

Food Insecurity in Canada

Considerations for Monitoring

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ABSTRACT

Food insecurity, which has been recognized as an important determinant of health, is estimated to have affected almost one in ten Canadian households in 2004. Analyses of indicators of household food insecurity on several recent population health surveys have shed light on markers of vulnerability and the public health implications of this problem. However, the lack of detailed information on the economic circumstances of households and inconsistent measurement across surveys thwart attempts to develop a deeper understanding of problems of food insecurity. To better inform the development and evaluation of policies to address food insecurity among Canadian households, more effective monitoring is needed. This requires the consistent administration of a well-validated measure of food security on a population survey that routinely collects detailed information on the economic circumstances of households. Health professionals can contribute to the amelioration of problems of food insecurity in Canada by advocating for improved monitoring of the problem at a population level.

Key words: Food insecurity; nutrition; poverty; policy; monitoring; surveys

RÉSUMÉ

L'insécurité alimentaire, que l'on sait être un important déterminant de la santé, aurait touché près d'un ménage canadien sur 10 en 2004. Des analyses portant sur les indicateurs de l'insécurité alimentaire des ménages dans plusieurs enquêtes récentes sur la santé de la population ont jeté un nouvel éclairage sur les indicateurs de vulnérabilité et les conséquences de l'insécurité alimentaire sur le plan de la santé publique. Toutefois, le manque de données précises sur la situation économique des ménages, ainsi que les différentes mesures utilisées d'une enquête à l'autre, nuisent à une connaissance plus approfondie du problème. Pour étayer l'élaboration et l'évaluation des politiques de lutte contre l'insécurité alimentaire dans les ménages canadiens, il faut en faire un suivi plus efficace, ce qui exige l'application uniforme d'une mesure éprouvée de la sécurité alimentaire dans le cadre d'une enquête démographique recueillant systématiquement des données précises sur la situation économique des ménages. Les professionnels de la santé peuvent contribuer à résoudre le problème de l'insécurité alimentaire au Canada en préconisant un meilleur suivi dans la population.

Mots clés : insécurité alimentaire; nutrition; pauvreté; politiques; suivi; enquêtes

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Food insecurity, “the inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so”,¹ has been recognized as a determinant of health by the Public Health Agency of Canada² and Health Canada.³ Our understanding of the public health implications of household food insecurity has stemmed from the inclusion of indicators of this problem on recent population health surveys. Analyses of data from the National Longitudinal Survey of Children and Youth (NLSCY) and the National Population Health Survey (NPHS) demonstrate that food insecurity is associated with poor health among adults and children.⁴⁻⁸ These associations persist in analyses of data from the Canadian Community Health Survey (CCHS) (Kirkpatrick, unpublished analyses). The array of poor health outcomes that have been associated with food insecurity highlights the vulnerability of individuals living in food-insecure households.

The measurement of household food security in conjunction with the collection of dietary intake data on cycle 2.2 of the CCHS has enabled assessment of the nutrition implications of food insecurity.⁹ Although few differences in dietary intakes by household food security status are apparent among children, food insecurity is a marker of consumption of fewer fruits and vegetables and milk products, lower fibre intakes, higher energy density and heightened risk of inadequate intakes across a broad spectrum of nutrients among adults and adolescents.⁹ These findings are consistent with smaller regional Canadian studies that have documented limited food selection,^{10,11} suboptimal nutrient intakes^{12,13} and high levels of nutrient inadequacies^{14,15} among adults in relation to indicators of food insecurity. The food intake patterns characteristic of adults in food-insecure households must compound the management of chronic diseases such as diabetes, hypertension, and cardiovascular disease that are more prevalent among this group.⁸ Obesity also appears to be more prevalent among women in food-insecure households.¹⁶ While recent longitudinal research in the US suggests that this association is not causal,¹⁷ the energy-dense and nutrient-poor diets of women in

TABLE I
Estimates of Household Food Insecurity in Canada as Measured by National Population Surveys*

