

Health Promotion and Hutterite Cultural Change:
Individual and Group Change Processes

by

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ABSTRACT

This thesis presents an examination of the cultural change processes involved in cardiovascular health promotion among Canadian Hutterites. The study takes place within the context of the Hutterite Heart Health Promotion Project, using an ethnographic approach to assess the success of public health intervention in Alberta Hutterite colonies. The processes of change involved in attempts by Hutterites and health promoters to reduce the incidence of cardiovascular disease in Hutterite colonies are related to change processes discussed in the ethnographic literature.

The study found several processes operating in health promotion, including controlled innovation, leadership initiative, re-categorization, individual decision, and feedback in consensus formation. Variation in the success of health promotion reflects colony diversity and the influence of many factors including the Hutterian faith, the balance between individual and collective, and colony interest in health. Recommendations are made to help health professionals promote health among Hutterites.

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Chapter 1. Introduction

The Hutterites of Alberta have been found to have a higher incidence of cardiovascular disease than the general population of the province. This discovery has led to the development of public health studies aimed at identifying possible reasons for this difference, and of health promotion initiatives with the goal of assisting the Hutterites in reducing their modifiable risk factors for cardiovascular disease. As reducing risk factors involves changing behaviour, it is essential that health promoters have an understanding of Hutterian culture; of the behaviour considered culturally appropriate, and of how behaviour can be changed within this culture. In this thesis I will be examining health promotion initiatives in six Alberta Hutterite colonies in the context of the Hutterite Heart Health Promotion Project (HHHPP). I will be exploring the cultural change processes that are involved in changing behaviour related to cardiovascular health, and the influence on these change processes of important aspects of Hutterian faith and culture. This investigation of change in Hutterite colonies will elucidate the management of change at the individual and colony levels, and provide health professionals with the ethnographic information they need to enhance health promotion programs, not only in the area of heart health, but also in other areas of health that are affected by lifestyle.

The Hutterites are Christian communalists living in the northern plains of North America. They are of European origin, yet deliberately remain separated by culture and geography from other North Americans of European descent. They lead a rural agricultural lifestyle in which each community, or colony, strives for self-reliance through communal labour and the sharing of resources. Colony lifestyle thus involves mainly agricultural work, and the Hutterite diet

consists of food produced by the colony. Their unique lifestyle involves activity and diet patterns that are different from those of many other North Americans, and that expose Hutterites to lifestyle health risks that are particular to this group. Despite their isolation, the Hutterites have been exposed to the mechanization of agriculture and to changes in food technology that have changed the lifestyles of most of North America. As a genetically isolated population, the Hutterites also have specific patterns of genetic predisposition to cardiovascular disease. As many non-Hutterites come into little close contact with Hutterites, many health professionals are unaware of aspects of Hutterian culture that may facilitate or impede health promotion.

The medical profession became aware of a high incidence of cardiovascular disease among Hutterites in Alberta through province-wide screening. When it became clear that genetic inheritance and lifestyle were combining in some way to create a high risk for cardiovascular illness, medical professionals began looking for ways to help the Hutterites reduce their modifiable risk factors by changing behaviour. However, the literature on public health initiatives among the Hutterites shows a limited understanding of Hutterian culture and of the effect that cultural differences have on the success of health promotion. The HHHPP was initiated with the goal of determining the relationship between culturally-determined aspects of behaviour and the effects of health promotion as measured by self-report of behavioural change and by physical and laboratory measures of cardiovascular risk.

The ethnographic literature contains many references to change in Hutterian culture. Hutterite change has been approached from many different theoretical viewpoints. These references have concentrated mainly on change in technology and in the standard of living, at the level of official Hutterite policies. Only recently have researchers (notably Stephenson 1991) begun to investigate

the importance of change at the individual and colony levels. None of the researchers have shown the impact that Hutterite policy, colony decisions, and individual behaviour can have on individual health, or that health has on both individual decisions and on the functioning of the colony as a whole.

In this thesis I combine a theoretical examination of change processes, as they apply to individual and colony decisions about behaviour, with a public health approach to the problem of cardiovascular disease in Hutterite colonies. I will describe attempts by Hutterites to alter aspects of their lifestyle that impact on cardiovascular disease, both as individual health promotion initiatives and as examples of change processes. I will be relating change processes described in the literature to particular changes occurring through health promotion and to individual decisions that affect health. Through an analysis of the cultural factors that influence health-related decisions and behaviour, I will formulate recommendations for health professionals in designing health promotion initiatives aimed at improving colony health.

Chapter 2. The Hutterites and Cultural Change

I. The Hutterites

The Hutterites are an agrarian people of the plains of North America, including the prairie provinces of Alberta, Saskatchewan, and Manitoba, and the states of South Dakota, Montana and eastern Washington. Today there are between thirty and forty thousand Hutterites in North America, descended from a small group of immigrants from Europe. Ethnically, they are of Tyrolean and Carinthian descent (from Austria and southern Germany), but they are set apart from North American society primarily by their religious convictions. The Hutterian faith originated in the radical *Täufer*, or Anabaptist¹, stream of the Reformation. The early *Täufer* were among those who demanded the most sweeping reforms to the Christian church. The beliefs espoused by these *Täufer* and shared by the present-day Hutterites include adult baptism, pacifism, the separation of church and state (and thus the refusal to participate in government), and a refusal to swear oaths. The Hutterites add the community of goods to these principal beliefs, and thus hold all goods communally, rejecting private property.

The *Täufer* were persecuted throughout Europe for their beliefs, particularly for their heretical insistence on adult baptism and on the separation of church and state, and were often forced to migrate or face extermination. As a result, the Hutterites wandered through eastern Europe for three centuries before emigrating to North America. Early in these travels, the Carinthian *Täufer* were

1 Following Stephenson (1991, 1979, 1978) I will use the term *Täufer* to refer to Hutterians and their spiritual cousins the Mennonites and Amish. The term 'anabaptist', meaning 'rebaptizer' was originally a derogatory term applied by Catholics and Protestants alike to the *Täufer* and other heretics. Despite the loss of this derogatory sense in the common use of the word, Anabaptist remains an offensive designation to many Hutterites; they refer to themselves as *Täufer*.

organized into a cohesive group by Jakob Hutter, who was later martyred for the faith. The group took his name after his death, and have since been known as the Hutterian Brethren, or Hutterites.

The Hutterite way of life in North America is based on a pattern established early in their history. They live in medium-sized communes called colonies, separate and isolated from the outside world. Each colony has a diversified economy, now almost exclusively agricultural, with the aim of self-sufficiency. Each colony member works as he or she is able for the colony, and is provided for by the colony according to need. The colonies range in size from 50-150 members, with the average around 90 members (Friedmann 1970:101). Although the natural expansion of the Hutterite population is rapid through a high birthrate, colony expansion is managed by colony fission. A large colony purchases land to build a new colony, and the population divides in half to form two new colony groups. One group stays in the old location, and the other moves to the new colony. Families are housed in the colony in a traditional settlement pattern of longhouses arranged around a central yard, with the colony dining hall at the centre or to one side of the yard. Usually four nuclear family apartments make up each longhouse. The apartments are used mainly for sleeping and for leisure time, as work, meals, and worship all take place in communal areas (Hostetler 1974:154-155).

Following Hutterian beliefs in daily life involves separation from the outside world and the obedience of all members to the will of God, as expressed in the Bible and sermons, and as manifest in the earthly authority of the colony. The minister of each colony is its highest authority. Each colony also has a householder, or financial manager, responsible for colony financial concerns, a farm manager responsible for the allocation of labour, and a German school teacher responsible for education and discipline of the colony children. These

men, with the second minister in a larger colony, make up the council of elders. Each agricultural operation also has a foreman responsible for that operation. There is a strict division of labour between Hutterite men and women, with the men working in areas of economic production, and women in domestic areas.

Each of the colonies belongs to one of three subdivisions of the Hutterian Church. These subdivisions arose in Russia in the late nineteenth century, after a period of disorganization during which the community of goods was abandoned. When the faith was revitalized, communal living was reestablished in three separate groups. Each of these three groups has continued as a separate entity from that time. These groups are the Schmiedeleut, who live primarily in Manitoba and South Dakota, and the Dariusleut and the Lehrerleut, both of which groups have colonies in Alberta, Saskatchewan, and Montana. The three groups share the same doctrine and colony organization, but are endogamous and differ in details such as clothing and customs (Stephenson 1991:66, 71). All three groups are united in the Hutterian Brethren Church, which oversees matters of doctrine if not of custom.

II. Change in Hutterian Culture

Most anthropologists and sociologists who study present-day Hutterian culture give some attention to change. The Hutterites give an initial appearance of timelessness and uniformity, supported by their sense of identification with their ancestors and with their living brethren as adherents of an eternal faith, and as living by universal principles. This appearance of religious and social continuity is contrasted with the Hutterites' use of modern, state of the art agricultural technology in a seeming paradox that is often unsettling to the outside observer. However, for the Hutterites, their use of the latest technology in farming is not inconsistent with their unchanging beliefs, for technology is

merely a tool “utilized for the good of the community” (Lewis 1976:76). The seeming paradox of progressive technological change accompanied by resistance to social change draws the attention of many to the possibilities for change in a system designed to resist alteration.

What these researchers have found is that some degree of change in social organization and in attitudes and values has occurred in the past and continues, alongside the constancy of the Hutterian faith. Although the principles governing Hutterite life are unchanging, their application has a degree of flexibility and has been adapted to the changing circumstances and needs of the communities. The changes discussed in the literature are mainly in three areas: technology, consumption of material goods, and social cohesion. Farming technology has a strong effect on the Hutterian agricultural economy and has had far-reaching effects on the lifestyle of Hutterites as it has for other farming peoples. Austerity in the consumption of material goods is an important way in which Hutterites differ from mainstream North American culture, and is important within the communal framework. The Hutterian doctrine dictates that material consumption should be kept to the minimum necessary, and that all should have equal access to goods. The social cohesion of the Hutterites is unusual in North America: the Hutterites have remained a separate and distinct people for over 100 years in North America, unlike most other immigrant groups, who have been integrated to a much greater degree into the mainstream society. For the Hutterites, maintaining social cohesion involves resisting the cultural influence of the individualistic and pluralistic outer society, and at the same time remaining flexible to the needs the community, in a balance between continuity and change that can be difficult to maintain.

A. Acculturation

The earliest studies of Hutterite culture change were done within the framework of acculturation theory. Acculturation refers to changes arising in a culture as a result of close contact with another culture. The changes consist of cultural forms that are borrowed from the other culture and are modified to fit with pre-existing cultural forms. This approach, which was widely used in studies of the effects of European colonization on the various 'native' cultures of the world, has also been applied to examining the adoption of various aspects of the mainstream North American culture by the Hutterites.

Lee Emerson Deets (1939) noted many ways in which Hutterites were adopting practices from the outside world. These changes included those in the areas of technology, consumption of material goods, and values. The Hutterite agricultural operations he described as thoroughly mechanized. Many of the improvements that had been made first in agricultural areas, such as electric lighting, had later been added first to communally used areas, and then to homes. In this way, "Devices introduced as producers' goods tend in time to become consumers' luxuries" (51). Changes in technology (originating in the outside culture) thus produce further changes in consumption. Deets also noted that values such as anti-materialism, and austerity in adornment of homes and persons, were being eroded as Hutterites accumulated decorative items and more fashionable clothing. The desire for these items he attributed to the example of the 'worldly' society of the cities: "When the young people come home from Winnipeg they ... have seen so many things they would like to have and would like to do and they feel that because they are colony people they are denied all these things" (53). At that time these changes in consumption and in the desire for less austerity were most noticeable in the colonies nearest the major

cities, where colony members had the closest contact with the city and its temptations.

Deets' main concern in describing these changes was to point out the socially disruptive effects of mechanization and the dangers of assimilation. Although Deets appears concerned that the insidious acculturative effects of technology and luxury may become too great for the Hutterite social system to withstand, he does point out that some efforts are made to resist unwanted changes. He identified a distinction made between "...that part of our culture which is viewed as means to ends and which may be adopted if used strictly for Hutterite ends, ...and the more ultimate values held in our own society. It is the latter which the Hutterites strenuously seek to resist" (50). Deets, however, does not describe the process by which undesirable changes are identified and prevented. On the whole, it appears from Deets' description that acculturation occurs largely unchecked, through inevitable contacts with the world outside the colony.

For a more thorough description of the process of balancing change and continuity, we must turn to Joseph Eaton (1952), who coined the phrase 'controlled acculturation' to describe the caution with which Hutterites consider the possible consequences of potential changes. He noted that the Hutterites have an institutionalized technique for accepting innovations before the pressure for change threatens community cohesion, and for forbidding those innovations that would themselves threaten cohesion. In examining the formal rules, or *Ordnungen*, of the Schmiedeleut Hutterites, he found that rules do not exist for many areas of behaviour. In most areas, behaviour is governed by traditional interpretations of scripture, and by informal consensus as to the range of acceptable variation in behaviour. Where rules exist, it is evidence that the common consensus has broken down, and that some kind of change has

occurred. The rule is either a formal acknowledgment that a change has occurred and is acceptable, or an official restatement of the tradition formerly maintained by consensus.

Changes that come to the attention of the leaders as being too widespread to leave to the disciplinary action of individual colonies are discussed at an annual meeting of all colony ministers, and a decision made as to the official Leut policy on the innovation. A proposed rule once adopted by the ministers' assembly is then subjected to a majority vote of all baptized men before becoming official. Although rules are never repealed, they may be contradicted by a later decision if pressure for change in that direction becomes so great as to 'make too many lawbreakers'. This flexibility allows the Hutterites to make changes in the practical application of their doctrine and principles, without challenging the principles themselves. It also allows the Hutterite system to retain control of the behaviour of its members, while remaining responsive to the needs of those members (334).

True to the acculturation theory that forms the basis of Eaton's approach, he attributes the changes controlled by this cautiously flexible system to the influence of the mainstream North American culture. The changes that have been recorded in the *Ordnungen* refer mainly to the consumption of material goods introduced through contact with the outside world. He describes two sources of pressure for change: the direct pressure of constant contact with the outside world and exposure to its lifestyle; and the indirect pressure of the influence of outside values on Hutterites, as some Hutterites internalize the individualism and consumerism of their neighbours (333). He sees acculturation as creating the desire for spending money, for more fashionable clothing and adornment in the home, and for bought goods to replace colony-produced items.

This pressure has led to the adoption of rules to maintain the standards of communal property, austerity, and community self-sufficiency.

It is to this process of controlled acculturation that Eaton attributes the success of the Hutterite communities in maintaining their social cohesion, and in allowing changes in technology and the standard of living without sacrificing basic principles. However, he suggests that this process cannot continue indefinitely without ultimately leading to assimilation, as changes in values must inevitably accompany material culture (340). The internalization of values may spread through the communities to a degree that seriously threatens adherence to the community of goods and to the faith that binds the community together.

Russell Lewis (1976) later reexamined Eaton's concept of controlled acculturation. His only point of difference with Eaton was on the inevitability of assimilation. Without challenging the notion that changes introduced from the outside culture have significant effects on material culture and also possibly on Hutterian values and belief, he concluded that acculturation need not lead to assimilation. He proposed six characteristics of a society that would be able to withstand assimilative pressure indefinitely. The first is institutionalized mechanisms for controlling change. This the Hutterites possess, as described by Eaton. Three different kinds of integration are also cited: community integration, or consistency of beliefs and standards throughout the community, and constant contacts between community members to reinforce those standards; ritual integration, or the support given to the value system by religious ceremonies and other ritualized community action; and spatial integration, or the degree to which the spatial organization of houses and other buildings supports the community's values. The Hutterites benefit from a high degree of integration through their common beliefs, daily ritual and group activities, and the central aggregation of the houses in each colony. Intense socialization is the

fifth characteristic discussed by Lewis: Hutterite community socialization is intense from early childhood, and is reinforced by the high degree of community integration. Lewis' final characteristic is that of economic self-sufficiency, which the Hutterites strive to maintain, with relative success.

Despite Eaton's concerns for the future assimilation of the Hutterites, Lewis found them to have maintained a high degree of social cohesion, and to be in no apparent danger as a distinct cultural group (82). He suggests that all of these characteristics have allowed the Hutterites to incorporate material changes without significant loss of their distinctive beliefs and values, and that they will be able to do so indefinitely.

Acculturation theory was developed primarily to explain the effects of colonizing cultures on those of the natives of the colonies, and as such emphasizes culture contact as the source of change. Internal forces and creativity are ignored, except as they work to integrate borrowed cultural forms into pre-existing patterns. There is no mention of changes that are deliberately sought; according to this theory, cultures are reactive, not active, in adapting to each other. The acculturation studies of Hutterite change are effective in showing how the Hutterite system resists and controls change in matters of policy, particularly in material culture. What they do not show is how creativity within the system can modify that system, and produce change within the parameters of tradition and rules. Acculturation theory also presumes that the incorporation of elements of material culture must ultimately lead to changes in values and beliefs, and as such portrays Hutterite culture as constantly threatened with insidious changes that may eventually destroy the beliefs that hold it together.

John Hostetler (1974) describes in further detail the process by which innovation is managed within the agricultural sphere of the Hutterite colony. He notes changes primarily in technology. These changes are sought initially by the

foremen of the agricultural operations, who often constitute a progressive element in the colony. Any proposed change is usually challenged by the more conservative element of the colony, who are wary of changes that pander to laziness and luxury and who propound the virtues of hard work. The foremen counter these arguments with appeals to the usefulness and efficiency of the innovation. In this way, the spiritual validity of a potential innovation is fully discussed before a consensus is reached among colony members. Mechanization of the colony is subject to concerns for the element of luxury and personal convenience, but if a change is felt to convey a benefit for the welfare of the colony, it will be accepted. Indoor plumbing, for example, was accepted on the basis of sanitation despite concerns that it was merely for convenience (299).

Changes in consumption are also made in a way that supports rather than challenges Hutterite beliefs and values. Any increase in technology or standard of living is shared by all colony members, without introducing any distinctions on the basis of wealth or access to material goods and conveniences. Goods or practices that are seen as intrinsically individualistic, such as worldly clothing styles, or the selling of colony goods by individuals for profit, are strenuously forbidden. Thus Hostetler does not find any changes in values or in social cohesion. Although the colonies have more contact with the outside world, the authority structure of the colonies remains intact, and the attitude of caution towards the outside is maintained (299).

Like the acculturation theorists, Hostetler emphasizes social continuity alongside technological change. Unlike them, he is not clear on the origins of change; although many technological changes are introduced by the outside culture, others may be invented by creative foremen². Changes in the

² I have known Hutterite colony corporations to be granted patents for agricultural devices invented by such creative colony members.

implementation of social policy are not classed as social change by Hostetler. Like the Hutterites themselves, he places the emphasis on the principles governing social policy and behaviour, rather than on the details of that behaviour. Intercolony differences and temporal variation in the implementation of the rules and traditions, while they remain within the limits imposed by group consensus, are not recognized as changes or differences, although they may in fact constitute noticeable variations in behaviour.

B. Cultural Ecology

John Bennett (1967, 1975) approaches the study of culture change among Hutterites from the perspective of cultural ecology. He describes his theoretical approach as a modified form of cultural ecology, as he contends that the cultural-ecological approach proper is more suited to the study of peoples that live entirely from the land, such as hunter-gatherers or horticulturalists, than to that of peoples who participate in a market economy. Bennett's 'social ecology' therefore discusses the Hutterites' adaptation to an environment that includes natural resources as well as the market economy and national structures that surround the Hutterite colonies (1969:19). Resources in that environment are seen as conditioning or determining factors for cultural forms. Changes in the adaptation of the Hutterites to their environment are seen as deriving from changes in the resources available, and as modified by pre-existing cultural forms such as the limits of belief, tradition, and the communal imperative.

Bennett found the same official controls on change that were described by Eaton as controlled acculturation. His account of change in Hutterite colonies was also similar to that of Hostetler. Bennett describes similarly the balance between conservative and progressive elements in technological decisions, and the importance of the principles limiting changes to agricultural technology and

the standard of communal living, rather than to individual consumption. These principles restrict changes to those with a perceived benefit for the welfare of the colony, and preclude any that are perceived as threatening the spiritual safety of colony members (268-271).

Bennett departs from the similarities with the acculturative accounts of change in his alternative explanation for changes in the communal standard of living. He perceives the increase in communal consumption (and cites the Hutterites as describing it thus) as a natural result of economic prosperity, rather than a change in policy on consumption. The higher standard of living is framed as a closer approximation of an ideal; achieving that ideal earlier was not forbidden but financially impossible. Resources that were formerly required exclusively for agriculture have been freed by mechanization and prosperity for use in improving the standard of living for the community. This reallocation of resources is seen not as a new development or as a change in values, but as an improvement within the group's beliefs. The resources reallocated include labour as well as money and material goods (1975:124-126). This explanation of the reasons for an increase in group consumption is fully consistent with the priority system first described by Deets, in which agricultural developments take precedence over the standard of living, and shared aspects of consumption are improved before personal aspects (1939:51).

This 'social ecology' approach attributes many other changes to the adaptation to economic necessity. Economic specialization, required by the economic climate in which land is difficult to acquire and agricultural competition requires heavy capital investment in farming, has reduced the size of colony considered to be large enough. Fewer responsible positions are available in a more specialized colony economy, and a smaller number of people can maintain a colony with the same prosperity and standard of living that formerly

required a larger labour base. Specialization also increases the variation between colonies in economy and in traditions, as young colonies abandon some aspects of agriculture to concentrate heavily in others (1975:130-131).

Bennett also notes some changes in social policies resulting from the changing economic and demographic situation in the colonies. He observes more travel and less isolation for the colonies with the use of trucks; contact with other colonies and with the outside world is easier and more frequent. Hutterites are thus better informed about the world in general while remaining closely connected with other Hutterite colonies. It is interesting that Bennett does not note evidence of acculturation in values resulting from this increased contact. The use of complicated technology has created a greater need for information from the outside, and for improved literacy in English and understanding of science in foremen. As a result, high school and technical education by correspondence are sometimes permitted. This is in contrast to the traditional distrust for higher education (education beyond grade eight or nine) as detrimental to the young person's faith and intellectual humility (127).

Increased prosperity for the colony and modernization in communal areas and households have also resulted in changes in the role of women. With greater availability of resources for household improvements, the women have become more assertive in their pressure for such improvements as indoor plumbing, improved kitchen technology, and the right to prepare some food in the homes. Moving the bathing facilities and some snack preparation to the home from communal facilities strengthens the role of the nuclear family household; although much of the Hutterite's day is spent in community activities, more time is spent in the home than previously, and there are more variations in behaviour between households in a colony (127-128). Bennett attributes the possibility for

such assertion of the family and particularly of the women to the increase in resources available for domestic economy.

The changes Bennett describes he attributes to economic changes; the Hutterite economy has developed along with that of the market economy to which they contribute, and has been modified by the requirements of that economy. The way in which economic developments have proceeded in the colonies, however, is directed by deliberate measures to remain true to Hutterite beliefs and traditions. Thus changes originate in external environmental pressure, but proceed in ways that are internally directed. Many of the changes that Eaton (1952) and others attributed to acculturation, or borrowing directly from mainstream North American culture, Bennett describes as resulting naturally from the way in which prosperity and technological change are handled by the Hutterites. Technology changes, consumption increases, and families become slightly more autonomous, but the colony and Leut authority structures remain intact and the principles of communalism and austerity continue to govern behaviour.

Bennett's social ecology takes into account the external pressures of economic change and development and of the flow of information from the outside world into the colony, while allowing for the influence of internal pressures such as the force of tradition and belief, and the desire of colony members for improvements in the standard of living. Bennett makes a distinction between changes that involve variation in the details of the implementation of rules, and those that involve an alteration in principle. The former are permitted, although cautiously, while the latter are resisted strenuously. He maintains that the changes that have occurred fall into the first category, and that they have been the way in which the Hutterites have adapted

their unchanging belief system to the constantly changing natural, social and economic environment.

C. Sociology

Two Canadian sociologists have approached the topic of cultural or social change among the Hutterites from very different approaches. Edward Boldt (1978, 1979, 1980) approaches the subject with a view to social cohesion and the maintenance of cultural distinctiveness. The key concept by which he explains the persistence of Hutterite cohesion and distinctiveness is that of 'structural tightness'. This 'tightness' is defined as the degree to which roles in a society are "imposed and received", rather than "proposed and interpreted" (1980:391). In other words, he claims that Hutterite roles are imposed by society and received by the individual; the individual has very little latitude to negotiate or reinterpret his or her role. Conformity to imposed roles takes the form of "doctrinal conformity", in which the outward professing of orthodox belief takes the place of internalized belief, and in fact often conceals inward dissension (1978:357). Boldt identifies two kinds of change that are possible within such a structurally tight system: those which are initiated and imposed by those in authority, consisting of altered role expectations, and those which involve an increased interpretability of roles (1979:22). Traditionally, changes would take the first form; decisions made by the Leut council or ministers would be imposed on the colonies and on individual members. With a loosening of structural tightness, change would take the second form, as individuals come to regard their roles as comprising a wider range of acceptable behaviour.

Boldt holds that this structural tightness is established and maintained as a response to hostile external pressures. Tightness is essentially a defensive mechanism to resist persecution and pressure to assimilate. When external

hostility decreases, structural tightness also decreases as the need for it becomes less urgent (1980:394). In support of this contention, he cites historical evidence of the formation of Hutterite society during a period of religious persecution and wars, and the subsequent relaxation of many principles during a period of religious tolerance and peace in Russia. Changes in consumption such as fashionable clothing and decorative furnishings, and changes in the frequency of travel and outside contacts are cited as present-day evidence of the relaxation of structural tightness in the present period of tolerance and friendly relations with the outside world (393-394). Boldt also refers to the reluctance of Schmiedeleut ministers to enforce the *Leut Ordnungen* as evidence of shift from authoritarian control to greater interpretability of roles (395).

There are several problems with the structural tightness model as an explanation of change in Hutterite society. Not least is the problem of the completeness of Boldt's historical evidence. Although the Hutterite faith was forged during a period of persecution, the group maintained thriving colonies with strict adherence to communal principles during the sixteenth century in Moravia, where they were tolerated and even encouraged by the landowners. During the period of persecutions and migrations that followed, the community of goods persisted on an emergency basis as a solution to chronic poverty, but was not fully organized and thriving as it had been until reorganized in Russia shortly prior to the Hutterites' emigration to North America (Stephenson 1991:38, 44-45). It is thus an oversimplification to suggest that the Hutterian way of life can only be maintained under external hostility.

Boldt's claim that the traditional pattern of change is imposed by the authoritarian elite upon inwardly dissenting but outwardly orthodox rank and file members is also oversimplified. First, it denies the possibility of 'attitudinal conformity', or faith, in individual Hutterites by suggesting that the appearance

of faith is produced to satisfy group expectations; that values feigned by the majority of individuals are somehow maintained and imposed by an aggregate of these individuals (1978:359). It also ignores the process of informal consensus that governs most traditions and colony decisions, and precedes any policy discussions by the Leut council; and discounts the importance of the vote at each colony that follows the formulation of any new rule. Decisions that are enforced by the ministers are made in effect by all colony members, although sanctions may be required to enforce the official position in cases of deviation from the consensus. There is also a range of variation allowed to each colony in the application of the rules. The roles of Hutterite colony members are thus negotiated and reinterpreted by the entire group on a constant basis, and are flexible to changing needs and pressures, rather than varying only at the discretion of the ministers, as Boldt suggests.

