



FOOD LITERACY ATTITUDE AND AWARENESS RESEARCH REPORT

Understanding the current state of food literacy among consumers in Ontario – measuring knowledge, attitude & awareness of local food, food literacy, food production, food access, food purchasing and preparation and Ontario agricultural practices

Project Lead:

Ontario Federation of Agriculture

Advisory Committee:

Nutrition Resource Centre – Ontario Public Health Association
Ontario Home Economics Association
AgScape
Farm and Food Care Ontario

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Project Completion:

October 1, 2016 – May 31, 2017



Overview:

The *Ontario Federation of Agriculture (OFA)* along with an advisory committee, including the *Nutrition Resource Centre – Ontario Public Health Association, Ontario Home Economics Association, AgScape and Farm and Food Care Ontario*, all have an interest in understanding the current state of food literacy in Ontario.

The Ontario Federation of Agriculture understands the importance of food literacy for a vibrant Ontario agri-food sector. OFA along with the Canadian Federation of Agriculture (CFA) identified food literacy as an important component of the National Food Strategy.

OFA developed the *Six by Sixteen* food literacy program that can be accessed by Ontario consumers including parents, teens and health professionals to promote a better understanding of agriculture production systems, nutrition and preparation – all of which improve food literacy.

Purpose:

The purpose of the Food Literacy Attitude and Awareness research project was to gain a better understanding of the current state of food literacy among consumers in Ontario, in order to effectively develop programs, resources and information that will effectively reach Ontario consumers.

Methodology:

The committee used a two-phase approach to the research process. The process included data collection through a qualitative phase (Phase One) and a quantitative phase (Phase Two). Results of the qualitative research, which included two focus group sessions, were used to fully develop the quantitative survey in phase two.

Research Objectives:

1. Gauge knowledge and attitudes toward local food production

- Understand familiarity with local food production systems, local options, local seasons and technology used

2. Gauge knowledge, attitudes and habits in meal planning, purchasing, preparation and consumption within the household

- Meal planning habits, frequency, participants
- Food purchasing: where, who, products chosen, drivers of food choice, comfort with and frequency of reading labels
- Meal preparation: who, when, meals prepared from scratch, food safety knowledge, comfort in kitchen
- Food consumption: in and out of the home, typical weeknight meals



3. Understand sources of influence and how to connect to consumers

4. Test Fields to Forks vignette for effectiveness and attitude toward Ontario's agricultural industry

- Have attitudes changed after watching the video?
- What caught consumers' attention, what was learned, what other questions do they have?
- Where should information like this be accessed?

Target Consumer Groups:

Three specific consumer groups were targeted based on recommendations from the food literacy project advisory committee.

1. Parents with kids at home

- **Why target this group?** Parents were targeted as a consumer group because they are the primary source of learning and information for the next generation, therefore we need to better understand their knowledge and food literacy levels.

2. Early millennials' (aged 18-26)

- **Why target this group?** Early millennials were selected as a target respondent because this group of consumers very likely recently left their own home (childhood home), therefore making it important for us to understand what knowledge and food literacy skills they took with them.

3. Teenagers (aged 13-17)

- **Why target this group?** The teenager group was significantly important because of the fact the food literacy project was heavily influenced by the Six by Sixteen program, which aims to help young people learn to plan and prepare six nutritious, locally sourced meals by the time they are sixteen years old. By surveying the teenage consumers, we wanted to better understand how involved teenagers are in meal planning, shopping and food preparation inside the home, as well as their knowledge and food skills in the kitchen and knowledge and awareness of local food, food literacy, food access and healthy eating.

Focus Group Background:

Group One Participants: Consumers with young families – 7 participants, 5 males / 2 females (parents with children in the household under 18 years of age)

Group Two Participants: Teenagers – 7 participants, 4 males / 3 females (12 to 16 years of age)



Two focus groups were held at a research facility in London, Ontario measuring consumers' knowledge and perception of local food production, local food consumption, food purchasing, food influencers, food literacy and Ontario agriculture.

The purpose was to compile qualitative data that was used to assess gap analysis prior to developing a comprehensive food literacy survey.

Consumer Focus Group Data – Major Themes

Cost and Convenience as Key Factors Impacting Food Consumption

Cost of food and the time it took to prepare it were the most cited factors impacting meal planning, food purchasing, and food preparation. In the parent group, the cost of a food item was the most important consideration when choosing whether or not to purchase it. When deciding where to shop, convenience was a major concern, with most participants choosing to shop exclusively in large supermarkets rather than smaller independent stores. In the teen group, lack of time and convenience played a major role in eating patterns, especially with regard to breakfast and lunch (while at school).

