Nutritious Food Basket for WDG 2018

TO: Chair and Members of the Board of Health

MEETING DATE: November 7, 2018

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Medical Officer of Health & CEO

Recommendations

It is recommended that the Board of Health:

1. Share the Wellington-Dufferin-Guelph Nutritious Food Basket (NFB) survey results with the following to increase community awareness of the cost of healthy eating:
   a. Consumers through the Public Health website and other media; and
   b. Local health and social service groups and officials.

2. Forward this report to the Association of Local Public Health Agencies and the Ontario Public Health Association to assist them in advocating for those who are food insecure.

Key Points

- This report provides information on the cost of a Nutritious Food Basket (NFB) in Wellington, Dufferin and Guelph (WDG) for 2018. The NFB is a tool that estimates the basic cost for an individual or household to eat healthy. Data from NFB costing
is used by Wellington-Dufferin-Guelph Public Health (WDGPH) for program planning and to promote access to healthy, nutritious food.

- In 2018, the cost of the NFB in WDG for a reference family\(^i\) of four is $210.09 per week (Appendix “A”).
- The cost of the NFB decreased 0.8% between 2017 and 2018. Overall, the cost of the NFB has increased 27% since 2009, when the NFB Protocol was implemented.
- Individuals and families with low incomes\(^ii\) do not have enough money to pay for their basic needs, including shelter and healthy food (Appendix “A”).
- Food insecurity is a serious public health concern because of its relationship with poor nutrition and poor physical and mental health in adults and children. Having economic and physical access to healthy food is vital to eating well, which in turn, plays an important role in an individual’s health at any stage of life. Improving incomes is the most important response to food insecurity.
- The findings of this report highlight the need to educate the public on the root causes of food insecurity and for public health to continue to work with community partners to advocate for adequate incomes for families and individuals that allow them to buy nutritious food.

Discussion

Introduction

Food insecurity is a serious public health issue. In Canada, food insecurity is defined as the inability of individuals and households to access adequate food because of financial constraints.\(^1\)\(^,\)\(^2\) “Because the inability to afford such a basic necessity as food is tightly aligned with financial hardships, food insecurity is a highly sensitive measure of material deprivation (the inability to afford basic needs).”\(^1\)

Local data from the 2012-2014 Canadian Community Health Survey showed that approximately 14% of households in WDG experienced food insecurity.\(^12\)

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\(^i\) Reference family is a man and woman each aged 31 to 50 years; a boy, 14 to 18 years of age; and a girl, four to eight years old

\(^ii\) For the purposes of this report “low incomes” refer to the case scenario spreadsheet appendix 1 in which households spend a significantly higher proportion of their income on shelter and food compared to average Ontario family income.
### Table 1: Comparison of the percentage of food insecure households in WDG and Ontario from 2012-2014

<table>
<thead>
<tr>
<th></th>
<th>Wellington-Dufferin-Guelph</th>
<th>Ontario</th>
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</thead>
<tbody>
<tr>
<td><strong>Marginally food insecure</strong></td>
<td></td>
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<tr>
<td>Worry about running out of food and/or limit food selection because of lack of money for food.</td>
<td>5%</td>
<td>3%</td>
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<tr>
<td><strong>Moderately food insecure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compromise in quality and/or quantity of food due to a lack of money for food.</td>
<td>6%&lt;sup&gt;iii&lt;/sup&gt;</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Severely food insecure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miss meals, reduce food intake and at the most extreme go day(s) without food.</td>
<td>3%&lt;sup&gt;iv&lt;/sup&gt;</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total experiencing food insecurity</strong></td>
<td>14%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Food insecurity is associated with inadequate intake of key nutrients and a variety of negative physical and mental health outcomes in adults and children.<sup>3,4</sup> Individuals who are food insecure are more likely to have chronic diseases, some of which include hypertension, coronary heart disease, stroke, and diabetes.<sup>3-7</sup> Social exclusion, distress, depression and suicide ideation are some of the psychological and social consequences that can be experienced by adults who experience food insecurity.<sup>3,8-11</sup>

### Methods

The Board of Health is required under the Population Health Assessment and Surveillance Protocol, 2018, to collect data on food security and food environments (including access and affordability).<sup>16</sup> The NFB is a survey tool that measures the cost of purchasing a ‘basket’ of healthy foods in a particular place at a point in time. The composition of the ‘basket’ reflects current nutrition recommendations and typical food

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<sup>iii</sup> Interpret with caution, there is a high sampling variability with these estimates.

