

Conceptualizing Food Literacy: A Literature Review

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Abstract: Food literacy is a complex and multifaceted concept but generally encompasses the knowledge, skills, behaviour and attitudes related to food. Over the last decade, the definition of food literacy has been expanded beyond food skills and nutrition knowledge to include food environments and the food system, but also contextual influences such as sociocultural and socio-economic factors. More recently scholars argue for a critical view of food literacy that takes into account the power imbalances of our food system prompting us to consider questions related to healthy food access, increased corporate food system control, who profits, and who loses (Renwick & Powell, 2019; Summer, 2015). As schools, community organizations, and policy makers continue to turn to food literacy to promote healthier dietary behaviours and increase population health, this review seeks to conceptualize the broadened understanding of food literacy and shed light on the critical and contextual aspects of food literacy.

Keywords: Food Literacy, Sociocultural, Food System, Critical Literacy

Introduction

Food literacy is a complex and multifaceted concept but generally encompasses the knowledge, skills, behaviour and attitudes related to food. Recent literature defines food literacy as more than food skills or nutrition knowledge. Emerging concepts of food literacy include “extrinsic characteristics” (Azevedo Perry et al. 2017, p. 2412) such as food environments and the changing food system. It also includes contextual influences (Colatruccio & Slater, 2016; Vidgen, 2014) such as sociocultural (i.e., way of living, values, and customs) and socio-economic factors.

A recent scoping study by Truman et al. (2017) found that the term food literacy incorporates six domains: “skills and behaviours, food/health choices, culture, knowledge, emotions and food systems”, as well as elements of “critical and functional knowledge” (p. 365). Truman et al. note a shift away from a “health literacy lens focused on the individual, and towards a critical food studies lens that includes broader critical contexts” (p. 307).

Within the definition offered by Truman et al. (2017), food literacy can be explored across multiple levels (individual, community, national and global) and across health, environmental, political, economic, educational, and ethical fields. It is indeed a very broad topic that does not stand in solitude, and is affected by almost all factors of our lives. This newfound understanding prompted some scholars to view food literacy from a critical lens, weaving together the various domains of food literacy with critical literacy to seek impact beyond individual nutrition gains towards collective action and “socially just and ecologically sustainable food systems” (Renwick & Powell, 2019, p. 29). This review aims to provide a broader understanding of food literacy and shed light on the critical and contextual aspects of food literacy. The overall intention is to enhance food literacy programming in schools and community settings to be more inclusive of sociocultural food literacy experiences.

Food Literacy

Food literacy is a contested and subjective topic. It is also a puzzling term with a narrow meaning to many in the educational and community settings I work in. These limitations often result in a superficial definition of food literacy that is restricted to food related knowledge and skills such as knowing how to cook or being able to read and understand a nutrition label. Numerous and varied definitions of food literacy exist across health, nutrition and education literature, but it can generally be summarized and condensed to the knowledge, skills, attitudes, and behaviours related to food.

Being food literate is crucial in today’s times of increased obesity and other health related impacts. The broader view of food literacy also prompts us to explore the wider influences of our current food systems on not only our health, but also our communities, and the long-term sustainability of our food system, and the environment. The COVID-19 pandemic has made it clear that an event like this uncovers the weaknesses of our food system such as a reliance on foreign workers, food transportation, or large-scale meat processing facilities that disrupt the supply chain if shut down. These weaknesses and their effects are felt by everyone, from farmers, to food industry employees to consumers, but disproportionately affect marginalized and low socio-economic individuals.

For the past decade, food literacy programs have increasingly been turned to as a “strategy to reduce food insecurity¹ by policy makers” (Begley et al. 2019b, p.13). In addition, improving food literacy has been linked to healthier dietary behaviours (Begley et al., 2019a), increased nutrition (Howard & Brichta, 2013), healthier food consumption (Poelman et al. 2018), improved health outcomes (Howard & Brichta, 2013), creating socially just food systems (Cullen et al., 2015), and even as a tool to combat poverty (Sandor, 2016). Recognizing the financial impact that food has on families, Sandor (2016) argues that food literacy promotion can lower monthly food expenses.

