

Why is Public Health interested in Food Skills?

Food skills are necessary for people to provide and prepare nutritious meals for themselves and their households. While there is no data to show that the food skills of the population are decreasing, there is evidence to show that our food choices and consumption patterns have changed over time. Increasingly processed, pre-prepared, and convenience foods are being purchased, assembled, and consumed¹. When a person's food skills limit the types of foods they can prepare, they tend to rely more and more on pre-prepared foods. There is some evidence to show that having fewer food skills leads to a less healthy diet, but it is not a straightforward relationship. There is more involved in determining what a person chooses to eat than their food skills.

While having food skills will not predict whether someone will regularly prepare nutritious food for themselves and their household, not having some food skills makes it impossible to do so. For this reason Waterloo Region Public Health is interested in measuring the level of food skills in the population. Having this data will allow us to track changes and trends and to help us and other community organizations plan and provide opportunities for food skills development within the local population.

Highlights

Between 2008 and 2014...

- A higher percentage of people are reporting that they have good* skills in preserving food
- Cooking from scratch appears to be on the rise, especially among men
- Cooking from scratch happens more frequently among those in mid age (45-64) as opposed to those who are young (18-24)
- Roughly the same proportion of people are saying they recently ate something grown by someone in their household

About this research

In 2008, the Region of Waterloo Public Health (ROWPH) developed research questions to obtain baseline information about the food skills of adults in Waterloo Region. This was the first time that food skills of adults within a Canadian community had been measured.

Since that time, the concept and definition of food skills has evolved and changed due to much debate and further research (please see heading titled "What are Food Skills" on page 4). Despite this evolving definition, ROWPH once again measured the food skills of adults in Waterloo Region with the same questions used in 2008 in order to see if the general level of food skills in the community had changed over time². Since there is not an agreed upon and validated tool to measure food skills and/or food literacy at this time, ROWPH felt that it would be useful to once again measure food skills using the definition and baseline established in 2008.

These results are the focus of this report.



^{*}From here on in, the rating "good" combines the responses for "good" and "very good".

Changes in Food Skills since 2008

While having food skills will not predict whether someone will regularly prepare nutritious food for themselves and their household, not

having some food skills makes it impossible to do so. Figure 1 shows the changes since 2008 in a series of self-rated food skills for Waterloo Region adults.

What stands out from Figure 1 is that there are significantly more adults who rated their skills in food preservation as good than there were in 2008 (the last two skills listed in Figure 1)3. These were the only food skills which showed a significant difference between 2008 and 2014. This may be due to people being increasingly aware of the social, environmental, and economic benefits of purchasing and preserving local food. This awareness may encourage people to take advantage of the many resources and training opportunities which are teaching food preservation skills in Waterloo Region.

When looking at these food preservation skills it is also interesting to note that in 2008, those aged 65+ were more likely to rate their skill in canning as good than those below 65. In 2014, that difference had disappeared and those below age 65 were just as likely to report good canning skills as those 65+.

Most adults (93-94%) continue to say that they have good skills in using a knife and peeling and chopping vegetables and fruit. Fewer adults, but still a majority (68%-86%), continue to rate their skills around planning and coordinating and cooking meals as good.



Figure 1: Seven food skills improved between 2008 and 2014 Canning fruit and salsa from raw ingredients to sealed glass jars, and freezing vegetables or fruits from raw to bagged in home freezer increased significantly (\longrightarrow) .



Waterloo Kitchens in 2008 and 2014



How much time is spent preparing the main meal?

Figure 2 compares the length of time spent preparing the main meal between 2008 and 2014 and shows that there were no significant differences between 2008 and 2014. This means that roughly the same percentage of people were spending the same amount of time preparing the main meal in 2014 as they were six years ago. It does not seem to be taking more time or less time to prepare the main meal.

In 2014, nearly a third of respondents (28.8%) reported that the main meal of the day required 30-39 minutes to prepare; more than half (54.3%) of respondents indicated the main meal of the day required 40 minutes or more to prepare.

Figure 2: Proportion of respondents, by length of time to prepare the main meal of the day, Waterloo Region, 2008 and 2014



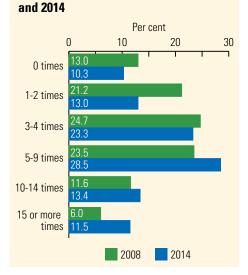
Cooking from scratch – is it happening?

In 2014, Waterloo Region residents were significantly more likely to have cooked "from scratch" 15 or more times in the past seven days than in 2008, see Figure 3. It appears that cooking from scratch happened more often in Waterloo Region in 2014 than it did in 2008. More analysis in the future will be necessary to conclude if this is actually a trend.

When we group the frequency of cooking from scratch into two groups – zero to four times and five to 15 times – we see some interesting differences between 2008 and 2014, as Figure 4 illustrates.

