

# Food & Nutrition, grade 9/10 and 12 Curriculum Support Resource

This resource is intended to support teachers in teaching the healthy eating expectations in the HFN10/20 and HFA4U courses. Developed by Registered Dietitians throughout Ontario, it provides reliable and credible references/links to teach the various expectations related to healthy eating, food and nutrition.

## LEARNING CHART TOPIC: RESEARCH & INQUIRY SKILLS

Relevant Expectations	Teacher Background information and Links for Students
<p><b><u>HFN20 / HFA4U</u></b></p> <p><i>A1. Exploring: explore topics related to nutrition and health, and formulate questions to guide their research;</i></p> <p><i>A2. Investigating: create research plans, and locate and select information relevant to their chosen topics, using appropriate social science research and inquiry methods;</i></p>	<ul style="list-style-type: none"> <li>● Ministry of Education School Food and Beverage Policy – background information about the legislation/policy, tools and resources to support implementation <a href="http://www.edu.gov.on.ca/eng/healthyschools/policy.html">http://www.edu.gov.on.ca/eng/healthyschools/policy.html</a></li> <li>● Student Nutrition Program Nutrition Guidelines – guiding principles, nutrition tips and sample menus to support implementation <a href="http://www.children.gov.on.ca/htdocs/English/documents/studentnutrition/SNP-nutrition-guidelines-2016.pdf">http://www.children.gov.on.ca/htdocs/English/documents/studentnutrition/SNP-nutrition-guidelines-2016.pdf</a></li> <li>● Nutrition Science and Research, Government of Canada – information about dietary reference intakes, food and nutrition surveillance in Canada, nutrient data, food security and health and nutrition surveys <a href="http://healthycanadians.gc.ca/eating-nutrition/science-nutrition/index-eng.php?_ga=1.40997729.2139902165.1468865007">http://healthycanadians.gc.ca/eating-nutrition/science-nutrition/index-eng.php?_ga=1.40997729.2139902165.1468865007</a></li> <li>● Canadian Food Inspection Agency <a href="http://www.inspection.gc.ca/eng/1297964599443/1297965645317">http://www.inspection.gc.ca/eng/1297964599443/1297965645317</a></li> <li>● How to find food and nutrition information you can trust – Dietitians of Canada advice about how to spot misinformation and evidence-based practice <a href="https://www.dietitians.ca/Your-Health/Nutrition-A-Z/Credible-Information/Find-info-you-can-trust.aspx">https://www.dietitians.ca/Your-Health/Nutrition-A-Z/Credible-Information/Find-info-you-can-trust.aspx</a></li> <li>● College of Dietitians of Ontario - video about how Registered Dietitians are regulated in Ontario <a href="https://www.youtube.com/watch?v=x_HLHDGEZoQ">https://www.youtube.com/watch?v=x_HLHDGEZoQ</a></li> </ul>

### Public Health

1-877-464-9675  
TTY 1-866-512-6228  
york.ca



## Suggested Activities

- Develop a survey to assess satisfaction with food/beverages sold in the cafeteria; or the social and physical atmosphere in the cafeteria (e.g. seating area, noise level, lighting, comfort level eating foods from their own cultures in the school cafeteria?)
- Develop a survey to assess how many students access the student nutrition program (i.e. breakfast and snack programs) in the school and what changes students would like to see. Students would need a general understanding of the Student Nutrition Programs structure in Ontario and refer to the Student Nutrition Program Nutrition Guidelines.
- Explore how many fast food outlets are within walking distance to the school.
- Explore how Canada monitors and measures food and nutrient consumption. Also find information on dietary reference intakes, food security, health and nutrition surveys, and nutrient values of foods.
- Choose a nutrition- related question (e.g. Is coconut oil better than other oils) and research the answer on the Unlock Food website ([www.unlockfood.ca](http://www.unlockfood.ca)). Compare this answer with information from other websites. Is there a difference? Why is there a difference? How can you be confident that you are receiving accurate, reliable and credible information from websites when researching nutrition topics?

