informants

Two key informants (Agar, 1980) were identified in the study area. As individuals who were well informed about the practices and beliefs of the community, they functioned as information resources throughout the study. Having more than one key informant allowed comparison of information to assure accuracy (Bass et al., 1979).

Field Diary

A field diary (Agar, 1980) was kept to detail personal impressions, daily activities, and other insights that could assist in explaining research results later.

Sample Selection by Referral

The method used for subject selection was best characterized as 'referral sampling', a non-probability technique. 'Referral sampling' was a modification of the snowball sample technique described by Bailey (1979). The first stage of referral sampling involved identifying and interviewing a few individuals meeting sample criteria. These subjects were asked to refer the interviewer to others qualifying for inclusion in the sample. These in turn suggested still others to be

interviewed, until the required number of interviews had been collected. Unlike snowball sampling, the referral sampling method did not require discrete stages of interviewing or referral quotas at each stage.

The referral sample method was chosen for three reasons. First, the method insured referral to a Finnish-American meeting sample criteria. Second, it was used to enhance subject acceptance of the interviewer and interest in the project. Third, referral sampling allowed the researcher to follow the diffusion of self-treatment or health maintenance practices that might spread through the sample.

Data-Gathering Instrument

Choice and Justification

A structured interview schedule composed primarily of open-ended questions was chosen as the appropriate instrument to obtain self-treatment data not otherwise available through observation or written response instruments (Talmage and Rasher, 1982). The interview schedule format allowed opportunity to clarify information and ambiguities with probes and follow-up questions in the interview situation. The structured format allowed interview data from many respondents to be aggregated and quantified (Talmage and Rasher, 1982). The use of open-ended questions established a more valid framework for data interpretation, because responses were subject-generated rather than externally imposed (Fabrega, 1974).

Instrument Design, Pretest, and Revision

An original interview schedule was designed to collect the following information: 1) data regarding dietary preventive health behaviors

(PHB); 2) data regarding dietary self-treatment of certain ailments and conditions; 3) self-care attitude data; and 4) selected demographic data. The term "food" used throughout the interview schedule was defined broadly to include anything taken in by mouth, including foods, food supplements, beverages, herbs and spices, teas, vitamin and mineral supplements, and "non-food" items.

The interview schedule was pretested in the field with four subjects meeting sample criteria. Revisions were minor. Confusing or ambiguous questions were refined. The order of sections and specific questions was arranged such that potentially threatening questions were administered last.

Final Instrument

The revised instrument was reviewed and approved by the primary researcher's Graduate Committee at Michigan State University. In final form, the 81 question instrument contained five sections with a total of 49 major questions asked of each participant and up to 32 subquestions depending on responses (Appendix B). Most questions were open-ended, although forced-choice types were included. The interview schedule required approximately one and a half hours to complete. The specific sections comprising the interview schedule are described below.

Section I and Section V of the interview schedule were designed to obtain selected demographic information. Questions in Section I established whether the interviewee met criteria for inclusion in the sample. Section V contained questions eliciting information regarding age, sex, income, employment, and education history for the interviewees

and their spouses where applicable. Data about health-care utilization and sources of self-treatment information were obtained also.

Section II of the interview schedule focused on current as well as childhood preventive health behaviors, especially regarding health-oriented uses of food. For this study preventive health behavior was operationally defined as any action undertaken by an individual to maintain or promote health and/or reduce the possibility of disease or disability.

Section III of the interview schedule asked for specific food uses involved in the treatment of common illnesses. A list of various illnesses and conditions was developed after reviewing the literature on types of ailments commonly self-treated in the home. All respondents were guided through the list of illnesses. Responses were recorded on a separate data sheet for each ailment reported.

Self-care attitudes of the sample in relation to medical care were addressed in Section IV. Self-care in this context related to illness detection and treatment (Linn and Lewis, 1979). A nine-item, Likert-scale instrument was adapted from Linn and Lewis' (1979) thirteen-item Self-care Attitude Scale, which was originally developed to measure physicians' self-care attitudes. Nine statements considered to be applicable to lay people as well as physicians were chosen from the thirteen. Seven items were adopted as written by Linn and Lewis, while two were reworded more appopriately for respondents. Each respondent was given the same instructions for completing the form, while the interviewer read aloud from her copy.

Data Analysis

Demographic data, self-care attitude data, and selected dietary preventive-health-behavior (PHB) data were coded and entered into a Cyber 750 computer at Michigan State University. These data were analyzed using programs in the Statistical Package for the Social Sciences (SPSS) by Nie et al. (1975). Frequencies and distributions were derived for all variables. Mean, median, and mode were calculated where appropriate.

Frequencies and distributions for selected dietary PHB data and data regarding self-treatment of illness were hand-tallied. Chi square and Kolmogorov-Smirnoff tests of significance were applied to selected data (Champion, 1970). The significance level for the chi square test was $p \leq .05$. The significance level for the Kolmogorov-Smirnoff One Sample test was $p \leq .01$.

Because of problems associated with interpreting recall data based on events in one's distant past, data regarding past self-treatment practices were limited to providing a broadly descriptive, qualitative background against which to compare current practices. Only data relating to current dietary self-treatment practices were tested for significance levels.

THE RESEARCH SITE

The Site

The Keweenaw Peninsula was selected as the research site because of the large number of Finnish-Americans concentrated there. It is located in the northwestern portion of Michigan's Upper Peninsula (Figure 1) and is a finger-like projection 55 miles into Lake Superior. It is bounded on the north, west and east by the lake, and on the south by the Portage Canal which transects it from east to west. On the southern side of the canal lies Houghton, which, with its rural environs, marks the southern boundary of the study area.

The research site included all of Keweenaw County to the north and about half of Houghton County to the south. Approximately half of Houghton County's population of 37,872 fell within the study site. Combining Keweenaw County's sparse population of 1,964 inhabitants with half of Houghton County's population yielded a total of approximately 21,00 people for the Keweenaw Peninsula, based on 1980 census data (Ketola, 1981). The population was largely concentrated in the lower half of the Peninsula.

The People

Current estimates suggested that Finnish-Americans comprised about 25 percent of the Keweenaw Peninsula's total multi-ethnic population (Ketola, 1981; Gregorich, 1981). The Finnish-American respondents were proud of their heritage and generally were well versed in their historical origins and common ancestry. They referred to themselves as "Finns", which applied to anyone who considered himself or was

FIGURE 1 Map of Michigan. Darkened area is Keweenaw Peninsula research site.

considered by others to be of Finnish background. In this paper, "Finn" is similarly used to refer to anyone of Finnish ethnicity.

Immigration History

Finnish immigration into the Keweenaw Peninsula peaked in the early 1900's (Hoglund, 1960; Jalkanen, 1969). Most immigrants were landless subsistence farmers from the rural provinces of Vaasa in western Finland and Oulu in the north (Figure 2). Leaving Finland largely for economic reasons, many immigrants were attracted to the Keweenaw Peninsula by the promise of work in copper mines and an environment similar to their homeland. By 1930, there were some 31,000 foreign-born Finns on the copper mining range of the Keweenaw Peninsula (Murdoch, 1964). Many returned to farming as soon as they were able. Because of their relatively recent arrival in the Peninsula and the resumption of agricultural lifestyles in somewhat closed communities, the acculturation process moved rather slowly, at least among the first generation (Armstrong, 1976).

Historical Background and Employment

Copper mining provided a stable economic base for the Keweenaw Peninsula through the second decade of this century. Mining companies operated from a base of socially-oriented paternalism providing miners and their families with medical services and economic aid when needed. When copper mining collapsed during the Depression, many mining companies sold company-built homes at nominal prices or gave them to employees (Murdoch, 1964). According to respondents, many unemployed Finns owned their own homes during the Depression, had a garden and

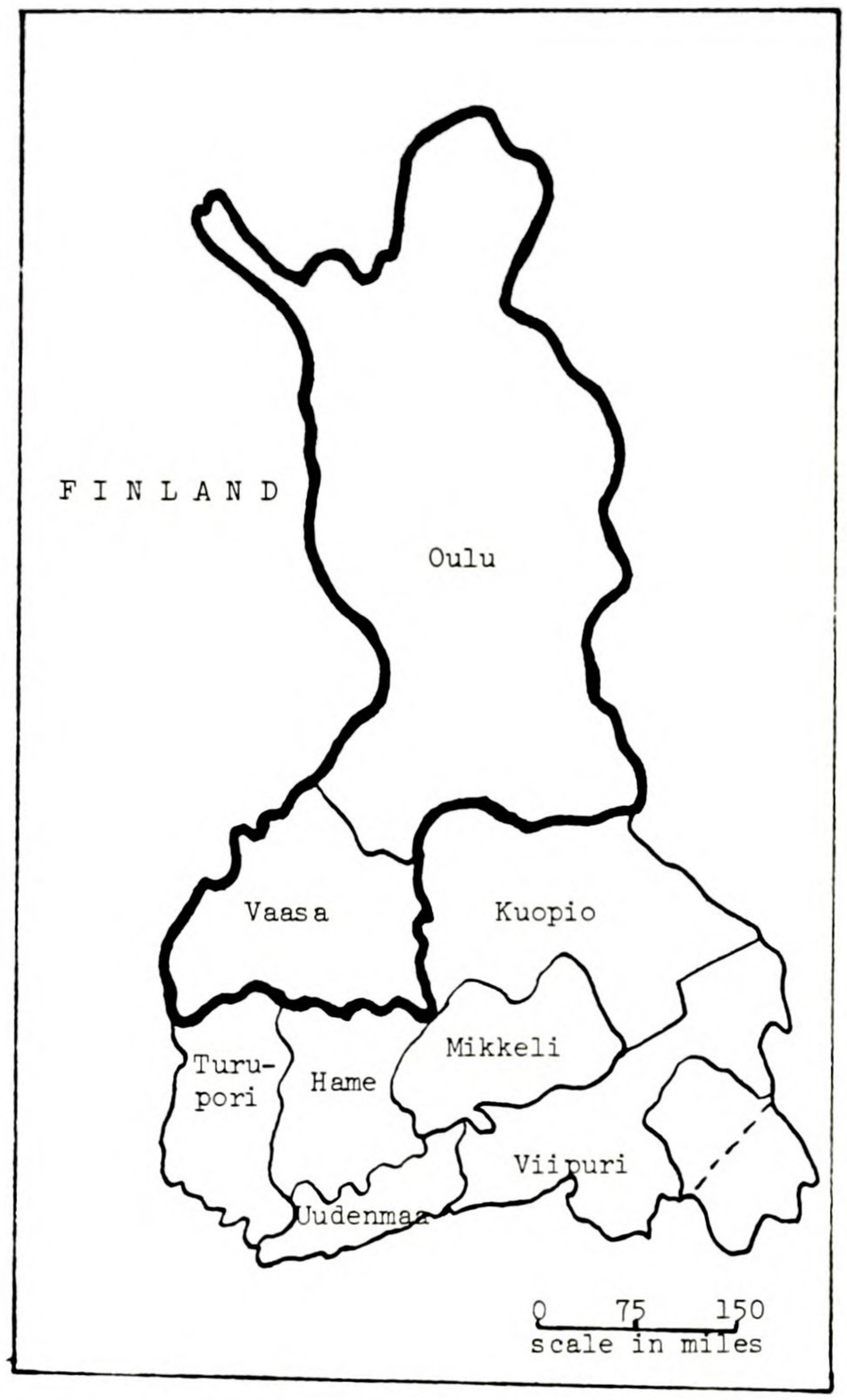

FIGURE 2 Map of Finland. Most Finnish immigrants in the Keweenaw Peninsula, Michigan, research site were from the provinces of Vaasa and Oulu, shown in bold outline. Adapted from Hoglund (1960:22).

family cow, and bartered for goods and services, a lifestyle reminiscent of rural Finland.

Since the mining days, population in the Peninsula has continued to decline due to a shortage of jobs. Houghton and Keweenaw counties have lived with double-digit unemployment throughout the 1970's and currently have low per capita incomes compared to the rest of the state and nation (Verway, 1979). Currently, remunerative jobs are found in the tourist industry, federal, state and local governments, lumbering, small farming, other trades and services; however, there is little industry in the area (Verway, 1979).

Sisu

"Sisu" is a Finnish word meaning "guts" and described a forbearance and perseverance through situations stolidly and without complaint (Lunden, 1970). "Sisu" had become a watchword associated with cultural pride among the Finnish-Americans in the Keweenaw Peninsula. This outlook was seen to influence the way in which the elderly Finns reacted to illness.

Visiting Ritual

The visiting ritual among Finnish-Americans has been described elsewhere as providing social cohesion and diversion to this group (Loukinen, 1979; Armstrong, 1976). The elements of this ritual were generally observed in the study population. Multiple visiting relationships with friends, neighbors and kin as well as visits lasting an average of two or more hours were noted. Coffee and baked goods, usually homebaked and often traditional, played an important

part in the visiting ritual. The offer and acceptance of these items was expected and considered polite.

The Sauna

The "sauna", which describes the Finnish bath and bath process, has maintained a centuries-old position in traditional Finnish culture (Viherjuuri, 1965). Its use was widespread among the Finnish-Americans in the Keweenaw Peninsula, especially among the older Finns, and it was the focus of strongly-held beliefs. The health benefits which the sauna provided in terms of cleanliness and "atmosphere" were expressed by several members of the study population. Typically, the heat of the sauna was reported to be best around 170°F. The heat and steam were also reported as beneficial to health and therapeutic for certain conditions.

Religion

The sample was predominantly Lutheran representing two distinct branches, the Apostolic Lutheran Church and the Evangelical Lutheran Church. Although the sample was largely Apostolic Lutheran, the Evangelical Lutheran Church had the larger membership among Finnish-Americans in the Keweenaw Peninsula. The Evangelical Lutheran Church was tied historically to the traditional Lutheran Church of Finland. The Apostolic Lutheran Church was an outgrowth of an emotional revivalism carried to the Keweenaw Peninsula by the Finnish immigrants. The followers of the revivalist movement were excommunicated from the Lutheran Congress held in the Keweenaw Peninsula in 1867 (Nelson, 1975). Since that time, a tension between the two doctrines has

existed, being mentioned by a few of the respondents.