Lack of Teen Involvement in Family Meal Planning and Preparation

Overall, the results of both focus group sessions indicated kids are not regularly involved in meal planning, purchasing, and preparation. In the parent group, it was indicated the children are consulted to ensure the food being prepared for meals is to their liking, but they did not play an active role in the purchasing or preparation process.

Limited Cooking Skills from Teenage Consumers

Some of the participants reported being able to prepare basic meals for themselves, while others considered preparing pancakes from a pre-packaged box, toasting bread, or cutting up fruit with yogurt to be cooking.

Social Media Networks and the Internet as Credible Sources of Information

Both teenagers and parents cited the Internet and social media networks as their most commonly used sources of information on cooking and healthy eating. Participants used low time commitment methods of information retrieval, such as Google, YouTube, Pinterest or Facebook.

Participants in both groups were uncertain of how and where to access credible nutrition information. Many claimed to have watched documentaries on animal welfare and food production and processing on Netflix and YouTube, and implied they viewed these as credible sources of information.

Limited Knowledge of Ontario Agriculture and Local Food Production

Participants in the focus group had limited knowledge about the seasonality of local products. Most parents rely on flyers/displays at the grocery store or markets to help them know which local food products are in season. Teens had some knowledge of



seasonality of local food products from their experiences visiting farmers' markets & roadside stands.

Common misconceptions about Ontario agriculture practices were related to the treatment of animals, pesticides, hormones, and antibiotic use, size and ownership of farms (family owned and operated vs "corporate" farms), and the impact agriculture has on the environment.

Many of the thoughts and opinions about farming were old-fashioned and neglected to consider the fact that modern agricultural practices need to produce enough food for more people than they did in the past. Reconciling this disconnect may improve attitudes towards farming, and help members of the general public understand the need for modern technology in agriculture today.

Survey Background:

The purpose of our qualitative work (focus group sessions) was to ensure that when the quantitative survey (food literacy survey) was developed we didn't have any large gaps and we knew through our 'testing' that respondents would understand the language and questions included in the survey.

Analysis taken from the focus group sessions with teenagers and parents provided the project committee with a better understanding of the current state of food literacy among consumers in Ontario. The group discussions and responses allowed us to gather qualitative analysis that influenced the direction and development of the survey. Teenagers and parents provided their knowledge and awareness of food literacy, insight into their food purchasing habits, cooking skills and attitudes towards Ontario agriculture and local food production.

The qualitative work allowed us to develop a more comprehensive survey that we knew would be understood by all target groups and therefore ensured a higher level of confidence in our results.

Our survey was completed by 1,003 Ontario consumers which results in an accurate and representative sample size. Based on the population and number of consumers surveyed, the final sample will yield a maximum statistical margin of error of +/- 5.66% at the 95% confidence interval for each target group.

Beyond the target groups – our research firm also had quotas for gender, age (with the teen group, the millennial group and the parent group) and region across the province, which helped to ensure we targeted an accurate representative group within the larger target group (e.g. not all moms in the parent group, not all urban etc....)



Survey Completion:

The Food Literacy Attitude and Awareness study utilized an online survey completed by **1,003 consumers** across Ontario.

- Parents with kids at home (**Total = 334**)
- 'Early millennials' (aged 18-26) (**Total = 336**)
- Teenagers (aged 13-17) (**Total = 333**)

The survey was distributed to our target respondent groups on March 28, 2017 and closed April 11, 2017.

Survey Data – Key Findings:

Meal Planning and Preparation:

- Teens mimic parents, not surprisingly
- **34%** of parents spend 15-30 minutes preparing meals during the week – most common recipes include healthy, quick and easy and those with fresh ingredients
- **Less than 50%** of teens regularly prepare their own lunches for school
- One-third of households across the survey do not have a dedicated food budget in place

Food Purchasing Behaviour:

- Majority of household's grocery shop at the major grocery chains, discount banners and mass merchandizers such as Wal-Mart
- Price and nutritional value are the most important drivers of food purchasing decisions for all respondents
- Overall respondents feel more knowledgeable about the location for food products within a typical grocery store than the price of staple food products – **less than 40%** of millennials know the price of staple food products
- Seeking out locally grown or produced food products occurs more frequently than seeking out organic, sustainable or GMO-free food products
- **More than 70%** of millennials read nutrition information on food products before making a purchasing decision – nutritional labels were identified as significantly more important than the ingredient list for millennials
- Teenage consumers do not regularly seek out and purchase local food products in comparison to parents or millennials

Food Skills Transfer:

- Very little participation in meal planning and preparation
- Participation in meal planning and prep increases with age



