



Joyce Carpenter with sons
Dakota (left) and Luke (right)

Photo by: Gary Beechey, BDS Studios

DO YOU KNOW

WHERE YOUR NEXT MEAL

IS COMING FROM?



Food insecurity affects four million Canadians—and it has an extra impact on many with diabetes

By Anne Bokma

Joyce Carpenter knows what it was like to go hungry as a child growing up near Cobourg, Ont. “We were very poor and often we didn’t have bread to make sandwiches to bring to school,” she says. Even today, Carpenter, 66, worries about being able to properly feed herself and her two youngest boys, 22-year-old Dakota and 10-year-old Luke, who still live at home in Toronto with her. Half of her government pension goes to rent and after all the bills are paid, she only has \$200 a month left for groceries, which means she needs to visit a food bank about once a month. “Sometimes I have a heck of a time finding good food for us to eat,” says Carpenter, who was diagnosed with type 2 diabetes when she was 50.

Pasta, potatoes, and peanut butter are staples for Carpenter. She shops for bread at the dollar store. Some favourite foods—such as watermelon, corn on the cob, and pork chops—are just too expensive for her. “I’d love to be able to feed my boys that stuff, but I can’t,” she says. “I do the best I can.”

Despite her financial struggles, she maintains a positive attitude, is diligent about monitoring her blood sugars (she regularly visits Anishnawbe Health Toronto, a culturally based program that integrates traditional and Western approaches to health care) and is proud of her sons, who help her out where they can—for instance, Dakota lends her his car to go grocery shopping and helps with the bills, while 10-year-old Luke is a “whiz,” she says, at comparison price shopping.

Carpenter is one of four million Canadians—including 1.1 million children, according to the Canadian Institutes of Health Research—who cannot get or afford sufficient healthy food (or are uncertain of doing so), which is known as food insecurity.

People in low-wage jobs and newcomers to Canada are among those at higher risk of food insecurity. While poverty is at the heart of food insecurity, it is a complex problem to solve—one that requires government commitment to social policy issues, such as affordable housing and drug plan coverage for low-income earners.

“Sometimes I don’t know where my next meal is going to come from.”

– Joyce Carpenter, person living with type 2 diabetes

FOOD INSECURITY LINKED TO HIGHER DIABETES RISK

Diabetes is more common in households facing food insecurity, according to studies conducted by Enza Gucciardi, an associate professor of nutrition at Toronto’s Ryerson University, whose research focuses on how health-care providers can support people with diabetes who cannot afford healthy food. In fact, Gucciardi says, diabetes risk is about 50 per cent higher among adults in food-insecure households, and these individuals often have to resort to skipping meals, eating less food so that their children will have enough, and eating stale food. They also generally eat fewer fruits, vegetables, and protein, and are at higher risk of low blood sugar (hypoglycemia). One of Gucciardi’s studies showed that people living with diabetes and dealing with food insecurity had twice as many episodes of dangerously low blood sugars as those who had easy access to healthy foods.



GETTING FOOD ON THE TABLE

Food insecurity is a serious public health problem that affects about four million Canadians. Veronica Rouse, a registered dietitian and certified diabetes educator who worked at a community health centre in Toronto, offers some of the ways people can deal with food challenges:

- 1 Use community resources** such as food banks or agencies that offer drop-in meals, food vouchers, or cooking classes that demonstrate how to prepare food on a limited budget.
- 2 Meet with a registered dietitian to get advice** on meal planning and food shopping on a budget.
- 3 Eat fruits and vegetables that are in season**, or buy nutritious frozen fruits and vegetables on sale.
- 4 Buy fruits and vegetables from the marked-down section** of the grocery store.
- 5 Group-shop with friends and family** in order to buy in bulk.
- 6 Grow a garden**, create a container garden, and/or be part of a community garden.
- 7 Shop at discount grocery stores**, which can be significantly cheaper than brand-name stores. "No Name" or store brands usually cost less.
- 8 Talk to your diabetes care team** about affordable prescription drug options for diabetes medications.
- 9 Try a few meatless meals each week** with dishes that feature beans and lentils.
- 10 Buy fewer prepared foods** and individual packaged items, as these items cost more and are often higher in sugar, salt, and fat.