The Apostolics and Evangelicals were quite different and did not appear to intermingle much. Historically the Apostolics placed emphasis on sober rural living in accord with the Bible (Karni et al., 1975). Conversations with Apostolic respondents indicated that Church teachings still encouraged sober and plain lifestyles and a reliance on the basics while staying close to nature. The Evangelicals also valued plainness, following the doctrines of traditional Lutheranism. Among both the Apostolics and Evangelicals, the Church held a place of central importance as a social and spiritual nexus, especially among the elderly.

Self-Reliance and Health

The self-reliant attitude within this population, which was apparent in matters relating to health, had its roots in Finnish history. Because doctors were uncommon in pre-twentieth century rural Finland, immigrants arrived in the Keweenaw Peninsula with traditional home remedies, a history of self-relaince, and an attitude that illness should not be encouraged (Armstrong, 1976).

Many respondents also reported a reliance during their childhood on specific laypeople with particular medical skills. "Bonesetters" were Finnish laymen skilled in the setting of bones, sometimes learned from a doctor, and were utilized by some respondents while growing up in the Keweenaw Peninsula. Lay midwives also were commonly utilized in those days, often working in conjunction with doctors. Finnish masseurs and masseuses trained in Swedish massage were utilized also

for their particular skills during that time. Respondents reported that the reliance on laypeople skilled in health matters had largely died out by the Second World War. Currently, there were no bonesetters or lay midwives in the Peninsula, but two masseuses, now elderly, still maintained a clientele.

Berry-Picking

Berry-picking had a traditional place of social importance among the Finnish-Americans of the Keweenaw Peninsula (Armstrong, 1976). Because of their age, only a few respondents continued to gather the wild blueberries, blackberries, and thimbleberries available in the Keweenaw Peninsula. However, many described berry-picking as a regular event when they were younger, which provided families with healthful exercise. Some respondents sought wild blackberries and blueberries because their medicinal properties were superior to the domesticated berries.

Health Care Services

Because of the paternalistic mining companies, respondents reported more doctors and health care facilities serving the Keweenaw Peninsula when they were growing up than currently. Today, health care services are concentrated in Houghton County with no doctor, hospital, or nursing home located in Keweenaw County (Ketola, 1981). Twenty-seven licensed physicians and two hospitals service the combined counties (Tieter, 1981), which results in a potential patient load of 1500 people per doctor. The percentage of the population 65 years of age and older in these counties has been increasing yearly

(Verway, 1979). If this trend continues, overcrowding of medical services may become a serious problem for the elderly.

RESULTS AND DISCUSSION

Results of field research are presented in this section. Field methods are described. Results obtained from the structured interview schedule are also discussed. Data presented include demographic information and information on dietary preventive health behavior, dietary self-treatment of illness, and self-care attitudes of the Finnish-American sample population in Michigan's Keweenaw Peninsula.

FIELD METHODS

Pre-Data-Collection Phase

Upon arrival in the study area, the researcher notified the appropriate civil authorities of her presence, purpose and length of stay. The Board of Commissioners for both counties in the study area were contacted, as were police and sheriff's departments at various locations in the Peninsula.

Two long-term Finnish-American residents known to the researcher functioned throughout the study as key informants. They suggested specific people or institutions in the peninsula which were generally well-regarded by the local Finns. As a result of these conversations, the researcher contacted the Cooperative Extension Service Home Economist, a respected pharmacist, a Finnish-American County Commissioner, a Lutheran minister, and a retired doctor who had treated many of the older Finns. This group served as a bridge into the subject population by offering support and suggesting specific people to participate in the study.

Participant observation was accomplished in a number of ways. The researcher informally attended various Finnish-American social and

church-related functions, for example, a Cooperative Extension Service meeting, polka dances popular among the older Finns, and various Lutheran church services. Informal conversations with local Finns occurred regularly over coffee in Finnish-American cafes or in homes around the peninsula. The local newspapers and radio talk shows provided information about some of the day-to-day concerns. Observations at the two food cooperatives and several pharmacies used by area Finnish-Americans provided insights about the position these places had in their self-treatment network. This process was on-going during the study period.

Establishing Referral Chains

Five subjects meeting sample criteria were initially identified through community contacts and key informants before data collection began. Each of the five suggested the names of others qualifying for inclusion in the sample. These individuals in turn suggested others to be interviewed. Thus five referral chains were established initially and were followed simultaneously (Figure 3). Individuals were interviewed as they became available until four pretests and 30 interviews were collected.

All individuals gave permission to have their names mentioned when their referrals were contacted. All referrals were reached initially by telephone and asked to participate. In all, five individuals declined to participate. Four individuals declined when initially contacted, and one individual failed to keep an interview appointment. It never became necessary to start a new referral chain,

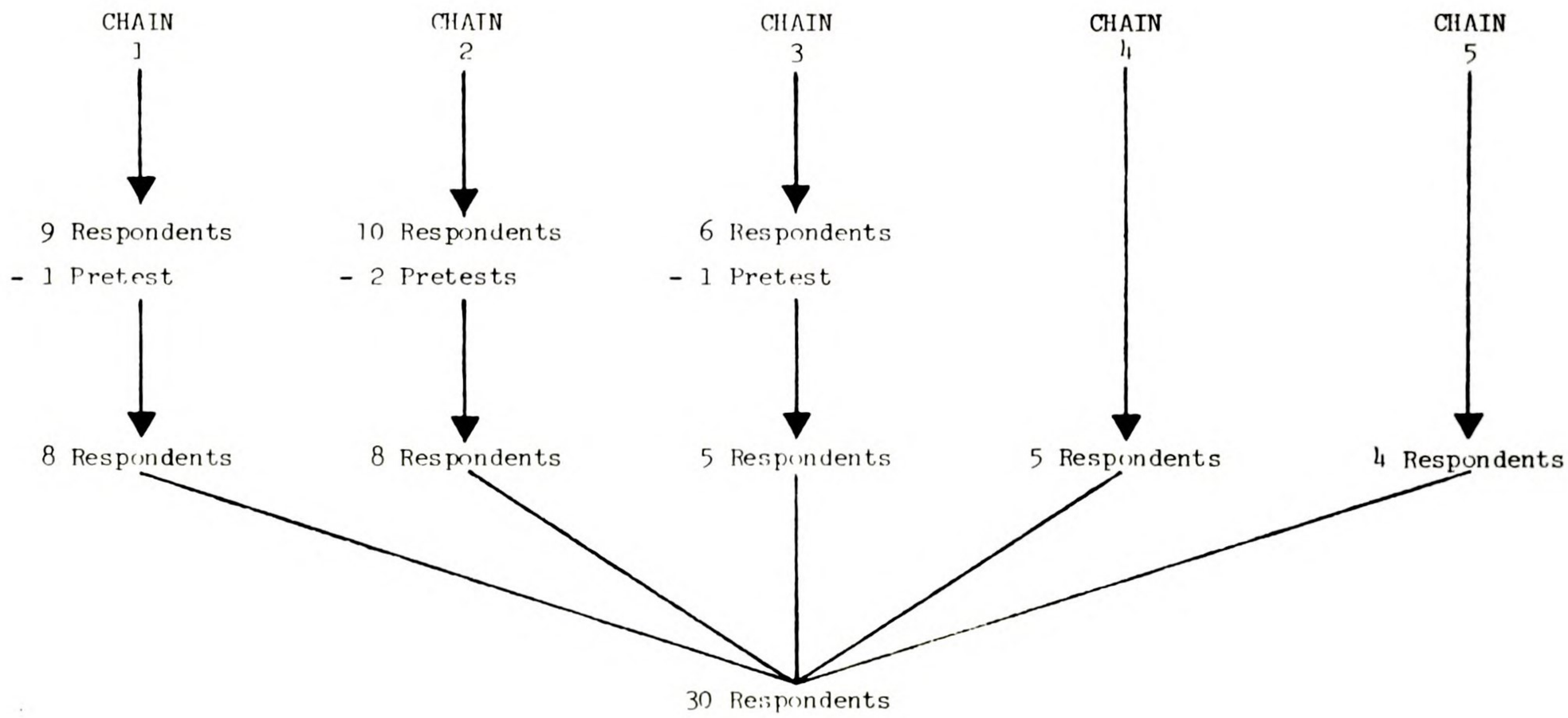

FIGURE 3 Flow chart showing number of referral chains initially established for subject selection and number of respondents, including pretest population, which each referral chain contributed to total sample population of 30 Finnish-Americans, Keweenaw Peninsula, Michigan.

since no dead ends were reached in any of the five original chains.

Structure of Subject Contacts

Initial Contact

Because of the size of the study area, all initial contacts with potential subjects were made by telephone. In a short conversation, the researcher identified herself, her affiliation, and the person who had suggested the individual. The project was briefly described, sample questions from the interview schedule were discussed, and the interview process was outlined. Questions were answered, and finally the individual was asked to participate in an interview. For those who agreed to participate, an interview was scheduled for a mutually convenient time and location. Individuals who declined were asked for a referral and thanked for their time.

Interview Location and Time

Based on conversations with key informants and observations during the participant observation and pretesting phases, the researcher encouraged interviews to take place in the subjects' home on a weekday, either at mid-morning or mid-afternoon. This location and time coincided with the local custom of visiting each others' homes for prolonged conversation over coffee and pastries in a relaxed setting. This custom has been noted for Finnish-Americans in general (Loukinen, 1976; Lunden, 1979; Armstrong, 1976). Thus the interview was paired with a culturally pleasant situation where prolonged, relaxed conversation was expected and competing time demands were at a minimum.

The Interview Session

Based on participant observation and conversations with key informants, the researcher utilized the pretesting phase to develop an interviewing style which would facilitate the interviewing process. As a result, interview sessions were structured into three parts, an introduction, the formal interview, and the informal post-interview.

The introduction was structured to inform the respondent of various aspects of the project, to focus attention on the relevant information, and to develop a favorable rapport. The researcher briefly recapitulated the initial telephone conversation, describing her affiliation and the purpose of the project and encouraged questions to bring about these ends. A brief explanation of the items on the consent form, which each subject read and signed, served as the transition from the introductory, conversational phase to the formal interview.

The formal interview phase involved administering the prepared interview schedule. The first few questions determined if the subject met the conditions for inclusion in the sample. In all cases subjects met the sample criteria. Sections I through V of the interview schedule were generally covered in that order.

The final phase was an informal post-interview, defined by Gorden (1975) as a "chat" which takes place after the interview is formally closed and this is not defined as part of the interview by the respondent. Some time was spent after each interview making sure that the respondent was left in a positive frame of mind about the interviewer and the interview process. Participants were asked for referrals at

the end of this conversational period.

The researcher took care to structure the interview session in ways most likely to promote desired outcomes. However, she remained flexible, allowing variations in structure depending upon the interview situation.

DEMOGRAPHIC DATA

Sex and Age

The sample was predominantly female and elderly. Twenty-three of the respondents (77%) were female and seven (23%) were male. Age ranged from 39 to 91, although 80 percent were 65 years of age or older (Table 1).

Ethnicity

The sample included first, second, and mixed first and second generation Finnish-Americans (Table 1). Over half of the respondents (67%) were first generation Finnish-Americans whose immigrant parents were born in Finland (90%) or Sweden (10%). The parents of second generation respondents (13%) were all born in the Keweenaw Peninsula, while the parents of the mixed first and second generation (20%) were either born in Finland or the Keweenaw Peninsula. Twenty-eight of the respondents (93%) stated that both parents considered themselves to be of Finnish background. The remaining two (7%) reported that their mothers were of Finnish background although their fathers were not.

Residence and Marital History

The sample had a history of stable residence in the Keweenaw Peninsula area. Twenty-seven respondents (90%) were born in the Keweenaw Peninsula, and twenty-nine (97%) were raised there during their school years. Three respondents (10%) were born elsewhere in Michigan, and one respondent moved into the area during childhood.

TABLE 1

Selected demographic data for Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Item		# of respondents	%*
SEX			
Male		7	23
Female		23	77
AGE (years)			
20-40		1	3
41-50		3	10
51-60		2	7
61-70		9	30
71-80		11	37
81-90		3	10
91-100		1	3
GENERATION			
First		20	67
Second		4	13
Mixed first and second		6	20
EDUCATION (years)			
Male	0-6	2	7
	7-8	4	13
	9-12	-	-
	12+	1	3
Female	0-6	1	3
	7-8	6	20
	9-12	15	50
	12+	1	3
RELIGION			
Apostolic Lutheran		20	67
Evangelical Lutheran		9	30
Other		1	3

*Due to rounding totals may not equal 100%.

Almost half of the sample (47%) lived in the Keweenaw Peninsula all of their lives. The other half (53%) had moved away for a time and returned. The average length of time away was approximately five years, usually spent in large urban centers. The main reason cited for moving was to find work.

Of the 29 married respondents, 83 percent were married to Finns, and only 17 percent were married to non-Finns. One respondent was single.

Education

Education levels differed between male and female respondents (Table 1). School attendance for female respondents ranged from six to 14 years with one female having had some college. Males had from five to 18 years of school with one male having received a master's degree. Female respondents averaged 10.3 years of school and were more likely to have completed high school, while male respondents averaged 8.4 years of school and were less likely to have attended high school. This relationship also held when education levels of female respondents and their husbands were compared. However, male respondents and their wives averaged the same amount of schooling (8.6 years). Thus, females generally had more schooling and were more likely to have finished high school than males, a pattern which was consistent with other data (Eicher et al., 1978).

Occupation History

Female respondents were most frequently homemakers (61%). Ten (43%) worked in clerical/technical occupations; six (26%) worked as

domestic laborers; and three (13%) worked on their farms. The sample's mothers were also reported as being homemakers (70%), domestic laborers (27%), and farmers (23%).

Male respondents were most frequently farmers (71%) and miners (57%). Two respondents (29%) were skilled tradesmen, while one respondent each was a storeowner, lumbermiller, and teacher. The sample's fathers were also most frequently miners (50%) and farmers (47%), with logging, unskilled and skilled labor also being mentioned as occupations.