Attributing changes to variations in structural tightness also negates the possibility of any other internal or external forces to motivate or resist change. Contrary to Boldt's findings, other researchers have found that religious belief, kinship ties, and economic pressure, to name a few, are forces that inform and guide decisions made as to role expectations and to the practical application of the rules.

Karl Peter (1987) has an approach that combines elements of controlled acculturation, social ecology, and Boldt's structural tightness. He attributes changes to various sources: to the internalization of values from the surrounding society, to technological changes and modernization, and to an increase in the interpretability of 'grey areas' or areas where a range of variation is tolerated (174-176, 200). The changes he notes include many of the same changes reported by other researchers: modernization in the standard of living (203), a tendency for individuals to accumulate personal property (178), growing assertiveness of

women in demanding household improvements (203), economic specialization of colonies (186). He also finds that these changes are producing changes in values. For example, Peter sees in the tendency to accumulate personal property a relaxation of the strict rules against such accumulation. He also maintains that the changes towards economic specialization are resulting in a movement away from traditional farming knowledge and towards higher education and creative innovation.

Many of the changes Peter describes have been corroborated by other researchers, and in fact have been noted several decades prior to Peter's research. Many of the changes, particularly acquisition of personal property and adornment, were first described by Deets (1939), and as such, could be seen as part of the chronic struggle between Hutterian belief and the temptations of wealth and individualism. Peter's description of innovation and flexibility in Hutterian agricultural management as recent developments in response to the necessity for economic specialization discounts the importance of cautiously controlled creativity in the Hutterites' continuous adaptation to the wider market economy. Finally, his explanation of the changing role of Hutterite women as a struggle for equal status to men, and for a release from second-class status indicates a fundamental misunderstanding of the relationships between men and women in Hutterite society (Peter 1987:199). These relationships, although outwardly patriarchal, are based on complementarity of roles and on mutual care and respect. Women are no more restricted in their choice of roles than are men. Hutterite women, although they do not vote on official policies, are included in the informal consensus process, and have particular influence in lobbying for changes in household matters. The household changes Peter describes are more readily accounted for by the system of priorities in development, as discussed most fully by Bennett (1975).

D. Evolution

The evolutionary perspective in studies of Hutterite culture change is unlike the other perspectives in that it is not focused on material changes or even primarily on social cohesion. This perspective looks at the development of Hutterite culture through its emergence and history, and relates that long-term development to smaller scale evolutionary development in the lives of colonies and individuals. Two researchers have discussed Hutterite culture from different kinds of evolutionary viewpoints.

Paul Diener's (1974) perspective is one which owes much to Leslie White and through him to Marx and Engels. He situates the emergence of Hutterian culture within the turmoil of the transition from feudal to capitalist economy in Europe, as a radical reaction against the worst abuses of emerging capitalism. The rise of the urban merchant class in the fifteenth century involved a transition from social relations based on a divinely inspired hierarchy for the common good to those based on profit and private enterprise, and from agriculture to manufacturing and trade (Diener 1974:609). Within this economic climate and the religious and social turmoil of the Protestant Reformation, the poor were deprived of a subsistence wage and of the support networks that had existed in feudal society. It is Diener's contention that Hutterian culture arose as a reaction of the poor against oppression and further impoverishment caused by the emergence of capitalism³. Using a social plan based on the medieval (feudal) idea of work for the common good, they withdrew from capitalist society and established revolutionary anti-capitalist communes in peripheral areas (612). Diener portrays the Hutterian faith as little more than an excuse for communism;

³ In fact the early converts to the Hutterian faith included noblemen, priests and monks, and tradesmen along with the poor labourers, widows and orphans (Hostetler 1974:42, Stephenson 1991:39).

the withdrawal from the church as incidental to withdrawal from capitalist social relations.

According to Diener, Hutterite culture has remained essentially unchanged though nearly five centuries of diaspora (615). Although the Hutterites as a group have undergone dramatic demographic, technological, economic and environmental changes, their basic plan for harmonious communal living he sees as unchanged since its emergence from the turmoil of the Reformation (607-608). This survival and persistence he attributes to their ability to occupy a particular evolutionary niche at the periphery of expanding capitalist economies.

There are several problems with Diener's static view of Hutterian development. The first is that he equates the persistence of communal living among the Hutterites with a lack of change in their social system. Persistence need not in fact mean lack of change. Social systems do not emerge fully formed and then remain unchanged for centuries, they develop over time and undergo modifications. In discounting the importance of demographic, technological, economic and environmental changes, as well as those deriving from cultural processes, Diener underestimates the amount of change in Hutterian social structure resulting from interactions between culture and environment in shaping the evolution of their plan for harmonious communal living.

Another important problem with Diener's analysis is discounting of the importance of faith in the evolution of communal living. When belief meant death for most converts, it cannot have been a mere excuse, a "clothing in religious shibboleths" (Engels, quoted in Diener 1974:612) of a class struggle for the thousands of *Täufer* who accepted torture and death joyfully. Diener is presenting in Marxist communist terms a group whose communism is fundamentally and necessarily Christian.

While Diener gives an analysis of evolution in the short term, of one evolutionary event followed by centuries of equilibrium, Peter Stephenson (1991) gives a more detailed analysis of the evolution of Hutterite culture through its historical development, particularly of the development of the process of colony fission, and on a smaller scale in cyclical changes occurring within colonies at the present time. Unlike Diener, Stephenson attributes primary importance to belief in shaping Hutterian culture, and in developing the communal system through internally and externally driven cyclical changes. While pointing to the Hutterites' origin in the turmoil of the Reformation, Stephenson sees their development as based primarily on belief, rather than on economic struggles. With the rise in literacy and the translation of the Bible into German, the common person was given direct access to biblical authority. The radical *Täufer* beliefs were based on emulation of the example of the life of Jesus and of the early church as described in the gospels and in Acts. Believer's baptism, communal living, and separation from secular government were all based on the newly accessible scriptural authority. Free choice in baptism, and thus in membership in both church and state, challenged the authority of those intimately connected bodies, and constituted at once heresy and treason (Stephenson 1991:52). The choice of adult baptism resulted in persistent persecution by Catholics and Protestants alike, alternating with brief periods of tolerance, for several centuries. The organization of communal life was organized as dictated by beliefs; as the Hutterian culture coalesced around the central act of believer's baptism, this initially anarchic act became integrative (214).

Stephenson chronicles the evolution of the *Bruderhof* (brethren-farm, or colony), initially a large aggregation of converts, characterized by intense missionary activity and a wide diversity of agricultural and craft-production occupations. The basic pattern of colony organization was established in the

early *Bruderhof*, with a central treasury and foremen for each trade, one preacher for each *Bruderhof*, and a council of preachers to oversee matters of doctrine (39-42). Communal living evolved through several episodes of severe persecution and migration. The migrations saw the cessation of missionary activity, the transition from expansion through conversion to natural increase, the abandonment of non-agricultural trades, and the concomitant reduction in the size of the colony.

An analysis of this large scale evolution of Hutterian culture is accompanied by a detailed examination of the evolution of modern colonies through feedback between demography and culture in a cyclical pattern of colony growth mediated by the ritual of baptism. Rapid population growth combined with the limits on the number of responsible jobs available to baptized men creates the necessity for colony fission. Frequent division keeps the colony population at a manageable size with enough work for all. The fission cycle is governed by demographic and economic growth, and demographic and economic variations during the life of a colony are in turn generated by this cycle of growth.

At the early stage of colony growth, the new colony is characterized by a small, somewhat overworked population, rapid population growth and quick succession of individual men through baptism, marriage, and promotion to responsible jobs. Farming technology changes rapidly, progressive attitudes towards such change prevail, and consensus over economic decisions is high. At the late stage, the established colony has a large population, responsible jobs are filled, and there are few opportunities for occupational advancement. Baptism and marriage are delayed, and population growth slows. Technological change also slows, attitudes among leaders and foremen become more conservative, and consensus begins to break down in disputes over employment and the

distribution of work and resources. At this point, the colony begins to prepare for fission (215).

Stephenson identifies baptism as the index to and mediating factor in this cyclical growth process. Changes in the average age at baptism, the frequency of baptism ceremonies, and the number of individuals baptized at each ceremony result from the reduction in opportunities to demonstrate the accountability signaled by baptism through responsible employment for men, and engender further changes in the rate of growth. Fission preserves colony size and structure while allowing each individual to participate in communal growth and rebirth. The life cycle of individuals - birth, death and rebirth as a child of God in baptism, then death and rebirth in heaven - is reproduced in the life of the group, in an endless cycle of birth and rebirth as colonies reproduce themselves (198, 213).

The periodic oscillations integral to the fission process, although for the most part homeostatic, also generate change through small incremental changes over many cycles. Adopting labour-saving technology at the early stage of colony growth initially solves problems of overemployment, but can later generate underemployment as the labour force grows. Thus with each increase in technology to improve individual productivity, the amount of labour required becomes smaller, and pressure to divide comes relatively more quickly (118). A reduction in employment opportunities can also reduce the rate of population growth as baptism and marriage are delayed, and increase the possibilities for attrition through defection of frustrated young people (130). With the increase in technology comes greater reliance on mechanical occupations (electrician, mechanic, carpenter), and thus an increase in the status of these positions relative to those in agriculture: a shift in the colony status hierarchy (122). These changes are most noticeable in the life cycle of each colony, and are reversed on

colony division, but are also reproduced in small incremental changes with each cycle.

In Stephenson's portrayal of Hutterian evolution, their static appearance is illusory. The communal pattern remains, but not unchanged. Ideology and rituals have also been somewhat modified over the centuries, and the basis of social organization has moved from conversion to lifetime teaching and belief. Stephenson depicts Hutterian evolution through cyclical migration episodes, and now through growth and fission episodes, as driven by internal and external forces: faith and the individual and community decisions regarding baptism, group consensus and dissension, and demographic change from within, and tolerance or hostility, economic opportunities, and the availability of land resources from without. Individual decisions affect the whole, and the whole in turn affects individual decisions.

The literature on culture change among the Hutterites contains several excellent explanations of the official processes of incorporating policy changes into rules and traditions, and of changes in technology, demography, ritual, and the communal principle. These accounts demonstrate how Hutterite culture adjusts to changes in the world around it and to changes in its own needs and circumstances by balancing continuity of belief and tradition with innovation in the daily practical applications of those beliefs and traditions. This balance is maintained by group processes and by individual decisions. All of the accounts considered here emphasize social continuity. In most, innovation and variation are discussed only as they pertain to technology and to the limits of acceptable behaviour. The area left unexplored by these approaches to change is that of innovation and change that occur within the limits of the acceptable.

Variation within the rules and traditions is alluded to often. The consensus as to the limits of behaviour is maintained not by rigid adherence to a static code of behaviour, but by constant renegotiation of the limits of acceptable variation through feedback between individual action and group consensus. As this consensus is subject to constant redefinition, it is achieved with reference to wide variation between and within colonies, in areas that are not considered threatening to spiritual well-being or to social cohesion, and to change over time that does not come to the attention of the official rule-makers. With the exception of the evolutionary approaches, social research has been confined mainly to the areas of change that are recorded in the *Ordnungen* and has not examined the changes that are considered unimportant for social policy and for spiritual authority.

However, changes in daily behaviour that fall within the rules can have a significant impact on the lives of individuals and of colonies. From a perspective of concern for the health of individuals and the impact that this has on the functioning of colonies, it becomes important to consider changes in attitudes and behaviour that impact on health. In much of social research, the measures of change in Hutterian colonies have been social cohesion and viability as a distinct cultural group, and the level at which changes are enacted is that of the collective, whether colony, Leut, or the Hutterian Brethren as a whole. With the notable exception of Stephenson (1991), little attention has been paid to decisions and actions of individual Hutterites and the impact that these have on the collective. A health-centred perspective will allow a different measure, that of individual and collective health, to indicate the extent of and possibilities for changes that work with the existing beliefs, rules and social structure to benefit the Hutterites, as individuals and as a collective.

Chapter 3. Public Health and the Hutterites

The Hutterites have been studied as much during this century by medical researchers as by anthropologists. The majority of the medical literature pertains to genetic conditions, although there has also been some attention to aspects of public health and to mental health among the Hutterites. There have also been a number of studies of the impact of lifestyle and cultural practices on the epidemiology of such diseases as cancer and cardiovascular disease which have genetic and behavioural components. As my primary interest is in the behavioural components of cardiovascular disease, I will situate a more detailed review of the literature on cardiovascular disease among the Hutterites within a briefer general review of the medical literature on genetic and behaviourally influenced illnesses in the Hutterites, and of their health care practices and response to health promotion.

I. Genetic Studies

The predominance of genetic studies in the medical literature on the Hutterites is largely due to the suitability of the Hutterite population for genetic research. Genetically the Hutterite population consists of three isolate populations by virtue of Leut endogamy. Their conservative sexual behaviour, high fertility within marriage, and interest in maintaining family histories mean that biological descent and relationships are easily and accurately ascertained. Relative homogeneity of lifestyle also reduces the confounding effect of behavioural variation on genetic research.

Chronologically and conceptually, genetic interest in the Hutterite begins with Arthur Mange's (1964) study of inbreeding in Schmiedeleut Hutterites. Mange found a high degree of inbreeding resulting from endogamy within a

small founder group; the average marriage occurs between second cousins (119). Because of efforts made by the Hutterites to select mates as distantly related as possible, this rate of inbreeding had remained constant for several decades. Mange found that the degree of inbreeding in a marriage had no influence on fertility (120). A later series of studies correlating HLA (human leukocyte antigen)⁴ and other antigens with individual fertility indicated that couples sharing antigens had slightly reduced fertility when compared with couples who do not share HLA antigens (Kostyu 1989, Ober et al. 1988, 1985, 1983). Thus inbreeding may have some effect on fertility by increasing the likelihood of antigen sharing between couples.

A study of congenital anomalies among Alberta Hutterites (Lowry et al. 1985) found that the Hutterites have the same rate of anomalies as the general Alberta population, but that the types vary in distribution. Among the Hutterites, monogenic (single mutation genetic) anomalies were more frequent, but multifactorial anomalies (with genetic and environmental components) less frequent than in the general population. This suggests that although genetic anomalies may be more frequent because of the small gene pool, this effect is offset by the benefits of the Hutterian lifestyle: home-produced food, moderate alcohol consumption especially among women, and the prohibition of tobacco smoking are cited by the authors as beneficial. Despite the genetic effect, Lowry et al. found no difference in inbreeding coefficient between the Hutterite 'case babies' and the Hutterite control group of healthy infants. Thus inbreeding may have some effect on the frequency of monogenic anomalies on a population level by increasing the likelihood of couples sharing recessive mutations, although it

4 A part of the major histocompatibility complex, the HLA system is comprised of a group of closely linked genes on chromosome 6, inherited in a codominant fashion, and responsible for the formation of tissue antigens involved with histocompatibility and in determining self from non-self.

does not have a demonstrable effect in individual cases. Gene sharing may also influence the incidence of other medical conditions with a genetic component, such as cardiovascular disease and some cancers, discussed below.

II. Mental Health

The highly ordered and harmonious lifestyle and strong faith of the Hutterites have long been credited with bringing about a high sense of security in members, and with greatly reducing the incidence of mental illness (Deets 1939:2). In the nineteen-fifties a research team headed by Joseph Eaton and Robert Weil undertook a psychiatric survey of Hutterites in an effort to relate cultural factors to the incidence of psychiatric disease (Eaton et al. 1951, Eaton and Weil 1956). They note a low incidence of most forms of mental illness, including schizophrenia, psychopathy, and personality disorder. Eaton and Weil identified most mental illness among the Hutterites as a variant of manic-depressive reaction: the condition known to the Hutterites as *Anfechtung* (temptation), an acute depression resulting from temptation to sin (1956:101).

Bert Kaplan and Thomas Plaut (1956) give a more detailed description of the uniquely Hutterian condition of *Anfechtung*. They emphasize that this condition is not the usual cyclical manic-depressive illness. *Anfechtung* takes the form of a sudden feeling of being overcome with guilt over sin, withdrawal from society, and dwelling on one's sins. Recovery usually follows confession to the minister. As such the Hutterites consider *Anfechtung* a spiritual rather than a psychological illness. Kaplan and Plaut attribute *Anfechtung* to anxiety and guilt feelings from the conflict between striving to achieve the ideal state of *Gelassenheit* (serenity) and realizing the impossibility of achieving perfection (68). This condition is treated by the minister who assists the sufferer in his or her struggle with the devil and in reintegrating with the religious community (70).

Stephenson (1979) connects *Anfechtung* with *Pshrien* (standard German *Beschreien*, conjuring or evil eye). *Pshrien* results from strong feelings of desire, admiration and envy directed at another person, and implies idolatry, or elevation to perfection of one of God's imperfect creatures. A person who has been '*pshried*' suffers from spells of acute anxiety, leading to disgust at having been the object of idolatry, and guilt over having invited such admiration. Disgust and guilt lead to withdrawal from the community, and to *Anfechtung* (261). *Anfechtung* has also been connected with guilt over sins that were unobserved by the community, and thus do not fall under social control. These may be sinful deeds committed out of the sight of colony members, or sins in thought only (Eaton and Weil 1956:104, Kaplan and Plaut 1956:68-69). Stephenson describes these problems of guilt, anxiety, and depression as the individual psychological cost of a system of social control based on group criticism and individual conscience. This individual cost is necessary to ensure harmony and security for the group as a whole (1979:261).

In the area of general mental health, Kaplan and Plaut give several indications of stress arising from conflict between individual impulses and socially acceptable behaviour or attitudes. They suggest that aggression, disobedience and acquisitiveness are all impulses imperfectly controlled by the social system. They also found indications that impulses which cause much of the conflict documented by Western psychiatry seem to cause no psychological problems for Hutterites; sexuality, competitiveness, and the balance between autonomy and independence all appear to be successfully managed by cultural means. The conflicted areas produce anxiety, guilt, and a sense of isolation, expressed as *Anfechtung* if serious (1956:79-101). Despite these areas of conflict, Kaplan and Plaut conclude that Hutterite mental health is generally good, as

seriously antisocial or disturbed states are rare, and most psychological problems can be cared for successfully within the community (102).

Eaton and Weil (1956) also noted differences between North American and Hutterian community responses to mental illness. In Hutterite colonies, psychological problems are treated as illnesses requiring compassion and special treatment for the sufferer. Psychiatrists and mental hospitals are eschewed in favour of home care and spiritual counselling by the minister. No stigma is attached to the illness or to the sufferer; recovered sufferers may later achieve full colony responsibilities (165-167). The overall attitude towards mental illness was described as compassion for and forgiveness of human failings. Within this supportive environment, Eaton and Weil note that the outlook for recovery or at least for social functioning is good (175).

The Hutterian lifestyle thus provides protection from some sources of stress and conflict and increases group harmony and security, but cannot ensure a completely stress-free life. Conflict is still implicated in the struggle between spiritual strivings and human failings, and in resisting individual impulses to maintain conformity. Although the connections between psychological states and physical illness have not been clearly identified, it is evident that the Hutterian lifestyle cannot completely eliminate any such effects.

III. Cancer Incidence

Cultural practices and religious beliefs have the potential to have a strong influence on individual health, and on the epidemiology of various diseases. George Jarvis and Herbert Northcott (1987) identify several ways in which religious beliefs affect the risk of illness and death. Belief enhances health when it prescribes healthy behaviours such as healthy eating habits, conservative sexual behaviour, and concern for the treatment of one's body, and when it

places people in groups that provide both psychological and practical support in times of stress and illness. On the other hand, beliefs may prescribe behaviours that threaten health, or prevent believers from seeking appropriate treatment for illness (Jarvis and Northcott 1987:813). In the case of the Hutterites, their religious tenets and the cultural practices that result from them have been associated with the distribution of certain cancers.

Two studies, one of Canadian Hutterites (Morgan et al. 1983) and one of all Hutterites (Martin et al. 1980) found a reduced incidence of cancer when compared with the general populations of Canada and the United States respectively. Most of this deficit is accounted for by the very low incidence of lung cancer, and of other cancers associated with smoking. Both groups also found a marked deficit of cervical cancer in women, attributed to conservative sexual mores (Morgan et al. 1983:8). The most frequent cancers found were stomach cancer, leukemia and breast cancer. A combination of genetic and environmental factors is suspected in the incidence of these cancers: deaths from childhood leukemia were associated with an inbreeding coefficient higher than the Hutterite average, and stomach cancer was noted to cluster in families. The tendency of families to reside in the same colony makes it difficult to determine whether genetic factors or intercolony environmental differences are responsible for the aggregation. In the case of endometrial and breast cancers, several counteracting factors are lifestyle-related: obesity increases, but high parity and low use of exogenous estrogens (birth control pills) decrease the risk of endometrial cancers, and high parity and late age at marriage may also counteract each other in influencing breast cancer (Martin et al. 1980:1112).

Hutterian beliefs thus protect the Hutterites from some forms of cancer by prohibiting tobacco smoking and by regulating sexual behaviour and reproduction. On the other hand, endogamy and the resultant inbreeding may

increase the risk of childhood leukemia for some. The more indirect role of community support and security is more difficult to ascertain, as psychological factors have not been conclusively linked to the development of different cancers.

IV. Cardiovascular Disease

A substantial portion of the health literature on the Hutterites is devoted to cardiovascular disease, a complex aspect of health with many factors, including genetic inheritance and behaviour. It is of great interest to the medical and public health community largely because it has become so prevalent, yet is treatable and possibly preventable through changes in behaviour. Thus there has been much interest in the recent medical literature in behavioural aspects of cardiovascular disease and in evaluating the prevention of and the contributions of behaviour and genetics to this disease among the Hutterites.

Cardiovascular disease is an umbrella term that refers to many different diseases of the heart and arteries. These diseases include coronary heart disease (heart attack, CHD), stroke, atherosclerosis, congestive heart failure, angina, and hypertension. Although separate conditions, these illnesses are interrelated, and contribute to each other. Hypertension, for example, increases the risks of heart attack, stroke, and congestive heart failure (Shank 1979). In this thesis, however, I am interested in cardiovascular disease (CVD) in its broadest sense, as a group of related conditions with similar etiology and risk factors and with multiple interactions.

A. Cardiovascular Disease Risk Factors

CVD in general is a disease of affluent, industrialized societies (Blackburn 1979:310). Thus prosperity and modernization have brought CVD to the Hutterites in increasing numbers as they have to other North American groups.

CVD is the leading cause of death in Canada, and also causes a substantial amount of disability (Ottawa 1987:7). The cause or causes of CVD are unknown, but many risk factors have been associated with the disease, including both modifiable and non-modifiable factors. The non-modifiable factors are age, sex, and family history: the risk for CVD increases with age, is higher in males, and often clusters in families (Brunt 1989:27). Although these factors are important for identifying individuals at risk, they are of limited use in treating and preventing incidence of CVD. Treatment and prevention therefore focus on several modifiable risk factors. These include elevated serum cholesterol, obesity, diabetes, a problematic diet, tobacco smoking, and a sedentary lifestyle.

Elevated levels of serum cholesterol pose a risk for atherosclerosis and CHD. The total cholesterol count includes several types of cholesterol; low density lipoprotein (LDL), high density lipoprotein (HDL), and triglycerides. Elevated LDL and total cholesterol counts indicate increased CVD risk, while HDL provides some protection against atherosclerosis (Olson 1979). Thus an elevated LDL to HDL ratio is also problematic. The relationship between serum cholesterol and CVD is significant, as elevated cholesterol has been shown to increase the incidence of CHD dramatically (Stamler 1979:58).

The link between obesity and CVD has not been established as a direct one, but a body mass index (BMI) over 27 kg/m² has been found to be associated with incidence of angina and hypertension (Kahn 1991, Shank 1979). It is still unclear whether obesity is a direct risk factor, or whether the increased risk is due to the associations between obesity and other risk factors such as elevated cholesterol, diabetes, and a sedentary lifestyle. There is some evidence that a central torso concentration of body fat is a better indicator of CVD risk than BMI; an elevated waist-hip ratio is more common among men than women and is associated with both elevated cholesterol levels and diabetes (Brunt 1989:21).

Diabetes mellitus, whether insulin-dependent or non-insulin-dependent, is associated with increased risk of hypertension, atherosclerosis, congestive heart failure, and CHD mortality (Freedman 1988). This is due to the effects of elevated serum glucose, which affects serum lipid levels and promotes atherosclerotic lesions (Little et al. 1979). Successful control of diabetes through diet or insulin treatment is effective in reducing the CVD risk involved with the disease.

Many dietary elements have an influence on CVD, although in many cases the mechanism of the influence is unknown. The foods associated with increased CVD risk are meat, animal fat (saturated fat and dietary cholesterol), refined sugar, and sodium. Vegetarians have lower incidence of CHD mortality than those who eat meat (Phillips et al. 1978, Snowdon et al. 1984). Dietary cholesterol and saturated fat have been shown to increase serum cholesterol and thus increase CVD risk (Blackburn 1979, Gotto et al. 1979). A diet high in refined sugar and low in complex carbohydrates also has a cholesterol-raising effect especially when combined with diabetes or obesity (Little et al. 1979). Salt has been associated with the etiology of hypertension, particularly in a diet low in potassium; and reducing dietary salt is effective in treating hypertensives (Shank 1979:532). There are also some dietary components that have a protective effect on CVD risk. Dietary fibre reduces serum cholesterol, and foods high in dietary fibre have the added benefit of containing more complex than refined carbohydrates (542). The role of alcohol consumption is more controversial. There is some evidence that moderate consumption (2-3 drinks per day) provides protection against CVD by increasing HDL and reducing LDL levels, while abuse of alcohol is associated with hypertension and diabetes (541, Brunt 1989:22).

Cigarette smoking is clearly associated with CVD risk. Many studies have indicated that the risk of CVD is directly influenced by the amount of cigarettes

smoked per day and by the number of years a smoking habit has persisted (Shank 1979:524).

Sedentary lifestyle is the final modifiable risk factor for CVD. Increased physical activity has been shown to reduce obesity, cholesterol levels, and hypertension, as well as improving cardiovascular functioning. Individuals with a more sedentary lifestyle are at increased risk for disability and death due to CVD. It has not been established whether lack of physical activity is an independent factor in CVD risk, but exercise is effective in reducing the severity of other risk factors (538).

Psychological stress is sometimes associated with CVD, but the relationship has not been established conclusively. Stress increases serum cholesterol and blood pressure in the short term, but it is uncertain whether there are any long-term effects (Brunt 1989:24).

These risk factors are not independent of one another, but have significant interactions with each other. Combinations of several risk factors account for a greater overall risk than the sum of the risk factors, so that small variations in several risk factors make for a large increase in overall risk. The interest for public health programs is that conversely, minor reductions in several risk factors can significantly lower the total risk for CVD. Public health therefore focuses on education about lifestyle risk factors, and attempts to reduce risk from the entire lifestyle.

B. The Hutterites and Cardiovascular Disease

Detailed interest in CVD among Hutterites is of recent origin. Early studies give incomplete information or anecdotal evidence of CVD as a problem, but do not discuss prevalence or possible culturally-related risk factors. Data from the nineteen-fifties indicated that Hutterites did not differ significantly in

serum cholesterol or hypertension prevalence from the general North American population (Goldberg et al. 1970). However, more recent investigation has shown that Schmiedeleut Hutterites now have significantly higher blood pressure and BMI measurements compared with other North Americans (Schlenker et al. 1989).