Survey	Questions	Estimated Prevalence (%)
1994 National Longitudinal Survey of Children and Youth	Has your child ever experienced being hungry because the family had run out of food or money to buy food? (Child hunger was indicated by an affirmative response)	1.2 ⁵
1996 National Longitudinal Survey of Children and Youth	Has your child ever experienced being hungry because the family had run out of food or money to buy food? (Child hunger was indicated by an affirmative response)	1.6 ⁷
1996/97 National Population Health Survey	Over the past 12 months, did your household ever run out of money to buy food? If yes, which of the following best describes the food situation in your household? • always enough food to eat • sometimes not enough food to eat • often not enough food to eat (Food insufficiency was indicated by sometimes or often not having enough food to eat)	4.0 ⁸
1998/99 National Population Health Survey	In the past 12 months, did you or anyone else in your household: • not eat the quality or variety of foods you wanted to eat because of a lack of money? • worry that there would not be enough to eat because of a lack of money? • not have enough food to eat because of a lack of money? <i>Response options: yes, no</i> (Food insecurity was indicated by an affirmative response to one or more indicator)	10.4 ⁶
2000/01 Canadian Community Health Survey (cycle 1.1)	In the past 12 months, how often did you or anyone else in your household: • not eat the quality or variety of foods you wanted to eat because of a lack of money? • worry that there would not be enough to eat because of a lack of money? • not have enough food to eat because of a lack of money? <i>Response options: often, sometimes, never</i> (Food insecurity was indicated by an affirmative response – sometimes or often – to one or more indicator)	14.7 ²¹
2004 Canadian Community Health Survey (cycle 2.2)	18-item Household Food Security Survey Module (Food insecurity was indicated by reported compromises in quality and/or quantity of food consumed among adults and/or children)	8.8% of individuals ³ (9.2% of households†)

* Adapted from Tarasuk V. Household food insecurity in Canada. *Topics in Clinical Nutrition* 2005;20(4):299-312.

† The release of household-level weights for use with the 2004 CCHS data enabled the estimation of the proportion of households that experienced food insecurity. Estimates from NPHS and previous cycles of CCHS are based on individual-level weights and are interpreted as the proportion of individuals who lived in households that experienced food insecurity in the reference period. Estimates from NLSCY are interpreted as the proportion of families reporting that children had ever experienced hunger.

food-insecure settings cannot be conducive to weight loss.

Analyses of food security indicators on health surveys have also provided insights into the magnitude of the problem in this country, although inconsistencies in measurement have hindered attempts to assess temporal patterns in prevalence. According to the most recently published estimate from cycle 2.2 of the CCHS, almost one in ten Canadian households was food insecure in 2004.³ Earlier surveys that measured more extreme manifestations such as child hunger or food insufficiency (i.e., not having enough to eat) yielded lower prevalence estimates in comparison to more recent surveys that have considered multiple dimensions of food insecurity ranging from anxiety about running out of food to not having enough to eat (Table I). Because the indicators used on different surveys reflect varying levels of severity of food insecurity, it is not possible to discern whether fluctuations in the estimates over time reflect changes in the prevalence of the problem or whether the proportion of Canadians characterized as food insecure

simply varies in response to the fact that different facets of the problem are being captured in the different datasets.

There has been a shift toward the use of a consistent measure of food security on recent cycles of the CCHS, beginning with the administration of the Household Food Security Survey Module (HFSSM), a validated multi-item measure,¹⁸ to all respondents to cycle 2.2 (2004). However, examinations of changes in the prevalence of this problem over time continue to be impeded by methodologic issues. The HFSSM was deemed optional and administered in only some provinces on cycle 3.1 (2005), making it impossible to generate a national prevalence estimate. Even in those jurisdictions where the module was administered on both cycles 2.2 and 3.1, differences between the general (x.1) and focused (x.2) cycles of the CCHS, including the target populations and sample sizes, make it difficult to assess trends over time.¹⁹ The HFSSM is being administered to all respondents to cycle 4.1 (2007/2008) of the CCHS.²⁰ Data from this cycle may enable some assessment of trends in the

prevalence of the problem in those jurisdictions for which food security data are available in both the 3.1 and 4.1 datasets. However, without multiple cycles of food security data from nationally-representative samples collected using a consistent measure, we will still have little insight into temporal patterns in the prevalence of the problem at a national level.