Religion

The sample was predominantly Lutheran (Table 1). However, two distinct branches were represented. Two-thirds (67%) of the sample belonged to the fundamentalist Apostolic Lutheran Church, while approximately one-third (30%) belonged to the Evangelical Lutheran Church, which had historical ties to the traditional Lutheran Church of Finland. The predominance of Apostolic Lutherans within the sample was probably due to the sampling technique. The respondents' referrals tended to be of the same religious affiliation as themselves, thus biasing the sample in favor of the Apostolic Lutherans. Only one respondent was non-Lutheran.

Family Size and Language

Respondents grew up in families with an average of six children, and over half the respondents (56%) grew up in families with six to 14 children (Table 2). However, only 23 percent of the respondents had six to 14 children of their own, with the average being 3.5 children per family.

TABLE 2

Number of children per family reported by Finnish-American sample population, Keweenaw Peninsula, Michigan, for themselves and their parents (N=30)

# of children	Respondents' Parents		Respondents	
	#	%*	#	%*
0	-	-	5	17
1-2	8	27	10	33
3-4	3	10	8	27
5-6	6	20	2	7
7-8	5	17	2	7
9-10	3	10	1	3
11-12	3	10	1	3
13-14	2	7	1	3

*Due to rounding totals may not equal 100%.

The use of the Finnish language at home also decreased from childhood to the present (Table 3). As children, half of the respondents spoke only Finnish at home, while ten percent spoke only English. Currently, over half the respondents (57%) spoke English exclusively in the home, while one respondent reported still speaking only Finnish. The remaining respondents (40%) spoke some Finnish at home currently, most of the time using English. This change over time in language spoken at home reflected the acculturation process primarily within the first generation, since most of the second generation grew up speaking English exclusively.

Rural vs. Urban, County of Residence, Communities Represented

The majority of respondents (93%) were from the rural Keweenaw Peninsula. Seventy-three percent of this group resided in small towns with populations less than 2,500, while only 27 percent were from farms. These data supported observations that the highest proportion of elderly were found in rural towns or villages with populations of 1,000 to 2,500 (Reichel, 1980). Two respondents (7%) resided in urban areas, defined as towns with populations greater than 2,500.

Approximately two-thirds of the sample (63%) resided in the larger county of Houghton, and about one-third resided in the rural county of Keweenaw. Respondents were dispersed over the Peninsula, representing 14 towns, villages, and rural locations. This situation underscored the observation of many respondents that they belonged to a peninsula-wide community.

TABLE 3

Language spoken in the home currently and during childhood reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Language spoken at home	As Child		Currently	
	#	%	#	%
Finnish only	15	50	1	3
Finnish and English	12	40	12	40
English only	3	10	17	57

Income

Income data were reported per household by two-thirds (67%) of the sample (Table 4). Seven respondents either did not know their income or preferred not to answer. Data were missing for three respondents. Reported annual income ranged between less than $3,000 and $18,000 to $20,999. Over half the respondents (55%) earned less than $6,000, one reporting less than $3,000 and ten reporting between $3,000 and $5,999. The large percentage of respondents at the lower end of the income scale reflected retirement-age income based primarily on Social Security benefits. In general, the younger respondents with children living at home had the highest reported annual incomes, with those earning over $6,000 annually averaging about $11,000 per year.

Medical Contact

The frequency with which respondents visited doctors changed over time (Table 5). Respondents reported that doctor visits during their childhood were infrequent both for parents and themselves, which was consistent with other data (Armstrong, 1976). Currently, however, all respondents reported seeing a doctor, with 70 percent doing so once or more a year. This change probably reflected the increased age of the sample. A third of the sample (30%) still saw a doctor only infrequently, perhaps indicating the persistence of traditional attitudes that illness should not be encouraged.

While the frequency of doctor visits increased, the distance to health care also increased over time from an average of four to nine miles, primarily due to the loss of mining company doctors. Distance

TABLE 4

Annual income per household reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=20)

Annual income	# of respondents	%
$ 0 - 2,999	1	5
3,000 - 5,999	10	50
6,000 - 8,999	2	10
9,000 - 11,000	3	15
12,000 - 14,999	2	10
18,000 - 20,999	2	10

TABLE 5

Frequency of doctor visits over time, reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Frequency of doctor visits	During Childhood				Present	
	Parents		Self as child		Self now	
	#	%	#	%	#	%
A few times per year (often)	-	-	1	3	8	27
Once a year (regularly)	1	3	-	-	13	43
Every couple of years (ocassionally)	5	17	2	7	5	17
Once or twice in life (seldom)	23	77	20	67	4	13
Never	1	3	7	23	-	-

did not appear to function as a barrier to health-care utilization among this sample. Other data supported this finding (Luft et al., 1976).

Self-Treating Illness

Respondents were asked whether they would seek information or advice to self-treat a health problem they did not consider serious before seeing a doctor. Three-fourths (73%) of the sample said they would seek information or advice first. This percentage agreed with other data on the incidence of home self-treatment (Hulka et al., 1972; Zola, 1972, 1973). Twenty percent said they would go to the doctor without checking other sources, and two respondents (7%) said they would go to the doctor first and check other information and advice sources afterwards.

The 24 respondents who would seek self-treatment information reported their sources of information and advice. Books and magazines were the most frequently cited sources for self-treatment information reported by 18 respondents (75%). Friends were sources for 13 respondents (54%), and seven respondents (29%) cited immediate family and relatives as sources of information and advice. Most respondents (63%) reported more than one source of self-treatment information.

Of the 18 respondents reporting books and magazines, about half used specific family medical guides, like Better Homes and Gardens Family Medical Guide or Reader's Digest Health Guide. Nine respondents (50%) also reported consulting Prevention magazine. Other popular health books reported by five respondents (28%) included books by

Adelle Davis and other popular authors.

Summary

The sample was predominantly female (77%); elderly (80% greater than 65 years of age); rural (93%); first generation Finnish-American (67%); and Apostolic Lutheran (67%) with marginal to modest annual household incomes. The sample had a history of stable residence in the Keweenaw Peninsula, and most were married to Finns. Higher percentages of the female respondents compared to male respondents had finished high school. Occupations of female respondents before retirement were most commonly homemaker (61%) and clerical/technical worker (43%). Male occupations before retirement were most commonly farmer (71%) and miner (57%). Respondents averaged 3.5 children per family. The sample utilized health care more frequently currently than in the past but were also likely to self-treat an illness not perceived as serious before seeing a doctor, seeking information from specific sources.

DIETARY PREVENTIVE HEALTH BEHAVIOR

Food-related and selected preventive health behaviors (PHB) of the sample are described in this section. Subject-generated responses were elicited from participants through open-ended questions to describe five areas of their preventive health behavior: 1) general components of PHB, past and current; 2) past dietary PHB; 3) current dietary PHB; 4) changes in dietary PHB over time; and 5) perceived health benefits of certain food items.

General PHB

Dietary PHB -- Current

Respondents were asked to describe their preventive health behavior in general. Diet behaviors emerged as important components of the sample's self-reported preventive health behaviors. Twenty-five respondents (83%) mentioned proper diet as an important PHB (Table 6). The sample appeared to view proper diet and work and exercise as about equally important for health maintenance, since there was no significant difference in the frequency with which these PHBs were mentioned. However, proper diet was reported significantly more often than rest and leisure activity as an important PHB. Avoiding excess consumption of certain foods was reported by seven respondents (23%), while the avoidance of alcohol and tobacco was more commonly mentioned.

For respondents, proper diet meant eating specific foods or food groups, which are discussed later, or "healthy" foods in general. Respondents described healthful food as homegrown, home-cooked, from the garden, pure, plain, simple, unprocessed, without preservatives, and organic. A small percentage of the sample (23%) recommended the

TABLE 6

General preventive health behaviors reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Preventive health behavior (PHB)	# of respondents	%*
Proper Diet	25 [a]	83
Work/Exercise	19	63
Rest/Leisure Activity	17 [a]	57
Avoid Certain Things	13 [a]	43
Regular Saunas	6 [a]	20
Other PHBs	9	30

*Due to multiple responses totals do not equal 100%.

[a] like superscripts in same column different at $p \leq .05$.

avoidance of coffee, snacks, and sweets in excess.

Descriptions of "healthy" food may reflect traditional patterns and beliefs as well as current input from the popular health media. For example, the belief that healthful food was homegrown may reflect the fact that all respondents currently raised vegetables or had access to homegrown produce through friends and kin. It may also reflect a traditional Finnish pattern of small-scale subsistence farming and self-reliance, which commonly persisted among Upper Peninsula Finnish-Americans in Michigan until well into this century (Nelson, 1975). In addition, conversations with respondents indicated that descriptions like pure, plain, and simple reflected elements of the sample's Lutheran belief system. Modest retirement incomes for half of the sample may also have encouraged continued reliance on the garden.

Terms like uprocessed, no preservatives and organic to describe healthful food probably reflected popular health beliefs about good nutrition. Widespread knowledge of current health beliefs was indicated, since a third of the sample (30%) subscribed to a popular health magazine. In addition, 90 percent of the sample talked to others, usually friends and kin, about their PHBs, thus facilitating the diffusion of current popular concepts and terminologies through their social networks.

A concern to moderate the use of coffee, snacks, and sweets, although not widespread, probably also stemmed from current health promotions in the popular media. These food items had a traditionally important place in the culturally-based visiting ritual practices by most of the sample. Thus it was unlikely that respondents would have commonly advised limiting the use of coffee and sweets as a preventive health behavior.

Other PHB -- Current

Other self-reported PHBs included work and exercise, rest and leisure activities, and regular sauna usage (Table 6). Nineteen respondents (63%) mentioned the importance of activities like making firewood, farm labor, walking, berry-picking, and any other good physical work. The importance of work and exercise reflected a traditional work ethic (Armstrong, 1976) and rural lifestyle that required hard physical labor from both men and women (Kolehmainen, 1968).

Rest and leisure activities were reported by 17 respondents (57%), who mentioned adequate sleep, usually eight hours, and activities that enhanced relaxation. Relaxing activities included having hobbies, reading to keep the mind active, living at a slower, easier pace, and avoiding stressful situations.

Six respondents (20%) mentioned the importance of a regular sauna, or Finnish bath, for cleanliness and other beneficial effects. Other PHBs included recommendations to get plenty of fresh air, take an interest in one's own health, and trust in the Lord.

Past PHB

When asked how their parents would have described their own PHBs, 70 percent of the sample said their parents would have answered in the same way as themselves. These data may suggest a cultural continuity of health maintenance beliefs and practices within the sample.

Dietary PHB -- Past

Respondents were asked to describe what their families ate to stay healthy during their childhood and multiple responses were given. The resulting categories are discussed in terms of their frequency of mention, specific components, and reflection of traditional foodways.

A profile emerged regarding the relative contribution of various food categories to dietary PHB during the sample's childhood. The Dairy group stood alone as the most frequently mentioned food group, reported by 83 percent of the respondents (Table 7). The Meat/Fish group was second, reported by slightly more than half of the respondents (52%). The Bread/Cereal group (35%), Meat/Vegetable group (31%), and Vegetable group (31%) were mentioned about equally as moderate contributors to a healthful diet. Fruit and Vitamin/Mineral supplement groups were mentioned least, reflecting their lack of availability while respondents were growing up.

These categories reflected elements of the traditional Finnish diet. Within the Dairy group the specific food items mentioned as healthful were viilia, buttermilk, whole milk and raw milk. By far the most frequently reported health-promoting food was the traditional fermented milk product, viilia, mentioned by 21 respondents (72%). Homemade cultured buttermilk was mentioned by nine respondents (31%). They reported that viilia and buttermilk were usually cultured from raw milk, which was also mentioned as a healthful food item by five respondents (17%). These dairy items were among the core dairy products upon which Finnish people have primarily relied for centuries (Pelto et al., 1981). In addition, a traditional pattern of having at

TABLE 7

Categories of healthful food and their components reported by Finnish-American sample population, Keweenaw Peninsula, Michigan as used during childhood (N=29)

Food category	# of respondents	%*
DAIRY	24	83
Viilia	21	72
Buttermilk	9	31
Whole milk	6	31
Raw milk	5	17
MEAT/FISH	15	52
Fish	8	28
Meat (beef)	6	21
Blood bread	3	10
BREAD/CEREAL	10	35
Homebaked bread	7	24
Hot cereal	3	10
MEAT/VEGETABLE	9	31
Meat and potatoes	7	24
Stew	2	7
VEGETABLE	9	31
FRUIT	1	3
Wild edible fruit	1	3
VITAMIN/MINERAL SUPPLEMENTS	1	3
Cod liver oil	1	3

* Due to multiple responses totals do not equal 100%.

least one cow per family was also established in the Keweenaw Peninsula, so that reliance on dairy products continued until relatively recently (Armstrong, 1976).

Components of the Meat/Fish group were mentioned by less than nine respondents (31%). They mentioned fresh fish, raw salt fish (sula kala) and a steamed fish pastry (kala kukko), all traditional elements of the Finnish diet (Kolehmainen, 1968). Meat and blood bread, sausage, and pancakes were also part of the traditional Finnish diet (Armstrong, 1976). Among respondents, "meat" generally meant beef, and "blood" usually referred to beef blood.

Homebaked breads and hot cereal mentioned in the Bread/Cereal group reflected the traditional Finnish dietary patterns of reliance on grains (Pelto et al., 1981; Armstrong, 1976). The mention of meat and potatoes as well as stews made of meat, potatoes, and vegetables in the Meat/Vegetable group also reflected traditional Finnish dietary patterns (Armstrong, 1976).

Respondents mentioned specific vegetables in the Vegetable group. Potatoes were invariably mentioned first, then usually carrots, rutabaga, beets, the cabbage family, peas, and beans. The lack of green, leafy vegetables in this list was consistent with Pelto and coworkers' (1981) observation that the traditional Finnish dietary pattern did not often include these vegetables.

Fruits and vitamin/mineral supplements were not generally available while respondents were growing up, even though wild edible fruits held a small place in the traditional Finnish diet (Armstrong, 1976). No evidence was found to suggest that the use of supplements was a

traditional part of the Finnish dietary pattern.

Dietary PHB -- Current

In order to describe current preventive health behaviors involving food, respondents were asked what they were currently eating or taking to stay healthy. Resulting responses are described in terms of frequency of mention and distinctions between traditional and nontraditional food items. Traditional food items are those elements of the Finnish dietary pattern which persisted from respondents' childhoods to the present, as discussed in the previous section. Nontraditional food items are dietary elements which have appeared since the respondents' childhoods.

