

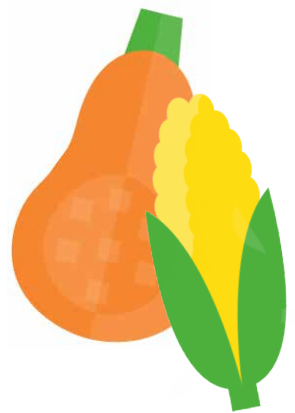


FOOD LITERACY PROGRESSION:

*A Framework of Food Literacy Development
for Children and Youth from 2-18 Years*



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FOOD LITERACY PROGRESSION:

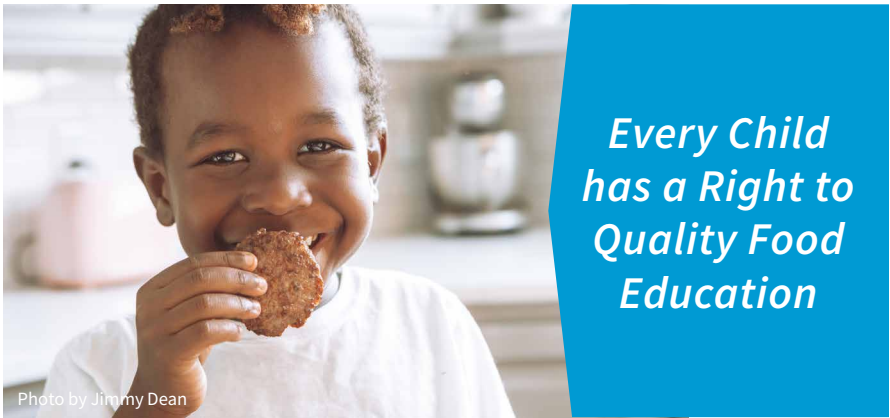
A framework of food literacy development for children and youth from 2-18 years

What Is Food Literacy?

Food literacy is a broad concept encompassing a spectrum of both tacit and procedural knowledge, skills and attitudes about food. As a form of literacy, it is the *outcome of educational goals intended to inform and develop personal skills, and contribute to personal and community empowerment and social change*¹. Food literacy increases food self-determination, and enhances health and well-being.

Why Do We Need Food Literacy?

We live in an incredibly complex foodscape. The widespread availability and marketing of highly processed foods in most countries has eroded food skills and knowledge, negatively impacting population health and well-being. These trends are further impacted through often erroneous or misleading food and nutrition information on social media and other platforms. We are also increasingly aware of the impact of food production and consumption on the Earth's sustainability. Consequently, the ability for people to maintain health and well-being of themselves and the planet, through food and nutrition, has paradoxically become more difficult. This is especially concerning for children and youth as they develop to become tomorrow's adults.



What Is the Food Literacy Progression?

The Progression provides an organizational framework for food literacy development from ages 2-18 years. The Progression is a tool that can be used to support food education by demonstrating *the importance and range of food-related capabilities in human development; and the progression of knowledge, skills and attitudes required to become food literate*.

Who Can Use the Food Literacy Progression?

The Progression can be used in many settings by educators to develop and evaluate food education programs and initiatives, and to communicate the breadth of capabilities required to be food literate. Program developers can use the Progression to plan and advocate for food literacy education and resources.

How Was the Food Literacy Progression Developed?

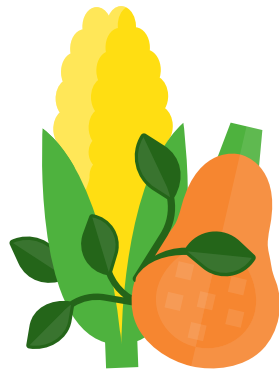
The Food Literacy Progression expands on the *Critical Food Literacy Competencies for Youth*^{1,2} framework developed at the University of Manitoba. Benchmarks are organized under three broad categories: *Functional, Relational and Systems Competencies*. The benchmarks were developed using principles and processes for social and emotional learning competence development³, and through a review of the literature, including *Core competences for children and young people aged 5-16 years: A framework of skills and knowledge around food, diet and physical activity*⁴. The Progression was assembled and reviewed by a team of Canadian home economics teachers, dietitians and nutritionists, as well as experts from the British Nutrition Foundation, and Deakin University School of Exercise and Nutrition Sciences.

