

Low income, welfare and nutritional vulnerability

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Ever since food banks began to operate in Canadian communities in the early 1980s, public attention has been drawn to the food shortages experienced by low-income families. Over the past 2 decades, charitable food assistance initiatives have become fixtures in our communities and “food drives” to collect food for the “hungry” have become a routine part of life. In academic circles, the problem has come to be known as “food insecurity,” broadly defined as the limited, inadequate or insecure access of individuals and households to sufficient, safe, nutritious, personally acceptable food to meet their dietary requirements for a healthy and productive life. A recent analysis of 3 indicator questions included in the 1998–1999 National Population Health Survey carried out by Statistics Canada suggests that 10% of Canadians may be affected by this problem.¹ However, there remains only limited understanding of the day-to-day reality of food insecurity and the nutritional and health consequences of this problem.

It is against this backdrop that the study reported in this issue (page 686) by Lynn McIntyre and colleagues² was conceived. Their study was undertaken to ask the chilling question whether, in the context of chronic poverty, lone mothers in the Atlantic provinces deprived themselves of food in order to spare their children food deprivation. They assessed the food insecurity and dietary intakes of 141 women and their 333 children over 1 month. They found a high prevalence of inadequate intakes among the women for most nutrients examined. The children’s intakes, by contrast, appeared adequate for all nutrients except folate and zinc. However, the observed pattern of within-month variation in the children’s energy and nutrient intakes suggests that the quality of their diets was highly sensitive to the ebb and flow of resources in the household. The absence of significant within-month patterns in the women’s nutrient intakes may be a function of sample size limitations and the relative insensitivity of the analytic methods used; alternatively, these findings may simply reflect the chronically compromised nature of women’s dietary intakes when they must care for children in the context of severe and chronic poverty.

How do the food intakes of the women and children studied by McIntyre and colleagues compare with those of the general population? Unfortunately, there are currently few data with which to compare these results. A provincially representative sample of adult women in the 1995 Prince Edward Island Nutrition Survey revealed similar or only slightly lower prevalences of inadequacy for many of the nutrients examined here,³ which suggests that at least

some of the dietary problems identified by McIntyre and colleagues may be more widespread concerns. Nevertheless, given that over three-quarters of the women in this study² reported household food insecurity, it is difficult to argue that they are not more vulnerable to dietary inadequacies than women in more “food-secure” households.

It is noteworthy that 87% of families in this sample were dependent on welfare. In consequence, the study findings add to the growing body of research suggesting that welfare benefit levels in Canada are insufficient to enable many recipients to purchase the most basic prerequisites to health. In the 1998–1999 National Population Health Survey, households that reported their main source of income to be social assistance or welfare (4.3% of households in the survey) were 3 times more likely than other households to report food insecurity and 3½ times more likely to report dietary compromises.¹ Fifty-eight percent of households on welfare or social assistance reported at least one episode of food insecurity.

Another way to look at this problem is through the lens of poverty using the Statistics Canada Low-Income Cut-Offs (LICOs). These represent the income levels in which a household will, on average, spend a share of its pre-tax income on food, clothing and shelter that is 20% higher than that of the average family. In 2000 (the year in which the study by McIntyre and colleagues was completed), welfare benefits for a single parent with one child were 63% of the LICO in Prince Edward Island, 64% in Nova Scotia and New Brunswick, and 72% in Newfoundland.⁴ Elsewhere in the country, benefit levels for this same type of household ranged from 47% of the LICO in Manitoba to 61% in Saskatchewan. Insofar as the nutritional vulnerability documented by McIntyre and colleagues is income related, lone mothers on welfare in other parts of Canada would appear to be even worse off.

In most jurisdictions, welfare benefits declined in “real dollar” terms through the 1990s as federal, provincial and territorial governments embarked on social security reforms in their efforts to reduce deficits and lessen public spending. In Nova Scotia, for example, the welfare income of a single parent with one child is estimated to have fallen by 23% between 1991 and 2001, after adjustment for inflation over this period.⁴ The federal government’s introduction of the National Child Benefit Supplement to the Child Tax Benefit in July 1998 presented a means to lessen the financial hardships of low-income families, but from the outset most provinces and territories have clawed back this supplement from families on welfare. The impact of this

practice on household incomes is considerable because, as of July 1, 2001, the National Child Benefit Supplement was \$104.58 a month for a family with 1 child and \$192.50 a month for a family with 2 children.⁴

One might argue that community supports such as food banks, children's meal programs and other community-based food programs lessen the deleterious effect of very low incomes on household food security. Indeed, 20%–30% of households that report problems of hunger or food insecurity indicate that they have sought charitable food assistance.^{1,5} Eighty percent of women in the study by McIntyre and colleagues reported receiving assistance from food banks, relatives and other sources over the last year. However, the existing evidence suggests that assistance from charitable food programs and informal support networks is insufficient to compensate for the extent of deprivation experienced by many food-insecure households.^{6–8}

The study by McIntyre and colleagues paints a disturbing portrait of the conditions of single-parent families living on low incomes, principally supported by social assistance. It is time for the federal, provincial and territorial governments to embark on a new phase of welfare reform — one in which policies and programs are redesigned to ensure that welfare incomes are not so low as to jeopardize the nutritional health and well-being of those Canadians who must rely on these programs.

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Technology-enabled knowledge translation: building a framework for collaboration

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It's a busy day in your office, and you are running behind. Your patient with arthritis of the knee greets you with a small stack of printouts from the Internet on glucosamine. She wants to know whether taking this medicine would be beneficial.

You're in the emergency department, managing a patient with unstable angina. You wonder whether the current evidence would support combining a glycoprotein IIb/IIIa inhibitor with low-molecular-weight heparin in this case.

Physicians need to find reliable evidence swiftly to help in “real-time” patient diagnosis and management. At the same time, faced with the rapid and voluminous accumulation of new research data, physicians are finding it increasingly difficult to keep up with current knowledge and to integrate it into practice. More and more, the ability to locate and access

evidence to support decision-making — just-in-time information retrieval — is becoming an essential skill for physicians.¹

How does research evidence become part of routine medical practice? The process of “knowledge translation” is of intense interest to researchers, clinicians and policy-makers and has been identified by the Canadian Institutes of Health Research as a major challenge.² Knowledge translation involves applying evidence to at least 3 areas of action: the practices of health professionals,³ policy-making by health authorities and governments,⁴ and the implementation of strategies to enable health professionals and policy-makers to work together to put policies into practice.⁵

It commonly takes more than 20 years for advances in medical knowledge to become widely incorporated into clinical practice.⁶ Barriers that contribute to this delay in-