Schools have been identified as a “promising setting” for developing food literacy (Amin et al., 2018). The Ontario Curriculum does address elements of food literacy in the healthy living strand for both elementary and secondary divisions (Ministry of Education, 2015 & 2019). In addition, many community-based organizations have taken on the role of food literacy education and promotion, including foodbanks, churches, medical clinics, libraries, as well as social enterprises, and grassroots organizations. These organizations promote and develop various elements of food literacy often with a focus on nutrition education, cooking, and gardening skills.

Health Literacy, Nutrition Literacy, and Food Literacy

There is a wide range of disciplines represented among studies on food literacy involving perspectives from nutrition (Cullen et al., 2015), family and consumer sciences, home economics (Vidgen & Gallegos, 2014), public health, food studies, and adult education (Sumner, 2015), confirming that food literacy is indeed a broad and wide-reaching topic. Where exactly does food literacy situate itself? Some authors see food literacy as a subset or part of health literacy (Howard & Brichta, 2013; Renwick, 2013, Cullen et al, 2015; Krause et al. 2018) and this is reinforced by the many studies that focus on food literacy as a tool to increase population health, combat obesity, and curtail chronic illnesses, such as diabetes (see for example Colatruglio & Slater, 2014; Slater et al., 2018). Certainly, the adage “eat well, live well, be well” comes to mind. Vettori et al. (2019) position nutrition literacy as a component of food literacy, while many others link food literacy to both nutrition and health literacy (Azevedo Perry et al., 2017; Nutbeam, 2000; Truman et al., 2017). Krause et al. (2018) recently conducted an extensive systematic review on the definition of nutrition literacy, health literacy and food literacy and “suggest to conceptualize nutrition literacy as a subset of food literacy and that both (nutrition literacy and food literacy) can be fruitfully framed as specific forms of the broader concept of health literacy” (p. 385).

Definition of Food Literacy

Three recent scoping studies (Azevedo et al., 2017; Cullen et al., 2015; Truman et al., 2017) have conducted in-depth explorations into the literature of food literacy to identify exactly what is meant by the term food literacy. Truman et al. (2017) found that the term food literacy incorporates six domains: “skills and behaviours, food/health choices, culture, knowledge, emotions and food systems”, as well as elements of “critical and functional knowledge” (p.365) which are described in Table 1. Truman et al. note a shift away from a “health literacy lens focused on the individual, and towards a critical food studies lens that includes broader critical contexts” (p. 307). For example, in 2011, Vidgen and Gallegos found that the following definition was most popular among food experts: “The relative ability to basically understand the nature of food and how it is important to you, and how able you are to gain information about food, process it, analyse it and act upon it” (p. ii). More recently, Cullen et al. (2015), as a result of their scoping study, offer a much broader definition:

Food literacy is the ability of an individual to understand food in a way that they develop a positive relationship with it, including food skills and practices across the lifespan in order to navigate, engage, and participate within a complex food system. It's the ability to make decisions to support the achievement of personal health and a sustainable food system considering environmental, social, economic, cultural, and political components. (p. 143)

Two out of the three scoping studies (Azevedo et al., 2017 and Truman et al., 2017) do not offer us a concrete definition, yet they provide us with themes or domains, as well as attributes or descriptions of food literacy (see Table 1 and 2).

¹ Food insecurity is the “inadequate or uncertain access to food because of financial constraints” (Tarasuk & Mitchell, 2020, p. 3)

Table 1. Six Domains of Food Literacy from Truman et al., (2017)

Domain	Description
Skills and Behaviours	Physical actions or abilities involving food
Food/Health choices	Actions associated with informed choices around food use
Culture	Societal aspects of food
Knowledge	The ability to understand and seek information about food (i.e., nutrition education)
Emotions	The influence of attitudes and motivation
Food Systems	Understanding the complexity of food systems (i.e., environmental impact, food waste, food risk/safety, etc.)

Truman et al. (2017) identified a shift in the recent literature that included among peer reviewed literature also grey literature, doctoral dissertations, and master’s theses. This shift explores food literacy towards a more critical and contextualized focus paying particular attention to the food systems domain which pertains to the understanding of the complexity of our food system.

Azevedo et al. (2017) identified five categories and 15 attributes of food literacy. These are displayed in Table 2. Azevedo et al. (2017) distinguish between intrinsic and extrinsic characteristics of food literacy and highlight that food literacy attributes are interconnected and interdependent.