For some people with diabetes, it is a choice between buying medications or buying food. They are also more likely to reuse needles (which is not recommended), to delay filling their prescriptions, and to monitor their blood sugar levels less often because of the cost of supplies, according to Gucciardi's 2014 study. The inability to afford healthy food also has a dramatic impact on diabetes management and on mental health, leading to high rates of depression among those who do not have enough to eat.



Enza Gucciardi

"In our careers as diabetes educators, many of us will encounter clients who experience food insecurity. It is important for us to transfer to our clients our knowledge and expertise of how to work with a limited food budget, as well as educating them about meal planning, food budgeting, and food preparation."

– Veronica Rouse, registered dietitian and certified diabetes educator

Veronica Rouse, a registered dietitian and certified diabetes educator who worked at a community health centre in Toronto for five years, says many of her clients were the "working poor"—people who were in low-wage jobs or single-income households, or who had short-term unreliable employment. Often daily life was a struggle. "Even having transportation to get to an affordable grocery store could be a challenge," she says. "And some people shared apartments or rented a room and didn't have fridges or stoves." She recalls one woman who lived in a rooming house without a fridge and struggled to find a way to refrigerate her insulin. "For a lot of these people, eating three meals a day at regular times that included three out of the four food groups was almost impossible."



Veronica Rouse

in similar situations—they'd see they weren't alone."

HOW CAN HEALTH-CARE PROVIDERS HELP?

It is important for health-care professionals to have an understanding of how food insecurity can affect diabetes management, says Gucciardi. She has developed The Food Insecurity Screening Initiative, a plan to help professionals identify who is at risk for food insecurity, so they can develop an appropriate treatment plan for these patients. "For example, if we know some patients can't afford certain foods, we shouldn't recommend them; and if they can't afford certain drugs, we shouldn't prescribe them," says Gucciardi. "The treatment plan has to be realistic."

The screening tool, which was initially tested last year on 33 patients at a Toronto health centre, involved asking patients three questions about their experiences with food over the previous three months: "Did you ever worry about running out of food?" "Was there a time when your food didn't last and you didn't have money to buy more?" and "Did you or others in your household cut the size of your meals or skip meals because there wasn't enough money for food?" Thirty-nine per cent of patients screened during a two-week period were identified as experiencing food insecurity.

"Health-care professionals need to know the extent of the problem and that's why screening is so important," says Gucciardi. "For example, if you know a patient is

skipping meals because of food insecurity, that can affect the medication you prescribe, because some diabetes drugs need to be taken with food."

"Caregivers can't fix the problem of food scarcity, but we have to be aware of its impact and provide patients with support."

– Enza Gucciardi, associate professor of nutrition

Gucciardi is currently testing her screening tool in the diabetes program at Toronto's SickKids Hospital; the goal is to make it available on a wider scale to health-care providers so they are better able to support their patients with diabetes who are also living with food insecurity.

"Can you imagine not being able to provide food for your family?" Gucciardi says. "Life circumstances can suddenly change, and people can find themselves in very precarious situations. When we have patients who are challenged by food insecurity, we don't want to set them up for failure. We need to provide them with support."

DID YOU KNOW?

- **Diabetes Canada's Food Skills for Families offers online resources on how to make healthy meals and includes a Virtual Grocery Shopping Tour, as well as a Session Sampler featuring recipes made with affordable foods. Talk to your diabetes team or visit foodskillsforfamilies.ca.**

There are no easy answers to solving the problem of food insecurity, but governments have a key role to play in creating policies that ensure healthy food is available to all Canadians. Read Diabetes Canada's Position on Food Security at diabetes.ca/foodsecurity.

Photos by: Gary Beechey, BDS Studios (top)

Photo by: Martin Poole/Thinkstock (right)