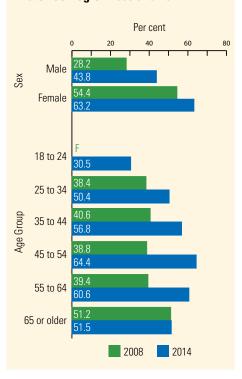
Male respondents were significantly more likely to report cooking from scratch five to 15 times in the past seven days in 2014 than in 2008. This could be a reflection of changing socio-cultural norms around cooking, living situations, and work environments, but further investigation would be required to confirm the reasoning behind an increase in male respondents reporting cooking from scratch more often.

Figure 3:
Proportion of respondents, by
frequency of cooking from scratch in
the past 7 days, Waterloo Region 2008



In 2008, there were no significant differences between age groups in terms of from-scratch cooking. In 2014, those aged 45-64 were significantly more likely to cook from scratch than those in the 18-24 range. It is not possible to tell from this data if the lower likelihood of scratch cooking amongst 18-24 year olds is due to perceived lack of skill, lack of time, or some other reason, but it is an interesting observation.

Figure 4:
Significant difference in frequencyof cooking from scratch five-15 times in the past seven days, by sex and age, Waterloo Region 2008 and 2014





What are Food Skills?

The most recent Canadian definition of food skills was published by the Ontario Ministry of Health Promotion⁴ and developed based on the definitions created by Vanderkooy⁵ and Short⁶. It follows:

Food skills are necessary to provide regular, healthy meals for one's household and comprise a combination of:

- Knowledge (nutrition, label reading, food safety, food varieties, ingredients, substitution)
- Planning (organizing meals, budgeting, food preparation, teaching food skills to children)
- Conceptualizing food (creative thinking about leftovers, adjusting recipes)
- Mechanical techniques (preparing meals, chopping/mixing, cooking, following recipes)
- Food perception (using your senses texture, taste, when foods are cooked)

One problem with the concept of food skills, however, is that the relationship between a person's food skills and whether or not they actually use them is not straightforward. That relationship involves a number of external factors beyond the individual presence of food skills. A related concept called food literacy has developed as an inevitable consequence of thinking about the factors that determine when and how people develop and use food skills.

Food literacy is a broader term that has more to do with whether or not people are able to use the food skills they have. It includes food skills but also looks at more individual and societal factors that impact a person's ability to actually prepare healthy, tasty, and affordable meals.

Based on research with youth in Ontario, Desjardins and Azevedo-Perry⁷ defined food literacy as a set of skills and attributes that help people sustain the daily preparation of healthy, tasty, affordable meals for their household. Food literacy includes not only food skills (techniques, knowledge, and planning ability) but also the confidence to improvise and problem solve and the ability to access and share information. Food literacy is made possible through external factors such as having the resources to buy healthy food, appropriate living conditions, broad learning opportunities, and positive social and cultural experiences with food. Food literacy builds resilience and helps people to overcome barriers to using their food skills.



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This document is available in alternate formats upon request



- ¹ Chenhall, C. (2010). Improving cooking and food preparation skills: A synthesis of the evidence to inform program and policy development. Healthy Living Issue Group (HLIG) of the Pan Canadian Public Health Network, 1-39.
- ² The research questions were included in the Waterloo Region Areas Survey (WRAS) (University of Waterloo Survey Research Centre) and asked during August/September of 2014. The WRAS was completed by 531 adults 18+ living in Waterloo Region. In this randomized, cross sectional survey the proportion of respondents was representative of the population of Waterloo Region (Census 2011). Technical details of the WRAS and Data analysis are available through Epidemiology and Health Analytics team, Region of Waterloo Public Health and Emergency Services.
- ³ Confidence intervals are available upon request. Tests of significance were performed.
- ⁴Ontario Ministry of Health Promotion (2010). Healthy Eating, Physical Activity &Healthy Weights Guidance Document (requirement #8), Standards, Programs and Community Development Branch http://www.health. gov.on.ca/en/pro/programs/publichealth/ oph_standards/docs/guidance/HealthyEating-PhysicalActivity-HealthyWeights.pdf.
- ⁵ Vanderkooy, P. (2009). Food skills of Waterloo Region adults. Region of Waterloo Public Health: http://chd.region.waterloo.on.ca/en/ researchResourcesPublications/resources/ FoodSkills.pdf.
- ⁶ Short, F. (2003). Domestic cooking practices and cooking skills: Findings from an English study. Food Service Technology, 3(3), 177-185.
- ⁷ Desjardins, E. and E. Azevedo (2013) "Making Something out of Nothing: Food literacy among youth, young pregnant women, and young parents who are at risk of poor health". Retrieved from: http://www.osnpph.on.ca/ resources/index.php.



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