Data describing current healthful-food categories in terms of frequency are presented in Table 8. The use of viatamin/mineral supplements was most frequently mentioned with the use of dairy products and fruits or juices next. There was no statistically significant difference between the frequencies with which these three items were reported, although the difference between Vitamin/Mineral Supplement and Fruit/Juice groups approached significance at the $p \leq .05$ level. These data suggest that vitamin/mineral supplements, dairy products, and fruits and juices were about equally important contributors to the sample's current dietary health maintenance practices, with the vitamin/mineral supplement group being somewhat more important than the fruit/juice group.

Respondents reported a wide variety of items within the Vitamin/Mineral Supplement group (Table 9). Vitamin C was the most commonly reported supplement, mentioned by over half of the respondents (57%). Use of vitamin C was reported significantly more often than fat-soluble

TABLE 8

Categories of healthful food currently used, as reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Food category	# of respondents	%*
Vitamin/Mineral Supplements	23 [a]	77
Dairy	20 [b]	67
Fruit/Juice	15 [c]	50
Vegetable	13 [a,d]	43
Bread/Cereal	7 [a,b]	23
Meat/Vegetable	7 [a,b]	23
Food Items Avoided	7 [a,b]	23
Meat/Fish	5 [a,b,c,d]	17

*Due to multiple responses totals do not equal 100%.

[a,b,c,d] like superscripts in same column different at $p \leq .05$.

TABLE 9

Components of Vitamin/Mineral Supplement group currently used, reported by Finnish-American sample population, Keweenaw Peninsula, Mich. (N=30)

Type of supplement	# of respondents	%*
VITAMINS		
Vitamin C	17 [a]	57
B vitamins	11	37
Vitamin E	8 [a]	27
Vitamin A and D	6 [a]	20
MULTI-VITAMIN/MINERAL TABLETS	5 [a]	17
MINERALS		
Zinc	2	7
Iron	1	3
Calcium	1	3
Selenium	1	3
OTHER SUPPLEMENTS		
Alfalfa pills	3	10
Garlic	3	10
Bonemeal	3	10
Brewer's yeast	2	7
Lecithin	2	7
Parsley	1	3
Wheat germ	1	3
Fructose pills	1	3

*Due to multiple responses totals do not equal 100%.

[a]like superscripts in same column different at $p \leq .05$.

vitamins, multi-vitamin/mineral tablets, and all other reported supplements, like alfalfa pills, garlic, and bonemeal. Reported use of vitamin C and the B vitamins was not significantly different, indicating that use of water soluble vitamins may be about equally common among this group. In addition, since no historical use or reliance on supplements had been documented for this gourp, their use was considered nontraditional.

Within the Dairy group, almost half of the respondents (47%) reported currently using the traditional cultured milk product, viilia (Table 10). Although half of the sample (50%) reported using fruits or juices currently, no single item emerged as especially prized for health promotion (Table 10). Since the use of fruits like apples, citrus, and bananas in Finland was historically low (Pelto et al., 1981), the elements of this category were considered nontraditional.

Responses within the Vegetable group were rather evenly distributed (Table 10). Homegrown garden vegetables refereed primarily to traditional vegetables, the major components of gardens visited by the researcher. Salad vegetables referred to nontraditional items like tomatoes and cucumbers, thus showing this category to be a mixture of traditional and nontraditional elements.

Responses within the Bread/Cereal group were evenly distributed among the traditional items of bread and hot cereals and the nontraditional items of bran (Table 11). The traditional combination of meat and potatoes was reported most often within the Meat/Vegetable group (Table 11). The avoidance of sugar and desserts mentioned in the Food Items Avoided group and the report of eating less meat in the Meat/Fish group (Table 11) were both contrary to the traditional acceptance of

TABLE 10

Components of Dairy, Fruit/Juice and Vegetable categories currently used, reported by Finnish-American sample, Keweenaw Peninsula, Michigan (N=30)

Type of food	# of respondents	%*
DAIRY		
Viilia	14 [a]	47
Buttermilk	6	20
Milk	3 [a]	10
Raw milk	1 [a]	3
FRUIT/JUICE		
Orange juice	5 [a]	17
Apple juice	3	10
Grape juice	1	3
Fruit juice	1	3
Cranberry juice	1	3
Apples	2	7
Grapefruit	2	7
Bananas	2	7
Oranges	2	7
Blueberries	2	7
Grapes	1	3
Pears	1	3
Fruit sauce (visku velli)	1	3
VEGETABLE		
Vegetables in general	5 [a]	17
Potatoes, carrots, beets, cabbage, rutabagas, etc.	3	10
Homegrown garden vegetables	3	10
Salads	2	7
Green leafy vegetables	1	3

*Due to multiple responses totals do not equal 100%.

[a] like superscripts in same column different at $p \leq .05$.

TABLE 11

Components of Bread/Cereal, Meat/Vegetable, Food Items Avoided, and Meat/Fish categories currently used, reported by Finnish-American sample, Keweenaw Peninsula, Michigan (N=30)

Type of food	# of respondents	%*
BREAD/CEREAL		
Homebaked bread	3	10
Hot cereal	3	10
Bran	2	7
MEAT/VEGETABLE		
Meat and potatoes	5	17
Stews	2	7
FOOD ITEMS AVOIDED		
Sugar/Desserts	5	17
Salt	2	7
Fat/Butter	2	7
Processed Foods	2	7
Coffee	1	3
MEAT/FISH		
Eat less meat	3	10
Meat (beef)	2	7
Fish	2	7
Poultry	1	3

*Due to multiple responses totals do not equal 100%.

these food items and thus were considered to be nontraditional.

Respondents were asked what their children were fed to stay healthy when they were being raised. Among 24 respondents, 18 (75%) said their children followed the same dietary pattern as themselves. A multivitamin supplement, like One-A-Day, was given to the children of five respondents (21%), and two (8%) gave their children vitamin C to prevent colds. Thus it appeared that, among this sample, children were not treated differently than adults regarding dietary PHBs.

Dietary PHB -- Changes Over Time and Perceived Health Benefits

Emphasis on some specific food-related PHBs within the sample changed over time while others remained relatively stable (Table 12). The greatest changes were seen in the Vitamin/Mineral Supplement, Fruit/Juice, Meat/Fish, and Food Items Avoided groups. The categories of Dairy, Vegetable, Bread/Cereal, and Meat/Vegetable changed least over time. Following are some reasons for the reported changes. Also described are health benefits reported for certain food items.

Vitamin/mineral supplements went from least common in childhood to most common PHB involving food currently. Their use probably became accepted within the sample partly as a result of increased availability, current media attention to PHB in general, and a lifestyle of self-reliance based on cultural and religious patterns. Diffusion of supplement information was probably efficient, since a third of the sample (30%) used a popular health magazine as a major source of health information, and 90 percent talked to others about their PHBs. Preference for taking nutrients individually rather than in multi-component tablets and the use of non-vitamin/mineral supplements, like lecithin or garlic, may be a reflection of the current influence of the popular health media.

TABLE 12

Comparison of past and current healthful food categories reported by Finnish-American sample population, Keweenaw Peninsula, Michigan

Food category	PRESENT n=30 # of respondents	PRESENT n=30 %*	PAST n=29 # of respondents	PAST n=29 %*
Vitamin/Mineral Supplements	23	77	1	3
Dairy	20	67	24	83
Fruit/Juice	15	50	1	3
Vegetable	13	43	9	31
Bread/Cereal	7	23	10	35
Meat/Vegetable	7	23	9	31
Food Items Avoided	7	23	-	-
Meat/Fish	5	17	15	52

*Due to multiple responses totals do not equal 100%.

Respondents were asked how each reported supplement helped (Table 13). Of 67 responses, less than eight percent were given as "I don't know", demonstrating that supplement users within the sample most often had specific opinions regarding a supplement's particular benefit. The most consistent agreement involved the use of vitamin C for preventing colds, reported by 88 percent of vitamin C users.

The use of fruits and juices increased as a reported PHB from childhood to the present. Increased availability of a variety of non-traditional fruits and current media attention to the importance of eating fruits probably accounted for the prominent place this category had assumed. All fruit users named a specific reason why the reported fruits helped. Individual fruits either provided vitamin C, promoted regularity, or maintained health in general. Responses indicated an understanding and acceptance of the role of nontraditional fruits as an important dietary PHB.

The importance of the Meat/Fish category diminished over time from second most commonly cited in the past to least mentioned currently. Respondents described meat and blood sausage in the past as providing strength for hard work and health during cold winters; fish was reported to be a common, inexpensive source of good protein. Half of the responses about meat currently involved eating less meat. The reasons given were that it was hard for the elderly to digest and not needed in large amounts as a person aged. Responses about eating less meat may reflect current opinions derived from popular media sources.

The appearance of a category involving the avoidance of certain food items in the sample's current dietary PHB may also reflect

TABLE 13

Benefits for components of Vitamin/Mineral Supplement group reported by Finnish-American sample population, Keweenaw Peninsula, Mich (N=23)

Type of benefit	# of respondents	%*	Type of benefit	# of respondents	%*
Vitamin C			Calcium		
prevents colds	15	65	good for bones	1	4
makes more regular	1	4			
helps arthritis	1	4	Selenium		
			prevents cancer	1	4
B Vitamins					
calms nerves	4	17	Alfalfa Pills		
makes feel better	2	9	good for arthritis	2	9
prevents fatigue	2	9	don't know	1	4
prevents colds	1	4			
helps backaches	1	4	Garlic		
prevents Bell's Palsy	1	4	lowers blood pressure	3	13
Vitamin E			Bonemeal		
helps arthritis	2	9	don't know	2	9
good for circulation	2	9	strong bones	1	4
keeps blood vessels clean	2	9			
			Brewer's Yeast		
helps leg cramps	1	4	helps regularity	1	4
good for memory	1	4	has minerals and B vitamins		
Vitamin A and D					
prevents colds	2	9	Lecithin		
good for eyes	2	9	keeps cholesterol down	1	4
helps arthritis	1	4			
nerves	1	4	good for diabetics	1	4
Multi-Vitamin/Mineral Tablets			Parsley		
			good for general health	1	4
less fatigue	2	9			
to feel good	1	4			
better fingernails	1	4	Wheat Germ		
don't know	1	4	good source of zinc for sex organs	1	4
Zinc					
helps male sex organs and prostate	1	4	Fructose		
			gives energy	1	4
don't know	1	4			
Iron					
low Hgb	1	4			

*Due to multiple responses totals do not equal 100%.

media-derived awareness of health-related dietary elements. When respondents were asked how avoiding the reported food items helped, they stated that sugar, salt, and processed foods were simply not good for a person, while avoiding fat and butter was good for keeping weight down and for lowering cholesterol.

Some food categories maintained relatively stable positions over time as contributors to the sample's dietary PHBs. Viilia and buttermilk maintained a consistent place of importance within the Dairy group, thus contributing to the relatively stable position of this food category among dietary PHB. Over half of the responses (60%) described viilia and buttermilk as especially good for digestion. Thus a persistent belief emerged among the sample about the health promoting qualities of these traditional cultured milk products.

The position of vegetables increased somewhat in importance over time. In general, all vegetables mentioned were perceived as helping in the same manner, namely, to keep a person healthy, supply vitamins and minerals, and promote regularity. However, it was the continued use of traditional vegetables that maintained the persistence of this food category over time rather than the use of salad or leafy vegetables. Persistent use of traditional vegetables probably combined cultural preference with a climate favoring them in gardens, reinforced by current media attention to their important place in healthful diets. Continued use of traditional food items in the Bread/Cereal and Meat/Vegetable groups accounted for the stable positions of these food categories over time. Bread and cereal were important for promoting regularity, and both grains and meat and vegetables were important for

general health.

Summary of Dietary PHB

Respondents were asked to describe their preventive health behaviors in general. Diet behaviors emerged as a major component of the sample's personal PHB descriptions, which also included work, rest, and sauna usage. Eight-three percent of the sample included proper diet as an important PHB, while avoidance of specific foods like coffee and sweets in excess was reported by 23 percent of the sample.

Relationships between these PHBs and the sample's cultural patterns and beliefs were seen with religion, economics, and traditional lifestyle being important influences. The popular health media also may have influenced the degree of belief in some current diet-related practices, especially if they tended to reinforce traditional beliefs or economic circumstances. A continuity of health maintenance beliefs and practices within the sample was indicated, since most respondents (70%) reported following the same general PHB as their parents.

Respondents were also asked what people ate to stay healthy during their childhood. A profile emerged regarding the relative contribution of various food categories to health maintenance during respondents' childhoods. The Dairy group stood alone as the major contributor to a healthful diet in the past, reported by 83 percent of the sample, while the Meat/Fish group was second. Bread/Cereal, Meat/Vegetable, and Vegetable groups were reported to be moderate contributors to a healthful diet. Fruit and Vitamin/Mineral Supplement groups were mentioned least.

The cultured-milk product, viilia, was by far the most frequently mentioned healthful food item in the past, reported by 72 percent of the respondents. Other healthful food items mentioned by approximately one-fourth of the sample were buttermilk, fish, home-baked bread, meat and potatoes, whole milk, meat, and raw milk. These food items were primarily traditional foods, allowing the statement that, during the sample's childhood, adherence to traditional beliefs about healthful food was widespread.

Respondents were also asked what they were currently eating or taking to stay healthy. The most frequent current contributors to the sample's healthful diets were vitamin/mineral supplements (77%) and traditional dairy products (67%). Fruits and vegetables, containing both traditional and nontraditional elements were moderately important contributors. The Bread/Cereal, Meat/Vegetable, Food Items Avoided and Meat/Fish groups contributed least often to the sample's current healthful diets. Respondents' children generally followed the same dietary patterns as adults, indicating that there were no dietary PHBs specifically for children among the sample.

Much of the traditional diet was currently viewed as health-promoting. Traditional cultured milk products maintained a prominent place of importance, while traditional vegetables, bread and cereal, and meat and vegetable combinations occupied positions of lesser but continued importance in the sample's current dietary PHB.

