Determinants of Healthy Eating Among Low-income Canadians

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ABSTRACT

This paper draws on four bodies of literature to consider the determinants of healthy eating for low-income Canadians: a) the social determinants of health; b) socio-economic gradients in diet; c) food security; and d) the sociology of food. Though there is a paucity of data for Canada, it is very likely that, as in other industrialized countries, there are socio-economic gradients in diet such that those who are better off consume healthier diets than those less well-to-do. The available evidence suggests that income affects food intake both directly and indirectly through the dispositions associated with particular social class locations. Thus, there may be both economic and cultural thresholds for some food groups or particular foods in food groups. Understanding these thresholds is especially important in addressing the issues facing those who are the most vulnerable among Canadians with low incomes: the food insecure. The literature reviewed suggests that improved nutrition for low-income Canadians may be difficult to achieve a) in isolation from other changes to improve their lives; b) without improvement in the nutrition of the general population of Canadians; and c) without some combination of these two changes. Four major areas of research need were identified: a) national data on socio-economic gradients in diet; b) sociological research on the interaction of income and class with other factors affecting food practices; c) sociological research on Canadian food norms and cultures; and d) research on the costs of healthy eating.

MeSH terms: Diet; public health; poverty; medical sociology; social class

The purpose of this article is to outline the state of knowledge regarding the determinants of healthy eating among low-income Canadians, as well as the gaps in that knowledge. The focus is income, the first of 12 determinants of health identified in Health Canada’s model of population health, as a key determinant of healthy eating. Income has direct effects on healthy eating as well as indirect effects, mediated through social class. Income affects and interacts with other important individual and collective factors affecting healthy eating practices. These include individual factors, such as food skills and preferences; social factors, such as gender and social support; cultural factors, such as traditions, norms and values; physical factors, such as housing and access to healthy food; and policy factors, such as food labeling, and school and workplace food policies.

A further factor is the type and strength of dominant political discourse (e.g., neoliberalism, welfare liberalism, democratic socialism), which affects the role the state plays vis-à-vis the private sector, civil society and the family in providing goods and services, as well as the ability of the state to develop healthy public policy and create the conditions that facilitate population health. The dominant political discourse in a society has effects on factors influencing healthy eating that range from the amount of time working parents have available to feed their families, to the ability of a society to regulate food advertising to children, to the breadth and adequacy of income support programs.

Low-income Canadians are considered to be nutritionally vulnerable for a number of reasons. First, analysis from the 2000-01 Canadian Community Health Survey (CCHS) suggests that 14.7% of Canadian households are food insecure. Food insecurity refers to “limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.” There is a growing body of literature on the extent, nature and manage-
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ment of food insecurity among Canadians, showing that inadequate income plays a pivotal role.

Second, there is evidence from Western, industrialized countries that those in higher socio-economic groups have healthier diets (eating more fruit, vegetables and low-fat or skimmed milk, as well as fewer fats and oils, and less meat) than those in lower socio-economic groups.

Third, there is considerable evidence that early life circumstances, including nutrition, have a significant impact on health in adulthood. As a result, there is great interest in improving the nourishment of infants and children, starting in utero and continuing throughout childhood, particularly those living in poverty, in order to offset potential future health problems.

Fourth, there is at least the perception of a socio-economic gradient in obesity among Canadians. There is evidence that rates of obesity follow a socio-economic gradient in the US, at least among women, however, until data from the 2004 CCHS (Cycle 2.2) are analyzed, we will not have strong Canadian data on obesity rates in relation to socio-economic position.

Finally, it is well established that there are social inequalities in health, such that as economic and social circumstances decline, people have shorter, sicker lives. It has been hypothesized that healthier eating and improvements in other lifestyle factors could reduce morbidity and premature mortality in low-income groups. However, the evidence suggests that the role of nutrition and other lifestyle risk factors, including smoking, in social inequalities in health are less important than the social determinants of health, particularly poverty itself.

Socio-economic Gradients in Eating Patterns
European studies have consistently shown that those of higher social class (generally defined using education as an indicator, rather than income or occupation) have healthier diets (eating more fruit, vegetables and low-fat or skimmed milk, as well as fewer fats and oils, and less meat). Socio-economic gradients have also been noted in studies in the US and Australia, with higher socio-economic groups consuming diets that are closer to the dietary recommendations than lower socio-economic groups. However, studies that have measured nutrient intake, rather than food consumption, have found the differences among socio-economic groups to be small and "appear to be of limited importance when considering the relatively low degree of compliance of all social groups with dietary guidelines."