The question of Hutterite CVD prevalence has been examined in a series of studies initiated by Howard Brunt in 1988. Brunt's initial study (1989) was exploratory in nature, surveying CHD among Dariusleut Hutterites and comparing their prevalence with that of other North American and European populations. In this study, Brunt found higher prevalence of hypertension, elevated cholesterol, and BMI over 27 kg/m² than in the other populations. All of these risk factors increased with age. The prevalence of diabetes was approximately 8% for both men and women. Although comparable data on other Canadian populations was not available, the Hutterite prevalence was significantly higher than that of an American population (147). Alcohol consumption was moderate, and very little abuse of alcohol was reported. Cigarette smoking was much less than is found elsewhere; only 3.6% of men and no women reported any smoking, while one third of Canadians are regular smokers (149). Brunt also found that most Hutterites have a sedentary lifestyle. Most reported little aerobic activity whether at work or in leisure time (155). Although Brunt did not find that living Hutterites had a greater medical history of CHD than other populations, he did not include CHD deaths in his data (161).

Many of the risk factors examined by Brunt were found to have a high prevalence among Dariusleut Hutterites. The relative lack of cigarette smoking, however, eliminates a risk factor that is problematic throughout North America. Brunt also surveyed the frequency of consumption of high fat versus low fat foods; high fat foods were found to be commonly consumed, and salt is

frequently added to food at the table (72). However, it is difficult to compare this data with dietary data for other populations, and thus assess the degree of risk attributable to the Hutterite diet.

A second study by Brunt, Love, and ter Keurs (1991) used the Alberta Heart Health Survey (AHHS) protocols to assess the prevalence and awareness of CVD risk factors in Alberta Hutterites (both Dariusleut and Lehrerleut), and to provide results comparable between Dariusleut and Lehrerleut Hutterites and with the general Alberta population. In this Hutterite Heart Health Survey (HHHS) they found that the prevalence of hypertension was still at about 20%. Cholesterol levels were also high, and increased for men and with age (12). Half of the study population had a BMI over 27 kg/m², and 35% had an elevated waist-hip ratio (15-16). These findings are all comparable with those of the earlier study. The incidence of diabetes in the HHHS, however, was lower than in the previous study, about 4% (16).

Alcohol and cigarette consumption were also similar to those found in the first study. Alcohol consumption above the moderate level was rarely reported, and less than 4% reported even occasional tobacco use (14). Physical activity also remained low. Less than half of all participants engaged in leisure time exercise, and most reported exercise of short duration and low intensity (16). Consumption of high fat foods and of salt were not examined in this study.

When compared with the results of the AHHS, the Hutterites were found to have a higher incidence of obesity, elevated cholesterol, and hypertension than the Alberta population (18). Comparison between the Dariusleut and Lehrerleut Hutterites indicated that these three measures were also higher in the Dariusleut than in the Lehrerleut (19). Brunt et al. (1995, 1994) attribute these inter-Leut differences to genetic factors, as the Dariusleut and Lehrerleut have similar dietary habits and exercise patterns. Because of Leut endogamy, the two groups

have distinct gene pools; inter-Leut differences are thus indicative of a founder effect maintained by consistent inbreeding (Brunt et al 1995:519, 1994:302).

The AHHS protocols also examined awareness and control of hypertension and risk factors. When compared with other survey populations, the Hutterites were less likely to be aware of their hypertension or elevated cholesterol, and many were not aware of the role of risk factors in the etiology of CVD (Brunt, Love and ter Keurs 1991:17, Brunt & Love 1992a:364). These results mark the first interest in the knowledge and education of Hutterites regarding CVD and healthy behaviours.

Sixteen months after the initial screening, the participants were given a follow-up survey and a large number reported lifestyle and pharmacological changes to reduce hypertension, including weight loss, and sodium and alcohol reduction (Brunt and Love 1992b). Brunt was encouraged by this evidence that health promotion initiatives could influence lifestyle changes, and initiated a third study, the Hutterite Heart Health Promotion Project (HHHPP) (Brunt et al. 1992) to assess these changes more thoroughly. In this study, Brunt and Stephenson combine medical with ethnographic methods to assess any changes in incidence of CVD risk factors since the initial survey, and to examine cultural contributions to the success of public health initiatives.

The objectives of the HHHPP are to assess changes in physical and laboratory measures of CVD risk factors, in lifestyle contributors to CVD risk, and in the Hutterites' understanding of CVD risk factors; to document any health initiatives that may have taken place in Hutterite communities; and to ascertain how health promotion could be made more effective in Hutterite communities. The study consists of three arms: an epidemiologic survey of 16 colonies found to be at high risk in the previous studies; an ethnographic study of six of these sixteen colonies; and surveys of others, including elders from

those colonies not surveyed in this study, and health professionals who provide medical care to Hutterites. Epidemiologic and ethnographic methods are combined in this study in order to allow the Hutterites to contribute directly to the development of health promotion programs (Brunt et al. 1992).

An important aspect of the HHHPP is the inclusion of a more thorough means of examining the diet, through records of the foods served at meals and snacks, and including where possible information about the ingredients and the methods of preparation of the foods. This information will allow for the assessment of dietary risk for CVD as well as the potential for reduction of risk in this area. In this study we were also looking for culturally appropriate ways to reduce risk in other modifiable areas such as physical activity.

Interest in CVD among the Hutterites has progressed from a concentration on physical and laboratory measures to an inclusion of cultural practices and behavioural variation in studying the prevalence and treatment of the disease. Several aspects of Hutterite lifestyle are of particular relevance to a public health approach to CVD. Hutterites eat communally, sharing food prepared in the colony kitchen; thus colony members share the same dietary risks. The usual diet is high in meat, animal fat, and full-fat dairy foods, and has a sodium-potassium ratio estimated at 4-1, which is high (Rokusek-Kennedy et al. 1987). Physical activity is limited by tradition and religious belief largely to work; leisure activities do not usually include exercise (Hostetler 1974:175). Tobacco smoking is officially forbidden, and in practice is usually limited to occasional smoking by young men (Brunt 1989:6). Alcohol consumption, while permitted, is limited by belief and social sanctions to use as an aperitif. Alcoholism occurs, but is often concealed from outsiders and difficult to ascertain (Brunt et al. 1991:2). Hutterites make full use of public health care in Canada, but their use of

alternative health care options has not been documented. Thus some aspects of Hutterite lifestyle increase, while others decrease the risk for CVD.

V. Medical Practices and Response to Health Promotion

Hutterite medical practices and use of health care are affected by their culture. Hutterites have a traditional respect for physical medicine. Their own traditions include skilled barber-surgeons and the institutionalization of good hygiene since the sixteenth century (Hostetler 1974:54-56), and colony-trained bonesetters, chiropractors, dentists and herbalists still pass their skills down through the generations. They also make use of health care available outside the colony and are not reluctant to seek medical treatment including medication and surgery when necessary (267, Eaton and Weil 1956:166).

Where possible, home health care is preferred to outside treatment; hospitals are used for acute health crises, but not for chronic care. Elderly, chronically ill, mentally ill, and mentally handicapped colony members are cared for at home by family members with the support of the colony. Mental hospitals and nursing homes are almost never used. Caring for needy colony members is seen as both a colony and family responsibility, and a privilege to the caregiver who enjoys a close relationship with the needy relative (Longhofer 1994).

There are both spiritual and practical concerns that motivate Hutterites to seek health care where they perceive a need for it. The spiritual motivation takes the form of the responsibility of each person to care for his or her body⁵. The practical consideration is that individual health or illness has an important effect on the functioning of the colony; each person has a responsibility to the colony as well as to God to maintain his or her body in a healthy condition (Brunt and Love 1992b:109). For these reasons, recommendations from doctors or health

5 Hutterian beliefs regarding the body are discussed more fully in chapter 6.

promotion workers are taken seriously, and behaviour modified if necessary. This has been noted by Brunt and Love in their hypertension screening program (1992b), and by public health nurses who work with Hutterite colonies on a long-term basis (Farthing 1994:24). Medical and public health intervention can thus have a significant effect in helping Hutterites to identify behavioural health risks and in prompting them to modify their behaviour.

The medical and public health literature contains several instances where aspects of culture have been shown to influence health, in a complex interplay between genetic factors and behaviour. These factors are closely intertwined for the Hutterites, who share a common biological and cultural heritage with all other Hutterites, and more closely with members of their own colony. The benefits of healthy behaviours include a reduction in some kinds of birth defects and cancers, and some reduction in CVD risk. These benefits derive from behaviour dictated by Hutterian beliefs and the accountability of each member to the community. There are also some risks inherent in Hutterite lifestyle, resulting from a diet high in animal products and sodium, and from a lack of aerobic physical activity.

The HHHPP was designed to identify ways for the Hutterites to reduce health risks in behaviour. The experience of public health nurses suggests that it should be possible to modify behaviour without challenging individual or group adherence to rules, the Hutterian faith, or Hutterite cultural cohesion and integrity. The following chapters will explore how the Hutterites participating in the study respond to changes in health and other circumstances by modifying individual and collective behaviour.

Chapter 4. Methodology

I. Data Collection

The data for this thesis were collected as part of the ethnographic arm of the Hutterite Heart Health Promotion Project (HHHPP). Fieldwork and interviewing methods were thus selected in accordance with the goals of that project to document CVD-related health promotion initiatives in Hutterite colonies and to identify ways in which health promotion could be enhanced in the Hutterian community. The information gathered during the HHHPP indicated a need for a more thorough understanding of the process of change at the individual and colony levels within the Hutterian community than is provided by previous ethnographic works, which focused on cultural cohesion, group adaptation and technological change at a more general level. A deeper understanding of change processes contributes both to the goal of the HHHPP to enhance future health promotion activities in Hutterite colonies, and to our understanding of how the general processes of change described in the literature are enacted by colonies and individual members.

A. Interviews and Fieldwork

The fieldwork portion of this study took place during a six week field trip to six Alberta Dariusleut colonies during June, July and August, 1994. A team of two researchers, one male and one female, visited each colony for a period of two weeks. There were two research teams, consisting of myself, Peter Stephenson, Jennifer Hopkinson and Hartmut Krentz in various combinations. The total time spent in the field was twenty-four person-weeks. The research team members lived with host families in the colony, and participated in appropriate colony work and activities according to their gender, age, and skills. In addition to

observing and participating in colony life, the researchers conducted interviews of key informants.

The interviews for this study were informal and open-ended. They were based on a protocol of topics for discussion rather than on a standardized questionnaire. This format has several advantages: it allows the respondents to expand on answers to questions and thus take part in directing the interview; it permits the continuation of the interview through several conversations and the elaboration of questioning in response to ideas that emerge during the interview; and it allows the interview format to be tailored to the situation and respondents. Many interviews took place during leisure time, when Hutterites gather in small informal groups to 'visit'. Thus most became small group discussions as other colony members added their ideas to those of the 'official' respondent. This small group discussion format is more comfortable for the Hutterites, and they are often more communicative in this setting than in a one-on-one interview following a standard questionnaire. The decision to tape-record or transcribe the interview was left at the discretion of the respondents.

The discussions included subjects initiated by the researchers and those brought up by the respondents. There were two protocols of topics for interviews: the general protocol for use with all colony members, and the cooking protocol for use with head cooks and other women (see Appendix A). The general interview protocol topics included family history of CVD, diet, exercise, lifestyle changes, and problems or successes encountered in attempts to change. The cooking protocol also included topics regarding the eating preferences of men, women and children, common preparations, seasonal variations in cooking, favourite recipes, changes in cooking, and the relationship between diet and health. Most of these topics elicited information relevant to the study of lifestyle change specifically as well as to the other goals of the HHHPP.

Observations and participation in colony life added to the information available in interview form. Many aspects of lifestyle that affect health were not discussed in interviews, but became evident through observation and informal discussion with colony members. Some aspects of colony dynamics, such as problems of poor leadership and colony factions, are not appropriate topics for open discussion, but also become evident through participation in colony life. Their influence on possibilities for change is more readily evident through observation than through questioning. Informal discussions, recorded as field notes by each researcher and shared with the research team, provided a means of contextualizing change as it was discussed in the recorded interviews.

B. The Sample

The sample included in the study consisted of eighty-seven adult members of the six colonies. These six colonies were selected from the colonies involved in the epidemiologic arm of the study, on the basis of the results of that arm. They were chosen to include colonies with high, intermediate, and low levels of reported change in lifestyle. Five of the six were within a short distance of Lethbridge, Alberta; the sixth was more isolated, but was selected on the basis of anecdotal reports of change. Participation in the study was voluntary for each colony, as well as for individual respondents.

All six colonies were Dariusleut colonies, although the epidemiologic arm of the study included both Dariusleut and Lehrerleut colonies. There were a number of reasons for limiting the ethnographic study to one Leut. The Dariusleut have a much higher prevalence of CVD risk; therefore it is more critical to examine their behaviour for potential public health assistance. The ethnographic study was also designed to find variations within common rules, as these show the potential for change in behaviour without challenging Leut rules.

Were both Leuts to participate in the study, differences between colonies might arise from differences in Leut rules or customs that would be more difficult to apply across Leut boundaries.

As the colonies ranged in size from sixty-eight to one hundred and fifteen members, it was impossible to conduct in-depth interviews with all members of each colony, or for the research team to become intimately acquainted with all members in the limited time available. However, team members did meet as many colony members as possible, and conducted interviews with as many people as time and work schedules allowed. Between ten and twenty adult members (aged 23 to 84) were interviewed in a total of sixty-four general and twenty cooking interviews. Colony ministers, financial managers, and head cooks, as the people with authority over colony decision-making, were sought out initially. We were also interested in interviewing any other available adults, particularly those who expressed an interest in health or in health promotion. Unbaptized members were not interviewed, as they have very little influence over colony decisions.

At least one minister was interviewed at each colony, and both at three colonies. Work responsibilities and visits to other colonies made it impossible to interview the financial managers of two colonies, and the head cook at another. Where other adults were concerned, the sampling was largely accidental. Any adult member who was willing and available was interviewed. In some cases the sampling was influenced by previous respondents who arranged for the researchers to interview other colony members that they felt would be interested or helpful. This opportunistic sampling may have introduced bias into the sample by selecting for those colony members who are interested in health-related issues. As it was more important for the purposes of the study to elicit as

many ideas as possible than to ascertain the numbers of people espousing each view, this was not felt to be a weakness in this study.

The researchers resided on the colonies with a host family. Although much of the day was spent in group activities, during leisure time the researchers were often treated as guests of the host family, and therefore had the closest contact with the close kin of that family. This did not preclude the researchers from associating with other colony members, but did introduce some bias in the availability of some groups for interviews, and in the frequency of contacts with different colony factions where these existed.

The nature of the sample imposed limitations on the possibilities for analysis. Because of the accidental nature of participation, the number of people interviewed at each colony does not constitute a representative selection of the colony or of its population structure. Our efforts to seek out people with an interest in health may mean that the numbers of respondents with positive or negative attitudes towards health promotion are disproportionate. A sample of six colonies can also not be taken to represent the more than eighty Dariusleut colonies in Alberta. This sample was intended not as a representative group, but to elicit as many different ideas about health promotion and lifestyle as possible.

II. Analytical Methods

The methods used in analysis were determined by the nature of the data and by the goals of the HHHPP. Detailed statistical analysis of responses was not feasible for a number of reasons. The demographic bias in the interviews meant that there are no meaningful demographic subsets in the sample population; any attempt to make subdivisions results in subsets too small for statistical significance. The non-standard format of the interviews made for responses that are not quantifiable as questionnaire responses would be. The

most important consideration was that the goal of the HHHPP was to search for evidence of behaviours, values, attitudes, and motivations: all concepts which are not readily quantifiable. The frequency of discussion is not the best measure of the cultural relevance or importance of an idea, nor of the feasibility of a suggested change; many important ideas were mentioned by only a few people. It was important therefore to consider each idea mentioned, regardless of the number of people who discussed it.

Content analysis and discourse analysis, both commonly used for qualitative analysis in anthropology, were also precluded by the nature of the data. Both require text for codification, and in this case, text in the form of reliable recordings of speech is not consistently available. Many Hutterites object to being tape-recorded; thus many of the interviews were summarized as notes, and no record of actual discourse exists. The main goal of the project was to record ideas and attitudes. The preservation of the integrity of text was not a consideration. Thus the codification of the content of each sentence, or the analysis of word choice and the associations of words, were not possible.

The idea-centred data were best suited to an inductive approach, combining interview data with observations and field notes. In this way we let the respondents tell us what kind of changes have been made, and could or should be made; what obstacles exist; and what motivates them as individuals and as groups to change. With this inductive approach I examined change in several ways. The first was to take note of each past change mentioned, each suggestion for the future, each reason for trying, succeeding, and failing at health promotion. Another level involved combining all the accounts of a particular change to get an overall picture of how it occurs, and what all the viewpoints are as to the reasons for the success or failure of the change. Finally, I combine many ideas about change to examine where the possibilities are for change, and how

these are affected by inter-colony differences and by circumstances. In this way I achieved a view of change that includes the details of behaviour and attitudes as well as the processes involved in initiating and implementing changes.

This kind of inductive analysis involves searching for ideas, juxtaposing and making connections between similar ideas, and contrasting different ideas. I looked for recurring ideas or accounts of events, and variations on themes, and sifted differences in opinion or viewpoint on a particular event. In compiling all the suggestions for and accounts of change, I looked for similarities and common elements, and for motivating factors, and tried to account for differences in discussions of change. Making use of field notes also meant making conceptual connections between what people said and what we observed of their behaviour and relationships.

Because of the bulk of the data, the interviews were entered in a computer indexing and database program to facilitate handling the information. The text of the interview was entered in database fields by protocol topic for ease of accessing each topic of discussion in an interview. The program, AskSam, facilitated searching for key words and phrases, and allowed links to be made between different interviews to facilitate juxtaposing ideas (see Appendix B). The program also made reports which displayed together all references to a particular key word or set of key words, and allowed easy access to the interview from which each reference was taken. This made it possible to compare different views on the same topic. Although the program did not analyze the connections between ideas and interviews, it made it easier for the researcher to navigate the data, to identify and analyze these connections. The report feature also allowed some simple quantification of the number of references to key words or phrases. This feature was used mainly in assessing the kinds of changes made or suggested, to give an indication of those ideas which were common to many

people and those which were mentioned by only a few people. These numbers were useful as a guide to recurring themes, but were not used for statistical analysis.

After preliminary analysis using the computer database, more detailed analysis combining interview data with field notes and observations was done manually. This analysis involved examining events of change and suggestions for change, as individual events and as groups displaying a pattern, to disclose the general tendencies: the different factors at work in the change, the reasons for its success or failure, and the attitudes surrounding it. In disclosing these generalities and the circumstances allowing or preventing change I was trying to identify the processes operating in each instance of change. These processes are then discussed in relation to the processes of change noted by other anthropologists in studies of Hutterite culture.

A. Identification of Individuals and Colonies

To keep my analysis close to the voices of the Hutterians who shared their ideas with the research team, I have included frequent references to the interviews we conducted with them. In referring to these interviews I was presented with the problem of how to ascribe authorship to the participants. The usual method is to assign pseudonyms to participants, but this practice is sometimes problematic. Traditional Hutterite naming practices involve a small number of given names, and the group also has a small number of family names. Because of the large number of participants, it would be difficult to select pseudonyms that are typically Hutterite names, but are not present in the sample of participants. Some Hutterites have in the past expressed concern that their words should be ascribed erroneously to another person; they would prefer to be referred to by their own name than by a name which refers to another person

known to them (Jennifer Hopkinson, personal communication). In the interest of preserving the confidentiality of the participants, the research team of which I am a part is reluctant to use the true names of the colonies or of individual participants.

The uneven distribution of family names through the colonies would also pose a problem for the preservation of confidentiality. Through the effects of patronymy and colony fission many colonies now have only one family name. The use of family names would thus identify, either correctly or incorrectly, specific colonies. For these reasons, the research team has decided not to use names at all, but to refer to participants by the number of the interview from which the reference is taken. The interview numbers consist of a letter, either G for general interview protocol, or C for cooking protocol, and a number that designates the particular interview, thus G37, C12. Because of the nature of the interviews, this means that the same number can refer to more than one person, or the same person be designated by more than one number. However, the exact identity of the speaker is not critical to the sense of the references.

The same considerations are implicated in the choice of names for the colonies. It would be difficult to choose six names for colonies that would reflect the usual types of names chosen for colonies, while preserving the confidentiality of the colonies. We have chosen to represent the colonies by the numbers 1 through 6. These numbers have no significance for any rank order of colonies; they were assigned on an arbitrary basis. The members of the participating colonies should be able to recognize descriptions of their communes, as should anyone familiar with these colonies, but they remain publicly anonymous in accordance with anthropological practices.

Chapter 5. Change in Health-Related Behaviour

I. Differences Between Colonies

Anthropological discussions, including this one of the Hutterites to some extent, make much of the generalizations that can be made about the entire group being studied in order to describe and further understanding. While the general traits of 'all Hutterites' can be useful in understanding many of the assumptions of this people, like all other groups the Hutterites are not homogeneous, and like all other anthropologists, the research team of which I was a member was not able to visit 'all Hutterites' to determine the extent to which our generalizations are true for every colony. Much of the following discussion concerns the importance of individual differences for the success of health promotion, but we must also emphasize the considerable differences from one colony to another. Despite the levelling effect of a common ideology, heritage, and identity, each colony is made up of an unique group of individuals, with their own history and, to some extent, customs. The interactions of these individuals make for differences between colonies that affect the possibilities for change as well as the success of health promotion activities in each colony. Some of the ways in which the colonies vary were particularly significant for health promotion and for the potential acceptance of change. These include the interest of the colony members in health and health promotion; the attitude of the colony leaders to health promotion; the preferred diet and the amount of control the head cook has over cooking decisions; the readiness of colony members to initiate or accept change; and the way in which the size, composition and wealth of the colony determine the availability of resources.

Colony 1

The members of Colony 1 show a strong interest in health, and are concerned with living a healthy lifestyle. Several colony members, including both head cooks, have been active in seeking health information from the outside and in initiating health promotion within the colony. Most members prefer to use diet and herbal remedies to prevent and treat illness, and use 'alternative' medical practices such as homeopathy in addition to allopathic medicine. The general practice is to try less invasive measures first, and to resort to drugs and surgeries only when less drastic measures have failed. This positive and proactive attitude towards health promotion is shared by the colony leaders. Much of the health promotion in Colony 1 focuses on the colony diet. The head cooks have a great deal of influence over the diet, as other colony members are not 'fussy' or difficult to satisfy.

At the time of the study this was a large, well-to-do colony, with sufficient labour and resources to support the needs of the various health related lifestyle changes. Although this group is fairly conservative in adherence to rules and traditions, their concern for health has made them open to outside information in that area. This conservatism, however, also means that there is some concern about the appropriateness of exercise other than work. Most people feel that they can manage their health sufficiently through diet and medical practices.

Colony 2

In contrast to Colony 1, there was not much interest in health or health promotion at Colony 2. Although there are several members with high BP or diabetes, their conditions are treated by medication alone. The attitude of most people at this colony is that it is up to people with problems to make the necessary changes themselves. Prevention of future problems was not a concern. Several colony members are very obese; some other members suggested that

these obese people required some changes, but were resigned to the difficulties of convincing people to change.

The head cook has introduced some changes to the diet by introducing more vegetables for example, but has met with some resistance from colony members. The schedule of meals is quite regular, and some members complain at variations from the usual meals. This colony fits the same pattern that was observed at several other colonies, in which the cooking caters mainly to the tastes of the men, while women are seen as less fussy, and children are fed as the cooks and German school teacher deem appropriate. There was little interest in exercise, and again the appropriateness of exercise outside of work was a concern. Generally the attitude was that the lifestyle is healthy enough for most people, and that those with health problems are responsible for finding their own solutions.

Colony 3

At Colony 3, the interest in health was variable. Most of the women and some of the men expressed some interest, but health was only a major concern for a few individuals. There were several people with high blood pressure or problematic cholesterol levels, but these people were often unaware that others in their colony shared their health concerns. One of the colony members is a massage therapist, and the head cook keeps some vitamins and herbal remedies for treating illnesses, but for the most part, medical practices are allopathic. Several members had been ordered by doctors to alter aspects of their lifestyle in response to various illnesses, and had tried to do so on an individual basis. Colony measures to prevent and treat problems were not discussed by most people.

A few members would like to see changes in the diet, but the majority seem content. There is generally more interest in improving health through exercise. The women of this colony had previously initiated an exercise program of brisk walking and calisthenics. This initiative eventually failed, and the participants are reluctant to try again without the participation and consent of the colony leaders. The leaders for their part have a positive attitude towards health promotion, and agree that some lifestyle changes would be a good idea, but are not active in initiating changes. As both the minister and financial manager are elderly men, the younger members are not in a position to pressure their elders to initiate colony changes.

Colony 4

At Colony 4, although the diet is unhealthy by our observations, it is perceived to have improved over the last several years. Several women, including the head cook, have been deliberately introducing vegetable dishes and trying to reduce the fat and salt content of the food. These changes have been a vast improvement from the days when vegetables were seldom served. Despite the desire for further change, however, the food preferences of the men still govern the diet. There is a great deal of resistance by some of the men for whom 'tasty' (i.e., fatty and salty) food is a far greater concern than healthy lifestyle. Because of the number of men who are 'fussy', the cook has very limited power to make changes.

Although dietary changes are particularly difficult at this colony, there is a strong interest in CVD and health promotion, as most of the adults have high blood pressure or diabetes. Unfortunately the desire to improve health conflicts with sedentary habits and food preferences in many cases. There is also a split between those who rely on allopathic crisis intervention medicine, and those

who are interested in prevention. This colony is relatively relaxed about adherence to rules and traditions, but resistance to lifestyle change is strong because of attachment to food preferences and habits. There was some interest in colony exercise facilities, but there was also a concern that any such facility would have to meet with the approval of the ministers of other colonies, as this colony has on other occasions experienced the difficulty of being an innovator in technological change.

Colony 5

There is little indication here of colony-wide health promotion activities. There are several 'health-minded' people who are careful of their diet, are physically active, and use herbal medicines to maintain their health. Others, however, seem unaware of potential health risks in their lifestyle or of ways to reduce them. Our visit came shortly after the fatal heart attack of a relatively young colony member, with the result that some people were expressing a new-found interest in learning about prevention, and were becoming more concerned about high blood pressure and other health risks. Despite the growing awareness of a need for changes, few people at Colony 5 seemed to have any idea how to implement changes at a colony level. The assistant head cook was very interested in introducing changes in the colony diet, but felt handicapped by the eating habits of the colony members. Health related changes are therefore left up to individuals. This colony is less conservative than some in allowing exercise outside of work for children and adults when there is time (some adults swim in the river and go for walks around the colony); lifestyle changes are not resisted on principle, but are simply hindered by practical considerations of time and labour.

Colony 5 is a small colony, with proportionately few young men and many elderly people requiring care. The resulting labour shortage means that adults are often too busy to devote time and energy to health promotion, and it is difficult for the cooks to have enough help in the kitchen to make changes involving more work. The colony leaders have a positive attitude towards caring for health, but seemed too busy to want to take on the responsibility of initiating health promotion activities. Those members who were aware of healthy behaviours indicated little sense of empowerment to influence other members.