The specific dietary components of vitamin C and viilia were being used currently by approximately half of the respondents, while the use of other vitamins was also relatively common. Food items

reported by approximately 20 percent of the sample were buttermilk, orange juice, multi-vitamin/mineral tablets, vegetables in general, meat and potatoes, and the avoidance of sugar and desserts.

The reported food items represented a mixture of traditional and nontraditional food choices. The existence of traditional and non-traditional food uses among this sample supported the observation that "...individuals do not necessarily have to give up old patterns when new usages are adopted...." (Pelto et al., 1981).

Emphasis on certain food categories changed over time. The use of vitamin/mineral supplements and nontraditional fruits went from least reported in childhood to positions of prominence in current dietary PHB, reflecting the increased availability of these items and current attitudes about their place in healthful diets. The traditional Meat/Fish group fell markedly in importance over time, indicating a change in the sample's perception of this category's health-promoting qualities. The appearance of a category involving the avoidance of some food items reflected current attitudes associating health risks with certain foods.

All respondents reported specific opinions regarding a food item's particular benefit. The most consistent agreement involved cultured milk products being good for digestion (60% of responses) and vitamin C for preventing colds (88% of vitamin C users). Regarding a vitamin/mineral supplement's particular benefit, 92 percent of the responses given were specific opinions of perceived benefit, perhaps indicating the degree to which supplement use has become an established practice among the sample.

DIETARY SELF-TREATMENT OF ILLNESS

Introduction

A list of 34 commonly self-treated ailments and conditions was compiled and presented to respondents (Appendix 2). For each condition that was reported, respondents were asked how they self-treated currently, what was done in their childhood, and what they did for their own children. The sample mentioned specific self-treatments for 44 different ailments and conditions. Certain acute and chronic illnesses were self-treated commonly, that is, by greater than approximately one third of the total sample (Table 14).

However, food-related treatments involving the internal use of foods in general, vitamin/mineral supplements, and herbal remedies were mentioned only for certain commonly reported acute and chronic illnesses. The common acute conditions with food-related remedies were grouped together as head, chest, and digestive-tract problems. The commonly reported chronic conditions with food-related remedies were arthritis and hypertension. In addition, at least one third of the female respondents reported food-related treatments for problems of pregnancy and lactation.

Dietary self-treatment for the most frequently reported acute and chronic conditions and for pregnancy and lactation are presented in this section. The primary focus of the discussion is on food-related treatments involving the internal uses of foods, vitamin/mineral supplements, and herbal remedies.

TABLE 14

Ailments and conditions for which self-treatment practices were reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Ailments and conditions	# of respondents	%*	Ailments and conditions	# of respondents	%*
1. Colds and fever	28[a]	93	23. Ulcer	4	13
2. Arthritis	25[b]	83	24. Breaks/sprains	3	10
3. Earache	21	70	25. Goiter	3	10
4. Diarrhea	19[a]	63	26. Alcohol problems	2	7
5. Boils	18	60	27. Anemia	2	7
6. Cuts and infection	15	52	28. Nosebleeds	2	7
7. Toothache	14	47	29. Tapeworm	1	3
8. Constipation	14[a]	47	30. Bell's palsy	1	3
9. Upset stomach	13[a]	43	31. Varicose veins	1	3
10. Headache	13	43	32. Teething	1	3
11. Breast-feeding	13	43	33. Athlete's foot	1	3
12. Acne and aczema	12	40	34. Diabetes	1	3
13. Heartburn	11[a]	37	35. Underweight	1	3
14. Cough	11	37	36. Vaginal infection	1	3
15. Sinus conditions	11	37	37. Thrush	1	3
16. Sore throat	10	33	38. Kidney problems	1	3
17. Hypertension	9[b]	30	39. Dehydration	1	3
18. Spring tonic	9	30	40. Scarlet fever	1	3
19. Pregnancy	7	23	41. Yellow jaundice	1	3
20. Burns	6	20	42. Shingles	1	3
21. Eye problems	5	17	43. Hemorrhoids	1	3
22. Respiratory problems	5	17	44. Water purification	1	3

*Due to multiple responses totals do not equal 100%.

[a,b]like superscripts in same column different at $p \leq .05$.

Acute Conditions

Dietary self-treatments were frequently reported for head and chest problems, which included colds, fever, cough, sore throat, and sinus conditions. Commonly reported digestive tract problems with food-related treatments included diarrhea, constipation, upset stomach, and heartburn. Cold and fever remedies were reported significantly more often than digestive tract problems (Table 14, page 65).

Dietary self-treatment of earache, headache, and skin problems like boils, cuts, and infections were also commonly reported. However, the food remedies, vitamin/mineral supplements, or herbal treatments reported of these acute conditons were externally applied to affected areas. Because the dietary remedies did not involve the internal use of food, they are discussed only briefly. Remedies for toothache are not presented, since they were non-food-related.

Head and Chest Problems

Colds and Fevers

Almost the entire sample (93%) self-treated colds and fevers. Over half of the total responses given about current and past self-treatment were food-related (Table 15). The remedies which persisted over time generally involved the use of specific juices or hot liquids, with blackberry juice being mentioned most frequently. This juice was usually made from wild blackberries and used primarily for medicinal purposes. Other persistent remedies included water and clear liquids taken in quantity to flush out a fever and hot lemon juice to break up congestion. The cultured milk product, viilia, was used by one respondent because of his belief in its ability to kill cold germs.

TABLE 15

Response distribution of food-related remedies for colds and fevers, reported by Finnish-American sample population, Keweenaw Peninsula, MI (N=30)

Remedies reported	Past # of responses	Current # of responses
Total responses	38	36
Food-related responses	20	21
Hot brandy or whiskey	6	1
Blackberry juice	5	5
Water and clear liquids	4	4
Hot lemon juice	3	3
Viilia	1	1
Milk toast	1	1
Vitamin C	-	4
Herb teas	-	2

The medicinal use of brandy or whiskey with hot water to promote sweating during a cold was relatively common in the past but was mentioned only once as a current practice.

Current use of vitamin C and herb teas for colds and fevers, though not widespread, may reflect new additions from the popular health literature. Vitamin C was taken by three respondents in dosages ranging from 900 to 2,000 mg per day to shorten the duration of a cold. One respondent said that he would take about 3,000 mg of vitamin C at once to "nip a cold in the bud". In general, respondents' children were reported to receive the same treatments as adults with the exception of remedies containing alcohol.

Cough and Sore Throat

Approximately one third of the sample reported remedies for coughs (37%) and sore throat (33%). Over one half of the past (61%) and current (58%) remedies reported for cough were non-food-related, while at least half of the past (50%) and current (69%) sore throat responses were food-related. These conditions were currently treated primarily with old family remedies used during childhood. For sore throat, the food-related treatments involved the use of salt or vinegar gargles. In the case of cough, persisting remedies involved honey and lemon juice, honey and whiskey, or warm sugar water to "stop the tickle".

Some reported Old Country remedies for coughs were no longer used. For example, the childhood use of honey with grated raw rutabaga or turnip to suppress a cough did not persist to the present. Another past remedy involved taking about a tablespoon of one's nighttime urine before bed to stop a cough.

Only one respondent mentioned taking vitamin C as a current remedy for a cough. Her reported dosage was 1000 mg per day in timed-release form. In general, children and adults received the same treatment for both cough and sore throat with the exception of remedies containing alcohol.

Sinus Conditions

A third of the sample (37%) reported remedies for sinus conditions. Patent and OTC medicines accounted for most of the remedies reported for the past (64%) and present (61%). Food-related sinus-condition remedies were about evenly divided between the use of old family remedies and the new use of vitamin and herbal treatments. Persisting self-treatment practices included breathing the vapors of raw onions to help break up congestion; drinking hot lemon juice to sweat out the sinus condition; and drinking hot chicken broth to reduce congestion.

Current non-traditional remedies included the use of alfalfa tablets, garlic cloves, and pantothenic acid to relieve congestion. The use of garlic cloves and alfalfa sprouts was learned from the popular health literature. Pantothenic acid was administered in 500 mg doses twice a day on advice received from friends.

Digestive Tract Problems

Diarrhea

Remedies for diarrhea were reported by about two thirds of the respondents (63%). Approximately 80 percent of the responses were food-related. The majority (88%) of food-related remedies currently used to treat diarrhea were also used during childhood. Many of these family

remedies were said to have originated in the Old Country and involved elements of the traditional Finnish diet like wild berries, grains, and dairy products.

The most frequently mentioned antidiarrheal foods were specific fruits (Table 16). The use of fresh or cooked blueberries or boiled blueberry juice was reported to relieve diarrhea, as was the use of boiled blackberry juice or blackberry jelly. Skinned apples were also mentioned as having antidiarrheal properties. Antidiarrheal remedies involving milk and grains like rice and oatmeal also were reported.

Wild blueberries and blackberries, boiled rice water, and boiled milk were the most frequently mentioned antidiarrheals used during childhood. While these remedies and others continued to be used currently, none emerged as particularly favored.

Constipation

Self-treatment of constipation was reported by about half of the sample (47%). The majority of responses (90%) given for past and current remedies were food-related. Half of the current constipation remedies had been used in childhood (Table 17). Laxative properties were described for several fruits, notably prunes. Fruit soup, a traditional dish made of stewed prunes, raisins, and apples, also was mentioned as laxative. Respondents also reported apples, blackberry juice, and raw fruits as aiding constipation. Traditional dietary elements like oatmeal and whole grains were mentioned as important in maintaining regularity.

TABLE 16

Response distribution of food-related remedies for diarrhea, reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Food-related remedies	Past # of responses	Current # of responses
FRUIT		
Blueberries	5	4
Blackberries	3	3
Apples (skinned)	2	2
GRAINS		
Boiled rice water	4	1
Toast (dry)	1	1
Oatmeal gruel	1	1
DAIRY		
Hot boiled milk	4	2
Milk and pepper	1	1
OTHER		
Dry gelatin	1	2
Black tea	1	1
Vinegar	-	1
AVOID		
Fatty foods	-	2
Fruits for a day	-	2

TABLE 17

Response distribution of food-related remedies for constipation, reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Food-related remedies	Past # of responses	Current # of responses
FRUIT		
Prunes	7	4
Fruit soup (visku velli)	3	2
Apples (with skins)	2	2
Raw fruit	-	2
Blackberry juice	1	-
DAIRY		
Buttermilk	1	1
GRAINS		
Oatmeal	3	2
Whole grains	1	1
Bran	-	1
OTHER		
Herbal laxatives	-	2
Vitamin C	-	1
Aloe vera juice	-	1

Current additions to constipation remedies were bran, herbal laxatives from a vitamin distributor, vitamin C, and aloe vera juice in moderately large quantities taken daily. Both aloe vera and vitamin C had originally been taken on the advice of friends or the popular health literature for something other than constipation. Herbal laxatives were purchased from relatives distributing vitamin products.

Upset Stomach and Heartburn

Approximately 40 percent of the sample reported treatments for upset stomach or heartburn. In the case of upset stomach, all current remedies mentioned were food-related. A variety of treatments was cited with about equal frequency (Table 18), indicating that the type of stomach remedy used was largely an individual matter. Respondents generally cited bland food or specific stomach calmatives. About half of the current stomach remedies persisted from childhood, while half were new additions. Blackberry brandy was mentioned as a specific stomach calmative. Herbal remedies used on the advice of friends or learned from the popular health literature included garlic, comfrey tea, and aloe vera juice.

Approximately half (53%) of the reported heartburn remedies were food-related. The most frequently mentioned remedy was the avoidance of the particular food items causing indigestion. Avoidance of certain foods was strictly individual and included coffee, pasties (a type of meat and vegetable pie), raw onions, saffron bread, cardamom, salt, and certain fruits and vegetables. Blackberry juice and blueberry juice were reported by one respondent each as soothing indigestion. These

TABLE 18

Response distribution of food-related remedies for upset stomach, reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Food-related remedies	Past # of responses	Current # of responses
BLAND FOODS		
Milk toast	2	1
Soft-boiled egg	1	2
Salt fish (raw)	1	-
Dry toast	-	1
Jello	-	1
STOMACH CALMATIVES		
Blackberry brandy	1	1
Vanilla extract	1	1
Black pepper	1	1
Vinegar	1	1
Garlic	-	1
Comfrey tea	-	1
Aloe vera juice	-	1
AVOID		
Coffee	1	1

uses persisted over time. Respondents mentioned more foods to avoid currently than in the past, probably due to their age.

Ulcer

Only four respondents reported remedies for ulcer. Colostrum milk from a newly freshened cow was cited by two respondents as an ulcer remedy which was used only in the past. Current remedies were derived from popular sources. Aloe vera juice was cited as helping an ulcer in a dosage of about one tablespoon per day. Cabbage juice was also mentioned as healing an ulcer.

Food-related Remedies for External Use

Certain acute conditions were commonly reported as having food-related remedies which were externally applied to affected areas. These conditions included earache, headache, and skin problems like boils, cuts, acne, and eczema.

Food-related treatments mentioned for earache involved warming the infected ear with a heated bag of salt or a few drops of warm onion juice, breast milk, or comfrey tea. However, most current treatments involved over-the-counter medicines.

A belief in "drawing power" as a quality of certain foods persisted over time in the case of remedies cited for headaches, boils, cuts, and infections. Raw potato slices or a vinegar-soaked rag in the past were commonly believed to be able to "draw out" headache pain when applied to the forehead. Respondents also reported that sugar combined with naphtha soap, masticated bread, oatmeal, and raw potatoes had the ability to "draw out" an infection or bring a boil to a head when

applied to the affected area. Many of these practices and beliefs were described as being traditionally Finnish, which agreed with other sources (Lunden, 1979; Armstrong, 1974; Vachon, 1973).

For acne and eczema, most of the reported remedies were non-food-related. Food-related remedies which were applied directly to the problem areas included colostrum milk from a newly freshened cow, vitamin E oil, or aloe vera juice.

Chronic Conditions

The chronic conditions which the sample reported self-treating most commonly were arthritis and hypertension. However, arthritis self-treatment was mentioned significantly more often than self-treatment of hypertension (Table 14, page 65).

Arthritis

Current self-treatment of arthritis among this elderly sample was widespread, being reported by 25 respondents (83%). Twelve of the respondents (48%) mentioned using more than one arthritis remedy. Seven respondents (28%) reported being under a doctor's care and self-treating at the same time. This situation indicated that about a third of this group did not consider the self-treatment of arthritis to be incompatible with their medical treatments.