Table 2. Food Literacy Characteristics, Categories and Attributes from Azevedo et al., (2017)

Intrinsic/Extrinsic Characteristics	Category	Attributes
<i>Intrinsic</i>	Food and Nutrition Knowledge	Food knowledge Nutrition knowledge Food language Nutrition language
<i>Intrinsic</i>	Food Skills	Food techniques Food skills across the lifespan
<i>Intrinsic</i>	Self-efficacy and Confidence	Nutrition literacy Nutrition self-efficacy Food self-efficacy Cooking self-efficacy Food attitude
<i>Extrinsic/Intrinsic</i> <i>Extrinsic</i>	Food Decisions Ecologic	Dietary behaviour Socio-cultural influences and eating practices Food and other systems Infrastructure and population-level determinants

Food literacy is developed over time and the relationship between environmental factors and individuals’ behaviours is symbiotic (Vidgen & Gallegos, 2014, p. 58). For example, a person renting a room without any cooking facilities, will not be able prepare meals they may have been able to cook previously nor practice and improve their cooking skills. Having a garden will allow a family to grow their own vegetables and hone their growing skills, and food knowledge. Moving to university and living in a dorm, can significantly change a person’s eating habits, including what they buy, what they eat, and who they eat it with. These experiences can greatly affect a person’s attitude and motivation concerning food literacy.

There is consensus among the three scoping studies that contextual influences are increasingly recognized to greatly impact food literacy with a greater focus on the food system and food environments, and sociocultural factors. As Cullen et al. (2015) state, “an ecological approach is necessary, in that individual behaviours and skills cannot be separated from their environmental or social context” (p. 144).

Sociocultural Impacts on Food Literacy

While there is a great debate among scholars about the definition of food literacy, and various applications of its meaning and impact, it is evident that the move to a broader definition is gaining ground. Sociocultural factors are increasingly recognized to influence food literacy (Azevedo et al., 2017; Cullen et al., 2015; Truman et al., 2017).

Azevedo et al. (2017) specifically mention sociocultural factors and eating influences as one of the attributes to food literacy. Identified as one aspect of the ecologic category (extrinsic) of food literacy, the authors state that “socio-cultural influences and eating practices encompass values and norms as well as understanding the impact of food on personal well-being” (p. 2411). In addition, the authors list the self-efficacy and confidence category, which is defined as “the ability to produce a desired or intended result” (p. 2409) in the context of health behaviours. According to Azevedo et al., “these abilities are not inherent but rather are acquired through supportive environments” (p. 2409) suggesting a strong sociocultural connection across the five attributes of this category (nutrition literacy, nutrition self-efficacy, food self-efficacy, cooking self-efficacy, and food attitude).

Culture, as one of the domains of food literacy identified by the Truman et al. (2017) scoping study, was placed in the social level category (as opposed to the individual level) along with food systems and emotion, while Cullen et al. (2015) list culture under individual food skills. Whereas the three scoping studies agree that sociocultural factors are influencing food literacy, the authors have presented a range of planes where these are situated (from micro to macro).

Informal and Formal Knowledge of Food Literacy

Gartaula et al. (2020) differentiate between formal and informal knowledge of food literacy. They describe formal food literacy as the knowledge acquired at school, through the formal curriculum in a classroom, whereas informal food literacy is acquired through social and cultural contexts, usually at home or in the community. While Gartaula et al.’s study focused on rural students in Nepal, their concept of informal food literacy can be thought of as the sociocultural aspects of food literacy. These are the knowledge, skills and attitudes that are shaped by our home and the communities we live in. Gartaula et al. found that sometimes this informal food literacy does not connect with the formal food literacy that is taught in schools.

This disconnect is prevalent with Canada’s Food Guide (Government of Canada, 2020) which is one of the key formal resources relied on in elementary and secondary schools (Ministry of Education, 2015 & 2019), as well as community organizations to teach healthy eating. Amend (2017) notes that Health Canada, who is responsible for revising the food guide, has struggled to make it reflective of Canada’s ethnic diversity, but also notes age, location and socio-economic reality as a factor in making the guide meaningful and effective for all Canadians. The latest version of Canada’s Food Guide, published in 2019, intended to reflect Canada’s cultural diversity. Although it is available in over 30 different languages (including many indigenous languages²), it continues to offer a one size fits all model and what Amend (2017) calls a “quantitative, Western biomedical discourse of food and eating as the “correct” or “only” approach (para. 20).