- Parents and teens view teen participation in meal planning, meal preparation and the entire food journey very differently
- All consumer respondents are more comfortable cooking or baking with pre-mixed packages than cooking or baking from scratch
- **Less than 50%** of parents know the safe cooking temperatures for a variety of meat/poultry items
- **Only 28%** of teenagers know how to plan and prepare a quick healthy meal using only the food that is already available in the household
- **Over 50%** of millennials use YouTube videos as a source for learning new information and cooking skills
- Participating in meal preparation and observing it in the home is the most common way to learn kitchen & cooking skills making it increasingly important for teenagers to get involved in the kitchen – due to the significance of this type of learning, it is essential parents are comfortable with cooking skills and have an adequate knowledge of health and nutrition

Source of Information and Knowledge:

- Only **25%** of respondents accessed Canada's Food Guide last year
- Those that did access the food guide, found it useful both for making food/nutrition decisions and for meal planning
- Nearly **25%** of all respondents knew **NONE** of the food groups
- Millennials were most likely to name all four food groups
- Millennials seek health and nutrition information from a wider variety of sources in comparison to the other groups
- Most food skills learning occurs inside the home however, certain areas of our results (Food Shopping, Knowledge of Food Prices and Location in Grocery Stores, Canada's Food Guide) show that knowledge transfer is not being made from parents to kids
- Registered dietitians that are currently targeting parents should revise their messaging and focus on targeting teens themselves – data shows the current way of reaching teenagers is neither effective nor impactful (credibility of these sources was questioned by respondents)

Local Food Knowledge:

- Overall, respondents know the growing and harvesting seasons in Ontario for a variety of products – there is a clear understanding of local food products but not of farming practices or food production systems
- The majority of respondents define local food as products that are raised, grown or produced in Ontario
- Local food production knowledge does not significantly change depending on residential location (rural, urban or suburban)



Local Food Production and Farming Practices (60 second vignette)

- Overall, respondents reacted positively to the video
- The video raised more questions about modern farm practices and animal care
- The video is important for kids to understand where and how their food is grown
- Millennials rate the video's effectiveness significantly lower than parents or teenagers – millennials were the most skeptical about the video and its authenticity or its representativeness of the farming industry as a whole
- Overall, respondents thought the video was of high quality and had a clear and concise message – which was promoting livestock production in Ontario



Click to Play Fields to Forks video

Project Conclusion:

The Food Literacy Attitude and Awareness Research Project is the first step in establishing a baseline level of food literacy knowledge and understanding among Ontario consumers. The data taken from the food literacy survey will benefit the development of future food literacy resources. We will be able to use the survey results to better understand gap analysis in food literacy and to improve our messaging to consumers. As stated in our key findings, registered dietitians that are currently targeting parents need to incorporate messaging that also targets the teenage consumer. The data shows the current way of reaching teenagers is not effective or impactful. It also indicates that dietitians and those with significant knowledge and experience in the field are not always viewed as credible sources. The results also disproved the stereotype that consumers in rural Ontario have more knowledge and a better understanding of Ontario agriculture, local food production and local food knowledge. Based on our data, it's clear that local food knowledge and understanding does not significantly change based on residential location (rural, urban or suburban areas).

The research data and analysis can serve as an industry resource to aid in future consumer communications and message development. Results of the baseline study can also help in the development of future consumer surveys pinpointing specific segments from our existing data. Various segments of the food system can extract a particular set of data and use those results to build their survey or research study. The opportunities for like-minded organizations and industry partners to build off this research project are endless.



We are in the process of working with a registered dietitian to develop suggested meal plans for teenagers that could be featured on the Six by Sixteen website (sixbysixteen.me) and packaged as an educational resource for industry partners and education professionals. The purpose of creating suggested meal plans for teenagers is to increase their motivation and help guide them in learning and understanding what constitutes a proper meal. The meal plan guide will also help to provide teenagers with a more tangible goal and objective in trying to achieve six meals by sixteen-years-old.

The next step on the issue of food literacy in Ontario is to bring the subject to the forefront as a public policy consideration. How do we increase knowledge and awareness that our lack of food literacy is a public health crisis? The research study clearly indicates there's a lack of food literacy among Ontario consumers and that gap in knowledge is an issue, but how do we engage the government and public in that discussion? We need to bring this issue into the public policy forum and encourage government to implement a strong food literacy component in our school curriculum.

Improved nutritional well-being depends on food literacy and on food access. Statistics show that an increase in childhood obesity rates and mortality rates are directly linked to nutritional intake.

We need the Ontario government to commit to an investment and engage in a serious long-term effort to improve literacy and access for food across the province. However, unless the public is willing to support the concept that food literacy is in fact a public health crisis, we are not likely going to capture the attention of policy makers.

Improving food literacy is a long-term solution that ends with a healthier population and a less taxed health care system, but the solution is dependent on support and engagement from both government and the public.

Future Considerations:

- Does the public consider food literacy important to health?
- If not, is education needed, warranted?
- Do provincial policy makers recognize the dietary potential for positive and negative impact on public health?