<sup>iv</sup> Interpret with caution, there is a high sampling variability with these estimates.
purchasing patterns. It is used to monitor food affordability, availability, and accessibility by relating the cost of the food ‘basket’ to the income of local individuals and families.\textsuperscript{17}

The NFB survey was conducted in May of 2018 by a WDGPH Public Health Nutritionist and a trained volunteer. Food pricing in seven grocery stores, including chain and independent stores across WDG, was assessed using the 2010 Nutritious Food Basket Guidance document.\textsuperscript{18}

Case scenarios were created to compare incomes and expenses for the purchase of food and rental housing for families and individuals in a variety of scenarios (Appendix “A”). The housing data used in the income scenarios represents average rental rates in the City of Guelph and were accessed from the Primary Rental Market Statistics for Guelph from the Canadian Housing Mortgage Housing Corporation.\textsuperscript{18} It is important to consider housing costs since shelter is a fixed cost. Shelter is also a critical basic need and this may resulting in households prioritizing housing expenses over other expenses like healthy food.

Food bank statistics for the WDG are also presented here, to help describe how many households are impacted by food insecurity.

\textbf{Findings}

\textbf{Nutritious Food Basket}

Appendix “A” provides the results of the NFB costing activity. The cost of the NFB in WDG for a reference family is $909.69 per month ($210.09 per week). This is 0.8\% lower than the cost of the NFB in 2017 ($917.22 per month), but 27\% higher than the cost of the NFB in 2009 ($723.19 per month). The changing cost of the NFB since 2009 is shown in Figure 1.

The results clearly show that many people in WDG do not have enough income to afford healthy food. Housing is the largest expense for most low income residents. Housing is considered affordable if it costs less than 30\% of a household’s income.\textsuperscript{19} In six out of the seven income scenarios presented in Appendix “A”, the percentage of income households are spending on rent is much higher than 30\% (range = 33-93\%). When a large portion of income must be spent on rent, there is very little money left over to purchase food and cover other basic expenses.
A single person on Ontario Works (OW) fares the worst, with 93% of their income going to rent, leaving insufficient money (7% of income) left over to purchase food and cover any other basic expenses. After paying for rent, a single person on OW would require an extra 31% of their income to afford healthy food excluding other basic living expenses (Appendix “A”).

A family of four with a median Ontario income is estimated to spend 15% of its income on rent, 12% on food, and has $5,761.31 left over to cover other monthly expenses. This demonstrates that a family of four with a median Ontario income can easily afford the nutritious food basket. A family of four on Ontario Works (OW) is estimated to spend about 46% of their income on rent, would need to spend about 35% of their income to purchase healthy food, and would have approximately $472.31 left to cover all other expenses (Appendix “A”).
Table 2: Presentation of select income scenarios from Appendix “A”

<table>
<thead>
<tr>
<th>Income Scenario</th>
<th>Percentage income required for rent</th>
<th>Percentage income required to purchase the NFB</th>
<th>Total percentage of income required for rent and the NFB</th>
<th>Money left for all other expenses</th>
</tr>
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<tbody>
<tr>
<td>Median Ontario income</td>
<td>15%</td>
<td>12%</td>
<td>27%</td>
<td>$5761.31</td>
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<tr>
<td>Family of Four on OW</td>
<td>46%</td>
<td>35%</td>
<td>81%</td>
<td>$472.31</td>
</tr>
<tr>
<td>Single person on OW</td>
<td>93%</td>
<td>38%</td>
<td>131%</td>
<td>(-$247.10)</td>
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</table>

The scenarios presented in Appendix “A” show that when families have adequate incomes they can easily afford the nutritious food basket. It is much more challenging for families and singles dependent on social assistance to afford healthy, nutritious food. This is concerning, given local statistics which indicate that the average number of monthly OW cases in Wellington County in 2017 was 2068.20 The average number of monthly OW cases in Dufferin in 2017 was 673.21 Increases to social assistance benefits, such as the Canada Child Benefit, help to offset some of the costs of food and housing. While the cost of the NFB as a percentage of income has decreased over the past five years, nutritious food remains unaffordable for households on social assistance.