¹ Nutbeam, 2000 in Slater et al., 2018. Int J Cons Stud. <https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.12471> | ² Slater et al., 2016. https://umanitoba.ca/faculties/afs/dept/fhns/media/UofM_FoodLiteracyReport_DIGITALwDATE.pdf | ³ Yoder & Dusenbury, 2016. American Institutes for Research. <https://casel.s3.us-east-2.amazonaws.com/CASEL-Resources-Developing-Articulating-Goals.pdf> | ⁴ British Nutrition Foundation, et al, 2016. <https://www.foodfactoflife.org.uk/professional-development/ppd-toolkit/secondary/core-competences-for-children-and-young-people-aged-5-16-years/>



FOOD LITERACY PROGRESSION COMPETENCIES





FOOD LITERACY DEVELOPMENTAL BENCHMARKS FOR CHILDREN & YOUTH AGES 2-18



Photo by Markus Spiske

FUNCTIONAL COMPETENCIES

Confidence and Empowerment with Food

AGES 2-4

NUTRITION

Understand the link between food and health at different ages and developmental stages

Find reliable food and nutrition information

- Recognize hunger and thirst
- Recognize that eating food is important for growth and health
- Recognize vegetables and fruit as part of meals and snacks
- Recognize that drinking water is a good way to satisfy thirst
- Identify different foods (e.g., fruit, vegetables, meat, eggs)

AGES 5-7

- Recognize that food and water are essential for life
- Recognize that a balanced and varied diet is needed to grow, be active and be healthy
- Recognize that some packaged food has added non-food ingredients (e.g., preservatives)
- Identify processed vs. whole foods (e.g., whole fruit vs. juice)
- Recognize that foods can be fresh, frozen, dried or canned
- Recognize that it is important to eat meals regularly
- Recognize that some people eat or avoid certain foods for different reasons (e.g., allergy, intolerance, religion, preference)
- Recognize appropriate portion sizes of snacks and meals
- Choose to drink mainly water when thirsty

FOOD SAFETY & HYGIENE

Use safe food handling practices when preparing, cooking and storing food

Practice effective personal hygiene

Follow safe kitchen and equipment use procedures

- Willingly wash hands before eating or preparing food
- Recognize what is safe to eat and what is not (e.g., cleaners, medications, packaging)
- Recognize that to be safe, some foods must be cooked and/or stored in the refrigerator
- Recognize that hot food can burn mouth and skin
- Recognize that some kitchen equipment should be avoided or approached with caution (e.g., hot stove)

- Recognize the importance of preparing and cooking food safely and hygienically (e.g., handwashing, cleaning up, keeping work surfaces clean)
- Demonstrate readiness to cook (e.g., tie back long hair, washhands, wear an apron)
- Recognize that all food (purchased or cooked) needs to be stored in different ways to keep it safe (e.g., fridge, freezer)

FOOD ORIGINS

Understand where and how food is produced

- Recognize that all food comes from plants or animals
- Recognize that we can grow/raise some of our own food

- Differentiate foods that come from plants and animals
- Explain where food comes from (e.g., farm, sea, land, wild)
- Recognize that food can be purchased, grown at home or at school, or gathered/hunted from the land
- Recognize that different foods are sometimes produced in different seasons
- Recognize that food can be processed and packaged in different ways
- Grow a seedling
- Describe some foods that are produced locally

AGES 8-11

NUTRITION

- Recognize that we need to eat more of some foods than others
- Use dietary guidelines as key messages for healthy eating
- Recognize that a variety of foods are required to provide different substances for body functions and health (e.g., energy, carbohydrate, protein, fat, vitamins, minerals, water and fibre)
- Explain why drinking water is healthier than sugar-sweetened beverages
- Recognize nutrition claims on food packaging, advertising and social media

FOOD SAFETY & HYGIENE

- Explain that food safety means preventing contamination and spoilage when handling and storing food, so that it is safe to eat
- Demonstrate good food safety practices when getting ready to store, prepare and cook food (e.g., keep raw meat away from other food, thorough handwashing)
- Explain date-marks and storage instructions on food labels

FOOD ORIGINS

- Explain where and how a variety of foods/ingredients are grown, raised, caught and processed
- Explain the basic steps in food production, including local food products
- Recognize that many foods contain additives (e.g., artificial flavourings, colours, preservatives)
- Grow basic food plants (e.g., herbs)
- Identify seasonal foods

AGES 12-14

- Use dietary guidelines to design varied and balanced meals and snacks
- Recognize that food and nutrient needs change through life stages
- Explain the importance of energy balance and the implications of energy excess or deficiency
- Recognize the importance of consuming appropriate proportions of foods from all the food groups (in dietary guidelines)
- Explain that human bodies contain water and need fluid from food and drinks to work properly
- Explain nutrition and health claims
- Recognize changing nutrition requirements during adolescent growth