For example, Anderson et al. (2015) found new immigrant mothers had difficulty following Canada’s Food Guide recommendations because their own traditional foods were not represented. Study participants further believed that the absence of their traditional foods in the guide meant it was not healthy. They also reported not being able to prepare the types of food illustrated in Canada’s Food Guide and did not know how to substitute traditional foods for those depicted in the guide. More importantly, the authors found that study participants “devalued their own previous knowledge... in favor of the authoritative knowledge learned from dietitians and other community service providers” (p. 359). Anderson et al. (2015) highlights that Canada’s Food Guide “neglects to integrate parallel nutritional knowledge systems espoused by many newcomer groups” (p. 364). Therefore, it is important as educators in schools and community settings to be critically aware of this disconnect between formal and informal food literacy, and to find ways to weave together Canada’s Food Guide with ethnically diverse food knowledge and practices of newcomers.

² As part of the most recent Canada Food Guide revision, Health Canada is currently working with the Indigenous community to “support the development of healthy eating tools”. The 2007 “Eating Well with Canada’s Food Guide – First Nations, Inuit and Métis” is still in use. (Government of Canada, 2019)

From a contextual perspective, Dr. Charlene Elliott found that children have difficulty applying knowledge about Canada's Food Guide with what students see on the shelves in the grocery store (University of Calgary, n.d.). Canada's Food Guide (Government of Canada, 2019) displays a beautiful plate of vegetables and fruit (half the plate), proteins such as meat, nuts, dairy and legumes (quarter of the plate), and whole grains such as pasta, rice, brown toast and what appears to be quinoa (quarter of the plate). Many foods are displayed in their original unprocessed form. However, when students enter a grocery store, they do not see these foods displayed in this way. Rather they are inundated with prepackaged and processed foods. This disconnect is an example of how 'formal food literacy' does not align with the 'informal food literacy', because the context of Canada's Food Guide is far removed from the social reality of where we get our food from.

The impact of students' social and cultural environment related to food literacy is perhaps greater than we think. Amin et al. (2018) found that children associated domains of food literacy to the home and family more so than experiential food literacy programs at school. This, they explain, could be either because the school programs did not reach all students, or that food literacy experiences at home or in the community were more personalized or memorable. Such observations point to the impact of the social context on food literacy and perhaps the disconnect between formal and informal food literacy. Similarly, in Howard and Brichta's (2013) framework for household food-related decisions, factors such as social, cultural and ethnic are graphically displayed as the foundation for food related decision-making.

In addition to the disconnection between informal and formal knowledge of food literacy, the effectiveness of food literacy education in schools is put into question. Perera et al. (2015) warn that "unless the food environment at school and home reinforce what is being taught in the classroom, nutrition education will have limited impact on student's food choices" (p. 49). Or, on the other hand, perhaps the answer to this problem is in reflecting the social, cultural, and ethnic contexts in formal food literacy programs.

Implications of a Narrow Food Literacy Definition

Early definitions of food literacy solely focused on nutritional knowledge and cooking skills, painting a very narrow picture of what it means to be food literate and neglecting the contextual influences on food literacy. A student's ability to read a nutrition label or be able to cook a dish is irrelevant when they do not have the environment to make their own food choices. In addition, narrow definitions focus on the individual versus the broader society, resulting in an interpretation of food literacy that ignores bigger questions regarding power within the food system (Sumner, 2015). Advertising, marketing, profits and the drivers behind fast food and highly processed foods significantly impact the food system and drive out healthy food options.