Old arthritis remedies were described, but none were used currently. The most frequently mentioned old remedies involved warming the affected joints with liniments or "drawing out" the pain with cow-manure poultices, described as an Old Country treatment.

Approximately two thirds of the responses (68%) describing current treatments were food-related. Most of the responses (70%) described

TABLE 19

Response distribution of current food-related practices reported for arthritis by Finnish-American sample, Keweenaw Peninsula, Michigan (N=30)

Food-related remedies	# of responses
VITAMIN AND HERBAL REMEDIES	
Aloe vera juice	6
Vitamin C	4
Apple cider vinegar & honey	4
Alfalfa sprouts or tablets	3
Vitamin E	1
Cod liver oil	1
FRUIT	
Apple juice	1
Blackcherry juice	1
DAIRY	
Raw milk	1
VEGETABLE	
Dark leafy vegetables	1
AVOID	
Red meat	2
Fish	1
Citrus fruit	1

the use of vitamin and herbal remedies (Table 19). The remaining responses were individually cited and included the use and avoidance of certain foods. Respondents stated that the primary sources of their current arthritis treatments were the popular health literature, the advice of friends, and individual experimentation.

The most frequently cited herbal remedy involved taking the juice of the aloe vera plant internally. Six respondents reported taking one tablespoon of aloe vera juice two or three times per day. One of the six respondents was responsible for introducing the use of aloe vera juice for arthritis into the study population a few months before the study began. The other five respondents had adopted its use based on her experience.

The use of vitamin C was the most frequently reported vitamin treatment for arthritis. It was taken in a variety of doses ranging between 500 mg per day and 10,000 mg per day, the mean being 4,000 mg daily to reduce joint discomfort. Advice of friends and individual experimentation accounted for the use of vitamin C in dosages of 4,000 mg per day or less.

The arthritis remedies involving alfalfa and vinegar mixed with honey were learned from the popular health literature, as were the individually cited remedies involving certain fruit juices, green leafy vegetables and the avoidance of red meat and citrus fruits. The use of large doses of Vitamin E, cod liver oil, and raw milk was the result of individual experimentation.

The respondent who used 10,000 mg of vitamin C daily was an example of someone attempting to manage a chronic condition from a number of angles. The vitamin C which he took was part of a megavitamin therapy he

adopted through reading health literature received from a vitamin salesperson. He also followed a diet plan adapted from a popular health magazine. At the same time, he continued to follow his doctor's treatment plan in addition to receiving therapeutic massage from a local masseuse in an effort to alleviate his chronic condition.

Hypertension

Approximatly a third of the sample (30%) reported currently self-treating hypertension. The old hypertension remedy mentioned was the traditional Finnish practice of bloodletting, called "cupping", a practice which, according to respondents, had died out by the World War II. Over three-quarters (83%) of current responses were food-related, being equally divided between an herbal remedy and diet modifications.

The use of garlic either in capsule form ar as raw cloves was the only herbal remedy mentioned to lower blood pressure. In all cases its use was learned from the same popular health magazine. Diet modifications to lower blood pressure included decreasing coffee, salt, sugar, and red meat. This dietary advice came from doctors in the case of coffee and salt and from the popular health literature in the case of sugar and red meat.

At least one respondent used garlic capsules in conjunction with diuretic treatment. Another respondent had stopped diuretic therapy to manage the condition solely by a diet adapted from the popular press. The diet substituted chicken and fish for red meat. She expressed confidence in her ability to feel changes in her blood pressure without using a blood-pressure cuff.

Pregnancy and Lactation

Heartburn, Morning Sickness and Pica Behavior

Only seven (30%) of the female respondents reported following specific food-related practices during their pregnancies. Over half (57%) of this number said that they did not know what their mothers did during their pregnancies because the subject was not openly discussed. As a result, current food-related treatments reported for heartburn and morning sickness during pregnancy were largely self-taught and individual. Remedies for heartburn included avoiding coffee, flour, and heavy foods. Morning sickness was eased by the avoidance of coffee and pepper. No pica behavior was reported by the respondents for themselves. However, one woman remembered her mother "craving corn-starch by the boxes" during one pregnancy.

Lactation

In contrast to pregnancy, over half of the female respondents (57%) reported following specific food-related practices during lactation. Two concerns emerged relating to lactation. One was to avoid "acid" foods which could give the baby colic, reported by 12 (52%) of the female respondents. The most commonly avoided "acid" foods were coffee and onions, although turnips, cabbage, and cucumbers were also mentioned as able to cause colic in babies. The second area of concern involved increasing the quantity of breast milk, which was accomplished by increasing liquid intake. Eight (35%) of the female respondents reported drinking more milk, water, beer, or coffee during the lactation period to assure a good quantity of breast milk. Apparently, the topic

of breast-feeding was more openly discussed than pregnancy, since most of the dietary practices involving breast-feeding were learned from family members rather than self-taught.

Summary of Dietary Self-treatment of Illness

A list of commonly self-treated ailments and conditions were compiled and presented to respondents. They reported specific self-treatments for 44 different ailments and conditions. However, food-related treatments, which also included use of vitamin/mineral supplements and herbal remedies, were most frequently mentioned for certain acute and chronic illnesses. These were head, chest, and digestive tract problems, certain skin problems, arthritis, hypertension, and such conditions as pregnancy and lactation. In general, this sample population reported treating the same common self-limiting ailments that have been described for other groups (Buchanan, 1979; Elliott-Binns, 1973; Bauwens, 1977; Harwood, 1981; Morrell and Wale, 1976).

In the case of head and chest problems, cold and fever remedies were reported by almost the entire sample (93%). Remedies for head and chest problems involved the current use of old family remedies utilizing traditionally available food items like onion juice, vinegar, honey, rutabaga, salt, and blackberry juice. Home self-treatment of digestive tract problems was also common and based largely on individual family remedies persisting from childhood. Blueberries and blackberries were reported as laxative. Dietary self-treatment of upset stomach and heartburn was largely individual, based on personal experience. For the acute illnesses children were generally given

the same treatments as adults with the exception of remedies containing alcohol.

The medicinal use of blackberries and blackberry juice persisted over time. The wild berries were still being collected by some of the respondents to be made into a thick, concentrated juice. The juice was used medicinally in relatively small amounts to reduce fevers, relieve diarrhea and constipation, and calm stomach cramps and heartburn.

The current use of vitamin C and various herbal remedies for coughs and colds was not widespread and reflected new additions from the popular health media. Vitamin C was used by a few respondents therapeutically for colds, cough, and constipation.

For some conditions food-related remedies were applied externally. A belief in "drawing power" as a quality of certain foods persisted over time in the case of remedies cited for boils, cuts, infections, and headaches. Respondents reported that sugar combined with naphtha soap, masticated bread, oatmeal, and raw potatoes had the ability to "draw out" an infection or bring a boil to a head when applied to the affected area. Raw potato slices were also commonly believed in the past to be able to "draw out" headache pain.

Current dietary self-treatment of arthritis was widespread, reflecting the age of the sample, having been reported by 83 percent of respondents. Dietary self-treatment of hypertension was less frequently reported (30 percent of respondents). None of the old remedies used to treat these chronic illnesses persisted to the present. Thus current dietary self-treatments also involved new additions

primarily from the popular health media.

In the case of arthritis, remedies were largely individual, but the most commonly cited treatments involved the use of aloe vera juice and vitamin C. Respondents reported taking two to three tablespoons of aloe vera juice a day internally. Vitamin C was taken by respondents at a dosage averaging 4,000 mg per day. Dietary self-treatment of arthritis often included more than one treatment and occurred in conjunction with standard medical therapies about a third of the time.

In the case of hypertension, remedies involved the use of garlic and diet modification. The use of garlic and the avoidance of red meat and sugar to control hypertension were learned from the popular health media, while some respondents followed their doctor's advice and reduced coffee and salt intake. At least one respondent used garlic capsules while taking diuretic medication. Another respondent, however, had stopped diuretic treatment to manage the condition solely by a diet adapted from a popular health magazine.

Pregnancy-related problems appeared to be treated matter-of-factly among the female respondents in this group. This observation was indicated since relatively few (30%) women reported self-treating common problems of pregnancy like morning sickness or heartburn. Among the women who did self-treat these problems, no specific food-related advice appeared to be passed from mother to daughter. The women stated that their self-treatment practices regarding nausea and heartburn were largely self-taught. About half of those who self-treated also indicated that the topic of pregnancy was not openly discussed when they were growing up.

In contrast to pregnancy, two specific concerns relating to lactation appeared to be passed from mother to daughter. One was to avoid "acid" foods like coffee and onions which could cause colic, cited by 52 percent of the women sampled. The second concern involved insuring an adequate quantity of milk by increasing liquid intake, primarily with milk and water.

SELF-CARE ATTITUDES

A self-care attitude instrument (SCAI), placing self-care in relation to medical care, was administered (Appendix B). The instrument contained nine items and a forced-choice scale with five options ranging from strongly agree to strongly disagree. In presenting the results, however, the number of choices was reduced from five to three, namely, agree, uncertain, and disagree, for two reasons. First, the sample tended to respond in terms of general agreement or disagreement rather than making finer distinctions. Second, because of the sample size, the level of discrimination with five choices was not informative. In addition, five items were excluded from the presentation of results because respondents consistently demonstrated confusion about their wording and meaning. Thus, included in the discussion are four items from the SCAI which respondents appeared to clearly understand. These items are presented and discussed in terms of frequencies. In addition, limitations of the Likert-scale format with this sample are discussed, and suggestions for future studies in this area are made.

Response distributions of the four items from the SCAI were tested for significance using the Kolmogorov-Smirnoff One Sample Test, even though the sample did not meet the assumption of randomness required by the test (Champion, 1970). Response distributions of all four items were found to be significant at $p \leq .01$ (Table 20).

Ninety percent of the sample agreed with Items 1 and 2, regarding physician accessibility and self-care. Self-treating less serious health problems was perceived as generally good if, by doing so, physicians would be more accessible to those with serious illness.

TABLE 20

Response distribution for Self-Care Attitude Instrument, ranked in order of agreement with items, as reported by Finnish-American sample population, Keweenaw Peninsula, Michigan (N=30)

Item	Agree		Uncertain		Disagree	
	#	%	#	%	#	%
*1. If people took care of their less serious health problems themselves, then patients with serious illness would have easier access to doctors.	27	90	2	7	1	3
*2. Self-care will probably reduce the number of times people contact the doctors.	27	90	2	7	1	3
*3. It is undesirable for people to diagnose and treat their own illness.	21	70	5	17	4	13
*4. People need to rely less on doctors and more on their own common sense regarding care of their own bodies.	19	64	4	13	7	23

* Response distribution significantly different at $p \leq .01$.

Because of strong agreement with the first two items, similar agreement with Item 4 was expected. However, only two thirds of the respondents (64%) agreed that people need to rely less on doctors and more on themselves in health matters. Those who agreed probably reflected the cultural value placed on self-reliance. On the other hand, those who were uncertain or disagreed with the statement expressed a hesitancy to rely completely on their own judgements as health problems became more common and serious with increased age. This hesitancy was reinforced when over two thirds of the respondents (70%) agreed that it was undesirable for individuals to diagnose and treat their own illness.

Thus, the sample indicated a positive attitude toward self-care in general, especially if it reduced congestion in the doctors' offices. In addition, there was general agreement that individuals could excercise common sense in taking care of themselves. However, when it came to individuals diagnosing and treating their own illness, the sample generally agreed that acting "like a doctor" was undesirable.

Limitations and Suggestions

There were problems inherent in the SCAI that compromised its effectiveness as a measurement tool. One problem was that the original SCAI was developed for a population of highly-educated urban physicians rather than a modestly educated population of rural elderly. The self-care statements of the SCAI were externally imposed on the subject population rather than being developed from the sample's own point of view about self-care. Extensive pretesting and revision would have been required to refine the original SCAI so that its statements were framed in the sample's own concepts and language. This process would have gnereated a more meaningful measure of the sample's

self-care attitudes (Fabrega, 1974). However, time constraints and the number of pretest subjects required to accomplish this task made the development of a more culturally sensitive attitude instrument impractical for this study. The end result was that five of the nine statements which were originally framed for physicians caused consistent confusion among the subject population and were excluded from analysis.

Another problem inherent in the SCAI was its forced-choice, Likert-scale format. It was apparent that the sample interpreted the response options differently, a common problem with this type of format (Talmage and Rasher, 1982). The format also did not allow the sample to qualify responses, which they preferred to do, especially if the statement was confusing.

The Likert-scale format could be used in a future self-care attitude study with this population. However, to reduce problems inherent in using a bounded, forced-choice scale, the instrument must be developed so that the sample is responding to statements which are meaningful and clearly understandable to them. This process would take time, utilizing standard ethnographic techniques (Fabrega, 1974) and allowing for adequate pretesting and revision within the study population. However, care in this area would enhance the validity of the data collected.

Since the sample responded well and comfortably to open-ended questions, an attitude instrument based on this format would sensitively reflect the sample's opinions about self-care. A future study investigating the sample's Health Locus of Control (Wallston, 1976) would also be appropriate. The degree to which respondents believe they have

responsibility or control over their own health and illness may be correlated to positive self-care attitudes (Linn and Lewis, 1979).

Summary of Self-Care Attitudes

There were problems inherent in the self-care attitude instrument (SCAI) that comprised its effectiveness as a measurement tool with this population. The SCAI was originally developed for urban physicians rather than for the rural elderly. Five of the nine statements comprising the SCAI caused consistent confusion among the subject population and were excluded from analysis.

However, based on participant observation and the usable results of the SCAI, the sample appeared to support individual self-treatment when it involved less serious illness and common sense. Nonetheless, they balked at the idea of assuming a doctor's role in self-diagnosis and treatment of serious illness.

In future studies with this population, care should be taken to develop an attitude instrument in terms that the sample can clearly understand, whether a Likert-scale or open-ended format is used to measure attitudes.