- Explain principles of preventing cross-contamination, chilling, cooking food thoroughly, and safely reheating food
- Plan and carry out food storage, preparation and cooking safely and hygienically
- Use date-mark and storage instructions when storing and using food
- Recognize that some foods have a higher risk of food poisoning than others (e.g., raw chicken)
- Recognize that food preservation keeps food safe to eat

- Recognize that food is produced, processed and sold in different ways (e.g., conventional and organic farming, greenhouses, fishing, hunting, gathering, local markets)
- Explain different stages in food production and processing
- Describe community benefits of local food production and distribution
- Recognize how geography, weather and climate influence food availability
- Recognize that many foods contain additives that help preserve food but some can also be harmful
- Demonstrate knowledge of basic food preservation methods (e.g., storing in refrigerator, freezing, canning)

AGES 15-18

- Use dietary guidelines to design their own diet and those of others, at different life stages (e.g., pregnancy, young children)
- Plan eating strategies that maintain a healthy weight range
- Identify different types of food processing and how they may or may not contribute to a healthy, varied diet
- Recognize that the need for water is affected by several factors (e.g., hot weather, physical activity), and recognize consequences of dehydration
- Value the role of food in personal health and well-being
- Evaluate nutrition and health claims when purchasing food
- Find reliable nutrition information
- Recognize that some nutrients depend on each other to work effectively (e.g., vitamin D and calcium)

- Implement safe food handling when preparing, cooking and serving food (e.g., handwashing, avoiding cross-contamination)
- Use food safety information on food labels when buying, storing and consuming food
- Explain food poisoning, its symptoms and preventative measures
- Preserve foods through freezing, canning, pickling and/or drying

- Explain food production and distribution systems (farming, harvesting, shipping, processing, marketing and distribution)
- Recognize the implications of food processing and food availability on current chronic health issues (e.g., obesity, heart disease, diabetes)

AGES 2-4		AGES 5-7		AGES 8-11		AGES 12-14		AGES 15-18					
<div>FOOD SKILLS</div> <div>Plan and prepare a range of dishes and meals using appropriate kitchen tools and equipment</div>	<ul style="list-style-type: none">Identify a variety of common foodsUse basic tableware (e.g., bowls, plates, spoons, forks, etc.)Recognize that meals are preparedDemonstrate basic food preparation (e.g., washing fruit, peeling bananas, scooping, mixing, spreading)Recognize that food waste is not desirable	<div>FOOD SKILLS</div>	<ul style="list-style-type: none">Recognize and taste a range of familiar foods and ingredientsDescribe food textures, smells, flavour (i.e. the 'senses' of food)Name and use a range of basic tools safely (e.g., small knife, chopping board, measuring spoon)Name and use a range of food preparation skills with supervision (e.g., peeling, slicing, mixing, scooping, grating, spreading)Help to prepare a range of healthy snacks, dishes and drinks safely and hygienicallyIdentify ways to avoid wasting food during preparation and cookingDistinguish between a dish (e.g., cake, lasagna, dal) and its ingredients (e.g., flour, noodles, lentils)	<div>FOOD SKILLS</div>	<ul style="list-style-type: none">Name, taste and prepare a range of simple foods and healthy recipes, reflecting cultural diversityDemonstrate an increasing range of food preparation skills (e.g., accurate measuring, cutting, kneading)Minimize food waste and compost fruit/vegetable scrapsRecycle appropriate food packagingHelp with preparation of "food-to-go" (e.g., school lunches)Identify and follow basic recipes	<div>FOOD SKILLS</div>	<ul style="list-style-type: none">Use several food preparation techniques and methods when cooking a variety of foods and recipes (e.g., stir-frying, steaming, blending)Demonstrate how to prepare and store snacks and dishes safely, using a variety of foods, recipes, and equipmentDescribe how to safely make use of leftoversPrepare food to be eaten outside the home (e.g., school lunches)Choose recipes that follow dietary guidelinesIdentify appropriate recipes for a variety of occasions and needs	<div>FOOD SKILLS</div>	<ul style="list-style-type: none">Apply skills and understanding to plan, prepare and safely cook dishes and menus for a healthy, varied and balanced dietModify recipes and dishes to make them healthy and appealing by altering ingredients, and/or by using different cooking methodsUse technology to find appropriate recipes for a variety of occasions and needsPlan a menu for a meal or several days, based on dietary guidelinesDevelop a repertoire of meals and snacks that can be confidently prepared and enjoyed				
	<div>OBTAINING FOOD</div> <div>Navigate food environments for health, convenience and economics</div>		<div>OBTAINING FOOD</div>		<ul style="list-style-type: none">Recognize that food can be bought at grocery stores, markets, restaurants, and other retail placesRecognize that food may be grown at home or on farms; hunted, gathered or fished		<div>OBTAINING FOOD</div>		<ul style="list-style-type: none">Explain factors influencing food choice (e.g., availability, season, cost, marketing, packaging, culture, religion, peer-pressure, allergy/intolerance)Help with food shopping and cooking at homeRecognize the key information on food packaging (e.g., nutrition facts table, ingredient lists, claims, 'use by' date)Recognize that food can be acquired through online/digital platformsRecognize that eating restaurant/take-out food can be more expensive than home cookingIdentify main sections of a grocery store/supermarket (physical or online)	<div>OBTAINING FOOD</div>	<ul style="list-style-type: none">Recognize less typical places to access food in the community (e.g., food banks and soup kitchens)Use nutrition and allergy information on food labels and ingredient lists to choose foodsEvaluate online/digital food platforms based on criteria such as nutrition, cost, environmental impact and marketingCompare costs of homemade vs. restaurant/take-out foodPlan a food shopping list based on a meal/menu	<div>OBTAINING FOOD</div>	<ul style="list-style-type: none">Compare costs to make food choices based on budgetCompare foods by interpreting food labels, packaging, nutrition information, and health claimsStock a pantry/kitchen with staple foods and ingredientsUse a shopping list to purchase food items online or at grocery storeConsider a range of factors when making food choices (e.g., seasonality, local food, sustainability)Make informed choices when purchasing foods (including digital/online) to achieve a healthy, varied, and balanced diet
					<div>BEING AN INFORMED CONSUMER</div> <div>Critically appraise food industry interests and marketing strategies</div> <div>Critically evaluate food and nutrition messaging on social media platforms</div> <div>Distinguish between food and nutrition facts and myths</div>				<div>BEING AN INFORMED CONSUMER</div>		<ul style="list-style-type: none">Appreciate food presented by parents/caregivers		<div>BEING AN INFORMED CONSUMER</div>