Sumner (2015) argues that these earlier narrow definitions approach food literacy from a deficit model, essentially blaming individuals for not making healthy choices or having the skills to cook healthy meals. It neglects to consider how people's choices are largely restricted and influenced by a variety of factors including social, cultural, environmental, and economic (Kimura, 2010). Indeed, there are numerous and complex factors that individually or collectively impact an individual's or population's food literacy in particular food availability, accessibility, and quality (Ontario Dietitians in Public Health, 2018). A narrow definition completely ignores the current food landscape, the lack of affordable and healthy food, the prevalence of food deserts in low-income communities, and the abundance of fast-food options wherever we go. Sumner argues for a recognition of a broader view, beyond the individual, but with a focus on the food system as a whole and the greater social reality it represents. Similarly, Kimura (2010) posits that "the food literacy framework can be contrasted with a more structural understanding of food-related behaviors and practices as functions of cultural and social influence, one's class position, gender stereotypes, social infrastructure, and the macrostructure of food and agricultural systems" (p. 480). This definition takes into account the contextual influences of food literacy, including cultural and social aspects. Equally, a study by Slater et al. (2018) revealed the need for a broader scope of food literacy competencies. The authors included "emotional and cultural aspects; and critical perspectives on food systems" (p. 551) as core domains of a food literacy framework. As schools and educators engage in food literacy programming and teaching, it is imperative that the social, cultural, economic, and environmental influences are recognized and highlighted in order for student's to critically engage in food literacy.

In a similar vein, Renwick and Powell (2019) argue for a greater focus on the *literacy* aspect of food literacy. The authors argue that food literacy should be approached as "literacy of practice" that recognizes literacy as a social practice and therefore acknowledges the wider contextual influences. Literacy as a social practice views literacy as a

practice - what we do with reading, writing and texts - and why we do it (Perry, 2012). These practices involve not just texts, but also values, feelings, attitudes, and social relationships (Barton & Hamilton, 2000) which are greatly influenced by culture and power (Perry, 2012). For Renwick and Powell (2019), viewing food literacy as a practice “has the potential to help move beyond understanding individual actions and toward understanding mechanisms for building capacity for participation in collective action” (p. 28). Both Sumner (2015) and Renwick and Powell (2019) reference critical literacy as an important component of food literacy with impact beyond individual nutrition gains towards collective action and “socially just and ecologically sustainable food systems” (Renwick & Powell, 2019, p. 29). Educators must move towards this critical understanding of food literacy to have the greatest impact and outcomes for students and communities.

In summary, the definition of food literacy has grown over the last decade to include wider contextual influences, including the food system and food environment, while acknowledging the interdependent relationships of the various attributes to food literacy. These attributes include knowledge, skills, behaviours, and attitudes, as well as social, cultural, political and environmental influences that are present from the individual to the societal level. Food literacy development not only takes place in formal settings such as classrooms but are often more memorable and impactful in informal settings, such as the home and community. Educators must however be cognizant of the disconnect between formal food literacy education and the contextual reality learners find themselves in. Social, cultural, and economic contexts greatly influence and can often restrict a person’s ability to act on their food literacy knowledge, skills, attitudes, and behaviours. From a social justice perspective, this review coupled with leading scholars in the field call for a critical approach to food literacy that recognizes the socio-economic power imbalances within our food system and advocate for a shift from an individualistic to a critical and socio-cultural perspectives for our food system.