In Canada, there is some historical evidence of socio-economic gradients in diet. More recent studies have also suggested the existence of socio-economic gradients and the likelihood of income thresholds for some food groups, including fruit, vegetables and dairy products. An income threshold refers to the likelihood that, beneath the threshold, income is the most important determinant of consumption; a socio-economic gradient suggests that other determinants, especially education, are also likely to be important. Thus it seems very likely that socio-economic gradients in diet exist in this country, as well as income thresholds for some food groups. Nationally representative data, collected on an ongoing basis, are fundamental to understanding nutritional inequalities in this country and to formulating strategies to address them.

Food Insecurity and Inequalities in Diet
There is considerably more research on a particularly vulnerable component of the Canadian low-income population: those who are food insecure. Income is the most important determinant of food insecurity and hunger, but there is not a linear relation between income and measures of food security. Analysis of available Canadian data shows that the odds of reporting food insecurity or food insufficiency increases with declining income, one nationally representative survey showing that households in the lowest third of standardized household incomes were 10.2 times more likely to be food insecure than those in the highest third. Analysis of the 1998-1999 National Population Health Survey (NPHS) shows that 10.2% of Canadian households, or approximately 3 million people, reported food insecurity in the previous year. More recent analysis suggests that the number of food insecure Canadians has increased dramatically, to 14.7% in 2000-2001.

While food insecurity is measured at the household level, dietary intakes are measured at the individual level, and individuals in food insecure households show differing patterns of intake. Research on the

METHODS AND LITERATURE SEARCH

Searches were conducted on the electronic computerized databases CINAHL, MEDLINE, and Sociological Abstracts over the time period of December 2002 to March 2003. ERIC was searched in July 2003. Citations from 1975 onward were included. The following key words were used: food insecurity; inequalities and nutrition; hunger; poverty and food; poverty and

* Food insufficiency is a narrower, simpler construct than food insecurity. Food insufficiency is measured by a single survey question about the quantity and quality of food eaten in the household, and is seen as a measure of fairly severe household food insecurity.
nutrient intakes of children in food insecure households, the management of household food insecurity and the gender aspects of feeding the family suggests that food is not evenly distributed among family members. This research shows that mothers protect their children as much as possible from overt food deprivation or hunger (though the quality of food fed to children suffers during times of constraint). Mothers employ numerous management strategies, including the reduction of their own food quality and quantity, to avoid the catastrophe of having their children go hungry. Two recent studies of the diets of high-risk Canadian households have focussed on mothers’ intakes, the most sensitive indicators of potential nutritional risk. These have demonstrated estimated prevalences of inadequacy for several nutrients.

The research on food insecure Canadians demonstrates that, for the populations studied to date, the most important barrier to healthy eating is inadequate income. This conclusion is supported by the fact that mothers do protect their children’s energy and nutrient intakes, and that energy and nutrient intakes decline systematically as food security status deteriorates. It is also supported by research establishing that incomes for those receiving welfare and those working at minimum wage jobs are inadequate to purchase the food for a healthy diet. Higher levels of education do not protect households from food insecurity nor does education appear to mitigate the dietary effects of inadequate income. Neither nutritional knowledge nor food skills appear to be significant factors affecting healthy eating in these populations. Those in low-income households have been shown to buy more nutrients for their food dollar than higher income households. Indeed, it can be concluded that those who live in poverty are particularly adept and creative in juggling and managing their financial and food resources to ensure that their most important needs are met first.

Using Sociology to Understand Food Practices

Sociological research on health and food practices that compares different classes suggests that there are two opposing, class-based relations to food: substance (food as material reality, sustaining the body and giving strength) and form (food as self-discipline to an aesthetic idea). These different relations to food are divided by the “distance from necessity”, which is an indirect way in which income and class position affect eating practices. This research suggests that apart from income thresholds for the consumption of different food groups, there may also be cultural thresholds related to class (including educational attainment) and class trajectory over time.