Photo by Jimmy Dean



Photo by Joyce Slater

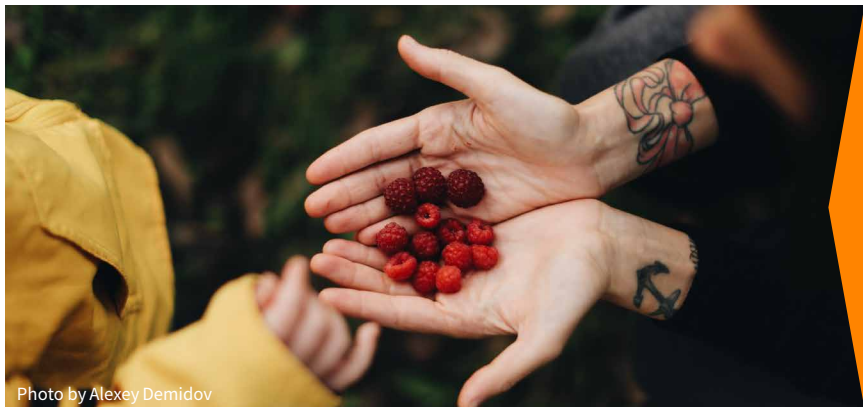


Photo by Alexey Demidov

Food literacy increases food self-determination.



Photo by Cottonbro

RELATIONAL
COMPETENCIES

SYSTEMS
COMPETENCIES

AGES 2-4

POSITIVE RELATIONSHIPS
WITH FOOD

Enjoy food and eating
Be present and attentive to food and eating
Choose food that promotes well-being and self-determination
Have a positive body image of self and others
Understand that food is more than nutrients

- Have a positive attitude at mealtime
- Be willing to try new foods regularly and expand taste repertoire
- Eat/drink according to body cues (thirst and hunger)
- Describe foods based on senses: taste, touch, sight, smell, and sound
- Identify foods that they like and dislike
- Choose preferred foods from those offered

FOOD & CULTURE

Enjoy food traditions, celebrations, cultural food and family recipes
Understand cultural influences on food and eating
Appreciate food and ways of eating from diverse cultures