REFERENCES

- Amend, E. (2017). My Food Guide, Their Food Guide: Diversity and Personalization in Canada's National Dietary Guidelines. *Cuizine*, 8 (1). <https://doi.org/10.7202/1046624ar>
- Amin, S.A., Panzarella, C., Lehnerd, M., Cash, S. B., Economos, C. D., & Sacheck, J. M. (2018). Identifying food literacy educational opportunities for youth. *Health Education & Behaviour*, 45(6), 918-925. <https://doi.org/10.1177/1090198118775485>
- Anderson, L.C, Mah, C.L, & Sellen, D.W. (2015). Eating well with Canada's food guide? Authoritative knowledge about food and health among newcomer mothers. *Appetite*, 91, 357–365. <https://doi.org/10.1016/j.appet.2015.04.063>
- Azevedo Perry, E., Thomas, H., Samra, H. R., Edmonstone, S., Davidson, L., Faulkner, A., Petermann, L., Manafò, E., & Kirkpatrick, S. I. (2017). Identifying attributes of food literacy: A scoping review. *Public Health Nutrition*, 20(13), 2406-2415. <https://doi.org/10.1017/S1368980017001276>
- Barton, D. & Hamilton, M. (2000). Literacy practices. In D. Barton, M. Hamilton, & R. Ivanič (Eds.), *Situated literacies: Reading and writing in context* (pp. 7-15). London: Routledge.
- Begley, A., Paynter E., Butcher L. M., & Dhaliwal S. S. (2019a). Examining the association between food literacy and food insecurity. *Nutrients*. 11(2), 445-463. <https://doi.org/10.3390/nu11020445>
- Begley, A., Paynter, E., Butcher, L. M., & Dhaliwal S. S. (2019b). Effectiveness of an adult food literacy program. *Nutrients*, 11(4). 797. <https://doi.org/10.3390/nu11040797>
- Colatruglio, S. & Slater, J. (2014). Food literacy: Bridging the gap between food, nutrition and well-being. In F. Deer, T. Falkenberg, B. McMillan, & L. Sims (Eds.), *Sustainable well-being: Concepts, issues, and educational practices* (pp. 37-55). ESWB Press. www.ESWB-Press.org
- Colatruglio, S. & Slater, J. (2016). Challenges to acquiring and using food literacy: Perspectives of young Canadian adults. *Canadian Food Studies*, 3(1), 96-118. <https://doi.org/10.15353/cfs-rcea.v3i1.72>
- Cullen, T., Hatch, J., Martin, W., Higgins, J. W., & Sheppard, R. (2015). Food literacy: Definition and framework for action. *Canadian Journal of Dietetic Practice and Research*, 76(3), 140–145. <https://doi.org/10.3148/cjdpr-2015-010>
- Gartaula, H., Patel, K., Shukla, S., & Devkota, R. (2020). Indigenous knowledge of traditional foods and food literacy among youth: Insights from rural Nepal. *Journal of Rural Studies*, 73, 77-86. <https://doi.org/10.1016/j.jrurstud.2019.12.001>
- Government of Canada (2019, March 4). *Eating Well with Canada's Food Guide – First Nations, Inuit and Métis*. <https://www.canada.ca/en/health-canada/services/food-nutrition/reports-publications/eating-well-canada-food-guide-first-nations-inuit-metis.html>
- Government of Canada (2020, January 28). *Canada's Food Guide*. <https://food-guide.canada.ca/en/food-guide-snapshot/>
- Howard, A. & Brichta, J. (2013). *What's to Eat? Improving Food Literacy in Canada*. The Conference Board of Canada. https://www.conferenceboard.ca/temp/456a8a5c-f822-4cf8-9f73-a31e9747d61a/14-091_WhatsToEat_CFIC_RPT.pdf
- Kimura, A. H. (2011). Food education as food literacy: Privatized and gendered food knowledge in contemporary Japan. *Agriculture and Human Values*, 28(4), 465-482. <https://doi.org/10.1007/s10460-010-9286-6>
- Krause, C., Sommerhalder, K., Beer-Borst, S., & Abel, T. (2018). Just a subtle difference? Findings from a systematic review on definitions of nutrition literacy and food literacy. *Health Promotion International*, 33(3), 378–389. <https://doi.org/10.1093/heapro/daw084>
- Ministry of Education (2015). *The Ontario Curriculum: Grades 9 to 12 – Health and Physical Education*. Revised. Queens Printer. <http://www.edu.gov.on.ca/eng/curriculum/secondary/health9to12.pdf>
- Ministry of Education (2019). *The Ontario Curriculum: Grades 1 to 8 - Health and Physical Education Grades*. Queens Printer. <http://www.edu.gov.on.ca/eng/curriculum/elementary/2019-health-physical-education-grades-1to8.pdf>
- Nutbeam, D. (2000). Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, 15(3), 259–267. <https://doi.org/10.1093/heapro/15.3.259>
- Ontario Dietitians in Public Health (2018). *Food literacy for Life: A call to action for healthy eating*. <https://www.odph.ca/upload/membership/document/2018-11/food-lit-call-to-action-booklet-sept-final.pdf>