Colony 6

The members of Colony 6 are generally content with their lifestyle, and feel little need for change. Most people expressed some interest in herbal and 'alternative' medicine, and in prevention of illness, but felt that other changes were not necessary. None of the members interviewed had CVD or diabetes, nor did they express much concern for preventing these illnesses. The colony diet and activity levels were felt to be satisfactory and there was no interest in health promotion in these areas. As at Colony 2, anyone who feels the need to change is welcome to make individual changes, but they do not feel that the whole colony needs to change.

This colony is the most isolated from the outside of the colonies in the study, and is quite conservative in many respects. The main concern for most people is work; eating well is justified by working hard, and work is the only appropriate form of exercise. The cooks have not found that people are 'fussy' or resistant to new dishes, as very few changes have been tried. This conservatism and lack of interest in health promotion are shared by the leaders and the rest of the colony members.

II. Lifestyle Changes and Health Promotion

The six colonies that participated in the study varied greatly in the amount of interest in health promotion, and in the numbers of people who had tried to implement lifestyle changes or were interested in doing so. In all of the colonies, however, there have been general changes in lifestyle that were caused mainly by the development of farming technology and methods, and by changes in the relationship between the Hutterite communities and the outside world. These changes have had an impact on all areas of life, including areas related to CVD health: opportunities for physical activity, eating habits, the sources of psychological stress in daily life, and health care practices. In many cases, these changes have made the Hutterites' lifestyle more conducive to CVD risks, and in others, they have provided means of combating illness and health risks.

A. Lifestyle Change

1. Activity Patterns

Since the Hutterites arrived in Canada their lifestyle has undergone many changes while remaining true to their beliefs and worldview. Most of these changes relate to technology. Although in earlier centuries there were many different crafts and trades practised by the colonies in addition to agriculture, Hutterites now make their living exclusively by farming. Unlike their fellow *Täufer*, the Amish and Old Order Mennonites, Hutterites have embraced modern farming technology as necessary to successful large-scale farming. The increased mechanization of farming in the twentieth century has changed the working patterns of Hutterites greatly. Many older men mentioned that work was very different when horses were used - when the horse was tired, the men rested also. Planting and harvesting crops took place over several days; both men and horses worked physically hard during the work day, and rest was enforced by the

physical limitations of both (G1, G2). Now, highly specialized farm machinery, such as combines and pressure seeders, allows the field work to be accomplished in a much shorter time to maximize productivity. The competitiveness of the agribusiness world means that the crops must be planted and harvested at exactly the right time to ensure the best harvest. With the machinery, the men now work around the clock for a few days to get the crops in as quickly as possible. This involves at least twelve hour shifts, and often longer, at the wheel of a combine - work that is monotonous and sedentary, but that must be done with precision. This kind of work creates added tension as men struggle to pay attention and not to make mistakes, while eliminating physical exertion. The work is psychologically more stressful, the hours are longer, and the opportunities for physical activity are greatly reduced.

With mechanization, the amount of physical activity on the colonies has decreased, particularly for the men. The smaller amount of physical labour still involved in farming is predominantly unskilled labour, and is done mainly by the young men. As men age, they achieve positions of greater responsibility, involving less physical activity and more overseeing and running of machinery. The net effect of mechanization for men is that although they are still working long days, they have less activity, decreasing further as they reach more stressful positions of authority and responsibility.

Similar patterns affect women, although to a lesser degree. Kitchen and laundry facilities are completely modern, and other aspects of women's work are mechanized to some extent. Many aspects of women's work, however are not mechanized: their contribution to agriculture - weeding and harvesting vegetables - is done by hand; keeping their houses and the colony buildings clean provides consistent mildly aerobic activity. Although women do not advance to positions of authority to the same extent as men, there is still a

reduction in their physical activity as they grow older. After the age of 45 to 50, they are no longer expected to take a turn as cooks (the thrice daily cleaning of the kitchen makes for a physically demanding cook week) or in garden work parties, and are more likely to be kindergarten teachers or to spend more time at home with their children and grandchildren. They are also likely to have one or more grown, unmarried daughters who share the burden of housecleaning, and thus have less physical work, even at home.

2. Eating Habits

Changes in farming lifestyle and mechanization have also affected the Hutterite diet. Changes in kitchen technology have meant a wider range of cooking possibilities: electric steamers, barbecues, deep fryers, and other cooking implements have been added to the traditional stove, oven, and griddle. The introduction of the deep fryer increased the fat in the diet as people developed a taste for deep fried foods, and now the use of barbecues and steamers is becoming more prevalent. With the barbecue, the benefit of cooking with less fat is perhaps offset by the carcinogenic elements in the smoke, but with steamers, the nutrient content of cooked vegetables is higher than boiled, and many people prefer the taste of steamed vegetables and indicate that they eat more of them.

Changes in the technology of food production throughout the world have made a wider variety of foods available to the Hutterites, in the form of fresh vegetables and fruit in all seasons. For those colonies who can afford some extra expense on food, fresh fruit and vegetables have become a reasonable expense when colony grown produce is not available or more limited in variety. New kinds of foods have been introduced to the Hutterites by contacts with people outside the colonies. The degree to which new foods have been introduced varies greatly from one colony to another, as some have more contact with the

outside world than others, or are more open to suggestions from the outside. The diet at some colonies seems to be responding to these changes, as there is a perception that more food is available, more variety of foods and dishes, and more rich foods, as well as more frying and less baking or boiling of meat, while at the same time, some of the traditional dishes are no longer being prepared. In other colonies, however, the diet remains more traditional, and outside ideas about cooking have made relatively little impact.

3. Sources of Stress

Several people mentioned changes that have made life more stressful for the Hutterites. The lifestyle on a large modern farm appears to be hectic for some who grew up in a less mechanized age. Modern farming practices mean that timing is critical in managing crops, and that time to relax and unwind from a stressful day is no longer part of the rhythms of working. Some people feel that there is enormous pressure on the colonies to make the right decisions regarding farming, particularly as their neighbours look to them to set the times for planting and harvesting. There is also the feeling that the mechanized lifestyle is busier than the lifestyle of the past, as there are constant time and money constraints. Financial and field managers and the managers of each separate operation make decisions involving hundreds of thousands of dollars which have a huge impact on the entire colony. For these men, the responsibility for the welfare of the entire colony is a source of stress. This stress can be acute for any size of colony: large colonies often have more resources, but they also are responsible for the welfare of more people; while colonies with fewer people sometimes have labour shortages or financial hardships. Another source of anxiety that was mentioned in the interviews is the struggle to resist the outside world, which is seen as a source of evil and temptation. Many colonies are

located near towns or cities that have grown to approach the colony, and the large number of trucks on the colonies makes it easier to go to the city.

Hutterites must therefore be all the more vigilant to keep worldly things out of the colonies, as it is harder to keep people away from the world.

4. Medical Practices

Medical practices among the Hutterites have undergone many changes over the years. Many years ago, during the Golden Period of Hutterite cultural and economic florescence in Moravia (1565-1592), there were many Hutterite physicians, and they were once renowned for their medical knowledge and skill both within and outside of the colonies (Hostetler 1974:54-56). Over the years, the role of the colony health care practitioners has changed. Within the lifetime of the oldest colony members, there has been a noticeable shift to reliance on outside doctors and dentists, and a decrease in reliance on colony caregivers: now mainly midwives, chiropractors, and massage therapists. This shift has been encouraged in Canada by the availability of free national health care. Diagnosis and treatment of CVD and diabetes are in the realm of doctors, and drugs and medical procedures and surgeries are the methods of treatment. Several people were diagnosed with hypertension or high cholesterol during the two health surveys, and as a result, they have consulted their physicians more often to control their CVD risk. Close relatives of these people often also sought the care of a physician following these diagnoses, and subsequently had their high blood pressure or cholesterol brought under control.

Ironically, now that such medical treatment is the norm, there is an opposite trend of distrust for doctors and drugs, and a desire to return to using herbal medicines and home treatments. This means increasing personal accountability for health and relying on the knowledge and treatments available

within the colonies. Many herbal medicines are inexpensive, and are also very effective in treating some health problems, especially when combined with a healthy diet. Wellness newsletters and other health literature are finding their way into the colonies, as is knowledge of 'alternative' health practices such as 'reflexology' and 'colon cleansing' as alternatives to physician or hospital care. Several people at Colony 1 have reduced their reliance on physician care by avoiding antibiotics and childhood vaccinations, and rely instead on herbal and homeopathic medicines and healthy diet to prevent problems. Many people have also come to rely on various forms of alternative medicine as provided by people within the colony, or by alternative health practitioners: visits to Chinese herbalists in Calgary were quite commonplace in this colony. This tendency to turn to alternative forms of treatment was most noticeable at Colony 1, but was present to a lesser degree at other colonies, mainly in an interest in herbal and Chinese medicines and in the presence of colony-trained health care practitioners.

B. Health Promotion

In addition to the changes that have come to all Hutterite colonies to a greater or lesser extent through their relationship with the outside world, many colonies and individual members have tried to make deliberate changes to their lifestyle. Because of the nature of the study, the majority of the changes discussed during the study pertained to health, particularly cardiovascular health. These attempts at community health promotion have taken many different forms, and met with varying degrees of success. Some health promotion has resulted in modifications to colony lifestyle and customs, some has consisted of altered individual behaviour, and some health promotion attempts have failed to make a lasting impact on the lives of colony members.

Examining the discontinued initiatives as well as those that have succeeded gives light to the ways in which changes are either resisted or supported by colony members and by the Hutterite system itself.

1. Unsuccessful Initiatives

Many people discussed activities that they had undertaken to improve their health, but that they had discontinued. These unsuccessful attempts to change ranged from individual measures in response to a health crisis, to organized group initiatives to maintain general health and prevent illness. The reasons for the failure of the initiatives varied greatly; some met with resistance from other colony members or leaders, while some were discontinued gradually as circumstances changed. For the most part these unsuccessful initiatives involved exercise, but a few people also found it difficult to maintain dietary changes.

The most widespread and organized of the discontinued activities occurred at Colony 3. A group including most of the married women went regularly for brisk walks around the roads near the colony during the summer months. After the walks, these women would often do stretching and calisthenic exercises together in the school building. This exercise program had taken place through several summers, but had not started again during the summer of the study. Although most of the women at this colony mentioned that the walks had stopped, some were not clear on the reasons for the failure of this activity. The general consensus was that the men had been concerned for the women's safety. During the year previous to our field visit, there had been some crimes against women in the vicinity of the colony. Following these incidents, the women's walks had stopped, and there had been greater resistance from the colony leaders to having the women walking on the roads around the colony: "After they found

that girl in the lake, I can tell you there was an end to walking" (G12). Although a large group of women are in little danger from similar attacks: "I don't know what they would do to pick up all us women together" (G44); such crimes likely served to remind the colony of the evil in the world around them and the dangers that await those who leave the colony for any reason.

Most of the women indicated that they would like to resume the group walks, but that no one had taken the initiative for doing so. The men had recommended that they walk around the colony compound and garden. This option is not entirely satisfactory to the women: "It's not a big walk, you can't walk brisk" (G14). Some of the women walk around the colony in smaller groups, often with a man along to assuage fears for their safety. The men of this colony, however, are not as interested in the exercise initiative, and do not participate with the enthusiasm or commitment of the women.

Groups of people at other colonies have also tried to institute a program of regular walking. None of these other groups was as organized as the group of women at Colony 3; they consisted mainly of couples or of small groups of women. The reasons given for stopping varied. A few elderly couples mentioned that they used to walk together, but that they had been forced to give it up because of arthritis or other infirmities. One woman used to walk with her sister, who was the initiator ("she hauled me along every night for a walk" G44), but has not kept it up since her sister moved to a different colony. Another couple started going for walks together, but gradually stopped: "got lazy, I guess!" (G37). A group of women at Colony 4 started going for brisk walks in an attempt to lose weight. Some of them also "watched their diet" by avoiding fat and concentrating on vegetables. Those who were not careful of their caloric intake found that they were not losing weight and quit walking in frustration (G64).

The situation is similar for many of the individuals who have tried to use exercise machines to manage their health. Some people observe that they do not find the time to use the machines, or that they are constantly interrupted if they do take the time. Several people seem to have purchased exercise machines such as treadmills and stationary bicycles on the recommendation of their doctors. Although some of these people have continued to exercise, others gave up the exercise routine when the original health problem was resolved (G35).

A few people have tried unsuccessfully to make dietary changes. Several cooks mentioned trying to introduce cooking changes, such as reducing the salt and fat content of the meals, and increasing vegetable dishes, but have met with resistance from colony members who are unwilling to try new foods, or who prefer the traditional foods. Some individual members in turn discussed trying to reduce their salt and fat intake at the table, but being limited by the cooking style. Others found that they avoided certain foods that they learned were problematic in their diets, but gradually increased their consumption of those foods again once their health improved.

Of these discontinued health initiatives, only some can be said to have failed, while others were blocked through changes in circumstances. The main reasons for the failures were changes in the circumstances that permitted exercise programs; lack of support from the leaders or other colony members; and the failure of the initiative to produce the desired results. In the cases where exercise or dietary measures were taken to improve health, and given up when health improved, it was the very success of the initiative that caused its abandonment. Thus the initiatives were successful as remedial measures but not as changes in lifestyle.

2. Successful Health Promotion Initiatives

In many instances, the circumstances surrounding attempts to change have allowed them to be successful. Several health promotion initiatives by individuals or by groups have managed to alter old patterns of behaviour on either an individual or a colony basis. The majority of these successful initiatives pertained to diet, but there have also been some long-term changes in the areas of exercise and of medical practices. In a few cases, the cooks have been able to introduce changes to the colony diet that have affected all of the members of their colonies. In other cases, individuals have made changes to areas of their lifestyle that are not governed entirely by the colony, such as food choices at meals and at home, leisure time exercise, and medical practices.

The most notable success in health promotion is the adoption of a healthy diet at Colony 1. This change seems to have occurred gradually over many years, through the concerted efforts of the present head cooks, and with the support of their husbands and extended families. Both of the head cooks have sisters who also married into the same colony, and who share their ideas about healthy eating. The husbands of these women include the financial manager and the second minister/German School teacher, and their families comprise a significant portion of the colony population. Although many new brides are too shy to introduce new ideas to their husband's colony, solidarity among sisters can provide a support system that enables women to risk introducing changes. In this case both sets of sisters (two sisters of one head cook, and one sister of the other) come from the same colony; thus they provide each other with a strong network of solidarity. The changes have been undertaken with the attitude that people can get used to anything, and that a healthy diet is more important than having what one wants. The men of the colony are not too 'fussy', and accept whatever food the cooks prepare. The German School teacher has also

participated in health promotion by teaching the children under his care to eat healthily.

The diet here is perceived as having increased greatly in vegetables and whole grains, and reduced in fat and salt, although meat consumption is still typically high. In planning and preparing meals, the cooks try to follow the Canada Food Guide recommendations for the numbers of servings of each food group. Candy and other sweet snacks are also provided less often than fruit and other healthy snacks. When compared with the diet at other colonies, by our observations, the diet is indeed healthy from the point of view of cardiovascular risks.

Health promotion at Colony 1 has also been supported by a general interest in health at this colony. This interest is particularly strong in a few individuals, but is generally shared by most colony members. One of the head cooks subscribes to several health journals and passes them around to people on the colony, so that the colony members are well-informed about healthy diet and behaviours. The results of the dietary changes have been positive at this colony. Everyone has adjusted to the diet and now enjoys the healthy foods, and the benefits for health have probably also been positive. There is a perception among its members that this colony suffers from very few chronic illnesses and that their good state of general health is due largely to their diet.

Although the changes at other colonies have been more modest and less widespread there have been some important health promotion activities that have operated on a smaller scale. At Colony 4, several of the women, including the head cook and several of her sisters-in-law, have introduced many changes to the diet. According to our observations, the diet here is still particularly problematic in terms of CVD risks, as it is high in meat, salt, and animal fat. However, most of the members of the colony reported that it has changed a great

deal in the last several years. Previously there were very few vegetables served, whereas now they are served at every meal, albeit in small quantities. Although some cooks were initially sceptical, other people began to eat the new dishes and have come to enjoy some of them. The cooks have also been attempting to reduce the salt and animal fat used in preparing the food.

As in the case of Colony 1, two of the women who have been instrumental in introducing changes are sisters who married in from the same colony and have the support of their husbands. These two women are particularly concerned about CVD and diabetes risks, and are very knowledgeable about nutritional ways to reduce risk. The head cook also promotes dietary change, and is accepting of changes that cooks want to introduce. Because of the large number of colony members with high blood pressure/ cholesterol and diabetes, and their family history of related illness, many of the colony members are becoming more interested in reducing health risks and more accepting of dietary changes.

This health promotion initiative has been only partly successful, as it has met with resistance from some colony members. Several members feel that the present changes are insufficient, and would prefer to see significant reductions in meat, animal fat, and salt. However, some of the members of this colony, including part of the colony leadership, are content with the diet and see no need for further change. Several of the men in particular are 'fussy', and actively resist changes in the colony diet. Although some of the cooks believe that people can adjust their eating habits, others are resigned to the necessity of catering to people's preferences.

There have been a few relatively minor changes implemented at several colonies, that nonetheless can have an effect of reducing CVD risk. Most of the colonies participating in the study had purchased steamers for the colony

kitchens, to be used primarily for cooking vegetables. Several cooks claimed that the steamers made preparing vegetables easier, and that steamed vegetables are more nutritious than boiled ones. This change in the method of preparation is perceived as having made a significant difference at a few colonies: "They like vegetables more now that we have the steamer, they eat more of them" (C19). Most colonies provide 'vegetable salt', made from dried vegetables and herbs, for seasoning, and some people use this instead of adding salt at the table: "I just love it, you can put that anywhere, especially in soup, or on potatoes" (G13). At one colony it was mentioned that they use no-cholesterol margarine instead of butter, both in the kitchen and at the table. Although these changes are minor, they indicate the possibility of small changes in food preparation to make the food healthier without changing the traditions surrounding food.

Other changes have been made on an individual basis. Many people report that they have altered their food choices to benefit their health, by reducing the quantity of food they are eating, by avoiding the salt shaker and fried dishes at the table, by reducing egg consumption, and by choosing more vegetables. These dietary changes are perceived as helping people to control their blood pressure and cholesterol levels, and to lose weight. In this way, many people have managed to control their diet within the limitations of eating from the colony kitchen, even though the choices of most colony members may not coincide with their own. A few have also managed to get around the necessity of communal eating, by purchasing food for 'lunches'⁶ that they feel is healthier than that provided in the dining hall. In a very few cases people will eat very little at a meal that they perceive as unhealthy, and eat their own food later at home. In this way they appear to participate in the colony meals without being limited in their food choices by what is provided from the kitchen.

⁶ Lunches is the term for snacks used by Hutterites when speaking English.

In a few severe cases, individuals with chronic illnesses are forced to adopt a special diet. In such cases, the food is provided by the colony, purchased specially if necessary, and prepared by someone other than the colony cooks. These special diets have been provided for individuals with severe forms of arthritis (G10, C19) and pulmonary fibrosis (G24). Such drastic dietary changes are possible only for individuals with severe chronic diseases, however. They are excused from eating in the colony dining hall only by the seriousness of their illness.

Although none of the exercise programs implemented on a large scale have been established successfully, several individuals have been able to establish exercise programs for their own health and well-being. Several people regularly take brisk walks around the colony or the nearby area in small groups. In this way, some individuals have lost weight, kept fit, and managed stress: "Walking is relaxing, it gives you time to think" (G60). Other people do exercises alone at home. Several women do "sit-ups and jumping jacks" or stretching exercises regularly: "I usually have some kind of program..."(G13). Many young men lift weights privately, and men and women of all ages use exercise machines such as stationary bicycles and treadmills. Although some people find that they do not stick to exercise programs, others make it a priority to find the time in an effort to combat depression (G12), to keep physically fit, and to stay relaxed.

Some people have made changes in the way in which they take advantage of the health care resources available to them, in an effort to find the best means of caring for their health. The interest of the members of Colony 1 in 'alternative' health care, such as homeopathy and herbal medicine, has already been discussed. A similar interest is also present, although less widespread, at other colonies. Several people at Colonies 5 and 6, in particular, prefer to prevent health problems or control conditions such as high BP and cholesterol with

herbal remedies and vitamins: "I don't like to take drugs for it, natural remedies work best" (G30). Members of these colonies mentioned several different herbs that are used to control BP and cholesterol, and reported consulting books on home remedies to find solutions to health concerns.

Many people have also changed the way in which they make use of allopathic medicine to manage their health. Individuals who have been diagnosed with high blood pressure or cholesterol or diabetes have often increased their physician surveillance to monitor this situation and to prevent the sequelae of these conditions. Other members of their families have also consulted doctors to be checked for a similar problem. In this way many people have taken steps to detect and treat health conditions at an early stage, rather than waiting until they have a serious problem such as a heart attack, stroke, or blindness. In increasing reliance both on allopathic medicine and on 'alternative' medicine, many Hutterites have increased their knowledge and taken control of their own health.

Many Hutterites have been successful in taking the initiative to change aspects of their lifestyle that they feel are unhealthy. These changes have occurred at all levels, and in all areas of health promotion. Where possible, they have changed the practices of the entire colony through the concerted effort of most colony members, but individuals have also managed to make changes within the colony lifestyle to improve their own health. Although not all of the attempted changes have been successful, the successes have shown that there is power to change for individuals, for small groups, and for entire colonies within the limits of the Hutterite lifestyle.

III. Suggested Ways of Changing

In discussing changes, many people mentioned not only those that had occurred, but also changes that they hoped for, anticipated, or thought would be a good idea. Some people had been thinking about changes already, but had not had the opportunity to attempt them. Many others reacted positively to changes that were suggested by the researchers or by other Hutterites. Also discussed were the problems that people anticipated in implementing changes, and how these problems could be resolved. The people we talked to identified many different areas in which they felt changes would be beneficial, including all areas of health promotion: diet, exercise, and medical practices. The only area not discussed for future changes was that of stress management. Although psychological stress is a problem for some people, most seemed to think that there was little to be done to reduce stress other than the measures already being taken. People were also interested in changes not only for themselves, but also for their colonies and for other individuals and colonies. Because of the differences between colonies in terms of interest in health promotion, the ideas for future changes were not distributed evenly among all the colonies, but were supplied in disproportionate amounts from some colonies. Two of the colonies were particularly uninterested in change, as most people are content with the lifestyle, but the members of the other colonies were more enthusiastic about introducing changes and supplied more ideas for doing so.

A. Cooking Changes

The most commonly discussed changes involved altering the cooking in the colony kitchen. Most people were willing to consider some changes in diet, and recognized that changing the cooking for the colony is the most effective way of altering the diet, as such changes would affect all colony members. Some

also felt that it is easier for the cooks to change the style of cooking than for individuals to select only the foods that they feel are healthy. For this reason, many people looked to the head cook to take the initiative for introducing a more heart healthy diet. The amount of enthusiasm for change varied: the range included some who felt that “changing the diet might be manageable if the food tastes roughly the same” (G20), and others who were eager to convince the cooks to make changes to “put the food on the table so that a person can eat it and enjoy it and know that it won’t make cholesterol or high blood pressure” (G34).

In discussing targets for change, several people mentioned only general changes that they would like to see, or that they felt might be possible. Some were not sure what parts of the diet needed changing, but felt that it could be healthier, and that more knowledge of healthy eating would help motivate people to change. Others pinpointed general changes such as eating less and trying to make the diet less ‘rich’. Some of the researchers suggested putting together a ‘Hutterite Heart Healthy Cookbook’, containing recipes for traditional foods that had been modified to make them less problematic for CVD risks. This idea was positively received by everyone with whom it was discussed, as was the idea of staging ‘taste tests’ of different ways of preparing food to show that healthier foods can be enjoyable.

Many Hutterites, on the other hand, had very specific ideas about the ways in which they would like to change the colony diet. Most of the specific targets for change involved reducing or avoiding certain foods or ingredients, or changing methods of preparation. The specific foods and ingredients that were identified as unhealthy or as foods that should be reduced included animal fat, salt and seasoning salt, ‘spices’, meat, eggs, potatoes, white flour, sugar and candy, and cream desserts. Instead of these foods, people wanted to see more vegetables and fruit, including salads and raw vegetables, and more whole

grains to replace the white flour in bread and buns. Dried vegetable flakes or 'vegetable salt' and potassium chloride 'no-salt' were both discussed to replace conventional salt, and vegetable oils (especially canola) to replace lard.

Changing food preparation methods would involve reducing the amount of frying and increasing the use of fat-free cooking methods; baking and barbecuing meats, steaming vegetables, and poaching eggs. It was also suggested that more care should be taken to avoid over-cooking vegetables, as this reduces their nutritional and fibre content.

A few people also discussed changes to the usual schedule of meals. At all colonies, three meals are served every day. Both the 'dinner' and 'supper', or midday and evening meals, consisted of cooked meals of meat, potatoes or starches, and vegetables, often with a dessert. A few people felt that the usual two hot meals a day encourages overeating, and suggested eating a light meal of sandwiches and soup to replace one of the hot meals: "...if I'd have a bowl of soup that's all I would need at lunch time" (G34). Some people also suggested changes to the traditional Sunday dinner of duck and noodle soup, but were not certain that these changes would be accepted by other members of their colony.

This Sunday duck dinner is a particular problem for CVD risks. The main constituents of the meal are roasted duck and a duck broth with fine egg noodles (geese or chickens are occasionally substituted for ducks). The duck is usually boiled with salt to make the soup, then rubbed with salt and roasted, and the boiled broth eaten as noodle soup. Some or most of the surface fat is skimmed off the broth. The stated purpose of rubbing the skin of the bird with salt is to draw out the fat from the meat, but in fact the salt draws out the water from the meat, allowing the fat from surrounding tissues to saturate the meat and make it moist and tender. Although some fat is removed by boiling, duck is a fatty

animal, and retains much of its fat even after cooking, and this method of preparation ensures that the meat is high in both fat and salt.

This meal is the traditional Sunday dinner of all of the colonies we visited, and apparently of all Hutterite colonies, and as such is considered part of the Sunday ritual. When asked what would be the most difficult thing to change, most people mentioned Sunday duck immediately: "If it's no duck, it's no Sunday here" (G37). The duck is a great favourite among the Hutterites, and many people overeat at this meal, choosing more meat over vegetables and other dishes. As Sunday is the day of rest, there is little physical activity to consume the calories of fat eaten at dinner. The Sunday dinner is an obvious target for change, as a heavy meal eaten when little energy is required. Some people indicated that they found the duck meal to be particularly heavy: "I know sometimes we run out of duck and we eat chicken or whatever, and I have to say to myself you feel better. ...duck you're eating lots and you're so full and bloated, you just lay on the couch..." (G37). Despite this, there would be a considerable amount of resistance to changing this traditional meal. Most people indicated that they would not be willing to eliminate the duck dinners, but a few said that they might accept moving the duck meal to a weekday when more energy is required, and eating a lighter meal on the day of rest.

The Hutterites we talked to had different ideas about the ways in which cooking changes should be implemented. Many people suggested that it takes time to adjust to changes, and that changes should be made gradually to accommodate people's changing tastes. This has often been the way in which the cooks have introduced new dishes to the colony: "We don't make so much the first time, then we give it to them a few more times and they will eventually eat it" (G62). The resistance to new dishes is often attributed to the men: "Especially with the men, we would have to ...get them over slowly. We like to try new

things, and the first time they won't eat it too much" (G13). One woman, however, suggested that a rapid changeover would not allow the 'fussier' colony members any choice. "If you make a dish and put it with the other food they usually eat, they'd never eat the new stuff." (C3) As a young woman marrying into Colony 1 from a colony with a much more problematic diet, she had had to adjust quickly, and felt this to be the best way of changing. This attitude was shared by some other women who were advocates of healthy eating.