SUMMARY

During the summer of 1981, thirty Finnish-Americans in the Keweenaw Peninsula of Michigan were interviewed about their dietary self-treatment practices. The primary objective of the study was to describe food-related practices for health maintenance and for self-treatment of selected ailments and conditions. Secondary objectives were to describe food-related self-treatment practices that had changed over time and current attitudes toward self-care.

The Keweenaw Peninsula, located in the northwestern portion of Michigan's Upper Peninsula, was selected as the research site because of the large number of Finnish-Americans living there, currently estimated to be approximately 25 percent of the population. They represented a population with a history of stable residence in the region, traditionally strong beliefs in self-sufficiency, and a large elderly population of first generation Finnish-Americans who remembered traditional self-treatment practices.

The field research methods chosen for the study involved the use of ethnographic techniques, subject selection by referral sampling, and the use of an interview schedule. The ethnographic techniques employed were participant observation, the use of key informants, and networking into the community. Subject selection was accomplished by referral sampling, a non-probability technique. Five subjects meeting sample criteria were initially identified and interviewed. They were asked to refer the researcher to others qualifying for inclusion in the sample. These individuals in turn suggested still others to be interviewed. Thus five referral chains or networks were established

initially and were followed simultaneously until 30 individuals were interviewed. A structured interview schedule was designed and pre-tested to collect data describing self-treatment attitudes and dietary practices in addition to selected demographic characteristics. Food was defined broadly for respondents to include anything taken in by mouth.

The sample consisted of 30 respondents, all living within the study area and claiming Finnish ethnicity. The sample was predominantly female (77%); 65 years of age or older (80%); rural (93%); and first generation Finnish-American (67%), with reported annual incomes often less than $6,000 (55%). Female occupations before retirement were most commonly homemaker and clerical/technical worker; male occupations before retirement were most commonly farmer and miner.

Food-related practices for health maintenance and for self-treatment of certain ailments and conditions were found to be common among this sample. Proper diet was the most frequently reported (83%) component of the sample's overall preventive health behavior (PHB), an indication of the importance placed on diet for health maintenance by this group. Respondents also indicated that self-treating illness at home was common, since 75 percent stated they would first self-treat a health problem which they did not consider serious before seeing a doctor. This percentage agreed with other data on the incidence of home self-treatment.

Dietary practices reported for health maintenance and self-treatment of illness involved a mixture of traditional and modern food usage. Much of the traditional diet was currently viewed as health-promoting. The traditional cultured milk products, viilia and

buttermilk, maintained a prominent place of importance in the sample's current dietary PHB. Traditional vegetables reported as "healthy" included potatoes, carrots, rutabaga, beets, and the cabbage family. Traditional grains as well as meat and vegetable combinations also continued to be of some importance in the sample's current dietary PHB. The traditional meat and fish group, although second most commonly cited for the past, was least mentioned currently as a dietary PHB, indicating a change in the sample's perception of the health-promoting qualities of meat and fish.

Current food-related remedies for head, chest, and digestive tract problems were generally traditional or old family remedies that had persisted from childhood. These remedies also utilized many readily available, traditional foods, primarily certain fruits, grains, and dairy products. Fruits like wild blackberries and blueberries, apples, and prunes were primarily used to treat a variety of digestive tract problems, including diarrhea, constipation, upset stomach, and heartburn. Lemon juice and blackberry juice were also used to treat colds and fever. Traditional grain products like oatmeal, toasted bread, and rice were used for digestive tract problems, while oatmeal and masticated bread were used as poultices to "draw out" skin infections. Respondents also mentioned traditional dairy products like boiled milk for diarrhea, buttermilk for constipation, and viilia for colds and fever.

The modern, nontraditional elements of the sample's current dietary PHB were vitamin/mineral supplements, fruits like citrus and vegetables like tomatoes and cucumbers. The use of vitamin/mineral

supplements went from least common dietary PHB in childhood to most common dietary PHB currently. Respondents took a variety of supplements; over half (57%) used vitamin C in addition to other water-soluble and fat-soluble vitamins. Individual supplements were taken more commonly than multi-vitamin/mineral supplements. Increased availability of nontraditional fruits and vegetables and current media attention to the importance of eating these foods probably accounted for the relatively prominent place they assumed in current dietary PHB.

Current food-related treatments for certain ailments included the nontraditional use of vitamin/mineral supplements and herbal remedies. In the case of acute ailments, the use of vitamin and herbal remedies was short-term and not widespread. For example, vitamin C was used by only a few respondents for colds, cough, and constipation, although in moderately high quantities.

For the chronic conditions of arthritis and hypertension, current dietary remedies involved vitamin and herbal treatments exclusively, learned primarily from the popular health media. Arthritis remedies were reported by 83 percent of the sample. The treatments were largely individual, but the most commonly cited practices involved the use of aloe vera juice and vitamin C, taken in moderately high dosages. Dietary self-treatment of hypertension was reported by a third of the sample and consisted of essentially harmless herbal and diet modifications. In one case, however, self-treatment negatively affected compliance with doctor-prescribed diuretic therapy. Dietary self-treatment of arthritis and hypertension was long-term, often included more than one treatment, and was likely to occur in conjunction with standard

medical therapies.

Pregnancy-related problems appeared to be treated matter-of-factly among this sample, since relatively few women (30%) reported self-treating common problems of pregnancy like morning sickness or heartburn. Two concerns relating to lactation emerged more commonly, however. One was to avoid "acid" foods like coffee and onions which could cause colic in babies. The second concern involved insuring an adequate quantity of milk by increasing liquid intake, primarily with milk and water.

The commonness of self-treatment for certain ailments may be partly explained by the sample's attitudes toward self-care, as measured by a Likert-scale self-care attitude instrument. The sample indicated a positive attitude toward self-care, especially if it reduced congestion in doctors' offices. They also generally agreed that individuals could exercise common sense in taking care of their less serious health problems. Nonetheless, they balked at the idea of assuming a doctor's role in self-diagnosis and treatment of more serious illness.

CONCLUSION

Implications

Results of this study allow a number of observations to be made about this group's dietary self-treatment. Current dietary self-treatment for both health maintenance and illness was widespread as well as being a mixture of traditional and modern dietary beliefs and practices. Respondents also indicated a willingness, in certain situations, to adopt new health and nutrition-related behaviors and beliefs, often from the popular health media.

In general, most dietary self-treatment practices were benign, and some were helpful. This observation was particularly true of traditional practices. For example, certain elderly populations have been shown to be at risk for low dietary calcium and certain B vitamins (Guthrie et al., 1972). However, for this Finnish-American sample population, traditional whole grains and cultured milk products, like viilia, provided good dietary sources of these nutrients. Thus, their reported regular use of these food items can be considered a positive health maintenance practice to be encouraged.

The practice of vitamin and mineral supplementation appeared to be well-established. Indeed, the practice will probably go on as long as this group continues to associate supplement use with perceived health benefits (Yarborough and Klonglan, 1974). Checking actual dosages in a future study would be useful to gauge the degree to which long-term, high-dosage use of vitamin and mineral supplements may be a problem among this group. On the other hand, therapeutic use of vitamin C for acute conditions, even in the moderately high dosages reported, probably presented little cause for alarm, because of the short-term nature of

acute conditions.

Self-treatment appeared able to compromise patient compliance with medically prescribed therapies in some cases, while, in others, it did not. For example, one individual self-treating hypertension stopped taking her medically-prescribed diuretic therapy, apparently because of her strength of belief in the self-treatment she was using. However, other individuals using hypertension self-treatments did not stop their diuretic therapy.

Future Directions

Dietary self-treatment was a common phenomenon in this ethnic group as well as in others (Snow, 1974; Bauwens, 1977; Harwood, 1981). It would be worthwhile to continue describing self-treatment practices of specific ethnic groups within the United States, especially for newly arrived groups like Indochinese and Haitian refugees. The methods used in this study worked effectively to obtain self-treatment information; the use of these methods may be helpful to researchers studying the food-related practices of other groups.

Since this study indicated that new dietary self-treatment practices are being adopted from common, nation-wide sources, namely the popular health media, it would also be worthwhile to look at current dietary self-treatment practices within a larger segment of the U.S. population. Some researchable questions in this area are: what is the general public doing regarding dietary self-treatment; where or from whom are the practices learned; are the practices more likely to be traditional or modern; do the practices have positive, neutral, or negative effects; what are the self-reported benefits and reasons for self-treating; and

how firmly entrenched are new and old dietary self-treatment practices?

Specific recommendations for a future study would include: 1) using a random sample to gauge prevalence of dietary self-treatment in a larger segment of the population; 2) checking actual quantities of vitamin and mineral supplements to gauge whether oversupplementation is a problem and to what degree; 3) ascertaining if current self-treatment practices are more or less likely to interfere with individual medical compliance or the seeking of medical care; and 4) describing characteristics of a person who is likely to self-treat. Data in these areas would allow health-care professionals and education planners to promote existing practices which have positive effects and redirect misguided practices in terms that have meaning to the population.

Practical Suggestions

Health and nutrition educators can use the self-treatment data from this study in a variety of ways. For example, knowledge of this group's belief in the health-promoting qualities of cultured milk products like buttermilk and viilia could be incorporated into menus at elderly feeding sites serving this population to help insure adequate calcium sources in their diets. In addition, the nutrition educator could take advantage of the current interest in Finnish cultural heritage to encourage continued use of these good sources of calcium in the population at large.

The nutrition educator might also direct individuals away from possibly risky, long-term supplement use by promoting nutrient dense foods as good sources of vitamins and minerals. Green, leafy vegetables, which are not a traditional part of the Finnish diet, could be targeted

as rich sources of vitamins, minerals, and fiber. Using such terms, which are apparently meaningful to this group, might more successfully increase awareness of the importance of these vegetables in healthful diets.

Another way to redirect long-term, high-dosage use of vitamin and mineral supplements involve the principle of cognitive dissonance from the field of educational psychology (Owen et al., 1978). For example, this group generally expressed an attitude that it was not advisable to take medicines without a doctor's prescription. The use of high doses of vitamin and mineral supplements could be put in terms of self-prescribing and treating with medicines "like a doctor", which the group generally agreed was not recommended. Thus, a cognitive dissonance would be generated, perhaps resulting in behavior change regarding vitamin and mineral supplement use among members of this population.

Health and nutrition professionals may also use knowledge of self-treatment practices, especially in the case of hypertension and arthritis, to tailor treatment and education plans to suit individual situations. Health professionals should also routinely screen for self-treatment practices, keeping in mind that it is important to do so in a non-judgemental way in order to find out what people are doing at home. The positive practices could then be encouraged, the negative ones redirected, and the benign ones left alone, while practices of unknown risk, like moderately high doses of water-soluble vitamins and internal use of aloe vera juice, could be monitored for long-term effects. Moreover, concern about the risks associated with self-treatment can be balanced against benefits that may result from the practices, if they are known.

Thus, for a number of reasons, it becomes advisable for nutrition and other health-care professionals to learn to work with lay health practices and beliefs as they inevitably exist among segments of their clientele. A step to developing this kind of awareness is to acquire knowedge of the ways in which individuals and ethnic groups treat themselves in health and illness.

APPENDICES

APPENDIX A

CONSENT FORM

APPENDIX A

Consent Form

1. I consent to take part in a survey of "Self-treatment Attitudes and Practices involving Food among the Finnish-Americans of the Keweenaw Peninsula" conducted by Carolyn J. Lackey, Ph.D. R.D. and Mary Anne Burke through the Department of Food Science and Human Nutrition of Michigan State University.

2. The study has been explained to me and I understand the explanation and what my participation will involve. I understand that, if I like, I can receive further explanation of the study after my participation is completed.

3. I understand that I am free to discontinue my participation in the study at any time.

4. I understand that my answers will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

5. I understand that my participation in the study does not guarantee any benefit to me.

Signed _____

Date _____

MB/CL
FSHN/81

APPENDIX B

INTERVIEW SCHEDULE

APPENDIX B

INTERVIEW SCHEDULE

DATE ____/____/____ **CODE** __ __ __

REF __ __ __

SECTION I. Since I'm studying the Finnish people particularly, I need some information about your parents and where they were born. So let's start with the first question, which is:

1. Where were your parents born?

__ __ __ **a. mother** _____

__ __ __ **b. father** _____

2. Where were your grandparents born?

__ __ __ a. Mother's _____ _____
__ __ __ mother father

__ __ __ b. Father's _____ _____
__ __ __ mother father

(3. Respondent's generation--as deduced from questions 1 and 2)

__ __ __ a. _____ 1st generation c. _____mixed 1st and 2nd generation

b. _____ 2nd generation

__ __ __ 4. Are both of your parents of Finnish background ? ____yes ____no

5. IF NO, Which one is Finnish?

__ __ __ a. _____mother b. _____father

-1-

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CODE __ __ __

SECTION II. Now I'd like to ask some questions about the different things a person can do to stay healthy -- about the different ways that foods, beverages, herbs/spices, teas, vitamin/mineral supplements, etc., might be used to keep a person form getting sick.

1. Ate there some things in general a person can do to stay healthy?

___yes ___no __ __ __

2. IF YES, What are they?

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

3. How do you think your parents would have responded to this question during your school years?

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

_____ __ __ __

(4. Respondent's answer for his/her parents is ___the Same or _____DIFFERENT than response for his/herself. __ __ __

I.E., are the answers to q's 2 & 3 the same of different?)

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CODE ___ ___ ___

SECTION II. (PAGE 2)

5. Are there any special foods, beverages, herbs/spices, teas, vitamin/mineral supplements, etc., or anything else that you take to stay healthy?

___yes ___no ___ ___ ___

6.IF YES, What are they?

7.How does this help?

8. Do you remember any specific things along the same lines that your parents might have taken to stay well when you were growing up?

____yes ____no ___ ___ ___

9. IF YES, What were they?

10.How did this help?

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ESHN/A1

CODE ___ ___ ___

SECTION II. (PAGE 3)

11. Do/did you give anything along the same lines to your children during their school years to keep them well?

____yes ____no ___ ___ ___

12. IF YES, What are/were they?

13. How w'ld this help?

14. Do you sver talk to other people about what you do or take to stay healthy?

_____yes _____no ___ ___ ___

15. IF YES, Who would you talk to? (not specific, just generally)

16. Where would this hap'n?

CODE __ __ __

SECTION III.* Now, in the next part, which will take up most of our time together, I'd like to ask you about the different ways a person could take care of an illness. I have a list of common illnesses, and I'll ask you to tell me what was done when you were little, what you would do for your child, and what you would do for yourself.