- Enjoy own cultural foods
- Identify some important family foods

EATING & COOKING
WITH OTHERS

Use food to promote social well-being and solidarity

- Enjoy eating with family and others
- Enjoy helping with family food preparation

SOCIAL JUSTICE

Understand food security issues at individual, community and global levels
Discover scope of careers in food production and nutrition
Be aware of social justice implications of food production and choices

- Recognize that food should be shared

FOOD & ENVIRONMENTAL
SUSTAINABILITY

Be aware of the relationship between food and environmental sustainability
Reduce food waste

- Recognize that the environment needs to be taken care of

AGES 5-7

- Enjoy trying and eating new foods
- Identify foods that they like and dislike and explain why
- Recognize that body size does not equate to health
- Recognize that food meets many needs (e.g., social, pleasure, nutrition/health)
- Recognize that eating should mainly happen without watching screens

- Enjoy cultural foods and begin to recognize the role of culture in family meals/traditions
- Recognize that people choose different types of food based on who they are with, preferences, season, mood, allergy/intolerance, religion, and occasion

- Eat sociably with others
- Help select ingredients and dishes for family meals
- Help plan and prepare meals for family
- Practice food etiquette (acceptable behaviour while eating)

- Recognize that some people cannot afford food
- Describe hunger
- Identify who produces food

- Discuss impacts of food waste
- Identify waste from personal eating habits



Photo by Edgar Castrejon

RELATIONAL
COMPETENCIES

SYSTEMS
COMPETENCIES

AGES 8-11

POSITIVE RELATIONSHIPS
WITH FOOD

- Recognize that there can be reasons we eat besides hunger (e.g., social, emotional, rewarding behaviour)
- Recognize that healthy eating should focus on foods, not nutrients
- Recognize that restrictive eating (e.g., eliminating an entire food group) can be harmful
- Recognize body positivity/confidence and weight stigma
- Have confidence in their body, and respect diverse body shapes and sizes

FOOD & CULTURE

- Describe family foods/food traditions
- Recognize how cultural foods bring family/community together
- Taste foods from different cultures

EATING & COOKING
WITH OTHERS

- Value eating together with friends and family

SOCIAL JUSTICE

- Describe barriers to accessing food in their community
- Identify various ways that food-providing animals are raised
- Describe different jobs in food production

FOOD & ENVIRONMENTAL
SUSTAINABILITY

- Identify environmental impacts of industrial food system (e.g., landfill, plastics in the ocean, climate change)
- Identify sustainable food production, distribution, purchasing, and storage methods
- Discuss strategies to reduce food waste

AGES 12-14

- Describe how eating certain foods impacts emotions and feelings
- Identify and describe unhealthy/restrictive eating patterns and consequences
- Recognize how culture and media play a role in body image
- Explain benefits of positive body image and harmful effects of weight stigma

- Examine the role that culture plays in food choices
- Value own cultural foods and those of others
- Describe where to access a variety of cultural foods

- Take a lead role in preparing basic meals for friends and family

- Identify strategies to increase access to healthy foods
- Describe food security and associated factors
- Describe agricultural animal welfare standards
- Describe strategies to improve food justice

- Describe sustainability in food systems
- Describe how citizens/governments can encourage food industry to follow sustainability principles including food waste/package reduction
- Engage in food sustainability efforts at home and school

AGES 15-18

- Explain social and psychological roles of food and meals
- Recognize that foods chosen at one meal, or over one day, do not represent overall eating patterns
- Recognize when their body needs certain nutrients (e.g., water and carbohydrates for sports)
- Identify restrictive eating patterns
- Identify strategies to increase body positivity and reduce weight stigma

- Prepare and eat food from different cultures
- Carry on family food traditions through celebrations, cultural foods, and family recipes
- Describe the role that cultural food plays in personal and community well-being

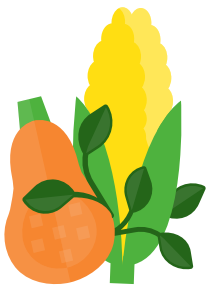
- Initiate meals and social eating for friends and family
- Explain how food can bring people together (e.g., fosters conviviality)

- Engage in community action to reduce food insecurity
- Discuss food sovereignty and what it means to different groups
- Identify strategies to improve animal welfare in food production
- Consider social justice principles in food choices

- Explain the concept of sustainability and how it is impacted by different food choices
- Assess the impact of food systems on the environment and local economy
- Choose and prepare foods to support sustainable eating
- Identify threats to global food systems and opportunities to improve them

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Photo by Hannah Tasker



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