Several people also felt that they should take measures to improve their diet through food choices at the table and at 'lunches'. The suggestions for individual changes were similar to those for changes in the kitchen. People felt that they should eat less in general, as well as choosing vegetables over meat and fried dishes and avoiding the salt shaker at the table. Between meals, people felt that they could reduce the quantity of 'lunches', and choose healthier snacks such as fruit or unbuttered popcorn instead of candy or ice cream.

B. Physical Activity

Although exercise was discussed with less enthusiasm than diet, several ideas for ways to increase physical activity emerged from the interviews. Because of the communal nature of Hutterite society, group or colony activities were discussed more frequently than individual exercise programs, but people had ideas for increasing activity at all levels. In an earlier study, some members of one colony had raised the idea of instituting a colony gym or exercise room; for this reason, the researchers made this suggestion often to determine whether it would be feasible for other colonies. In one colony (Colony 3) it was apparent that some members had already discussed this idea independently.

Some exercise facilities for colony use are already present in most colonies: many colonies are located near rivers or man-made ponds with suitable

swimming holes, and many have also made provisions for group sports such as volleyball and baseball that have been popular among young Hutterites. These facilities are used mainly by children and young adults and not by older adults (there are some exceptions) as swimming and sports are seen as more appropriate for children. Several adults indicated that they would welcome the opportunity to use facilities aimed at adults and provided by the colony for group use. Enthusiasm for this idea varied, as some people merely agreed that a gym of some kind would be possible, and others were already trying to convince the colony leaders to acquire some equipment for colony use. A few people indicated that a precedent for colony facilities existed already: "A lot of the Manitoba colonies, they have gyms and swimming pools" (G51); and that the Dariusleut colonies should be able to set up a similar sort of gym for everyone to use.

The suggestions for colony exercise facilities involved purchasing exercise machines such as treadmills, cross-country ski machines, and stationary bicycles, and setting aside a room to house these machines. One person even suggested that the colony "could go into making them and selling them to the colonies" (G10). The argument for collectivizing the exercise equipment is that "it is too expensive to buy individually, and it's something everybody would get something out of." (G13) It was also suggested that a schedule of use should be set up, in which men and women would use the gym at separate times to preserve modesty. The schedule would also take into account the work requirements of different individuals: "three or four might do it today, the other ones tomorrow..." (G42). Many people felt that such a gym "would be loaded, you couldn't get in" (G37), but others said that it would mainly be the younger people who would use the machines.

Several concerns were raised regarding the implementation of such an idea. One important concern is that of leadership support. In some cases, many colony members are in favour of a colony gym, but “convincing the bosses is the thing” (G13). Some colony elders indicated an interest in colony exercise facilities, but others were less enthusiastic. Even where the colony ministers and elders are in favour, the approval of the council of ministers is essential, as they can forbid any colony activities they deem unsuitable. Although many people use exercise machines in their homes, some people felt that the church might object to colony involvement in and sanctioning of exercise programs, as this might be interpreted as condoning “jumping around and playing games” (G21) rather than using one’s energy to work for the benefit of the colony. The leaders of one colony (Colony 2) expressed doubts about the readiness with which some members of their colony would accept colony provisions for exercise (G20). One person also raised the concern that colony exercise machines would be vulnerable to misuse and mistreatment (G23). On the whole however, colony property is kept in good running order and repaired if necessary by colony mechanics; if exercise facilities were treated as a colony responsibility, they would likely also be well maintained.

Notwithstanding the apparent popularity of the idea of colony gyms, some colony members felt that exercise should be an individual concern, or that exercise machines were not necessary. Walking was the most commonly mentioned alternative to using a gym. Several people who were concerned about the appropriateness or the feasibility of other kinds of exercise indicated that they could walk more. It appears that walking is the ideal exercise for Hutterites, as it is allowed for all ages by the Hutterite faith, and it can be done by people of all ages and of both genders, alone or in groups. Neither does walking require any special clothing or equipment. Several people indicated that

they could increase their walking by choosing to walk around the colony to their work, rather than driving.

There are two problems associated with walking as the main form of exercise. One is the choice of a suitable area for walking, as roads outside the colony are considered unsafe, and some people find that the paths available on the colony are insufficient: "it's no good walking around the yard. It's not a big walk, you can't walk brisk" (G14). People also find that inclement weather can prevent them from walking outdoors. This is a particular problem in the winter, when deep snow and cold winds make outdoor activities difficult and unpleasant (G34).

A few people also indicated that they should increase other exercises that are done indoors. Stretching exercises and calisthenics such as sit-ups and jumping jacks are done by some women in their homes, and some of these women felt that they should "do more exercise to get that tummy down" (G12). Some of the people with exercise machines also indicated that they should use them more frequently. One of the major impediments to increasing this kind of exercise is the necessity of doing it alone. Hutterites generally do not enjoy being alone, and are encouraged to choose sociable activities over solitary ones. The prospect of exercising alone is often enough to discourage people from starting individual exercise programs: "it's better when more... so I don't want to go alone, that's why I don't" (G43).

C. Health Knowledge and Attitudes

Several people who have successfully instituted health promotion, or who have made changes in their own lifestyle and choices, credit their ability to change to their having the necessary knowledge and an attitude of interest in health. They see these attributes as lacking in others who have maintained more problematic aspects of lifestyle, and want to find ways to interest others in learning about healthy behaviours. A few people felt that others needed education, as they “don't understand the connection between what you eat and your heart” (G28). Some also indicated concern that the head cooks sometimes lack the knowledge of nutrition that they should have in their position of responsibility over the diet of the whole colony. More knowledge of the connection between diet and health would also help individuals make food choices at the table and when selecting snacks.

In some colonies, health information is readily available throughout the colony, but in other places, only a few people have taken an interest in learning about health. These more isolated ‘health-minded’ individuals have had difficulty in spreading their knowledge: “I told them I could teach them a lot if they would listen, but they don't listen.” (G43). In such cases, people feel that they need help from outside experts who might have more influence in educating other members of the colony. It was suggested that head cooks should be required to take nutrition classes, and that individuals should consult outside dieticians to learn about healthy eating (G34, G43). There were also those who felt that other members of their colony would not be sufficiently interested to consult outside experts, and who therefore requested assistance from the project researchers: “You should come back with pictures or slides or even a film so people can see it for themselves. That would be most useful” (G28). In addition to education for individuals, several people also hoped that the project

researchers would teach the head cooks how to cook with less animal fat and salt.

There was some concern that efforts to educate the head cooks about nutrition would be insufficient to change the dietary habits of the colony. One person thought that “A ‘healthy’ cookbook would also not help since the problem lies with the head cook and her cooking. She would still fry foods because most people would like it that way.” (G23). He felt that the problem was not only with people’s knowledge of healthy behaviours, but also with the indifferent attitude of most colony members towards health in general. Several other people also discussed the difficulty of convincing others to change in terms of attitudes: “It’s all up to them, it has to come from within, they won’t do it if you tell them” (G8). Without the necessary interest in health, people will not take advantage of any information available to them. Most people had little idea of how to change the attitudes of others: some think that education about the risks of problematic behaviours should be enough; but others are less optimistic: “they would have to get sick first, then you know you have to change” (G56).

Several of the people we talked to also recognized the need to stimulate interest in prevention. Many of the participants felt that changes were only necessary for those who became ill, but others thought that people should take more care to prevent illnesses. “We need to convince them that it would be good to get them out there (exercising) before they have a problem ... even for other things than heart, just to get energy” (G53). This would involve taking a proactive attitude towards health care. The other measures discussed included using diet and herbal remedies to manage health: “If they would eat healthier and get enough rest, the body builds up a resistance” (C19). Many people seem reluctant to take control of their health through diet and medicine, however. “The problem is they panic too soon and I guess they don’t trust it enough” (C3).

Those who have made changes to their diet and medical practices have found that their health and well-being have improved, and want to see others enjoying similar benefits.

For some people, the lack of interest in health shown by some colony members indicates a general attitude towards life that needs changing. “I believe that no matter how well you eat and take care of your diet, if there is a lot of tension, hate and anger in you, you can't be healthy” (G56). An unhealthy attitude is therefore damaging not only to one's body, but also to one's spirit. A few people discussed the connection between spiritual health and physical health. The ideal of spiritual health seems to involve reducing tension and paying attention to the Hutterite religious principle of *Gelassenheit*⁷. All of the people who discussed spiritual health were also interested in and knowledgeable about health; for these people, a healthy diet and physical activity are inseparable from their spiritual well-being, and their faith leads to a positive attitude towards preventive health care.

Although the members of a few colonies perceived little need for change, the members of the other colonies have many ideas for changing problematic aspects of lifestyle. The concerns raised around the implementation of these changes related to one of two areas. The first is the difficulties of finding motivation for different people to participate in health promotion. Many sources of motivation were discussed, including spiritual concerns, pressure from other colony members, and primarily concern for health. The other area is that of the decision-making structure of the colonies. This structure is two-fold, as it comprises elements of egalitarianism and authoritarianism. Hutterite colonies

⁷ *Gelassenheit*, literally ‘giving-up-ness’, is usually glossed as serenity in literature on the Hutterite faith. In modern standard German the term means calmness or composure.

are egalitarian in that many decisions are made by majority decision, and changes must be sought by most members of a colony, but authoritarian in that the ministers and colony elders have more influence than more junior colony members, and can veto proposed changes. The balance between the egalitarian and authoritarian principles makes up the structure for making decisions in the colonies, within which structure any health promotion initiatives must be implemented. All of these considerations have had, and will continue to have, a strong influence on the possibilities for deliberately controlled changes in the colonies.

Chapter 6. Discussion

There are many aspects of Hutterite culture that affect the course of change in the colonies. These will be outlined in this chapter, as they influence the possibilities for and limitations of change, and guide the way in which changes occur. The Hutterian faith, as the reason for the group's distinctiveness, is the theme that sets the context for everything else. Life for the Hutterites is given meaning and structure by their religious beliefs, which require communal living and obedience to God's will as revealed to the community. The obligation of communal living creates a situation of conflict between the interests of individuals and of the collective; much of the responsibility for decisions is in the realm of the collective, but individuals retain their own views and sources of motivation. Health was the most important of the sources of motivation discussed. Individual health is often considered the responsibility of individuals, but can be cared for by collective action as well. Food is another important topic for Hutterites, as it is surrounded by symbolic and traditional significance as well as preferences and eating habits. Resistance to dietary change is often based on traditions and individual tastes. Resistance to change is also encountered for more practical concerns, such as the reallocation of resources or an increase in initial costs in making changes. In many cases, the health concerns returned to the topic of knowledge and education. Hutterites are open to education in general, but are often wary of what the outside world has to offer. Some have been able to use the outside world as an information resource, but others may need assistance to learn about healthy behaviours.

I. Religious Ideas Affecting Lifestyle Change

The Hutterites' faith is the underlying theme of their entire way of life. Religious principles are the basis of their communal lifestyle, and guide every aspect of daily life. However, their religion is so completely central that it is often taken for granted. Their godly living is so ingrained that the religious reasons for their actions seldom need to be articulated, so that many people are not consciously aware of doctrinal explanations for unquestioned choices and activities. The centrality of the Hutterite faith makes it essential to ascertain the doctrine that relates to diet and exercise in order to understand the inherent guidelines for or restrictions upon behaviour, but this very centrality also makes it difficult for many Hutterites to articulate the beliefs behind their actions.

At each colony there are a few people whose special interest in the scriptures makes it easier for them to express the basis for their beliefs. The ministers have the greatest familiarity with the sermons from constantly copying and reading them; their knowledge of scripture and sermons is often extensive. The German school teachers also have extensive knowledge of sermons, prayers, and hymns gained through teaching the content of these writings to the children. These men are often those who are best able to explain the scriptural basis of belief because of their responsibility for instilling this knowledge in their pupils. Other people with a great deal of scriptural knowledge are those who take a special interest in reading and studying the Bible. It is from these people that we obtained the best explanations of the spiritual underpinnings of Hutterite daily life.

Unlike many other religions, Hutterites do not place any restrictions on foods which may be eaten. The food taboos of Judaism were rescinded in the New Testament: "... whatsoever thing from without entereth into the man, it cannot defile him; because it entereth not into his heart, but into the belly..."

(Mark 7:18-19)⁸. The influence of faith on eating habits is thus felt not in particular choices of food, but in the behaviour surrounding food and eating. There are many biblical references discouraging overeating and drunkenness and praising temperance. Although food and drink are both necessary for the body and enjoyable, they can be consumed in excess. Enjoyment of food can be both a blessing and a temptation to sin, as gluttony is one of the 'lusts of the flesh'. Resisting the temptation to overeat is seen as virtuous, while overindulgence is a sign of spiritual weakness as well as being unhealthy for the body. Some people extend the idea of overeating as giving in to fleshly desires to include the temptation to eat unhealthy foods. Although no foods are inherently unclean, some are better for the body than others. For some people, 'junk' foods are as dangerous a temptation as overeating, for when people choose only the foods they like instead of those they know to be healthy, they are catering to the 'lusts of the flesh'. Choosing healthy foods thus indicates concern for both physical and spiritual health (G16).

Because the New Testament declares that all foods are clean, the judgment as to which foods are healthy or 'junk' foods must be a human judgment; likewise, no specific instructions are given as to how much food is excessive. For this reason there is a great deal of variation in people's ideas of healthy and unhealthy eating habits: what one person sees as a healthy diet is often a cause for concern to others. The choice in foods is therefore left up to the cooks and to individuals. The influence of the minister over the diet is not spiritual authority in determining what is acceptable, but rather the influence of a man in authority in making his preferences known. Eating habits are not considered a matter for

⁸ Biblical references are taken from the King James version, as it best expresses the old-fashioned language preferred by Hutterites for religious writings.

the church as a whole, but rather for the colony to decide, and thus vary greatly from one colony to another.

The lack of specific spiritual guidelines can work either for or against change. On one hand, the necessity to avoid junk foods or those that are problematic for CVD is undermined by the idea that no foods are inherently harmful. On the other hand, the lack of religious prescriptions also means that food habits or traditions are not rigidly defined; any diet that provides sufficient food for everyone's physical needs is acceptable to spiritual standards. Hutterite doctrine therefore neither requires nor prevents the adoption of a heart healthy diet, although it does encourage prudence in food choices and quantities.

The reasoning behind the necessity to eat and drink in moderation has to do with the New Testament idea of the body as God's temple. According to scriptural authority, the Christian people are themselves God's temple and the dwelling place of the Holy Spirit⁹. One can choose either to honour God through that temple, or to defile it. Some Hutterites believe that abusing the body by eating unhealthy foods constitutes defiling God's temple, while eating a healthy diet and caring for one's body is a way of honouring God. However, this idea of honouring God through caring for one's body has not been extended to maintaining it in good physical shape through exercise. The Hutterite beliefs concerning exercise relate instead to the exhortation in Titus that "...denying ungodliness and worldly lusts, we should live soberly, righteously, and godly" (2:12). The opposition of worldliness to godliness is one of the key paradigms of the Hutterite faith. Avoiding worldliness is done physically, in the isolation of the Hutterite colonies from the surrounding world, as well as spiritually by removing the emphasis on material non-essentials. The concern with keeping

9 "Know ye not that your body is the temple of the Holy Ghost, which is in you, which ye have of God, and ye are not your own? For ye are bought with a price, therefore glorify God in your body." (1 Cor 6:19-20)

away from worldly things and passions is applied to every aspect of life, especially to people's activities. This means that over-concern with appearance is equated with 'worldliness' and vanity; this obsession is seen as the sinful motivation for much exercise and dieting in the 'outside' world. Exercise for its own sake is thus seen as spiritually dangerous by the more conservative Hutterites.

More leeway is given to children in the expectations for godliness. Children are considered to be naturally inclined towards the world, and as they have not yet learned right from wrong, it is believed that their natural sinfulness is forgiven. However, restrictions are placed upon their actions in order to teach them godliness. They are allowed to play freely as long as they do not violate the principles of their group. Worldliness when applied to children's play includes the use of toys and bicycles; as material non-essentials, these are kept to a minimum¹⁰. Games that require complicated equipment are not possible, as the equipment will seldom be available. Competitiveness in play is also kept to a minimum, as it goes against the spirit of communalism. Children are taught instead to play together cooperatively, and games that tend to induce strong competition are forbidden. A further principle limiting play is that of physical separation from the world; any play must take place within the colony compound or nearby.

Hutterite children do not play organized sports to the extent of their counterparts in 'the world'. Only a few sports are allowed, and these must not require much equipment or involve strong competition. Swimming and riding horses are acceptable where facilities are available; volleyball and baseball are

¹⁰ In practice, the restrictions on bicycles and other toys vary from one colony to another. At some colonies they are forbidden, while at others they are commonplace. The age at which children are expected to give up using bicycles and other toys also varies by colony.

both popular games in the colonies as they are played with only mild competitiveness and emphasize cooperation and group play. Hockey is one game that is not allowed as it tends to become too competitive and aggressive (Hopkinson and Brunt n.d.). Running around within the colony is allowed, but long-distance running is not, as it takes people away from the colony. Some teenage boys lift weights to improve their strength; this is not officially approved, but is tolerated if it is not done too openly. The improved strength of the boys is an asset to the colony, even if the method is somewhat suspect.

As teenagers become adults, they are baptized and married, and take on adult responsibilities. Becoming an adult also involves putting away childish things and exercising self-discipline and temperance. Games that are tolerated in teenagers are not allowed for adults. Running is no longer appropriate. The only physical activities that are sanctioned are those required for work. In adulthood, exercise for its own sake is indulgence in worldly passion and vanity, as it contributes nothing to the colony and takes time and energy away from working. Most of the aerobic activities favoured by North American adults are unacceptable for Hutterite adults, with the exception of brisk walking.

In the area of exercise, therefore, the influence of the church is strongly felt. The more conservative element would confine aerobic activity to physical labour, which is less and less frequent with mechanization. More liberal views allow brisk walking within a short distance of the colony compound, preferably away from main roads; calisthenics such as sit-ups and jumping jacks done indoors; and the use of exercise machines, especially for therapeutic purposes as recommended by a doctor. These, however, are leisure time activities and imply time away from productive work, which is an obligation the individual owes to the group. Instituting colony exercise programs would require the approval and support of the minister as well as the participation of the colony members, and

must be done in such a way as to meet with the approval of the other ministers. Collectively purchasing and using exercise equipment, as a technological change and an official endorsement of a leisure time activity, would require the explicit approval and permission of all the ministers. Although many ministers are willing to accept that some colony members exercise privately in their spare time after work, they will be much more reluctant to sanction publicly activities that are potentially dangerous to the souls of their flock.

The Hutterite faith involves striving to achieve *Gelassenheit*, or serene resignation to God's will and joyful acceptance of suffering for His sake, and there are many scriptural passages bidding the Christian not to worry about material matters. This principle of *Gelassenheit* affects the Hutterite response to both psychological stress and illness. Faith and serenity are the Hutterites' ways of dealing with stress. In addition to a strong belief, the community also provides opportunities for prayer and discussions with elders to alleviate worrying. When this resignation can be achieved, it alleviates stress. In regards to illness, however, complete acceptance of suffering can also have negative consequences.

Contrary to the North American view that sickness is to be avoided or cured at all costs, for Hutterites suffering is not to be avoided, but rather to be accepted joyfully as bringing one closer to God. In the early days of the Hutterite faith, martyrdom and starvation were common forms of suffering for the faith, but in modern times suffering more often takes the form of illness. Any form of sickness is considered to be the will of God; one cannot avoid God's will. The orthodox Hutterite's response to illness should be to pray for the strength to endure suffering, or to care for those who are ill; the Hutterite theology does not discuss prevention of illness. This kind of fatalism in the face of illness is not ubiquitous among Hutterites, but it is certainly a widespread idea. Although it

does not prevent Hutterites from seeking medical attention for their illnesses, this idea reduces the urgency of the need for prevention and ways of maintaining good health. Many people believe that good health is a matter of caring for one's body, but others believe that it comes from God, and cannot be changed significantly by human action.

Hutterite communalism, or *Gütergemeinschaft* (community of goods) is based on biblical descriptions of the early church: "and all that believed were together and had all things common", were as one heart and soul, and sold their goods to distribute among the community of believers according to the needs of each (Acts 2:44-47, 4:32-35). *Gütergemeinschaft* for the Hutterites thus means not only material communalism, but also striving to be one heart and soul, and to follow together the narrow path to salvation. It is considered essential for the members of the church to be constantly together in groups; this allows everyone to observe everyone else, to protect each other from temptation and to prevent a spiritually dangerous individualism from developing among the believers. The principle of *Gemeinschaft* (community) combined with that of *Gelassenheit* necessitates submission to the community in all matters, as this is equated with accepting the will of God.

This submission to the community affects the daily lives of Hutterites in ways that are difficult to understand for non-Hutterites. Contrary to the ethos of most of North America, the Hutterite faith aims to reduce the individual differences between people to make them into willing servants of God. In order to do so, the community places strict limitations on individual behaviour. Daily life is ruled by obligations to the community; work, rest, meals, and to a certain extent recreation are ordered by the community according to centuries-old principles.

Changes to lifestyle behaviours are limited by these constraints on individual behaviour. Therefore, the extent to which individuals can change their lifestyle is quite limited, as most of the day is spent in work determined by the needs of the group. An individual has no choice in the kind of work he or she does, as the jobs and the way in which the work is done are assigned and largely predetermined. Colony members cannot change jobs because of stress or insufficient physical activity, but must cope with these problems on their own and adapt to the work. Individuals are allowed to spend their free time as they choose, but in practice there are significant limitations on the activities that are considered appropriate, and the amount of free time is quite limited. Increasing physical activity must therefore be done in such a way that it does not take people away from their work duties.

Living communally also requires constant contact with the community. Hutterite work patterns are structured such that people seldom work alone; “many hands make light work” is their philosophy. Working as a group also ensures cooperation in other matters, as Hutterites become accustomed to following the colony ways in everything. There are no rules requiring that Hutterites spend their spare time with others, but sociability is an important part of *Gemeinschaft*. Hutterites are not accustomed to being alone, as they spend most of their lives surrounded by groups of people while working and at home. Enjoying the close company of others is part of the communal lifestyle, and indeed craving solitude is thought by Hutterites to be a symptom of *Anfechtung* and is discouraged on that grounds. As a result, most people spend their time after work ‘visiting’. For leisure activities, colony members seek out the company of others. People who are invalids or sick are not left alone but are surrounded by a constant stream of brethren providing comfort and support. The Hutterites’ love of company also places limitations on lifestyle changes.

Some can and do choose to exercise alone, for example, but most find it difficult to find both the time alone and the motivation in isolation for solitary activities. As the Hutterite faith emphasizes group-directed activities, Hutterites are unaccustomed to self-directed initiatives such as solitary exercise programs.

Hutterite communalism also extends to preparing and eating meals. The three main meals of the day are cooked in the colony kitchen and served in the communal dining hall. Schoolchildren take their meals together in a separate room with the German school teacher, and the adults eat together in the main dining hall. Missing meals and eating at home is allowed only under special circumstances: if someone is travelling during the normal meal hour, food will be kept from the meal for them to eat later; and if there are visitors they will sometimes be fed in the home they are visiting rather than in the dining room, but again it will be from the meals made in the kitchen. 'Lunches' eaten in working areas or in homes also consist of food provided by the colony and distributed to each household for their use¹¹. Generally there is no cooking in the apartments. The homes in some colonies have microwave ovens or barbecues for reheating leftovers or for preparing late meals to supplement the colony diet, but these are not to be used to replace eating in the dining hall. Hutterites are thus not completely free to alter their diet on an individual basis by preparing their own food and avoiding meals in the colony dining hall. Sharing colony-provided food is an important aspect of *Gemeinschaft*, and therefore dietary changes must be made within the limitations of colony cooking.

11 Some Hutterites have private money which can be used to purchase food for 'lunches', but such private resources are officially forbidden and vary in practice from one colony to another and from one family to another. Opportunities to acquire money and to shop for food items are rare in most cases.

Following the narrow path of obedience to God's will places severe limitations on the Hutterite lifestyle, and on the possibility of change. Scriptural authority restricts physical activity to avoid 'worldliness', but allows relative freedom in choice of diet, and is silent on health care practices. Hutterian doctrine necessitates participation in *Gemeinschaft*, or community, and limits individualism. Hutterites must therefore make most changes as a group rather than as individuals.

II. Responsibility and Motivation

A. The Communal Division of Responsibility

Making a commitment to communal life, and giving up 'the world', involves giving up individual goals and responsibilities for those of the group. The identity of the colony member is fused with that of the colony, and he or she accepts a pattern of living predetermined by religious principles, traditions, and rules. In becoming a baptized Hutterite, the individual renounces autonomy and independence to become part of a larger and more important whole, and to accept God's will as expressed in the colony. The collective group in turn assumes responsibility for providing for the spiritual and temporal needs of its members. The colony expects obedience to its authority as expressing the will of God, and punishes disobedience through social sanctions.

Although the colony assumes responsibility for decision-making in many areas of life, it leaves some leeway to the individual members. Most of the Hutterite's day is structured by work and meals, but home responsibilities and leisure are left to the individuals to organize. Likewise, resources are allocated to each member according to their presumed need, but the actual disposal of these resources, such as food, housing, and clothing, is left at the discretion of the individual. Within the guidelines provided by the colony for appropriate

behaviour, each member has some independence in making what are considered to be minor decisions. Having given up everything in submitting to the community, the individual is then given back some of the surrendered responsibilities. This balance between obedience and independence is maintained by social sanctions on those who break the rules or act outside the colony traditions.

In those areas where the colony assumes responsibility, there are two levels at which the colony is governed. The first is that of the body of all baptized men, who discuss and vote on major decisions affecting the whole colony. The decisions of the voting members or of those in positions of responsibility are accepted by the membership of the colony; this is ensured by the respect the Hutterites have for this decision-making process. The outcome of a vote held between all baptized male members is considered to be the expression of God's will for the community. The discussion and voting also serve to bring out the wishes of the voting members (and often also those of their wives).

The second level of governing is that of individuals who are placed in authority in certain areas, and given the responsibility of making decisions and taking action in that area. These individuals must act in accordance with the Hutterite religious principles, rules, and traditions, but are given latitude to use their own judgment and to take into consideration the wishes of the colony members. Respect is cultivated in Hutterites for the decisions of those in authority, as it is not appropriate for more junior members to question or challenge their elders. The individuals in positions of authority also ensure that this respect is not strained by trying to act as much as possible within the wishes of most colony members. It would also be inappropriate for a Hutterite to take

advantage of the authority entrusted to him or her by the colony in acting against the will of the colony members.

In a communally organized society, the wills of all members must be harmonized to bring about deliberate changes. As the Hutterite system is organized around the principle of consensus, only those changes that are sought by the majority of colony members will be made by those in positions of responsibility. A few individuals that want change find it difficult to convince those in positions of responsibility to make changes without the support of other colony members, and may be reluctant to appear to express criticism of their elders by requesting changes. People who are in positions of authority and responsibility are also reluctant to introduce changes without the support of the colony members, as they do not wish to appear to be abusing their authority. Thus, in order for deliberate changes to be made, they must be sought by both the general membership of the colony, and by those individuals who are in the positions to implement changes through the proper channels.