Social science research also suggests that the concept of “belonging” may be important for understanding food practices. As political scientist Deborah Stone has put it, what we eat is “a sign of membership, social status and spiritual worth. Eating the same food as others is a basic mark of belonging” (p. 71). The practice of feeding the family involves, in part, meeting what Stone calls “communal needs”, which include “community, solidarity, a sense of belonging; dignity, respect, self-esteem, and honor; friendship and love” (p. 77). The desire of low-income people to belong to the dominant culture through food has been well documented by those examining the social aspects of food insecurity.

This body of research highlights the important social, cultural and symbolic functions of food, eating and “feeding the family”, and suggests that there are different cultural “logics” underlying these everyday practices for different social classes.

KNOWLEDGE GAPS IN THE LITERATURE

National data on socio-economic gradients in diet

A robust research program on the determinants of healthy eating among low-income Canadians must be founded on quantitative data examining dietary intakes and patterns in Canadians; therefore, the lack of national data on socio-economic gradients in diet is perhaps the most significant gap in the Canadian research literature. Fortunately, that gap will begin to be filled in the near future, with the results of the CCHS, Cycle 2.2, Nutrition Focus, which was scheduled to conclude data collection in December 2004.

Ideally, a nutrition monitoring and surveillance system would provide data over time. To provide data that would help us understand socio-economic gradients in diet and the determinants of healthy eating among low-income Canadians, the design of a nutrition survey would have to incorporate multiple measures of class, including income, level of education, occupation and the social trajectory of both the respondent and spouse/partner (if applicable). Other known influences on eating habits should also be included in the survey, such as family structure, family roles and responsibilities, ethnicity, length of time in Canada, hours of employment, food availability at work and so on. Ideally, such a survey would also include measurement of individual food insecurity and food costs. A longitudinal study design could provide data on how changes in cultural capital, income and food security status, as well as in factors such as age, family composition and children’s ages, affect food practices.

National nutrition data, provided over time, could help us fill the gaps about how significant the dietary differences are among socio-economic groups; how the gradients are different using different measures of socio-economic position; the relation between socio-economic gradients and income thresholds for different food groups; whether the relation is different for different food groups or for food groups rather than nutrient intake; how socio-economic differences in diet are distributed among rural, urban, remote and urban localities, between the sexes, across age groups, and among different ethnic groups; the relation between the expected gradients in food groups and adherence to the dietary guidelines and other measures of dietary quality; and how these relations change over time.

Sociological research on the interaction of income and class with other factors affecting food practices

There is little research on the interaction of income with other factors affecting food practices, such as housing status, social support, family roles and responsibilities, time constraints, the stage of the life course, ethnicity, length of time in Canada, etc. Sociologically informed, qualitative research could help develop additional indicators of food insecurity that assess qualitative and social dimensions of...
Sociological research on Canadian food norms and cultures

There is little written about Canadian food norms and cultures. If, as suggested by this review of the literature, one of the conditions for improving the food practices of low-income Canadians is an improvement in the dominant food culture and food norms, then it will be important to characterize food cultures and food norms in this country, since the most effective means of shifting them is to believe that these have become particularly salient with the awareness of increases in the prevalence of obesity and a growing sense of urgency to undertake interventions to combat the problem.

For example, one important influence on the ways in which food norms are shaped and developed in contemporary North America is the food industry and its marketing practices. The food industry has its own logic, that of making profit, which is often in conflict with the promotion of healthy eating. It is important to explore how food technology shapes social norms around eating in Canada; how those in different positions in social space (e.g., class, sex, ethnicity, age, etc.) are targeted by food marketers; and how people take up and act on those marketing messages and thus produce and reproduce food norms and culture. Such research could be useful, for example, in understanding how social marketing campaigns to promote healthier diets can be more effective.

Research on the costs of healthy diets

Ideally, food costs would be included in a national nutrition survey, so that dietary and economic variables can be linked. In the meantime, smaller research projects could begin to fill the gap, with studies comparing prices of healthier options within food groups (e.g., lower-fat products), comparing food baskets, and comparing food prices and energy density. If it is the case that healthier diets are more expensive than less healthy diets, this has important implications for public policy. At the individual level, changes in pricing have a strong effect on food choices, and pricing strategies have been suggested as potentially effective population-based strategies to improve eating practices. Understanding the costs of healthier diets would be a first step towards assessing the potential of community-based food pricing interventions to affect food practices in Canada.
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