Food Bank Statistics

There are 38 organizations in WDG that provide some type of emergency food service in an attempt to meet local needs in WDG. This large number of agencies highlights the magnitude of the food insecurity issue locally.23 In 2017, the Ontario Association of Food Banks (OAFB) reported that 3334 visits were made to food banks within WDG region during the month of March.24 This statistic is an underrepresentation of the actual number of people accessing emergency food locally because it only includes the agencies who are members of the OAFB, not all emergency food providers in the region. Furthermore, despite the high number of emergency food services and individuals accessing these services, a Toronto based report estimated that only 25% of those who are food insecure access emergency food providers.25
Conclusion

When housing costs and other basic living expenses are considered, many individuals and families with limited incomes in WDG do not have adequate funds to purchase nutritious food on a consistent basis. Food insecurity is a major public health issue due to its relationship with poor physical, mental and social health. Families with lower incomes are at a higher risk of experiencing food insecurity. Charitable food programs have been the traditional response to this issue but these support services do not address the root issue of inadequate income to afford food.

Households with low incomes are particularly at risk for not being able to afford healthy food. Local, provincial and federal governments should continue to address food insecurity with a focus on income-based solutions rather than on food-based solutions. This will require policy changes to support income adequacy and address the factors that limit food purchasing.\textsuperscript{1,26,27} The findings presented in this report highlight the need for WDGPH to continue to work collaboratively with local and provincial advocacy groups such as the Guelph and Wellington Task Force for Poverty Elimination (Poverty Task Force), Dufferin County Poverty Task Force, the Ontario Dietitians in Public Health’s Food Security Work Group and Headwaters Food and Farming Alliance to advocate for income-based solutions.

Ontario Public Health Standard

Population Health Assessment and Surveillance Protocol, 2018 requires

1. The board of health shall, subject to applicable privacy laws, including the Personal Health Information Protection Act, 2004 and the Municipal Freedom of Information and Protection of Privacy Act collect and use timely quantitative and qualitative data and information obtained from multiple sources and methods in order to undertake population health assessment and surveillance. Table 1 depicts categories of population health data and inclusions that shall be used for population health assessment and surveillance to inform public health practice, programs and services: This includes data access, collection and management related to: Food affordability and food security.

\textsuperscript{v} For the purposes of this report “lower incomes” refers to the case scenario spreadsheet appendix 1 in which households spend a significantly higher proportion of their income on shelter and food compared to average Ontario family income.
6. The board of health shall provide population health information, including social determinants of health, health inequities, and other relevant sources to the public, community partners, and other health care providers in accordance with the Population Health Assessment and Surveillance Protocol, 2018 (or as current).

Chronic Disease Prevention and Well-Being

1. The board of health shall collect and analyze relevant data to monitor trends over time, emerging trends, priorities, and health inequities related to chronic diseases and report and disseminate the data and information in accordance with the Population Health Assessment and Surveillance Protocol, 2018 (or as current).

Health Equity

1. The board of health shall assess and report on the health of local populations describing the existence and impact of health inequities and identifying effective local strategies that decrease health inequities in accordance with the Health

**WDGPH Strategic Direction(s)**

- **Health Equity**: We will provide programs and services that integrate health equity principles to reduce or eliminate health differences between population groups.

- **Organizational Capacity**: We will improve our capacity to effectively deliver public health programs and services.

- **Service Centred Approach**: We are committed to providing excellent service to anyone interacting with WDG Public Health.

- **Building Healthy Communities**: We will work with communities to support the health and well-being of everyone.

**Health Equity**

The World Health Organization considers food insecurity to be a social determinant of health. Food insecure households do not have the financial resources to purchase healthy food or to make personal decisions about the quality and/or quantity of foods that meet their household needs. Households that are food insecure are often dependent on services that supply charitable food, however accessing these services presents significant barriers including limited options for religious, nutritional or health-
related dietary needs. These services also do not address the root cause of food insecurity, which is inadequate incomes. Overall, individuals experiencing food insecurity experience health inequities in that they are more likely to report poor general health, adverse mental health outcomes, and multiple chronic conditions.