1. Positions of Responsibility

Many changes have been or could be attempted to improve health, and in particular cardiovascular health, in the Hutterite colonies. In most of Canadian society, many of these changes would be at the discretion of the individual or the family, but for Hutterites, the colony assumes responsibility for many aspects of lifestyle that are touched upon by diet, exercise, and health care practices. Most lifestyle changes must be undertaken by the whole colony in order to be effective. For this reason it is essential to examine the influence that various individuals in positions of authority have over decisions that affect the colony lifestyle.

Spiritual matters are the responsibility of the ministers. Any reference to religious doctrine in enhancing health promotion must go through the minister,

as he is the only one with authority in this area. As spiritual leader, the minister also has final authority in all other aspects of life, whether it is exerted or not. He is thus a key contact for outside health promoters. In most instances, the minister will not initiate change himself, but will instead either approve and encourage or discourage any changes that are made by other members. In many areas, the council of ministers from all colonies holds a higher authority than any one minister. Changes involving technology or behaviour, exercise machines for example, must also have the explicit approval of the council of ministers.

Financial managers ('bosses') have the responsibility for all colony financial decisions. Their authority extends over any matter that involves the allocation of colony funds or other resources such as labour. This responsibility makes the boss a key person in dietary change, because he decides what foods will be purchased for the colony; fresh vegetables in winter, vegetable oils, salt substitutes, and snack foods must all be approved and purchased by him. His active participation is therefore necessary to the success of dietary changes requiring special foods or ingredients from outside the colony. Providing colony exercise facilities would also be the responsibility of the boss, since he would make decisions about the purchase of equipment and the construction or conversion of a room to house it. Many people complain that they would like to see colony facilities, but "convincing the bosses is the thing" (G13).

Together the ministers and financial manager constitute the main source of authority, which has a subtle but pervasive effect on everyone in the colony. In interviews, the number of people who discussed the importance of leadership in colony decision-making was small, but often the necessity for permission or approval is taken for granted within the colony. The success of changes with the support of the leaders, and the failure of changes without it indicate the

importance of these men as key initiators or facilitators in any group-wide change.

The third position of authority in lifestyle change is that of the head cook. Although her influence is over food alone, in this important area it is very strong. The support of the head cook is necessary if any significant changes are to be made in the meals and the way they are prepared. The responsibility for changing diet is in fact allocated to the head cook by most people: "...the rest is up to the cook. The way she feeds us, that's the way we're going to be" (G33). Although individuals can choose the foods they eat from those available, it is the head cook and the cooking women who decide what the choices will be, and what the ingredients of the dishes will be. The most successful and widespread dietary changes, those at Colony 1, were initiated by the head cooks, while changes that did not involve the head cook have been more restricted in their impact. Without the active participation of the head cook, any dietary changes will be minimal. It is therefore essential that the head cook be the means through which dietary health promotion initiatives are directed.

The German school teacher is a fourth position of authority for lifestyle change. This man is responsible for all children of school age throughout the day, and has some control over all unbaptized young adults. His primary responsibility is the education of the children, which for Hutterites involves every aspect of their upbringing. He teaches the Hutterite faith in hymns, prayers, and sermons; reading and writing the German script; and the rules for appropriate behaviour at all times. He is the primary disciplinarian for all children whether they misbehave in his presence or not. He supervises the school children's meals, teaching them table manners and eating habits, and organizes other activities such as work when the children's help is needed in the garden. This far-reaching responsibility gives the German school teacher a great

deal of power to influence change by instilling his attitudes towards appropriate behaviour and eating habits in the children under his care. His cooperation is therefore key in instituting colony-wide changes in diet.

2. Individual Responsibility

The individuals in positions of responsibility have a great deal of influence as those through whom decisions are made. However, in most areas, individuals are still at least partially responsible for their own decisions and behaviour. In many cases, the responsibility is shared by the individual and the authorities. Colony authorities can provide the necessary tools for a healthy lifestyle, but ultimately it is up to the individual to make many of the necessary choices. The cooks provide a range of foods from which individuals choose, but cannot control the foods or quantities that people choose to eat from this range. Likewise, the colony or the bosses can provide exercise facilities and encourage aerobic exercise, but it is up to individuals to use their free time as they see fit; to use the machines or to walk, or not.

Where responsibility is shared, it is doubly necessary for the success of health promotion initiatives that there be cooperation between individuals and those in authority. As no one party is completely responsible, it is easy for either party to blame the failure of initiatives on the other. For example, many people claim that changes in diet are entirely up to the cooks, and that individuals cannot make such changes; while the cooks for their part claim that they can only make suggestions, but cannot force anyone to change. In reality, both parties have some power to make changes, but neither can be completely effective without the participation of the other. The same is also true of the roles of individuals and authorities in exercise initiatives.

Some of the areas of lifestyle that touch on cardiovascular health do not fall under the responsibilities of colony authorities, but are left more or less entirely at the individual's discretion. Psychological stress, health knowledge, and medical practices are the most significant of these. Individuals are expected to find their own means of dealing with psychological stress. The preferred source of relief is in *Gelassenheit*, in adopting an attitude of peaceful resignation to God's will in all areas of life. There was no discussion of ways in which the colony could help those members who suffered from stress. For the most part, individuals are also expected to inform themselves about health, and to make their own decisions regarding the health care resources available. Health information is available through various knowledgeable individuals in each colony, as is information about health care practitioners, so that "if they're not healthy, it's their fault" (G7). The colony authorities take no responsibility in any of these areas beyond providing information to those who request it.

Effective lifestyle changes are therefore made through the interaction of the coordinated wills and efforts of the individual members of the colony and the initiative of the various people in positions of authority. Some changes can be made by individuals, but all colony-wide changes require the participation of most colony members as well as the spiritual support of the ministers; the efforts of the financial manager to allocate the necessary resources; and the participation of the German school teacher in educating the colony's children to incorporate the changes into their lifestyle. The head cook has further influence in implementing dietary initiatives.

B. The Interaction Between Responsibility and Motivation

An inherent contradiction in Hutterite life lies in the fact that although much of the responsibility for daily life is given over from the individual to the

colony, the will or motivation behind the decisions and actions of the colony does not originate in the people in positions of authority or in the collective as a single entity, but in the individual members that make up the collective. As egalitarian groups, Hutterite colonies must take into consideration the wishes of each member in decisions that affect the whole community. In this they must find a delicate balance between individual and collective thinking.

The Hutterite faith works against individualism. Children are taught unquestioning obedience and acceptance of religious teachings, of the authority of God over the community and of the authority of elders over juniors; and this unquestioning acceptance carries over into adulthood. Hutterian communalism fosters collective thinking and acceptance of a predetermined and universally valid truth. The structure of authority within the colony and the church reinforces obedience to its tenets through social pressure for conformity and punishment for deviance. The influence of this authority structure spills over from matters of faith and personal conduct to practical matters such as economic decisions. Decisions are not imposed unilaterally by those in authority, but the views of the elders have weight to influence those of junior colony members. However, practical decisions affecting the colony are made by majority decision. Although the elders have more influence in discussions, each member's vote counts equally in the final decision. And despite the constant teaching designed to foster a collective orientation, Hutterites remain individuals, with individual desires, goals, and motivations.

During the normal running of the colony, there is little change, as the daily, weekly, and seasonal rounds of activities proceed according to the larger traditions of the Hutterite faith and the smaller traditions of each community. Most of the desires and expectations of individual members are shared, through familiarity with the traditions formed in spiritual necessity and practical

agreement. Although individual wills are distinct from authority in most cases, the separation between the wills that make up the collective and the collective's responsibility for decisions is minimized by the lack of conflict. The members may have some common and some distinctive sources of motivation, but they bring their diverse wills to support decisions that are acceptable to all. In this way the source of motivation is less evident and less important than the end result of collective agreement.

A situation in which deliberate change to some aspect of colony tradition is sought divides the colony members according to their diverse motivations and desires, so that the separation between individual members and the positions of responsibility is widened and becomes all too evident. When some members desire a break from tradition, the problems of coordinating the wills of many diverse individuals become very real difficulties. Only then is one aware of the complexity of uniting all the members of a colony behind the actions of one responsible individual in a way that the faith is followed and all members are satisfied.

When change is sought by an individual in a position of authority, he or she faces the difficulty of convincing all of the other colony members to accept the change. When the change is sought by individuals without authority or responsibility in the colony, they must convince not only the other colony members, but also importantly the members in positions of authority to accept and to take initiative for implementing the change. In both situations, the innovator has little chance of making rapid, widespread changes. Attempts to make widespread changes such as health promotion initiatives must take into account the sources of motivation for each individual, from the elders to the young adults, and must provide each with a convincing reason to support change.

C. Sources of Motivation

Naturally, perhaps, given the topics of most of our interviews, the most commonly cited motivation for lifestyle change was a concern for health. There were several different ways in which health motivated people to change their behaviour. The first was as a response to an illness or to generally poor health. People diagnosed with a medical condition change their lifestyle on the recommendation of doctors in order to cope with the condition. The most commonly mentioned illnesses provoking lifestyle changes were CVD and diabetes, but there were also people who changed in response to pulmonary fibrosis, gastroenteritis, arthritis, gout, and other conditions, often with the additional result of reducing cardiovascular risk. Most people with some form of CVD were on medication for hypertension, most also mentioned avoiding certain foods, and some had increased their activity levels as well. Several people also altered aspects of their lifestyle in response to illness in close relatives or colony members: when one member is diagnosed with high BP or cholesterol or diabetes, or suffers a heart attack, close relatives and other colony members become aware of the possibility of risks in their own lifestyle. Many people consulted doctors for CVD screening after a sibling or peer was diagnosed.

Some people are particularly concerned about a diagnosis of CVD or diabetes, as these illnesses are known to be possible precursors of sudden death through heart attacks or strokes, or of a long-term disability such as stroke-induced paralysis or diabetic blindness. Both of these situations are particularly distressing to Hutterites, as they violate accepted ideals of aging, illness, and death. Disability is difficult for Hutterites to deal with as the Hutterite life is structured largely around work. The ability to contribute productively to the colony is central to the Hutterite's self-worth, and is essential to a sense of full participation in colony life. A long term disability is also troubling in terms of

categorization, as it is neither a temporary illness from which one will heal, nor a terminal illness that leads one to prepare for death.

Sudden death as from a heart attack is troubling to Hutterites as it is not seen as a 'good death'. Ideally, Hutterites will die following an illness that can be recognized as terminal. During the course of the illness, the dying individual makes his peace with and says good-bye to his brethren and repents for his sins. Relatives and colony members have an opportunity to prepare for the loss of the individual. When a Hutterite dies suddenly, the surviving members feel that he has not had the opportunity to repent and be comforted by his brethren, and that they have been deprived of the normal process of preparation and grieving (Stephenson 1983).

An additional source of distress in deaths from CVD is that many fatal heart attacks occur in men in their thirties, forties, and fifties, who are often the fathers of young families. These events can leave young widows with several children to raise. Several people with a family history of early death from heart attack and a diagnosis of high blood pressure or cholesterol have been motivated to change their diet and activity levels and to seek medical treatment by the fear that they too will die young or be disabled by CVD.

Among people with no personal or family history of CVD or diabetes, many have been motivated to make lifestyle changes by a general concern for health and a knowledge of health risks in behaviour. 'Health-mindedness' in these people comes not from the salutary effects of a health crisis, but from the desire to maintain and promote general health and well-being. Those with this attitude seek out health information in newsletters and in books, and use this information to guide their choices in diet, activity, and medical treatments. The attitude of maintaining general health and good nutrition is predominant at Colony 1, and spread through the other colonies in varying degrees. The diet

changes at Colonies 1 and 4, although they have been effective to differing degrees, were both motivated by this general concern for health on the part of at least a few key people. Concern for maintaining general health is also the motivation for the reluctance of some Hutterites to try invasive medical procedures or drugs until less invasive measures have been tried.

For several people, the motivation to lead a healthy lifestyle, including diet and exercise, came directly from their faith. They consciously associate spiritual and physical health, and use their concern for spiritual health openly to guide their decisions. The spiritual motivation to care for one's body through healthy eating and through exercise comes from the idea that one's body is the temple of the Holy Spirit, belonging not to oneself, but to God; and from the frequent exhortations in the Bible to resist the lusts of the flesh. Resisting gluttony includes, for some Hutterites, choosing what one knows is healthy rather than what one wants, in food as well as in activity. Demanding that all food be 'tasty' is seen by some as giving in to the temptation of carnal pleasures, which are dangerous to one's soul and lead one off the narrow path to salvation. The people who discussed their spiritual reasons for lifestyle choices felt that others who do not appear to share this motivation either are unconcerned about their spiritual well-being, or fail to apply the spiritual warnings to their daily behaviour: "they don't think that it means ... that they can't eat what they want" (G34). In either case, there are some Hutterites who feel that there is a growing infiltration of 'the world' into their colonies in the acceptance of sinful habits.

Only one person mentioned psychological stress as a motivation to change lifestyle. This woman suffered from clinical depression following the birth of one of her children, and has since changed her diet by avoiding refined starches and

fats, and taken up regular exercise. These changes, in combination with medication, have helped her cope with anxiety and control her depression (G12). Other people who suffer from depression or anxiety have been treated with medication, or have tried to change their attitude towards life and to avoid worrying. Many people, however, feel that there is little that can be done to reduce stress.

A perception of obesity has motivated some Hutterites to alter their lifestyle in order to lose weight. Several people mentioned watching their intake of calories and fat and exercising as ways to “get that tummy down” (G12). The people we talked to identified several problems associated with obesity. Being too heavy was perceived as causing or exacerbating health problems, and as increasing the risk of illnesses such as CVD and NIDDM, especially during middle age and later years: “Some of these women and girls are so overweight. What will those girls do when they reach my age?” (C4). Obesity also signifies an inability to resist the temptation of gluttony and a failure to care for one’s body, and as such is an outward sign of a spiritual weakness.

The idea that obese bodies are unattractive, such as motivates many North Americans to lose weight, is seldom apparent in Hutterite colonies, as vanity is considered sinful. However, appearance may be an issue, particularly for young unmarried women. One woman referred to several girls in her colony as limited in marriage prospects by their obesity. She felt that if they lost weight, “they would marry, just like that they would have a boyfriend” (G34). Thus there is some evidence that a concern for appearance is connected with obesity, in addition to the problems for both spiritual and physical health.

Much of the motivation for choices that Hutterites make in daily life comes from the expectations that others have of them. Hutterian doctrine and

teachings emphasize obedience, and enforce it not through force, but largely through the observations and expectations of colony members. Hutterites must also accept the decisions of the majority in all colony matters. In this way colony members are taught to respond to the expectations of conformity from their elders and the colony as a whole. For this reason, some Hutterites felt that colony members could be convinced to participate in colony wide changes by peer pressure. In the case of Colony 1, the decision of the head cooks and their families to change cooking and eating habits resulted in colony-wide change, as other members had no choice but to accept the initiative implemented by the majority. The same pressure that ensures that colony members follow traditional rules and the colony decisions could also be applied to expectations to modify eating and exercise habits.

1. Negative Motivation

In addition to identifying sources of motivation for change, many people also identified areas in which insufficient motivation or impediments to motivation were preventing change. A lack of spiritual concern has already been mentioned as an impediment, but several others were also evident.

Many people were seemingly unconcerned about the state of their health, or about prevention of illness, and therefore felt no need to alter their lifestyle. Many of the participants in the study felt that there was no need to change unless one suffered from poor health, and that colony-wide changes were not needed at all: "I tend to think if a person doesn't have a weight problem they don't have to" (G54). This was interpreted by some more 'health-minded' individuals as a lack of concern: "Some people just don't care enough to do something about their health" (G5). In such cases, information about healthy behaviours is

ineffective as motivation, as people will wait until they become ill to take an interest in health.

For some people, the situation is less one of not caring, and more one of ignorance. Several people seemed unaware of the risks of a problematic diet and insufficient activity levels, or of the benefits of healthy eating and regular exercise for general well-being, stress management, and for preventing illnesses such as CVD and NIDDM. In such cases, behaviours have remained unchanged largely because "They don't realize how harmful it is, and they've done it for years" (C1). Although some people have tried to educate others about the harmfulness of an unhealthy diet, in many places the level of understanding is still not sufficient to motivate change. Some people are becoming aware that there might be room in their lifestyle for change, but lack the knowledge of healthy vs. problematic behaviours that would allow them to make important changes: "I should know more. [My cousin] died just last week from a heart attack, so I should know how to prevent it. ...I think most people would change things if they could understand how eating too much might be hurting them" (G31). Many Hutterites also believe that heredity is unchangeable; that a family history of CVD or diabetes means that the next generation will have it also. Relatively few people are aware of the importance of behaviour in allowing or preventing the expression of the hereditary tendency to manifest these diseases.

In some cases, the lack of sufficient motivation to change is based not in ignorance of risks or in lack of concern, but in specific problems involved in altering lifestyle. Changes that require an increase in effort or work to implement often run into difficulties when people are unable or unwilling to make the extra effort. Many people pointed to the difficulty of changing long-established habits in eating and activity, especially when these are based in

traditions and in preferences. When people like foods that they know to be unhealthy, the choice not to eat these foods is a difficult one: "People said 'How can [your husband] do that? Sit at the table and not eat what he likes? I don't know if I could do that.' ...Some people have a stronger will than other people" (G34). In some cases the effort of will required to make healthy choices at the table is prohibitively great. Effort of will and physical effort are both required to increase exercise, and many people find that this effort is also too great. During the summer months when agricultural work is at its most demanding, "the menfolk come home too tired" (G53) from a long day's work to want to exercise or go for a walk. During the long prairie winters, agricultural work is less physically demanding, but the cold weather and the snow prevent people from going for walks.

Extra work is sometimes also required to prepare healthier food. Vegetables are labour-intensive to prepare in large quantities, as some colonies have found, and there is often resistance to the additional work involved. "The women say that all that vegetable preparation is hard work, some of the new wives from other colonies, they might complain about the work involved in preparing more kinds of vegetables in larger amounts" (G57). Increasing vegetable preparation makes the cook week more difficult, and increases the need for extra help in the kitchen. If the women are not convinced of the need for more vegetables, they will not accept the increased burden easily. In colonies where labour is in short supply, it can be impractical to increase the amount of work required in cooking.

Many of the sources of motivation that are used in Canadian public health initiatives to encourage a healthy lifestyle are ineffective in changing behaviour in Hutterite colonies. Public health campaigns often appeal to people's vanity or

to the element of enjoyment in healthy behaviours as motivation to change. For the Hutterites, however, vanity and satisfying “the lusts of the flesh” are considered sinful, and the Hutterian faith and way of life are set up to avoid such temptations to sin. Although the goal of improved health may be valued, if the means of attaining that goal is through sinful motives, the change will be rejected; for Hutterites, a valid end does not justify an invalid means. For this reason, colony members must examine not only their behaviour, but also their motives for the possibility of sin. In a situation where motives are suspect, or may be perceived as suspect, any attempts to change will be resisted.

The opportunities for sin in changing behaviour are numerous. As already discussed, yielding to vanity in dieting or exercising to make one’s body more attractive is a dangerous temptation to be avoided. Exercising for the sheer enjoyment of physical activity is considered paying sinful attention to worldly passions. Before taking up exercise or dieting, Hutterites must consider their reasons, and those who express such unacceptable motives will be discouraged or even forbidden to make the changes.

Although some colonies and individuals have made changes to lifestyle that they feel are beneficial in improving health and reducing the risks of CVD and other illnesses, often it appears that these successes have not encouraged other colonies or individuals to make similar changes. This may be related to a desire to avoid the sin of envy. Using others as an example to follow is open to an interpretation of envy. Direct emulation of others who are perceived as superior in some respect (i.e. in possessing greater knowledge of health or the secret to a ‘better’ lifestyle) is thus to be avoided; and Hutterites are also reluctant to be set up as an example for others to follow. Elevating an individual or a colony as an example implies the kind of idolatry, or elevation to perfection, that is involved in *Pshrien*, and must thus be avoided.

All individuals can potentially make changes in their food choices within the limitations of the food available at the colony table. However, the extent of selectivity or 'fussiness' must not be excessive; individuals who are considered overly selective and who pressure the cooks to change the diet provided by the colony can encounter resistance from other colony members. Excessive selectiveness implies a challenge to the decisions made by the financial manager and the head cook about appropriate food, and an appropriation of the colony authority in placing one's own judgment over that of the colony elders and customs. In taking on for themselves decisions that are the responsibility of the colony and of specific individuals in responsible positions, Hutterites are guilty of the sin of arrogance or pride. No one in the colony should presume to be more knowledgeable than those in authority, or fail to defer to the judgment of the elders. It is difficult for Hutterites to break away from the respect and deference that they have been taught, and such presumption is also not encouraged or sanctioned by other colony members. Individual food choices must be framed in the context of individual taste differences or 'cravings', and not in that of superior health knowledge, for Hutterite elders will not be receptive to education from their juniors¹².

A final concern for the validity of motivation to change lifestyle is raised by the Hutterian emphasis on spiritual rather than on material 'worldly' matters. An excessive concern for material matters such as lifestyle and physical health is seen as indicative of a weakness of faith. Although one should care for one's body as the temple of the Holy Spirit, one must also be open to God's will.

12 Many Hutterites themselves use the term cravings to refer to their food preferences. This word minimizes the importance of food choices. A craving is an individual weakness which invites tolerance, but implies no value judgment on the quality of the food. A stronger preference suggesting a value difference implies a criticism of the choices of others and would be arrogant.

Gelassenheit implies acceptance of illness as suffering sent by God to try the spirit of the faithful; thus an over-concern with preventing illness can be seen as an attempt to circumvent God's plan for one's life. An over-concern with healthy vs. unhealthy foods challenges the Biblical authority, which states that there are no unclean foods. According to St. Paul, "one believeth that he may eat all things; another, who is weak, eateth herbs" (Romans 14:2). Thus those who are concerned with avoiding many foods have no scriptural support for their choices. Expressing strong concerns for appropriate food choices and other behaviours related to health can indicate a lack of *Gelassenheit*, a failure of faith in God to provide for one's health, and a belief that human judgment can better assess people's needs than divine judgment: dangerous spiritual failings for a Hutterite.

The possible pitfalls of sinful motives in attempts to change lifestyle are numerous, so much so that one may wonder how it is that any changes are possible at all. In practice, however, people's actions and motivations are open to many different interpretations. The definition of over-concern, for example, is not fixed, but varies among individuals and groups. The same is true of the balance in Hutterite life between the necessity of living an upright, Godly life in one's daily behaviour, and that of paying more attention to spiritual than to material matters. In most cases there are justifications for healthy behaviours to be found in Hutterite doctrine as well as concerns for the validity of motivation. The difficulty for many Hutterites is in choosing the best way of expressing their motivation to change in a way that emphasizes both spiritual and practical benefits of healthy behaviours, and encourages others to live healthily. Although the examination of motives may prevent some changes from occurring, it does not altogether preclude the possibility of change. On the contrary, examining

motives allows the Hutterites to adopt only those changes that are consonant with their faith and traditions.

Belonging to a colony means that many decisions are made on a group basis by vote and by key individuals to whom responsibility is delegated. The power to change lifestyle is thus shared by the individual and the colony, who must coordinate their efforts to allow change. Although the colony strives against individualism in its members, the support of individual members is required for colony decisions. The sources of motivation for individuals include predominantly health and faith, but there are also many influences that cause reluctance or unwillingness to change. These include ignorance or unconcern about health, the effort involved in making changes, and concern for the validity of motivations such as vanity, envy, and 'worldliness'.

The many sources of motivation and of resistance to change in individual Hutterites can make it difficult to coordinate health promotion initiatives in a colony. Although some individuals can change their own behaviours based on their motives and priorities, colony changes require the coordination of between fifty and one hundred and twenty individual sets of wills, goals, and motives. Despite the communal orientation of Hutterite life, this harmonization of will is difficult to achieve. Even when many colony members are united behind a common goal, it still remains for those in the relevant positions of authority to implement the necessary decisions. Given the many stages at which motivation must come into play and then be examined against Hutterian doctrine and the best interests of the colony, it can often be a lengthy process from the conception of a health promotion initiative to its implementation.

III. Conceptions of Health and Community Care for Illness

A. Meanings of Health and Illness

Several issues concerning the meaning of health and illness to the Hutterites emerged from our discussions. Defining health as the absence of illness is not sufficient to explain its meaning for Hutterites, for many people with chronic conditions such as high blood pressure or diabetes indicated that they were healthy. Health for the Hutterites consists mainly of a state of physical well-being that allows one to work. If health is equated with the ability to work, then illness is any condition that interferes with one's ability to work: "When I first got married to her, she couldn't get tired. ...She worked eighteen hours a day, and... she was ready to go at six o'clock in the morning again, but she's slowed down a lot now. ... I think it's the diabetes" (G39). Health is also equated with strength, and with a solid build. Thinness is associated with frailty, while a solid build indicates strength and resistance to disease.

For some people who are particularly spiritually inclined, physical health is closely connected to spiritual health. Many Hutterites believe that "you need to be healthy in your spirit to be healthy in your body" (G43), and that an unhealthy spirit can make physical health impossible: "no matter how well you eat and take care of your diet, if there is a lot of tension, hate and anger in you, you can't be healthy" (G56). Freedom from stress and a strong faith are seen as building up spiritual and physical well-being, while worrying and negative feelings have a negative impact on both kinds of health. *Gelassenheit* is thus an essential component of health. For most people the mechanism by which stress and negativity influence health is not elucidated, but one person made a clear connection between spiritual health and behaviour. She felt that a lack of concern for spiritual matters has a direct influence on diet and activity (G16). Overeating and eating unhealthy foods occur when people give in to temptation,

but people who are concerned for their spiritual well-being resist the lusts of the flesh and eat only foods that they know to be healthy. Likewise, working hard to contribute to the colony and to avoid laziness provides the physical activity necessary to maintain one's body in good physical shape. Thus a godly life assures both physical and spiritual health.

Some Hutterites expressed the belief that health comes directly from God, but most acknowledged the contributions of individual behaviour to health, and identified specific behaviours that they considered healthy or unhealthy. Most related to eating: over-eating and over-drinking, and excessive consumption of fried foods, meat, and sweets were seen as unhealthy; while reducing fried foods and meat, and increasing vegetables, fruit, whole wheat bread, and steamed or boiled foods were seen as beneficial. Brisk walking and hard work were mentioned as being healthy activities; healthy medical practices included using Chinese and herbal remedies and vitamins to maintain health and prevent illness.

The effect of obesity on health was recognized by many people, but there were differences in definitions of obesity between Hutterites and the medical profession, and among the Hutterites themselves. In general, Hutterites accept a greater amount of body fat as normal and healthy than does the medical profession. Thinness is seen as normal for teenagers and young adults, but indicates frailty in older adults. In particular, weight gain following child-bearing for women is accepted as natural. During and after middle age, some degree of obesity is accepted as part of growing older and a result of doing less physical labour; it is not necessarily perceived as an unusual or unhealthy condition. Older women who are thin are unusual: one woman whose elderly mother had lost weight following a heart bypass operation remarked that "she's making a twelve-year-old's pattern" for her clothing (G47), and that she could

stand to be a little less thin. This attitude persists despite the recommendation of her doctor that she lose weight. Only a few Hutterites expressed the opinion that weight gain in middle age is unnecessary and unhealthy.

