Applying a food literacy framework to address and measure healthy eating in public health in Ontario

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Disclaimer

The views expressed in this project update are those of the Locally Driven Collaborative Project (LDCP) team, and do not necessarily reflect those of Public Health Ontario.
Presentation Outline

1. To describe how the LDCP team derived the key attributes of food literacy.
2. To show how the LDCP team conceptualized the food literacy attributes.
3. To increase understanding of how the food literacy attributes are interconnected when addressing healthy eating.
4. To apply the food literacy framework to program planning.
5. To describe current project to develop and test a tool to measure food literacy.
Food literacy emerges

• 2013 LDCP explored the meaning of food skills with high risk youth, pregnant women, and young parents
  • www.foodliteracy.ca

• Other research in the field
  • Cullen, 2015
  • Vaitkeviciute et al., 2014
  • Vidgen, 2014
What determines food literacy?

- Socio-cultural environment: Food experience, normalization of skills, emotional support
- Food & facilities: Food availability, meal provision, cooking facilities
- Learning environment: Literacy, numeracy, experiential learning, youth engagement
- Living conditions: Income, employment, housing

Food preparation skills & experience

Organizational skills & experience

“...tasty meal on the table that I made, that makes me feel good”

Food & nutrition knowledge

Psycho-social factors

Food Skills & Literacy LDCF 2013
Research objectives: Year 1 (2016)

- To identify and summarize the attributes* of food literacy in the literature;
- To determine which attributes of food literacy, are priorities for measurement and tool development.

* ‘Attribute’ is the quality or feature regarded as a characteristic or inherent part of someone or something.
Defining Food Literacy

- Scoping Review
- Delphi Process
Peer Reviewed Article Yield

N = 851
Initial search of 17 databases after removal of duplicates

N = 806 Papers excluded by LDCP team (title/abstract)

n=45

n=36 Papers excluded by consultants (full article review)*

n=11

Sources Included
n=19

N= 8 Papers retrieved through hand searching
Scoping Review

Peer-reviewed articles n =19

Grey literature n =30

Total yield: n=49

Food Literacy Categories

<table>
<thead>
<tr>
<th>Food and nutrition knowledge</th>
<th>Food Knowledge</th>
<th>Nutrition Knowledge</th>
<th>Food Language</th>
<th>Nutrition Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Skills</td>
<td>Food Techniques</td>
<td>Food Skills across the Lifespan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy &amp; Confidence</td>
<td>Nutrition Literacy</td>
<td>Nutrition Self-Efficacy</td>
<td>Food Self-Efficacy</td>
<td>Cooking Self-Efficacy</td>
</tr>
<tr>
<td>Ecologic (beyond self)</td>
<td>Socio-Cultural and Economic Influences and Eating Practices</td>
<td>Food and Other Systems</td>
<td>Infrastructure and Population-Level Determinants</td>
<td></td>
</tr>
<tr>
<td>Food Decisions</td>
<td>Dietary behaviour</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Delphi process: Consensus building

Purpose:

• Validating the **language** used to describe the food literacy attributes;

• Confirming the **relevance and importance** in the public health context;

• Determining the **priority attributes** to be measured for program planning and policy work*. 
## Delphi participants

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>PARTICIPANT RELATIONSHIP*</th>
<th>PARTICIPANT DISTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health Units</td>
<td>X</td>
<td>60%</td>
</tr>
<tr>
<td>Community/Grass-roots partners and agencies</td>
<td>X X</td>
<td>20%</td>
</tr>
<tr>
<td>Non-governmental provincial organizations with focus on food literacy</td>
<td>X</td>
<td>10%</td>
</tr>
<tr>
<td>Academia</td>
<td>X</td>
<td>5%</td>
</tr>
<tr>
<td>Educational agencies with focus on food literacy</td>
<td>X</td>
<td>5%</td>
</tr>
<tr>
<td>Non-health related government sector</td>
<td>X</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Private sector and/or charitable organization (e.g., industry)</td>
<td>X</td>
<td>&lt;5%</td>
</tr>
</tbody>
</table>
Food literacy attribute progression

Delphi Process

Validate **language** used to describe attributes

Confirm **relevance and importance** in the public health context

Determine **priority attributes** to be measured for program planning and policy work

<table>
<thead>
<tr>
<th>Food Literacy Categories</th>
<th>15 Attributes x 3 Rounds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food Skills</strong></td>
<td>5. Food Techniques  6. Food Skills Across the Lifespan</td>
</tr>
<tr>
<td><strong>Food Decisions</strong></td>
<td>15. Dietary Behaviour</td>
</tr>
</tbody>
</table>

12 Attributes - Final

Key Recommendations

• Shift dialogue from food skills to food literacy;

• Promote interconnected attributes rather than attributes considered only in isolation;

• Develop measurement tool.
Food literacy is a set of interconnected attributes organized into the categories of:

- **food and nutrition knowledge**
- **food skills**
- **self-efficacy/confidence**
- **food decisions**
- **ecologic (external) factors**.
Food Knowledge

To understand the variety of foods within all food groups. To know where food comes from and what is in it.
Food Skills

To be able to prepare meals throughout the life span using basic skills like chopping, measuring, cooking, reading recipes, and food safety.
The impact of the **food system** (e.g., growing, manufacturing, transportation, preparation, consumption and disposal of food products) on individual health, broader societal and economic wellbeing, and the **environment**.
The ability to make **healthy** food choices.
Call to action: 5 recommendations

1. Support and adopt research findings: food skills → food literacy.

2. Use comprehensive framework to review programs, services, or policy when planning, implementing, and evaluating healthy eating public health initiatives.

3. Use the comprehensive food literacy framework to implement healthy eating programs in schools.

4. Support the development and testing of a tool for measuring food literacy.

5. Rebrand and promote community-based food programs as food literacy programs rather than those that address household food insecurity or food security.
Applying the food literacy framework to practice

- Evaluated food literacy program
- Vegetable and fruit promotion
- Students learn:
  - basic cooking skills
  - safe food handling skills
  - how to make healthy eating choices
- One 1.5-2 hour session/week for 4-5 weeks
- Uses train-the-trainer model
- Students in grades 5-8
Food literacy attributes

- Cooking Self-Efficacy
- Food Knowledge
- Dietary Behaviour
- Social Determinants of Health
- Food Attitude
- Nutrition Knowledge
- Nutrition Literacy
- Nutrition and Food Self-Efficacy
- Food Skills
- Food and Other Systems
- Food and Nutrition Language

You're the Chef
YTC Cook-off

Extends YTC messages and expands on the food literacy attribute – *Food and Other Systems* by:

- Making links to other local food program and networks, e.g., GFB
- Highlighting local produce in a fun and experiential way
- Increasing awareness about the abundance of affordable local food that can be easily accessed
- Emphasizing the importance for food literacy for school age children and cooking more with fresh local ingredients
Current Research objectives:  
Years 2-3 (Dec 2017 to Nov 2019)

1. To develop a food literacy measurement tool for use with high-risk groups of youth (aged 16 to 19 years), young parents and pregnant women (aged 16 to 25 years).

2. To evaluate the tool with the identified target population, considering various facets of validity, reliability, sensitivity to change, and feasibility.
Acknowledgements

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