References


**Appendices**

Appendix “A” – 2018 Nutritious Food Basket Scenarios
### 2018 - Nutritious Food Basket Scenarios

|------------------------------------------|-----------------------------------------------|-----------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|

#### Monthly Calculations

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<td></td>
<td>$ 2,427.00</td>
<td>$ 486.00</td>
<td>$ 744.00</td>
<td></td>
<td></td>
<td>$ 1,130.00</td>
<td>$ 71.00</td>
<td>$ 151.00</td>
<td>$ 13.00</td>
<td>$ (40.00)</td>
<td>$ (106.00)</td>
<td>$ 2,582.00</td>
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<tr>
<td></td>
<td>$ 7,967.00</td>
<td>$ 354.00</td>
<td>$ 686.00</td>
<td></td>
<td></td>
<td>$ 1,087.00</td>
<td>$ 71.00</td>
<td>$ 151.00</td>
<td>$ 13.00</td>
<td>$ (125.00)</td>
<td>$ (125.00)</td>
<td>$ 3,603.00</td>
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#### Selected Expenses

<table>
<thead>
<tr>
<th>Selected Expenses</th>
<th>(3 Bdr.)</th>
<th>(3 Bdr.)</th>
<th>(3 Bdr.)</th>
<th>(2 Bdr.)</th>
<th>(Bachelor)</th>
<th>(1 Bdr.)</th>
<th>(1 Bdr.)</th>
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<tbody>
<tr>
<td>Average Monthly Rent (may or may not include heat/hydro)</td>
<td>$ 1,200.00</td>
<td>$ 1,200.00</td>
<td>$ 1,200.00</td>
<td>$ 1,124.00</td>
<td>$ 751.00</td>
<td>$ 980.00</td>
<td>$ 980.00</td>
</tr>
<tr>
<td>Food</td>
<td>$ 909.69</td>
<td>$ 909.69</td>
<td>$ 909.69</td>
<td>$ 687.34</td>
<td>$ 306.10</td>
<td>$ 306.10</td>
<td>$ 222.00</td>
</tr>
</tbody>
</table>

#### Total Selected Expenses

$ 2,109.69 $ 2,109.69 $ 2,109.69 $ 1,811.34 $ 1,057.10 $ 1,286.10 $ 1,202.00

#### Funds Remaining (for other basic needs e.g. telephone, transportation, child care, household and personal care items, clothing, school supplies etc.)

$ 472.31 $ 1,493.31 $ 5,761.31 $ 551.66 $ (247.10) $ (35.10) $ 492.00
### APPENDIX “A”

<table>
<thead>
<tr>
<th>Percentage of income required for rent</th>
<th>46%</th>
<th>33%</th>
<th>15%</th>
<th>48%</th>
<th>93%</th>
<th>78%</th>
<th>58%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of income required to purchase healthy food</td>
<td>35%</td>
<td>25%</td>
<td>12%</td>
<td>29%</td>
<td>38%</td>
<td>24%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Note: All dollars rounded to nearest whole number.
Scenario References:
Scenario 1 - 2 adults (male and female ages 31-50), 2 children (girl age 8, boy age 14); Ontario Works (OW).
Scenario 2 - 2 adults (male and female ages 31-50), 2 children (girl age 8, boy age 14); income is based on one minimum wage earner, 40hr/wk, $14.00/hr (minimum wage in May 2018).
Scenario 3 - 2 adults (male and female ages 31-50), 2 children (girl age 8, boy age 14).
NOTE: Income from employment is based on median after-tax income- couples with children; however, EI and CPP contributions are calculated using median total income- couples with children. Assumption of a dual income family with a split of 65% / 35% between partners.
Scenario 4 - 1 adult (female age 31-50), 2 children (girl age 8, boy age 14); Ontario Works.
Scenario 5 - 1 adult (male age 31-50); Ontario Works.
Scenario 6 - 1 adult (male age 31-50); Ontario Disability Support Program (ODSP).
Scenario 7 - 1 adult (female age 70+); income based on Old Age Security and Guaranteed Income Supplement (OAS/GIS).

a - Due to the Northern Ontario Energy Credit portion of the Ontario Trillium Benefit (OTB), this worksheet is applicable for Ontario excluding the districts of Algoma, Cochrane, Kenora, Manitoulin, Nipissing, Parry Sound, Rainy River, Sudbury (including the City of Greater Sudbury), Thunder Bay, and Timiskaming.


APPENDIX "A"


o - Housing for Scenario 6 was changed from a Bachelor apartment in 2010 to 1-bedroom in 2011. This change reflects a more accurate housing need for persons with a disability. This change will need to be recognized when attempting to compare year over year results.


Excel document developed by the North Bay Parry Sound District Health Unit.

Updated for 2018 by Ontario Dietitians in Public Health Food Insecurity Work Group