Excessive obesity, as discussed earlier, is perceived as a sign of spiritual weakness in the inability to resist the temptations of food, and in a failure to care for one's body. It is also recognized by most people as being accompanied by a host of other medical complaints, including increased risk of CVD and diabetes. However, the amount of adiposity that is considered obese by the Hutterites is higher than that of the medical profession. Many people who would be considered medically obese (having a BMI over 27 kg/m²) are seen in the colonies as sturdily built, with a large frame of bone and muscle, rather than as fat. The definition of obesity for many Hutterites is based not on adiposity or BMI, but again on one's ability to work. As long as a large body size does not seem to interfere with one's ability to work it is not perceived as obesity, or as a problem for health.

A concept that was raised frequently in discussions of health was that of 'health-mindedness'. People who express interest in and knowledge about health, and who apply their knowledge to choices that they make in diet, activity, and medicine are referred to as 'health-minded'. These people read about health and nutrition and often advise others about healthy behaviour. In some cases an entire colony will be seen as health-minded, and in other cases there are a few such individuals within a colony. Attitudes towards health-mindedness vary. Those people who are health-minded see it as a positive thing, and would like to see everyone joining in their point of view. They find it distressing to see others around them disregarding their health and persisting in unhealthy habits. Of the people who would not be considered health-minded, some indicated that

perhaps they should be more aware of ways to prevent health problems that they see in people around them. However, many of the people we talked to were not concerned with health. They felt that health need only be a concern for those who are ill, and that constant health-mindedness is unnecessary and excessive, or a 'fad' shared by some individuals and colonies. The term 'health-minded' is used disparagingly by these people. Most of the ideas for modifying lifestyle to benefit health came from Hutterites with a positive attitude towards health-mindedness, while much of the resistance to change came from people who were not interested in being health-minded.

B. Community Health Care

Although not all Hutterites share a 'health-minded' attitude, providing community health care for the ill is important to all Hutterites. Caring for the sick is in fact one of the most important responsibilities of the Hutterite colony. Individualized care is provided within the sick person's own home, including full-time nursing and special diets if required. Hutterites will seek medical care from outside when necessary, but they prefer where possible to care for their own ill and elderly people, rather than confining them to nursing homes or extended hospital stays. This care is extended automatically to those who are debilitated to the point of being unable to care for themselves. The knowledge that one will be cared for throughout one's life, regardless of one's ability to contribute to the colony, is an important part of the security that members feel in colony life.

The individual care provided includes the selection of someone to provide a special diet if required. The situations that came to light in which special food has been prepared include the recent birth of a baby, and illnesses such as pulmonary fibrosis and severe arthritis. Whenever possible, those with chronic

illnesses are encouraged to eat either in or from the colony dining hall, but if this is not possible, special food will continue to be prepared. Obese people who are trying to lose weight will also be allowed to prepare their own food, but must return to eating colony food once they resume a more moderate weight.

However, some other conditions that would benefit from the adoption of an altered diet are not treated by colony measures. These include conditions that increase the risks of CVD and other life-threatening situations, such as high blood pressure or cholesterol and NIDDM. Although these medical conditions are alleviated by strict control of sugar, salt and animal fats, sufferers must take responsibility themselves for avoiding foods that are unhealthy for them. In most cases, these conditions also do not result in any changes being made to the diet of the whole colony.

This lack of special treatment for people with high blood pressure or diabetes indicates that these conditions are not seen as serious illnesses, but only as relatively trivial complaints. Although these conditions can reduce one's working ability by increasing fatigue and reducing endurance, they are not usually severe enough to require that the sufferers give up their work responsibilities. Thus they are not perceived as illnesses, and are not treated by colony measures unless they are followed by a severe health crisis such as a heart attack or stroke. Such conditions also do not affect one's ability to care for oneself, and thus do not invoke the responsibility of the community to care for the sick. When a medical condition is not perceived as an illness, it is difficult for others to take it seriously enough to provide the care that is necessary to alleviate the problem.

The traditional Hutterite model for community health care, therefore, means that individualized care is provided for colony members suffering from illnesses that prevent them from working or from taking care of themselves.

Caregivers are designated by the colony to provide nursing and special diets. This model of community health care does not involve changes made to the colony lifestyle in order to prevent or alleviate the symptoms of a few individuals; neither is care provided for those with minor complaints that increase the risks of future severe health crises.

An alternative model of community health care is in effect at a few colonies other than those studied. Several people in the colonies of the study suggested using this alternative model for dealing with 'minor' conditions: "Instead of always being the wrong kind of food, put food on the table so that a person can enjoy it and know that it won't make cholesterol or high blood pressure" (G34). This alternative model includes an aggressive attitude towards prevention, so that any medical condition requiring drugs is seen as meriting colony care. With this attitude, the colony as a whole can take measures to reduce the health problems of the person who is ill, and at the same time, reduce the risk that others in the colony will become ill in the same way. At one colony with this proactive stance on CVD,

When they cook soup it's not being salted. One big tin is put in the oven - whoever wants salt, there's a teeny bit of salt put in. All the rest is non-salted for people that want it, that need it to get their high blood pressure under control. So is all their food... also the [boiled] chicken, the breast for people that have high blood pressure. (G34)

Although many people feel that there is little the colony can do to manage the health of its members, this colony demonstrates the possibility of a health care model that emphasizes maintaining health and preventing illness.

This model stems from a difference in the definition of illness. Rather than including only conditions that are immediately debilitating, it includes those conditions that pose a risk for future health and ability to work. In this way there is a change from a short-term orientation, grounded in the present, to a long-term

orientation, grounded in the future. It also becomes the responsibility of the colony to maintain and protect health in a non-crisis situation, in a preventative manner. Although a change to such a model of community health care would involve a different attitude towards prevention, it would not change the emphasis on work as the most important activity of a Hutterite individual. Neither would such a change undermine the importance of spiritual strength in general well-being, as community care can work alongside pastoral care in maintaining all-around health.

V. The Importance of Food

Food is an important topic for health promotion, as many small changes in diet can have a significant impact on health. In the context of cardiovascular health promotion, food is particularly a critical topic as eating habits play an important part in determining CVD risk. In some Hutterite colonies, a diet high in meat, fat, and salt and often low in green vegetables is one of the main targets for change. Diet is also important in Hutterian culture, as an aspect of life with symbolic, social and traditional functions as well as the practical importance of nourishment.

The primary symbolic importance of food in Hutterite culture is as an expression of *Gemeinschaft*. By sharing three meals every day in a common dining room, the colony members express ritually their common resources and their interdependence. The thrice daily ritual of the meal represents the communal structuring of colony life through equality and hierarchy. The equality of all members is enacted in sharing the dining room and eating the same food as all other colony members, yet the hierarchy is enacted in the seating arrangement. Men and women have separate doors to the dining room, and eat at separate tables. At the tables, adults are seated in order of age, with school

children sitting in the same arrangement in another room. Thus the separateness of genders and the differentiation according to age are maintained at the table.

Providing food is also one of the most important ways in which the collective cares for the needs of the members. This responsibility is at the basis of much of the work of women in the colonies, and most of the important positions for women relate to food. The highest status position for women, and the only one that is elected, is that of head cook. This woman spends the major part of every day preparing and cooking food, and planning future meals. The second most important female position is that of gardener, which involves raising produce for colony consumption. Other important traditional roles are the keepers of geese and ducks, who are usually women¹³. Much of the shared work of women is also food related: butchering, cooking, baking, preparing noodles and potatoes for cooking, and picking and preserving fruit and vegetables are some of the jobs of teams of women in the colonies.

The social importance of eating in Hutterite culture consists partly of the reinforcement of the age and sex structure of the colony, with each person knowing his or her place in the social order; and partly of the opportunity for socializing provided by 'lunches'. Although the main meals are eaten in silence, snacks are an opportunity for socializing, and visits within or among colonies include food as a natural part of showing hospitality. Work stops during both morning and afternoon for a 'lunch', no matter the activity: "They must have their coffee break and a lunch in the morning and the afternoon, whether they're hungry or not, or if they're working or not, just to take the time" (C19). Lunches with visitors are often shared during the evening, so that there are at least three

¹³ These positions are filled by women when geese and ducks are raised for colony consumption only, but by men if geese and ducks are raised for commercial sale, as is the case with other animal foods produced by the colony.

opportunities for snacks during the day. These informal meals take place in the context of visiting and provide an important venue for social interaction.

The many traditions surrounding food are another source of its importance in Hutterite culture. The times for eating, and the way in which food is served and eaten, are determined by tradition, as are the kinds of meals eaten. At most colonies, the breakfasts follow a predictable weekly schedule that varies somewhat from one colony to the next: "On Monday, Thursday, and Saturday we have cereal, on Tuesday we have bacon, Friday we have fried eggs and on Sunday a bun with summer sausage and jam. Saturday and Sunday are the only days we have jam" (C3). At some colonies, the 'dinners' and 'suppers' (midday and evening meals, respectively) are also made according to a predictable schedule, but at many the cooks try to provide variety to keep the people interested: "I don't like the same food every week. ...a lot of colonies do though, they know what they're going to have when the bell rings" (C6). Both dinners and suppers consist of a cooked meal at most colonies, with meat, starchy foods, and vegetables. Sunday dinners at the majority of colonies consist of roast duck with broth and noodle soup. There are many other traditional dishes that are popular in the colonies, many of which have been prepared by Hutterites for many years. These traditional foods for both main meals and snacks constitute a continuity of diet with other colonies and with Hutterite ancestors in this country and in Europe. Many of these traditional foods are also colony favourites, so that the cultural traditions are tied closely with people's food preferences in determining the foods they eat.

A. Food Preferences

One of the most important impediments to dietary changes is raised by food preferences. Ideally under the communal eating system, there is no room

for individuals to have preferences. Many cooks, when asked about people's preferences, restated the ideal situation in which "Men and women can't have any preferences, they have to eat what we cook" (C12). However, individuals do have different tastes, as is acknowledged by people who admit to having 'cravings' or preferences for foods that they know to be unhealthy: "...and I grab it, and ... I know it's not good, but I just can't help myself" (G36). Food preferences obviously have more influence on food choices than many cooks will usually acknowledge.

Many people seemed to have an attitude of resignation towards the food preferences of others, even if these are unhealthy. They acknowledge that "people love to eat" (G15), and that there is little one can do to prevent people from eating the things they like. This attitude is reinforced by the idea that hard work is impossible without adequate fuel. Many of the cooks in particular operate on the assumption that if people are working hard they must eat well. In the case of Hutterites, eating well means eating one's fill of satisfying foods, which are mainly meat and dairy foods, and those high in carbohydrates and fat. Eating heavily after a hard day's work is not seen as overindulgence, but as necessary. Tasty, enjoyable food is to some extent an earthly reward for diligent labour. For this reason, a main concern of cooks is often providing food that is satisfying in terms of both calories and taste.

The effect that people's food preferences has on the colony diet is difficult to ascertain precisely. Cooks and other people have different ideas about the effect that individual tastes should and do have on cooking. According to the communal ideology, everyone should get the same diet regardless of their preferences. Some people with this view deny that anyone has preferences, and others acknowledge preferences, but state that "it's too much hassle to make separate meals for men and women" (C19). This fits with the communalist view

in which people receive according to their needs but not according to their desires. By our observations, however, there were some differences between the different age and sex categories in what was served, and people definitely help themselves to different quantities and kinds of foods from what is available on the table. Generally, men seemed to eat more meat and eggs, while women ate more vegetables and salads. If there was not enough of a dish to serve everyone, it would go first to the men and then to the women if there was enough left. Some foods are also considered more appropriate for children than others; for example, children were served soup more often than adults.

Food preferences have an important effect on the diet in two ways. The first is a direct effect; if there are a lot of complaints about the cooking, the cooks will make changes. Because of the authority structure of the colony, the people with the greatest influence over the diet are the minister and elders, and older women. Men generally have more influence in this way than women, as it is the job of the women to provide food for the men. Women who cook can make decisions about food, and can indulge their own preferences in this way during their cooking weeks, but for most people their only direct influence is through complaining. Many cooks acknowledge that men's and women's tastes differ; men are more often described as 'fussy', while women are seen as having "only a few cravings" (C4). This is likely due to the difference in the way they influence cooking: verbally for men, and for women by cooking what they like.

The second effect of people's preferences on the diet is indirect, through the amount that they eat. Dishes that everyone eats are prepared more often, while dishes that many people do not eat are cooked less often. Essentially, people vote with their stomachs. The same applies to the success of new dishes:

Now, we used to start with a little portion. This big. I was cooking with [my sister-in-law] that time... And I said, "oh my goodness, dear ..., don't make it, nobody will eat it. It'll all come into the garbage." ...My goodness,

the next thing you know the boys started to like it, womenfolks started liking it. ...Next time we made it bigger and bigger, and now we always make it, we can't be without it. (G46)

Likewise if "it all comes into the garbage", a new dish will not be served again unless the cooks are determined to introduce it into the diet. In both of these ways of influencing the diet, the effect results from the preferences of a majority of the members. In this as in many other areas of decision-making in the colonies, the group consensus or majority decision has the strongest influence over decisions. The diet consists largely of dishes that most people like. For individuals whose preferences are not shared by the rest of the group, there is little effect that they can have on the diet. Effective changes through people's food preferences must therefore include the majority of individuals in the colony to exert pressure on the cooks for change.

In finding a diet that is satisfying to the people and to the cook's ideas about what is healthy food, a balance must be continually sought. This balance is between what people want and what the cooks think they should have, and it varies greatly from one colony to another and within the same colony over time. In some colonies the people are relatively easy or more difficult to please.

We're a bad bunch here. If it just doesn't taste correct they won't even touch it. And some people, ... if it's food they eat it. They don't even question it. ... And this outfit here is different. If he asks what's for supper, if they don't like it they won't go. They'd rather starve. It's very hard for [the head cook], very hard. ... It's very hard, you know, satisfy people. And some people are easy to satisfy. I know in Washington down there, those guys down there, if it's food they eat it, they don't question nothing. They eat lots of vegetables. And here, like I know when we were there they had to cook special for us. All our brothers. Even [my brother], he'd go to the kitchen and make his own before he'd [eat] what's on the table there, you know, if he doesn't like it. That's how bad we're spoiled. (G39)

In a colony such as this one, the efforts of the cooks to introduce healthier foods are impeded by the 'fussiness' of the men, who have a strong preference for meat

and fatty, salty foods. In other colonies, the cooks are able to make dramatic changes in the diet without resistance from the people. The success of dietary changes for health promotion depends largely on this balance between people's preferences and the cook's ideas about healthy food.

B. Eating Habits

Many people discussed the importance of long-term eating habits in determining food preferences. "What you're used to is what you like" (G62) was a commonly expressed idea. They stress the importance of teaching children to eat properly. Children have no say in what they are served at meals, unlike adults who can complain about the cooking. Children are given foods that are considered appropriate for them, usually soups and softer foods than the adults eat, and less 'big meat' (steaks and chops) and spicy food. Unfortunately many of these appropriate foods are high in fat and salt, so that children grow up with a taste for foods that increase CVD risk.

The German school teacher and his wife, who supervise the children's meals, have an important role in determining what children eat, as discussed earlier. They can be quite effective in training children to have healthy eating habits. In some cases their control has been used to encourage children to eat vegetables, and to avoid fatty and salty foods: "20 years ago when we started feeding the children, we had to bribe them into eating the vegetables, now we don't have to ...they are used to it" (G56). When the German school teacher and his wife cooperate with the head cook, the children can be taught healthy eating habits easily as they come to expect and enjoy healthy meals.

Outside of the kitchen, it is the parents who control the children's 'lunches'. Although in the kitchen the children have no choice and must eat what their elders determine is good for them, we observed that at home their

food preferences are often indulged. Many parents allow their children to eat whatever they want for 'lunches', so they seem to be constantly eating candy, sweets, and other 'junk'. Despite the effectiveness of controlling the meals, many parents encourage their children to establish a preference for sugary snacks that can counteract the health benefits of wholesome meals. Some parents have already recognized the hazards of allowing children uncontrolled access to 'junk' food, and make an effort to choose healthy 'lunches' for their own children. This can be difficult, as candy and other 'junk' foods are distributed to families for their children as a matter of course at Christmas and other times. One mother describes her solution to this problem:

We really try to teach the kids to eat right. We always have food on the table for them, or make them a sandwich, and not have them into too much junk food when they come home. Candy! If [the boss] would keep all that candy at Christmas and give me stuff that the kids eat, or soups or anything, I'd be satisfied. They're being hidden so fast, all those candies that are given to our people, where the kids can never get them. It's not good to give kids so much candy, it makes them hyperactive. ...We end up going into the stores and instead of buying all kinds of candies, we buy the pretzels with cheese in it, or the pretzels with peanut butter in it - for snacks for the kids. (G64)

Many other parents, however, are not interested, or cannot afford the extra expense of providing healthy snacks for their children. Cooperation between the parents and the manager would be required to reduce the amount of 'junk' food provided as snacks, and increase the healthier foods, giving more parents the opportunity to instil healthy eating habits in their children.

Although long standing eating habits established in childhood play an important role in determining food preferences and in influencing the diet, several people emphasized that preferences or eating habits can change. They pointed out that, although it can be difficult, eating habits change as one gets used to new foods. People can get used to a new diet until they prefer the new one to that with which they grew up. This is often the case for the women who

move to a new colony on marriage: "They go back to their home, and they can't eat that sweet anymore" (C15). Cooks can take advantage of this by making gradual changes in cooking and by slowly adding and increasing new dishes, while reducing the unhealthy foods that were colony favourites. Individuals can also come to like foods that they began to eat for health reasons. Many Hutterites have found that after a period of adjustment, which is sometimes difficult but can be easy if it is gradual, one adapts to the new diet and no longer prefers the old one.

Despite the emphasis in the Hutterian faith on spiritual rather than on material concerns, the material concern of food is one that is very important in Hutterite culture. It is also an area in which, paradoxically, tastes are constantly changing over time, but many people are resistant to deliberate change. Because of the considerable symbolic, social and traditional meanings of food, it is essential that changes in this area be initiated through group agreement and collective action. In the balance between hierarchy and equality in Hutterian life, ultimately equality is more important in the area of food. The authority structure may be enacted in spatial organization at mealtimes and implicated in the allocation of responsibility to initiate change, but the satisfaction of all colony members is an even more important factor in the balancing act of determining the colony diet.

V. Costs and Availability of Resources

Both the cost and the availability of resources are important factors in determining the lifestyle changes that are possible for Hutterites. These factors were not mentioned often, but observation showed that they can be a significant concern and have a great deal of influence on the decisions that are made. As in

other aspects, colonies vary in how wealthy they are; some have more disposable income than others, and some have little money to spend on extras. Even where the colony is fairly well off, there is a dislike for prodigal spending. In every colony some of the food supplies are purchased, but the amount of money available for the food budget is variable.

Switching from salt to a salt substitute without cardiovascular side-effects (potassium chloride 'no-salt') and from animal fats to low cholesterol vegetable oil were two suggestions for increasing the heart-healthiness of the diet without substantially altering the taste of the food. Both of these changes involve an increase in spending. Salt is available in large quantities at very low cost, whereas 'no-salt' is not now available in large quantities from the usual suppliers. Some people suggested that the colonies could get together and write to the manufacturer for large quantities at a bulk rate, but this would require the cooperation of the bosses of at least several different colonies. Animal fats are provided by the colony livestock operations at no cash cost, while canola or other oils must be purchased. Although canola is grown by many Hutterite colonies, it is not processed on the colonies, and to do so would require expenditure in machinery and labour. Lard, on the other hand, is rendered down easily from fat cut from livestock during butchering, costing little in labour. Usually some canola oil is purchased for special dishes such as Chinese food, but this expensive resource is not used for baking or frying other foods: "Well, that's all expense. See, what would we do with our lard that we render down? That's why we use lard for frying." (C20) Lard, however, is also used for making soap. In some colonies, there is a shortage of homemade soap, necessitating the purchase of commercially produced soap. In this case, making more soap would free the necessary funds for buying vegetable oils. In other colonies, using all of the lard for soap would make more than the colony requires, providing an excess that

could be sold commercially. The money from this enterprise could pay for vegetable oil. In either case, using lard for soap instead of cooking would involve a redistribution of resources, rather than an extra expense for cooking oil.

Additional costs would be involved in providing exercise facilities. Whether for individuals or for the colony, exercise machines are expensive. Although some individuals already have exercise machines, others are not able to afford them. The cost of the machines is also part of the reason for the reluctance of some colonies to provide exercise facilities.

In order to make some of these changes in diet and exercise opportunities possible, the costs involved must be either reduced or justified. Cooperation between colonies could reduce the cost of salt substitutes and vegetable oils, if several colonies negotiated together for a bulk price. The same might also be possible for exercise machines, if several colonies approached a dealer together. Another way to reduce the cost of establishing an exercise room with several machines in a colony would be for those individuals who own machines to donate them to the colony exercise facility. The machines would still be available for the use of the original owner, but would be used by everyone and cared for by the colony. A further way to reduce the costs involved in providing exercise equipment would be to make use of resources already available in the colony: "They could probably make one in the machine shop. We could go into making them and selling them to the [other] colonies" (G10).

Justification for the expense on different food ingredients or on exercise facilities can be found in terms of the counterbalancing expenses created by preventable CVD and NIDDM. Both of these illnesses require medication and can cause disabilities or reduce one's lifespan. Medication for hypertension and diabetes is expensive, and in many cases the conditions can be prevented or managed largely through diet and exercise. Although prescriptions are an

individual cost for most Canadians, for Hutterites they are a colony expense. For one woman in a colony with a high rate of CVD, the issue was clear:

There is no expense compared. ... You take all the prescriptions, all the blood pressure pills that are being filled, as fast as they're being filled, and for all the ailments in this colony, and add them up to that animal fat. They'd be over 50 times as much. Where they wouldn't have that prescription if they'd eat right. (G64)

In many cases a demonstration would be necessary to get across the point that spending more on food, for winter vegetables, salt substitutes, and vegetable oils, would reduce spending on medicine. Where CVD and diabetes reduce one's ability to work or result in a permanent disability, there is additional uncounted cost for the colony. People who are ill or disabled do not contribute to the colony's economy, and require more of its resources than able people. Although the colonies are accepting of their responsibility to care for the ill, this care can constitute a drain on the colony's resources. Preventing and managing CVD and NIDDM through diet and exercise, while involving an initial expense, can save money for the colony in the long term as healthier people live longer and more productive lives.

VI. Knowledge and Education

Hutterite colony healers have passed on a wealth of health knowledge from one generation to the next for centuries. However, much of the current enthusiasm for health-related changes has been fuelled by information about recent developments in health research and the treatment of disease. This information is coming into the colonies from the outside world, through doctors and health care professionals, and through reading materials. Hutterite acceptance and use of this worldly knowledge is complicated by their ambivalent

relationship with the secular world. Their faith demands that they separate themselves from the world, yet their economy requires that they remain engaged with the world. The world is seen as a source of evil and sin, a dangerous place, yet also as a source of financial resources and knowledge that benefits the colony. This general ambivalence means that in individual cases, the attitude to the outside consists mainly of either a sense of wariness of its dangers, or an interest in the valuable resources available there.

There is also some ambivalence in the Hutterite attitude towards education. As a general principle, learning and education are considered good and useful things. Formal state education up to the middle school level is valued as it gives skills and knowledge necessary for dealing with the world: the English language, mathematics, and some understanding of worldly ways useful to those who must deal with outsiders. Religious education is valued even more highly. Instruction in the faith starts earlier in life and continues later, giving a thorough knowledge of religious teachings, hymns and prayers, and providing the basis for an adult understanding of the Hutterian faith. Too much education, however, is considered dangerous. Higher education is seen as creating an analytical, sceptical outlook which destroys faith and encourages intellectual arrogance. The Canadian curriculum even at early levels includes exposure to worldly ideas that are considered false according to religious precepts: e. g. scientific cosmology, Darwinian evolution. This scientific teaching challenges Hutterian fundamental beliefs about the creation of the universe and of humanity, and is therefore dangerous. The German school teaching tries to control these dangerous influences on children, and gives precedence to religious teachings where they conflict with the curriculum. Thus the desire for education is accompanied by suspicion, and the desire to control potentially dangerous

information. Outside sources of education are accepted as necessary, but not unquestioningly, and not without caution.

This suspicion of the sources of outside knowledge does not reduce the esteem Hutterites have for learning in general. For adults, learning that benefits the colony is particularly valued. In farming operations, outside knowledge is necessary and welcome, and the managers of operations are continuously seeking agricultural information. The knowledge acquired is used creatively to improve the operations and to benefit the colony. This knowledge is kept in agricultural areas, however, and not allowed to influence life within the colony compound. In areas of personal conduct and faith, outside knowledge is considered irrelevant. Learning about spiritual matters is also valued, and efforts to have a greater understanding of the Hutterian faith are always welcome.

In the areas of health and lifestyle change there is a great deal of variation in the sources of information that are available and exploited. Religious teachings on health are few and unspecific, so that decisions about health are made mainly through human judgment (with the exception of physical activity, where strict limitations are in effect). The sources of knowledge include traditional knowledge passed on orally; colony healers such as midwives, bonesetters, and massage therapists; doctors and other health professionals such as homeopaths, naturopaths, chiropractors, dieticians, and herbalists; and reading material such as books, newsletters and journals on health. Different colonies and individuals have different degrees of access to outside information, depending on their interest and the amount of contact they have with the outside world. Some have managed to seek out many different sources of information and to use it with their own discernment. Others rely mainly on colony knowledge and on doctors to supply information. The main difference between those with differing reliance on outside information was in terms of their

proactive or reactive attitude towards treatment, and in their aggressiveness or passiveness in seeking and using information. This variation in attitude affects the balance between wariness of outside influences and the importance of information that could benefit the colony and its members.

Where many people are interested and are active in seeking beneficial information, the transmission of knowledge through the colonies is not problematic. The shared interest in health makes it a topic of conversation, and ideas are passed in conversation and in the form of reading materials through the colony and from one to another. Where only some colony members are interested in health knowledge, it becomes more difficult for interested individuals to share their knowledge. In many cases knowledgeable people are not considered 'experts' by other colony members, nor are they in positions of authority over matters such as diet and health care. Thus often they have little influence over the behaviour of others. It is not possible for colony members to set themselves up as experts or as teachers in such areas. They must not be arrogant or proud of their knowledge, but must respect the wisdom and authority of their elders. It is therefore very difficult for 'health-minded' individuals to educate other colony members who do not seek health information.

Several people who had found themselves in this position were eager for the project researchers, or other perceived experts with a background of training and experience in health matters, to come into their colonies with educational materials, to convince other colony members to adopt a more health-minded approach to life. They felt a need for more information to come into the colonies for the benefit of those who wouldn't seek it on the outside. The fact that people are requesting assistance from project researchers also suggests that such

information would be more readily accepted if provided by someone familiar to the colony. In order to convince those who are wary of outside information, a combination of familiarity with colony members, familiarity with colony ways and the limitations of Hutterian lifestyle, and the influence of a perceived expert is required. Using familiar outsiders also reduces the sense of danger in dealings with the outside. Although much of the information in the outside world is not to be trusted because it is based in sinful, worldly concerns, there is less concern that outside friends will introduce dangerous elements into the colony, as they are seen as having the colony's interests at heart. This would not be the case with health professionals who are unfamiliar with the Hutterites and the particularities of their culture.