1. So let's start with COLDS/FLU and tell me if you remember being treated when you were little for that with any FOODS, BEVERAGES, HOME REMEDIES, MEDICINES, HERBS/SPICES, OR TEAS.

___yes ___no

2. Was nay food particularly good for taking care of _____?

   a. How did this help?

3. Was any food particularly bad for _____?

   a. Why?

4. IF NO FOODS, How about

   a. homemade remedies

      1. what was it made of?

      2. how did it help?

   b. teas/herbs/spices

      1. kind

      2. how did it help?

   c. patent medicines

      1. what type

   d. anything taken orally, like liniment

      1. what

      2. how much

      3. how did it help

5. Would the same thing be done for both grown-ups and children with _____?

   __yes ___no

   a. IF NO, What was the difference?

6. Can you give the best guess as to where your parents learned this way of treating _____?

* RESPONSES TO THE QUESTIONS IN SECTION III ARE TO BE RECORDED ON THE ATTACHED DATA SHEETS, A DIFFERENT DATA SHEET FOR EACH CONDITION REPORTED ON.

MB/CL
FSH$_N$/81

CODE ___ ___ ___

SECTION III.(PAGE 2)

7. When you were raising children, what would you have done for your child if he/she had _____?

8. Was any food particularly good for taking care of _____?

   a. How did this help?

9. Was any food particularly bad for _____?

   a. Why?

10. IF NO FOODS, How about

   a. homemade remedies

      1. what was if made of?
      2. how did it help?

   b. teas/herbs/spices

      1. kind
      2. how did it help (what did it do)?

   c. patent medicines/OTC medicines

      1. what type

   d. anything taken orally, like Liniment

      1. what
      2. how much
      3. how did it help

11. Do you remember where you learned this way of taking care of _____, or from whom you learned it?

   a. IF PERSON,what's ethnic background?

12. Do you remember the situation or setting in which the information was traded?

   a. IF A PLACE, Which specifically?

13. What would you do for _____, if you had it yourself?

   a. same thing as parents
   b. same thing as for child
   c. something different--what

14. Was any food particularly good for taking care of _____?

   a. How did this help?

15. Was any food particularly bad for _____?

   a. Why?

CODE ___ ___ ___

SECTION III. (PAGE 3)

16. IF NO FOODS, How about

    a. homemade remedies

        1. what was it made of?
        2. how did it help?

    b. teas/herbs/spices

        1. kind
        2. how did it help (what did it do)?

    c. patent medicines/OTC medicines

        1. what type

    d. anything taken orally, like Liniment

        1. what
        2. how much
        3. how did it help

    e. vitamin/mineral supplements

        1. what type
        2. how much
        3. how did this help

17. Do you remember where you learned this way of taking care of _____, or from whom you learned it?

    a. IF A PERSON, what's the ethnic background?

18. Do you remember the situation or setting in which the information was traded?

    a. IF A PLACE, where specifically?

BLOOD / HEART PROBLEMS

- BLOOD PURIFICATION (SPRING)
- HIGH BLOOD PRESSURE
- OTHER

DRINKING PROBLEMS

- CONTROL THE PROBLEM
- RELIEVE THE HANGOVER

OTHER PROBLEMS

- BOILS
- ECZEMA
- INJURIES, CUTS/BRUISES
- T.B. / ASTHMA
- GOITER
- JAUNDICE

ANYTHING ELSE YOU REMEMBER?

COLDS / FLU

- STUFFY NOSE
- EARACHE
- COUGHS
- FEVER
- HEADACHE
- TOOTHACHE

JOINT PAIN

- ARTHRITIS
- GOUT
- RHEUMATISM

STOMACH / INTESTINAL PROBLEMS

- INDIGESTION
- CONSTIPATION
- HEARTBURN
- DIARRHEA
- STOMACH ACHE
- ULCER
- GAS
- ABDOMINAL CRAMPS

PREGNANCY

- DETERMINE SEX OF BABY
- PROMOTE GOOD PREGNANCY
- MISCARRIAGE
- MORNING SICKNESS
- HEARTBURN
- EASY DELIVERY
- BREAST FEEDING:
  - ANYTHING TO AVOID?
  - ANYTHING TO INCREASE VOLUME?
  - ANYTHING TO ASSURE GOOD FLOW?

DATA SHEET

CONDITION _____ CODE ___ ___ ___

	What was done when you were little?	What would you do for your child?	What would you do for yourself?
What was done for the condition?			same for par. as child diff. What?
Food that was GOOD for condition? How did it help?	YNDK	YNDK	YNDK
Food that was BAD for condition? Why?	YNDK	YNDK	YNDK
1. Homemade remedies what make of-- how it helped--	YNDK	YNDK	YNDK
2. Teas/herbs/spices kind-- what did it do--	YNDK	YNDK	YNDK
3. Patent medicines/ OTC medicines what kind--	YNDK	YNDK	YNDK
4. Vitamin/Mineral Supplements what kind-- how much-- how it helped--	YNDK	YNDK	YNDK
5. Anything taken orally, (Liniment) what type-- how much-- how it helped--	YNDK	YNDK	YNDK
Child and adult get same treatment? IF NO, diff?	YNDK		
Where or from whom did yr mom/you learn this? Ethnic Backgrnd			
Setting in which info learned. Specific--			

SECTION IV. INTERVIEWER'S COPY

We've just been talking about some specific ways people take care of themselves when something goes wrong. Self-care is a word used now to describe the kind of care we provide ourselves and our families. Here is a list of nine statements that people are saying about self-care nowadays. I'll read each of the statements, and then, based on what you think about them, I'd like you to mark in the appropriate column whether you STRONGLY AGREE, AGREE, are UNCERTAIN, DISAGREE, or STRONGLY DISAGREE with each of the statements. There are no right or wrong answers. We just want your opinion.

1. TEACHING PEOPLE HOW TO CURE SOME OF THEIR OWN ILLNESS WITHOUT CONTACTING A DOCTOR MAY BE A GOOD HEALTH PRACTICE.

2. SELF-CARE WILL PROBABLY REDUCE THE NUMBER OF TIMES PEOPLE CONTACT THE DOCTORS.

3. ONE PROBLEM WITH SELF-CARE IS THAT MOST PEOPLE CAN'T LEARN TO TAKE CARE OF THEMSELVES ADEQUATELY.

(In general, when I say "most people", you can take that to mean "most people you know".)

4. MOST PEOPLE WOULD PREFER TO TAKE CARE OF THEIR OWN HEALTH PROBLEMS WITHOUT ASKING FOR PROFESSIONAL HELP.

5. VERY FEW PEOPLE WANT TO BE SELF-RELIANT IN MAKING DECISIONS ABOUT THEIR HEALTH.

6. IF PEOPLE TOOK CARE OF THEIR LESS SERIOUS HEALTH PROBLEMS THEMSELVES, THEN PATIENTS WITH SERIOUS ILLNESS WOULD HAVE EASIER ACCESS TO DOCTORS.

7. A PERSON SHOULDN'T TAKE ANY MEDICATION UNLESS A DOCTOR RECOMMENDS THEM.

(Think of medication as being any substance used in treating a health problem or illness.) Amer. Coll. Dict.

8. PEOPLE NEED TO RELY LESS ON DOCTORS AND MORE ON THEIR OWN COMMON SENSE REGARDING CARE OF THEIR BODIES.

9. IT IS UNDESIRABLE FOR PEOPLE TO DIAGNOSE AND TREAT THEIR OWN ILLNESS.

Please mark beside each question below whether you STRONGLY AGREE, AGREE, are UNCERTAIN, DISAGREE, or STRONGLY DISAGREE with each of these statements. There are no right or wrong answers. We just want your opinion.

	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
	1	2	3	4	5
1. TEACHING PEOPLE HOW TO CURE SOME OF THEIR OWN ILLNESS WITHOUT CONTACTING A DOCTOR MAY BE A GOOD HEALTH PRACTICE.	☐	☐	☐	☐	☐
2. SELF-CARE WILL PROBABLY REDUCE THE NUMBER OF TIMES PEOPLE CONTACT THE DOCTORS.	☐	☐	☐	☐	☐
3. ONE PROBLEM WITH SELF-CARE IS THAT MOST PEOPLE CAN'T LEARN TO TAKE CARE OF THEMSELVES ADEQUATELY.	☐	☐	☐	☐	☐
4. MOST PEOPLE WOULD PREFER TO TAKE CARE OF THEIR OWN HEALTH PROBLEMS WITHOUT ASKING FOR PROFESSIONAL HELP.	☐	☐	☐	☐	☐
5. VERY FEW PEOPLE WANT TO BE SELF-RELIANT IN MAKING DECISIONS ABOUT THEIR HEALTH.	☐	☐	☐	☐	☐
6. IF PEOPLE TOOK CARE OF THEIR LESS SERIOUS HEALTH PROBLEMS THEMSELVES, THEN PATIENTS WITH SERIOUS ILLNESS WOULD HAVE EASIER ACCESS TO DOCTORS.	☐	☐	☐	☐	☐
7. A PERSON SHOULDN'T TAKE ANY MEDICATION UNLESS A DOCTOR RECOMMENDS THEM.	☐	☐	☐	☐	☐
8. PEOPLE NEED TO RELY LESS ON DOCTORS AND MORE ON THEIR OWN COMMON SENSE REGARDING CARE OF THEIR BODIES.	☐	☐	☐	☐	☐
9. IT IS UNDESIRABLE FOR PEOPLE TO DIAGNOSE AND TREAT THEIR OWN ILLNESS	☐	☐	☐	☐	☐
	1	2	3	4	5

CODE ___ ___ ___

SECTION V. I have a few questions now to ask about you and your family.

1. Where were your born?_____ ___ ___ ___

2. Where were you raised during your school years? _____ ___ ___ ___

3. How many years have you lived in the Keweenaw Peninsula? _____ ___ ___ ___

4. Have you ever moved out of the community and moved back?

   ___yes ___no ___ ___ ___

   IF YES,
   a. How long were you away? _____ ___ ___ ___
   b. Where did you go? _____ ___ ___ ___

5. What language was spoken in your parents home by the whole family when you were growing up?

   _____Finnish _____English _____Other _____ ___ ___ ___

   _____Both, but predominantly _____

6. What language is spoken in your home now?

   _____Finnish _____English _____Other _____ ___ ___ ___

   _____Both, but predominantly _____

7. How many children were you, when you were growing up? _____ ___ ___ ___

8. How many living children do you have? _____ ___ ___ ___

9. What were your parents' occupations? _____ ___ ___ ___
   father

   _____ ___ ___ ___
   mother

10. What is/are your occupation/s? _____ ___ ___ ___
    ___ ___ ___
    _____ _____ ___ ___ ___

    a. Is it year around or seasonal? _____ ___ ___ ___

11. What is/are your spouse's occupation/s? _____ ___ ___ ___
    ___ ___ ___
    _____ _____ ___ ___ ___

    a. Year around or seasonal? _____ ___ ___ ___

12. Did you go to the doctor during your school years? ____yes _____no ___ ___ ___

    a. About how far in miles were you from the doctor during those years?
    _____ ___ ___ ___

    b. How long did it take you to get there? _____ ___ ___ ___

    c. How did you get there? _____ ___ ___ ___

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CODE ___ ___ ___

SECTION V. (PAGE 2)

13. Do you go to a doctor now? ____yes ____no ___ ___ ___

a. About how far away are you from the doctor's? _____ ___ ___ ___

b. How long does it take you to get there? _____ ___ ___ ___

c. How do you get there? _____ ___ ___ ___

14. How often did you see the doctor during your school years?

1. _____often, a few times a year
2. _____regularly, once a year
3. _____occassionally, every couple of years
4. _____seldom, once or twice in your life
5. _____never ___ ___ ___

14(A). How often did your parents see the doctor during those years?

_____ ___ ___ ___

15. How often would you say that you visit the doctor nowadays?

_____ ___ ___ ___

15(A). How often do/did your children visit the doctor during their school years?

_____ ___ ___ ___

16. Do you or have you consulted with anyone besides a doctor about health matters? _____yes _____no ___ ___ ___

a. IF YES, Who? _____ ___ ___ ___

_____ ___ ___ ___

_____ ___ ___ ___

_____ ___ ___ ___

17. Let's say that you have some sort of health problem. Would you try to find information about how to take care of it before seeing the doctor?

_____yes _____no ____don't know ___ ___ ___

a. IF YES, Where might you be likely to pick up that kind of information if you wanted it?

_____ ___ ___ ___ b. which/who specifically _____ ___ ___ ___

_____ ___ ___ ___ _____ ___ ___ ___

_____ ___ ___ ___ _____ ___ ___ ___

_____ ___ ___ ___ _____ ___ ___ ___

MEDIA

magasines
books
television

visiting in homes of:
friends
relatives

At own home
School
Social functions
Church functions/groups
Cafe/restaurant

CODE ___ ___ ___

SECTION V. (PAGE 3)

18. How many years of schooling did you complete?
    1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20+ ___ ___ ___

19. How many years of schooling did your spouse complete?
    1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20+ ___ ___ ___

20. Is/was your spouse Finnish? ____yes ___no ____not married ___ ___ ___

21. Sex _____male _____female ___ ___ ___

22. County of residence _____Houghton _____Keweenaw ___ ___ ___

23. Town, village or location _____ ___ ___ ___

    24. _____greater than 2500 pop. (urban area) ___ ___ ___

    25. _____less than 2500 pop. (rural area), ___ ___ ___

        a. _____farm ___ ___ ___

        b. _____ nonfarm ___ ___ ___

26. When were you born? _____ _____ _____ ___ ___ ___
    month day year

27. I have a list of incomes on this card, please tell me which letter includes the family's income for 1980?

A. under $3,000	E. $12,000 - 14,999
B. $3,000 - 5,999	F. $15,000 - 17,999
C. $6,000 - 8,999	G. $18,000 - 20,999
D. $9,000 - 11,999	H. $21,000 - 24,999
	I. $25,000+
	J. Don't Know
	K. Prefer Not to Answer ___ ___ ___

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