The measurement of food security on surveys with extensive measures of health has been valuable in shedding light on the implications for public health, but it yields little insight into the factors that give rise to this problem. The availability of some information on household socio-demographic characteristics on the health surveys has enabled the identification of key markers of vulnerability, including low income adequacy, reliance on welfare, lone motherhood, lack of home ownership, and Aboriginal status.^{3-8,21} However, the lack of detail on household economic circumstances thwarts attempts to develop a deeper understanding of the factors that mitigate vulnerability to food insecurity. For example, because of the paucity of detail

on housing circumstances beyond tenancy on the health surveys, we are unable to examine the salience of other aspects of housing – such as shelter costs or receipt of a housing subsidy – to household food security.

Furthermore, while problems of food insecurity have long been linked to shifts in social policy in this country,²²⁻²⁴ the lack of comparability between surveys has prevented ecologic investigations of the influence of changing social or economic conditions on the prevalence of food insecurity. Thus, it has been impossible to determine how federal, provincial, and territorial policies have functioned to increase or reduce problems of household food insecurity. For example, the National Child Benefit (NCB) Supplement was introduced in 1998 to provide financial support to low-income families with children. This program increased the incomes of ‘working poor’ families nationwide, but initially only New Brunswick and Newfoundland and Labrador permitted welfare recipients to receive the full amount of the Supplement.²⁵ Since 1998, several other provinces have amended their policies to allow welfare recipients to benefit from the NCB. While one might assume that the NCB would have a positive effect on household food access, it is impossible to draw upon the existing data to gauge the effect of this major federal initiative on household food insecurity among either the ‘working poor’ or welfare recipients. Similarly, we are unable to examine the effect of changes to welfare benefit levels, minimum wage levels, Employment Insurance policies and other programs on rates of food insecurity.

More effective monitoring of household food insecurity in Canada is needed to facilitate the in-depth examination of factors that mitigate vulnerability and to inform the development and evaluation of policies related to these factors. This requires the consistent administration of a well-validated measure of household food security on future surveys, with attention to minimizing methodological changes from cycle to cycle to enable inferences about trends over time. In addition, a reconsideration of the most appropriate survey vehicle for the collection of food security data is needed. The measurement of food security on a population survey

that routinely collects detailed information on the economic circumstances of households would support efforts to go beyond the identification of general markers of vulnerability. There are already data collection efforts underway that could be exploited for this purpose. For example, with the addition of a validated food security measure, Statistics Canada’s Survey of Household Spending²⁶ (a cross-sectional household expenditure survey) or Survey of Labour and Income Dynamics²⁷ (a household panel survey aimed at understanding the economic well-being of Canadians) could be valuable tools for informing policy interventions to ameliorate problems of household food insecurity.

This call for consistent and thoughtful monitoring of food insecurity in Canada does not preclude the need for immediate policy responses to address this problem. For many years, we have had evidence that food insecurity is linked to inadequate household economic resources.^{3-8,21} Several policies impact the financial resources of Canadian households, but limitations in the available data make it difficult to elucidate the specific policy changes that would be most effective in fostering food security. Nonetheless, the existing evidence points very strongly to the need for adequate incomes, suggesting that improvements to the adequacy of welfare rates and minimum wage levels, for example, would be useful in ameliorating food insecurity. The implementation of improved monitoring is needed to identify the most effective longer-term strategies for redressing problems of food insecurity. Health professionals can support the amelioration of problems of food insecurity in Canada by advocating not only for policy responses, but also for effective monitoring of this problem on population surveys.

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