Chapter 7. Change Processes - Implications and Recommendations

I. Processes of Change

The change processes occurring in the Hutterite colonies have been discussed frequently by researchers investigating predominantly one aspect of change at a time. The long term group-wide changes in technology, demography and colony structure have been explored at length from different perspectives. Although these changes were discussed by many Hutterites, adding to our understanding of these large scale processes is beyond the scope of a short term study. However, the processes discussed in the literature in relation to group-wide change have relevance to the topic of smaller scale change within colonies. This literature provides a background for understanding the variation occurring in daily behaviour and the changes that individuals and colonies can make to some aspects of their lifestyle.

In examining the changes that had occurred in the behaviour of colony members, I found not one process accounting for the bulk of the changes, but instead several processes operating under different circumstances. These processes included those discussed in the literature as well as some that have been less thoroughly explored. The five processes that I observed are controlled innovation, leadership initiative, shifting of categories for behaviour and illnesses, individual decision-making, and feedback between individual decisions and group consensus. All of these processes have been discussed to some degree in the literature as they pertain to group-wide change, but they have not been explored for the impact they have on individual and colony lifestyle and health, nor have they been considered in relation to one another.

A. Controlled Innovation

This process is that described by acculturation theorists as controlled acculturation. It involves the process of change that begins with discussion of a proposed innovation, or of an innovation that is becoming unofficially widespread through individual variation. A consensus view is reached through discussion, and this consensus as to acceptance or prohibition of the innovation is made official through a vote and entrenched in the *Leut Ordnungen* (Eaton 1952). This process may also operate at the single colony level, as in the case of innovation in agricultural technology (Hostetler 1974). I have chosen to refer to this process as controlled innovation rather than as controlled acculturation because of the assumptions implicit in the term acculturation. It implies that the changes under control are derived from the surrounding culture and result in bringing Hutterite culture closer to that of the outside, and precludes the possibility of innovation that results from internal creativity. This assumption limits our understanding of Hutterite inventiveness and creative use of borrowed ideas.

Controlled innovation was evident in this study in the failure of the exercise program at Colony 3. From the vantage point of many months after the failure of the initiative, it is impossible to discover the origins of this activity. Discussion of this activity was focused on the reasons for its demise and the possibility of resuming the group walks, rather than on the decision-making process involved in the initial activity. Although the women were in agreement to continue walking, the discussion that resulted from concerns over the safety of walking on the roads ended in a consensus of the men that this activity was not suitable for the women. Once this consensus was reached, the women were no longer allowed to continue.

The control of innovation is shown here as applying to an activity that was not based on technology or on standards of consumption, but rather to an innovation that took the form of a group initiative. The colony tradition was challenged as people put a new idea into action. After much discussion of the suitability of the activity, the consensus view was reached to prohibit this activity.

This process of discussion and conscious control over innovation applies to any attempt to alter the official policy of colony or Leut. It is most notable with regard to technology and consumption as these are areas central to communal principles of hard work and simple living. We note it in relation to exercise or physical activity more than with diet or medical practices as physical activity also relates to these principles. Exercise that is non-productive by definition takes away from the energy available for productive activity; therefore it is difficult to sanction activities that seem to benefit the individual at the expense of the community. This kind of conscious control is less necessary in areas of lifestyle that relate more to the body's needs (food, medical care) than to its uses.

The implementation of the consensus view is the responsibility of the colony minister; most of the women at Colony 3 referred to the minister as the one who was concerned for their safety, and who had 'put a stop to' their activity. Although Boldt would indicate that this demonstrates the imposition of role expectations by those in authority (1979), I do not observe this as an authoritarian move. The minister in his position of authority is the representative of the colony and does not act on his own decisions. The decision to prohibit the women's walks was made by the colony's men, and the minister had the job of implementing this decision. Thus the minister stands for the colony consensus, both literally and symbolically. The women, in attributing the

decision to the minister alone, were expressing this symbolic aspect of the minister's authority, rather than his absolute authority over colony activities.

This attempt by Hutterite women to introduce group exercise into their lifestyle demonstrates a degree of innovation that separates this initiative from instances of acculturation. In adapting the idea of exercise to their communal lifestyle, they showed creativity in finding suitable locations for walking or for other aerobic exercises, and applying their group activity model to exercise. These forms of exercise are not the same as those found most often in the surrounding culture, which emphasize competitive team playing, or solitary activity with or without competition. The Hutterite exercises are done either alone as part of individual health care, or in groups as a cooperative venture to improve the well-being of everyone involved. Thus incorporating exercise into the Hutterian lifestyle does not make them more like worldly people; Hutterites surround exercise with attitudes and ideals that are communal in orientation.

B. Leadership Initiative

In contrast to the usual situation in which discussion and consensus formation precede widespread change, change through leadership initiative involves decisions made solely by those in positions of responsibility, and implemented by them without recourse to discussion among all colony members. In this process leaders take advantage of the responsibility entrusted to them to make decisions on behalf of all colony members. Colony members then have the option of disputing the change, although trust in colony leaders generally ensures the support of the group.

This is the process that operated when the cooks at Colony 1 introduced widespread dietary changes. Without altering dietary traditions such as the Sunday duck dinner or the schedule of meals, they were able to introduce

changes to the ingredients and preparation of different foods and to the proportions of different food groups served, reducing dietary health risks significantly at this colony. The other attempt to change through this process is occurring at Colony 4, where it is less successful. Here the head cook and some of the other cooks are introducing new foods and methods of preparation that reduce dietary risk for CVD and other illnesses, but have encountered resistance from colony members who demand many of the foods that the cooks would like to eliminate. Thus the changes introduced by the cooks accompany but do not replace old eating habits.

The contrast between the two examples of this process show the importance of several factors. Although the cooks are entrusted with the responsibility of providing healthy and satisfying food, their choices must be approved by colony members. Where women must convince men of the necessity to change, many rely on a network consisting of supportive sisters, sisters-in-law, and other women with similar ideas. Colony unity is also an important factor; when the group consensus is tight and colony members are generally unified in decision-making, trust in those responsible is high, but when the community is divided, those divisions can stimulate opposition to changes initiated by one faction. Seemingly paradoxically, doctrinal conservatism is also a key. In a conservative group for whom spiritual considerations are used consciously to judge every decision, dietary changes based on knowledge of nutrition and concern for health are encouraged, while resistance on the basis of food preferences is discouraged as indicating over-concern with fleshly pleasures. In a less conservative colony, wariness of gluttony may be somewhat relaxed.

Although change through leadership initiative does not rely on the process of consensus formation, it is closely connected to group consensus, as it

must be supported by strong trust in those in positions of leadership and a consensus to accept innovations made by these people in the interest of the colony.

This process bears a resemblance to that proposed by Boldt (1979), in which leaders make decisions on behalf of the colony and impose them upon colony members. Boldt, however, does not allow for opportunities for colony members to oppose changes that are made. In my observation, other colony members, including other leaders, have the option to resist changes made by the cooks, and are not forced to acquiesce to changes that impact upon their lives. The changes that I describe are also operating at the colony level, and thus are not imposed by the Leut council of ministers, but are introduced on a colony basis by cooks acting in a position of responsibility over one area of colony life, much as foremen are at liberty to introduce changes to the operations for which they are responsible. The cooks also limit the changes they introduce to those that they believe will be acceptable to colony members. They do not push change that breaks with Hutterite traditions or with the wishes of the entire group.

C. Re-categorization

Part of most of the processes of change involved a shifting of the categories that apply to behaviour. This consists of a re-application of the same values to different groupings of actions, either consciously through modification of *Ordnungen* or of colony policy, or unconsciously as individuals gradually come to think differently about behaviour. This shift in the application of values in turn often results in other changes through controlled innovation, leadership initiative, or individual decisions.

This process became evident in the differences in attitude towards behaviour such as overeating and choosing healthy foods, reliance on health care

alternatives, and in different ideas about the responsibility of the colony for preventive health care. As a result of health crises or increased knowledge about healthy behaviour, many people were changing their ideas of how much they should eat, which foods they should choose, and which health care options were suitable for their needs. For example, people who had seen vegetables as 'rabbit food' came to view them as healthy food for people, and others who had been heavy eaters were realizing that the quantities of food they had thought appropriate were actually excessive for their bodies' needs. In a similar line, medical conditions such as diabetes and hypertension are seen by some as minor complaints, and are not treated as serious until they have resulted in blindness or heart attacks, while many people are beginning to conceive of these conditions as requiring action to prevent further illness.

This process of shifting the boundaries of conceptual categories was alluded to by Deets as he described how "producers' goods become consumers' luxuries" (1939:51), and later elaborated by Bennett as he described how technology that was once considered a luxury when there were insufficient resources to provide it became an acceptable part of the standard of living once the resources were available (1975:124-126). In both of these cases the values pertaining to the different categories do not change; the Hutterites still struggle to resist luxury and pandering to individual desires, but the application of these categories has changed. In the same way, Hutterian values continue to oppose gluttony and encourage moderation in eating while the definition of moderate eating is altered. Likewise the colony responsibility to care for the sick is extended to treatment of hypertension and diabetes only when these conditions are considered serious diseases.

Many of the changes that result from shifts in the categories applying to objects and behaviour have been regarded as evidence of acculturation, as the

technology of the Hutterites remains in step with that of the outside world. As Bennett has discussed, however, changes in the standard of living operate within the communal principles of the Hutterian faith, and involve a distribution throughout the colony of the resources available for its use, rather than differentiation between colony members (1975). Redefinition of behaviour relating to health also makes use of Hutterian principles. Although medical information may often be acquired from the outside world, it is combined with the Hutterian ideals of colony care for the sick, and of spiritually and physically healthy restraint in satisfying the desires of the flesh. Thus using knowledge from the outside world does not necessarily draw Hutterites closer to the surrounding culture. Redefining categories of behaviour and objects allows the Hutterites to incorporate new knowledge and resources into their system while remaining true to their faith.

D. Individual Choices

The guidelines for behaviour that are provided by Hutterian principles, the Leut Ordnungen, and colony tradition and consensus limit the choices that are available to individual Hutterites, but still leave some room for individual decision and variation. Some aspects of behaviour are more closely limited than others, so that in some areas, many decisions are left at the individual's discretion. Hutterites make decisions based on these guidelines, but also on their individual circumstances, motivation, and goals. This room for individual variation provides the opportunity for the introduction of new ideas where behaviour is not closely determined by tradition. These differences constitute a source of potential changes to colony custom and ultimately to Leut policies as ideas spread among colony members.

Many instances of individual variation were evident in people's attempts to improve their health by changing behaviour. These included food choices, both at the common table and at home, solitary and small group exercise activities, and choices of medical care and treatment methods. These choices were based on individual knowledge and interest in health, and motivation and will to change. While some 'health-minded' people were active in seeking information and health care alternatives, others relied more on the resources already available within the colony. For many people their motivation for healthy changes increased when they became ill, while for others a concern for prevention of illness came from their interest in maintaining their spiritual and physical health. These and other individual concerns made for differences in the way in which individuals made choices in their daily behaviour.

These individual variations are often neglected in the literature as researchers emphasize uniformity within the group. While this is partly an artifact of the need for generalized description, it also relates to the Hutterian ideal of eliminating individual differences in unity with the collective. Uniformity may be the ideal, but in practice there remain many differences between individuals and colonies that are accepted within the limitations of the Hutterian lifestyle¹⁴. As these differences often spread and become sources of change for the entire group, it is important to consider their impact in discussing change at a group level. Most researchers focus on changes that affect the Hutterites as a group, whether it be in Leut policy or colony decisions, or in changes to the communal standard of living. Stephenson (1991) offers a rare view of the importance of individual decisions in regulating colony growth, and shows that these decisions are influenced by a variety of factors, rather than

¹⁴ Despite the ideal of uniformity, Hutterites acknowledge differences between individual and in custom between colonies and Leuts. These differences contribute to Leut and colony identity within the Hutterian tradition.

being entirely determined by group policy. Boldt, on the other hand (1979), presents a view of Hutterite decision-making that shows individual behaviour as dictated by policy decisions made by the control group. While colony authorities are responsible for ensuring that group policies are adhered to, they do not oversee every aspect of colony life, but allow individuals to refer to their own conscience and judgment in making many daily decisions. These daily decisions, while they are not usually of great economic significance, do have a significant effect on customs and health, both for the individual and for the collective body.

E. Feedback in Consensus Formation

Consensus is by definition not static, but made up of many individual decisions, each of which is affected by group influences and by individual motives and goals. Each individual decision thus contributes to the formation of a consensus view. The consensus view in turn influences the decisions made by individuals, in a relationship of feedback between each person and the collective. As each decision becomes part of the history of choices that informs each successive choice, a few small changes in individual decisions can alter the group consensus by setting a precedent for further variations. If many people vary from the customary views, the custom itself is challenged and may be on the way to change. Thus room for individual diversity provides a source of potential for change that allows the consensus view to remain flexible and to change with altered circumstances.

This relationship between individual choices and consensus can be seen in the decisions made in regard to the colony diet. At each colony, dietary traditions, member preferences, and cooks' decisions contribute to the totality that is the colony diet. Cooks' choices in cooking are influenced by the cooking traditions they have learned as well as by the food preferences of colony

members (made evident by their past food choices). The food preferences of members are influenced by the foods they have customarily been served, but also vary in unpredictable ways by individual. Dietary traditions are based partly on the cooking heritage of the Hutterites, but depend on the member preferences that have been expressed in that colony for many years as well. When a new dish is introduced, the totality of individual decisions to eat or not eat it makes up the consensus view on the innovation; this aggregate of individual decisions influences the future choices by increasing or decreasing the likelihood that the cooks will serve the dish again. Thus small incremental changes in the frequencies of people's choices can have a significant impact on the colony diet. This process is not limited to food choices but also applies to other areas where decisions are partly at individual discretion, including choices in medical care, where colony members often share information and opinions about the options for treatment.

This feedback process that I have identified in the choices relating to food and to medical care relates directly to the process Stephenson describes in which individual decisions to seek baptism are influenced by the decisions of others around them and by other factors such as opportunities for work, and in turn influence the characteristics of the collective, including the rate of colony population growth and the decisions of other individuals to seek baptism (1991). Stephenson was the first to show how the choices made by individuals in matters that are highly personal have a strong effect on the collective. Food preferences and choices in medical care are likewise highly personal, and have a significant effect both on the health of the individual and on other personal factors such as religious feeling, satisfaction and feelings of autonomy and control over one's health. However, health-related behaviour in individuals also has a strong effect on the health of the group. The health of colony members is closely connected to

the colony economy, as healthy members contribute to the economy while sick members contribute less and require more of the colony's resources . Thus the effects of individual choices extend far beyond the individual to include all other colony members and the stability of the colony itself.

Change as I have observed it in the colonies of this study is not a single simple process, but many processes operating in combination with one another, and influenced by individual and collective decisions, by information available to colony members, and by the physical and material circumstances in which each decision is made. It occurs either gradually through individual choices and a shift in the group consensus, or rapidly through the initiative of leaders. It can be opposed consciously by the control group or unconsciously by problems inherent in the attempt to change. Almost all cases of change involve a reapplication of Hutterian principles as the boundaries between conceptual categories are redefined.

II. Implications for Future Changes

The ways in which these different change processes interact have had and will continue to have a significant impact on the possibilities for health promotion. The limited outlook of this study does not allow me to comment on the future of Hutterian social cohesion or cultural adaptation, but I can offer suggestions as to how health promotion can proceed in the colonies in each of four areas: diet, exercise, medical care, and education.

The possibilities are great for changes in cooking. Significant changes can be made through leadership initiative, as we have seen in the case of Colony 1. A similar proactive attitude on the part of the cooks in other colonies could bring about similar changes provided colony members do not seriously oppose the

move. The effects of such opposition are evident in the difficulties encountered by the cooks at Colony 4. Success in health promotion initiatives through colony cooks is thus dependent upon a strong will to change as well as on a high degree of trust in the ability of the cooks to make informed decisions.

It is unlikely that similarly sweeping changes can be made to the diet by controlled innovation. Official Leut and colony policies do not intervene in cooking decisions, as these are seen as the responsibility of cooks and of individuals. An informal consensus, on the other hand, consisting of many individual opinions about healthy eating, could exert pressure on the cooks to reduce dietary health risks in colonies where the cooks do not take decisive action in changing the cooking. This kind of informal consensus would require that many colony members hold proactive attitudes towards preventive health care. Such attitudes are more noticeable where many people are knowledgeable about healthy behaviour and where there has been significant experience of health problems exacerbated by a risky diet. Colonies with high prevalence of CVD and diabetes and which have access to health information should therefore experience the greatest stimuli for changes in attitude and in behaviour concerning healthy eating. Health professionals certainly do not seek to increase the experience of CVD and diabetes, but they can assist Hutterites by providing information about dietary risks to supplement existing colony knowledge.

In many cases changing eating habits will also involve significant redefinition of categories of food and behaviour surrounding eating. The cultural importance of communal eating cannot be over-estimated; however, within the communal eating pattern there is room for the redefinition of appropriate meal components and preparation and of appropriate quantities of food. Again, many individual Hutterites are coming to change their ideas through the intervention of doctors following illness, but health promoters can

help by providing more information to colony members who have not (yet) experienced the risks inherent in a diet high in animal fats, salt and sugar.

Our interviews revealed that many ideas for changing the colony diet are present in Hutterite colonies but have not been implemented. Many colony members, although not acknowledged experts in healthy cooking, possess valuable and useful information. Health promoters can facilitate the spread of these ideas by collecting them and presenting them to head cooks as possible alternatives.

Introducing exercise into the colony lifestyle is more problematic. The restrictions imposed by the Hutterian faith have been discussed in Chapter 6; they constitute a significant limitation on the possibilities for developing colony exercise programs. Although many individuals have purchased and used exercise machines, this option is not feasible for most Hutterites who simply lack the financial independence to make such a purchase. Introducing any colony-wide exercise programs would require controlled innovation. The involvement of ministers will be necessary to sanction such a change in policy regarding physical activity, as will a redefinition of exercise as essential for the maintenance of one's body for the benefit of individual and colony health. It will also be essential to develop more fully the spiritually valid arguments in favour of exercise and to satisfy concerns for the carnal and individualistic nature of many exercises. Such a shift in policy will not be achieved quickly through leadership initiative, as the spiritual import of physical activity is so great.

Individuals and groups of Hutterites have already been creative in finding and adapting exercises that are suitable for colony adults. This innovation will certainly continue at an individual level as people seek solutions to their health problems, and at a group level as Hutterites apply their group orientation to this as to other activities. Health promoters can provide assistance by spreading

ideas that work from one colony to another, and by providing information about the health benefits of exercise activities that are considered acceptable.

Medical care is one area of lifestyle that is almost entirely at the individual's discretion. Group measures are thus not likely to be effective in changing the way in which Hutterites make medical decisions. Any changes in the future will continue to occur on an individual basis, according to individual health needs and attitudes towards the health care alternatives available. Health professionals of all kinds can promote positive changes in the use of medical care by emphasizing a preventive approach to health management and by providing information that allows individuals to make educated decisions regarding health care.

Education is the main way in which health promotion from outside the colonies can be effective. Many Hutterites are receptive to information from health professionals and are creative in making use of this information. There were instances where colony members indicated a need for more health education, but were not able to find this information themselves. Their needs would be met best by health promotion involving education about nutrition, physical activity, and alternatives in medical care. This information can be most effectively provided by health professionals who have regular contact with Hutterite colonies, and who are aware of the specific health needs of each colony and its members.

III. Recommendations

I have made several references to ways in which health promoters outside the colony can be of use in facilitating beneficial lifestyle changes within the colonies. The main contribution that health promoters can make is that of educating colony members, and thereby empowering them to make healthy

decisions in their day to day behaviour and in their medical care choices. In the interest of furthering the effectiveness of health professionals as health promoters in Hutterite colonies, I have a number of recommendations based on the change processes I have observed and the limitations placed on lifestyle by the Hutterian faith.

- In approaching colonies for health promotion, ascertain first their specific needs for health education and identify target areas for lifestyle change.
- Target people in appropriate positions of responsibility, i.e. head cooks for diet, manager and minister to encourage physical activity.
- At the same time, work with individual colony members to encourage individual participation in health promotion initiatives.
- Provide many reasons for change to appeal to as many different sources of motivation as possible.
- Become aware of motives and activities that are not feasible and concentrate on those that are, i.e. advocate group walking or exercise machines rather than encouraging sports.
- The most readily accepted changes to diet involve altering ingredients in traditional foods rather than replacing these foods.
- Suggest cost-effective solutions for changing ingredients, i.e. use animal fat from butchering to make soap, and use savings to buy vegetable oils for cooking.
- The most effective changes to diet are achieved through the head cook, but individual eating habits are also important.
- Health promotion in the area of medical use must be aimed at individuals rather than at authorities.

- Be aware of strict limitations on physical exercise: competitive activities are inappropriate, cooperative activities are acceptable, running is not sanctioned for adults.
- In colonies wanting to set up exercise rooms for group use but wary of authorizing the expense on facilities, encourage people who already have exercise machines to move them to a common room such as an empty house for everyone to use.

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Appendix A: Interview Protocols

The list of topics on the left was used in general interviews. Questions pertaining to each topic were asked as the topics arose in discussion. The questions given on the right are examples of the kinds of questions that may have been asked.

I. General Interview Protocol

keywords (includes the name of the interviewer, the colony name or number, and the interview number)

name

age

gender

married Are you married? To whom? How long have you been married?

children Do you have children? How many? Are they all healthy?

colony history Have you lived in any other colonies than this one?

CVD Have you ever had heart trouble or diabetes? Does anyone else in your family? What heart problems have you/they had? Do you think heart trouble is preventable? How?

diet Do you think diet is related to heart trouble? In what way? What foods in your diet do you think are good for your heart? What foods do you think are unhealthy?

exercise Do you do any exercise other than your work? What kinds? Do you think exercise is important for heart health?

change Have there been any health-related changes in your colony in the last several years? Have you made any changes individually to benefit your health? Do you perceive a need for any changes?

	What kinds? Do you have any other suggestions on how to promote heart health on your colony?
problems	Would it be difficult to introduce changes to your colony? What would be difficult to change? How could your colony overcome these problems?
success	Have attempts to make your lifestyle more heart healthy been successful? Why or why not? Have you heard about any successful changes at other colonies?
transcript	(indicates whether the interview was taped or written)

II. Cooking Interview Protocol

keywords	(Includes the name of the interviewer, the colony, and the interview number.)
name	
age	
colony	
status	(head cook, stand-in head cook, or assistant cook)
number of years cooking	
men's preferences	Do the men in your colony have any preferences for specific types of food or any meal preparations such as fried or baked foods?
women's preferences	(as for men)
children's preferences	(as for men)
favourite recipes	Do you have any favourite meals that you like to make during your cooking week?
common preparations	What are some common meals on your colony?

seasonal changes	Are there seasonal variations to the meals you cook or to the foods that are available? Do you ever buy fresh fruit and vegetables in the winter when you can't grow them?
changes	Have there been any changes in meals over the last several years? Would you like to see any changes? Do you think these changes would be possible? What kinds of problems would you face if you tried to introduce changes?
health	What parts of your diet do you think are healthy? What parts are not? Is there any way to make your colony's diet more heart healthy? Do you think most people on your colony are relatively healthy?
transcript	(indicates whether the interview is taped or written)

Appendix B: Computer Software

The interviews were transcribed from tapes or written notes into a computer indexing and database program called AskSam. As a research tool, this program did not perform analysis, but facilitated analysis by functioning as a sophisticated filing system. Each interview was stored as a separate document in this program, and the interview text was broken down by the topics listed in Appendix A; each topic was stored as a field within the document. This method of storing the interview text allowed the data to be accessed interview by interview or topic by topic.

AskSam has a sophisticated searching feature which allows the researcher to perform searches based on several criteria at once. This possibility of using many criteria allows uncoded text to be searched for several different words referring to the same topic simultaneously. Complicated coding within the interviews was not necessary, nor was time-consuming manual searching for similar topics. Once a search has been performed, the program indicates how many documents contain search criteria, then allows the researcher to scroll quickly through each reference to the search criteria.

The program does not draw conclusions from the results of these searches, but facilitates the searching process so that the researcher can see quickly any connections or contradictions contained in the many references to the same topic. In this way, AskSam allows rapid discovery of connections and discontinuities, as well as the verification of hypotheses that emerge during research.

An example of the way in which AskSam facilitated discovery can be shown in the discussion of food preferences. In the 'preferences' topics of the cooking interviews, many of the cooks indicated that colony members expressed very few preferences, or that their preferences, if any, could not be indulged.

This suggests that taste in food has very little influence over cooking decisions. In the general interviews, however, many people indicated that they themselves or other colony members were 'fussy' and demanding of the cooks to provide satisfying food. As there was no topic field for food preferences in the general interview protocol, these references to taste were located in several fields, including 'diet', 'change', 'problems', and 'success'. These references were found easily by using the search feature to locate all references to 'taste', 'like', 'craving', 'enjoy', 'fussy', 'favourite', and 'satisfy'. The number of these references showed a sharp contrast to the cooks' statements that most people expressed no preferences; I found that many people did in fact express food preferences, and that there were suggestions that these preferences sometimes influenced decisions made by the cooks.

The computer program goes no further in reaching conclusions as to why the cooking and general interviews seem to contradict one another. It can only bring together all of the related passages. In fact, one of these passages offered a clue to the resolution of this problem; one of the head cooks, when pressed to give examples of preferences, said "OK, you learn what they like, then you just cook that" (C20). In the context of the apparent contradiction between the cooks and the colony members, I interpreted this remark to mean that the colony diet is based heavily on the preferred foods of the colony as a whole; in other words, a consensus of food preferences is reached that means that most people eat food they like most of the time, and that generally members of a colony share many food preferences. If this is so, I reasoned, then the cooks who say that preferences are not indulged are referring to individual tastes that differ from the usual diet, and are not suggesting that they cook what they like regardless of whether colony members will want to eat it. Individuals, when asked, will indicate foods that they favour over other aspects of the diet, or foods that they

would like to eat more often, but usually express these preferences by choosing from the food on the table or by choosing snack foods rather than by demanding changes to the colony cooking.

This searching feature of AskSam also allows for simple hypothesis testing. Conclusions reached in the field can be backed up, or disproved, by referring to that subject in the interviews. For example, many people at Colony 3 were vague about the reasons why the women no longer went for group walks. In the field I had come to the conclusion that following a nearby murder, the minister had become concerned for the women's safety and forbidden the walks. By searching for all the references to walking at Colony 3, I found indications that the decision had not been so simple. Some of the women indicated that the minister had become concerned despite the women's feeling of safety in numbers, but the minister and some other men indicated that the women themselves were afraid to walk off the colony without an escort. When I considered all these passages together, it seemed more likely that the intrusion of brutal violence into a territory previously considered safe had reminded the whole colony that the outside world is dangerous, and that it is always very close. With such a reminder of danger, it was likely the consensus view that the group walking should stop, and that the women should stay closer to home.

Thus AskSam, although incapable of interpreting the results of searches it performed, brought together quickly and easily many references scattered through the eighty-four interviews, allowing the discovery of important connections and contradictions, and the verification or falsification of many hypotheses generated during research. The ability to do these things without the necessity for complicated coding of the interviews or for manual searches made this program a valuable research tool.

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