- Perera, T., Frei, S., Frei, B., Wong, S. S., & Bobe, G. (2015). Improving Nutrition Education in U.S. Elementary Schools: Challenges and Opportunities. *Journal of Education and Practice*, 6(30), 41-50. <https://eric.ed.gov/?id=EJ1081364>
- Perry, K. H. (2012). What Is Literacy? A Critical Overview of Sociocultural Perspectives. *Journal of Language & Literacy Education*, 8(1), 50. <https://eric.ed.gov/?id=EJ1008156>
- Poelman, M. P., Dijkstra, S. C., Sponselee, H., Kamphuis, C. B. M., Battjes-Fries, M. C. E., Gillebaart, M., & Seidell, J. C. (2018). Towards the measurement of food literacy with respect to healthy eating: The development and validation of the self perceived food literacy scale among an adult sample in the Netherlands. *International Journal of Behavioral Nutrition and Physical Activity*, 15(54). <https://doi.org/10.1186/s12966-018-0687-z>
- Renwick, K. (2013). Food literacy as a form of critical pedagogy: Implications for curriculum development and pedagogical engagement for Australia's diverse student population. *Victorian Journal of Home Economics*, 52(2), 6-17. https://www.researchgate.net/publication/308795386_Food_literacy_as_a_form_of_critical_pedagogy_Implications_for_curriculum_development_and_pedagogical_engagement_for_Australia's_diverse_student_population/link/57f296f708ae91deaa58fd12/download
- Renwick, K. & Powell, L. J. (2019). Focusing on the literacy in food literacy: Practice, community, and food sovereignty. *Journal of Family & Consumer Sciences*, 111(1), 24-30. <https://doi.org/1014307/JFCS111.1.24>
- Rogoff, B. (2003). *The cultural nature of human development*. ProQuest Ebook Central. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca>
- Sandor, S. (2016, July 14). Growing healthy communities through food literacy and education. *Growing Chefs Ontario*. <https://growingchefsontario.ca/blog/growing-healthy-communities-through-food-literacy-and-education>
- Slater, J., Falkenberg, T., Rutherford, J., & Colatruglio, S. (2018). Food literacy competencies: A conceptual framework for youth transitioning to adulthood. *International Journal of Consumer Studies*, 42(5), 547-556. <https://doi.org/10.1111/ijcs.12471>
- Sumner, J. (2015). Reading the world: Food literacy and the potential for food system transformation. *Studies in the Education of Adults*, 47(2). <https://doi.org/10.1080/02660830.2015.11661680>
- Tarasuk, V., & Mitchell, A. (2020). *Household food insecurity in Canada. 2017-2018*. PROOF Food Insecurity Policy Research. <https://proof.utoronto.ca/resources/proof-annual-reports/household-food-insecurity-in-canada-2017-2018/>
- Truman, E., Lane, D., & Elliott, C. (2017). Defining food literacy: a scoping review. *Appetite*, (116), 365-371. <http://doi.org/10.1016/j.appet.2017.05.007>
- UN General Assembly (1966), *International covenant on economic, social and cultural rights*. United Nations, Treaty Series, vol. 993. Retrieved September 30, 2020, from <https://www.refworld.org/docid/3ae6b36c0.html>
- University of Calgary (n.d.). Raising food-savvy consumers. A guide to media and advertising literacy for children. <https://explore.ucalgary.ca/raising-food-savvy-consumers>
- Vanderlee, L., Hobin, E. P., White, C. M., & Hammond, D. (2018). Grocery shopping, dinner preparation, and dietary habits among adolescents and young adults in Canada. *Canadian Journal of Dietetic Practice and Research*, 79(4), 157-163. <https://doi.org/10.3148/cjdpr-2018-025>
- Vettori, V., Lorini, C., Milani, C., & Bonaccorsi, G. (2019). Towards the implementation of a conceptual framework of food and nutrition literacy: Providing healthy eating for the population. *International Journal of Environmental Research and Public Health*, 16(24), 5041. <https://doi.org/10.3390/ijerph16245041>
- Vidgen, H. A. (2014). *Food literacy: what is it and does it influence what we eat?* [Doctoral thesis, Queensland University of Technology]. Queensland University of Technology Library. https://eprints.qut.edu.au/66720/1/Helen_Vidgen_Thesis.pdf
- Vidgen, H. A., & Gallegos, D. (2011). What is food literacy and does it influence what we eat: A study of Australian food experts. Queensland University of Technology, Brisbane, Queensland, Australia. <http://eprints.qut.edu.au/45902/>
- Vidgen, H. A., & Gallegos, D. (2014). Defining food literacy and its components. *Appetite*, 76, 50-59. <https://doi.org/10.1016/j.appet.2014.01.010>

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