## LEARNING CHART TOPIC: NUTRITION AND HEALTH

Relevant Expectations	Teacher Background information and Links for Students
<p><b><u>HFN20</u></b></p> <p><i>B1. Canada's Food Guide: demonstrate an understanding of the nutritional and health recommendations in Canada's Food Guide;</i></p> <p><i>B2. Eating Patterns: demonstrate an understanding of eating patterns that contribute to optimal physical health;</i></p> <p><i>B3. Body Image and Attitudes about Food: demonstrate an understanding of factors that contribute to a positive body image and healthy attitudes about food.</i></p> <p><b><u>HFA4U</u></b></p> <p><i>B1. Nutrients: demonstrate an understanding of nutrients and their connection to physical health;</i></p> <p><i>B2. Food Guides: demonstrate an understanding of Canada's Food Guide and its role in promoting physical health;</i></p> <p><i>B3. Energy Balance: demonstrate an understanding of the</i></p>	<p><b>Canada's Food Guide</b>  <a href="http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php">http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php</a></p> <p><b>Healthy Canadians Food labels</b> –technical documents and practical tools for understanding the Nutrition Facts Table, list of ingredients and nutrient content claims  <a href="http://healthycanadians.gc.ca/eating-nutrition/label-etiquetage/index-eng.php?_ga=1.72528848.2139902165.1468865007">http://healthycanadians.gc.ca/eating-nutrition/label-etiquetage/index-eng.php?_ga=1.72528848.2139902165.1468865007</a></p> <p><b>Food Portions Toolkit</b> – includes tips, videos, articles and resources to manage food portions  <a href="http://www.unlockfood.ca/en/FoodPortionsToolkit.aspx">http://www.unlockfood.ca/en/FoodPortionsToolkit.aspx</a></p> <p><b>eaTracker</b> – online tool to check your food and activity choices, analyze your recipes and plan your meals (must be 14 years of age and older)  <a href="https://www.eatracker.ca/">https://www.eatracker.ca/</a></p> <p><b>My Menu Planner</b> – online tool creates personalized menu plan based on individual goals  <a href="http://www.unlockfood.ca/en/MenuPlanner.aspx">http://www.unlockfood.ca/en/MenuPlanner.aspx</a></p>

*physical processes involved in maintaining energy balance;*

*B4. Nutritional Status: demonstrate an understanding of their nutrient intake and of factors that affect the nutritional status of individuals and groups.*

### **Healthy snacks**

<http://www.unlockfood.ca/en/Recipes/Snacks.aspx>

### **Eating Fat makes you Fat CBC idea debunked - dietitian**

<http://www.cbc.ca/news/health/eating-fat-makes-you-fat-idea-debunked-dietitian-1.3206180>

### **Canadian Nutrient File**

<http://www.hc-sc.gc.ca/fn-an/nutrition/fiche-nutri-data/index-eng.php>

### **Nutrient Values of Some Common Foods**

[http://www.hc-sc.gc.ca/fn-an/nutrition/fiche-nutri-data/nutrient\\_value-valeurs\\_nutritives-eng.php](http://www.hc-sc.gc.ca/fn-an/nutrition/fiche-nutri-data/nutrient_value-valeurs_nutritives-eng.php)

### **Dietary Reference Intakes**

<http://www.hc-sc.gc.ca/fn-an/nutrition/reference/table/index-eng.php#rvm> and  
[http://www.hc-sc.gc.ca/fn-an/nutrition/reference/table/ref\\_macronutr\\_tbl-eng.php](http://www.hc-sc.gc.ca/fn-an/nutrition/reference/table/ref_macronutr_tbl-eng.php)

### **Dove Self-Esteem project**

<http://selfesteem.dove.ca/en/>

### **Dove Confident Me: Five Session program (ages 10-16)**

<http://selfesteem.dove.ca/en/Articles/Written/Dove-Confident-Me-five-session-resources.aspx>

### **NEDIC Beyond Images lesson plans**

<http://nedic.ca/sites/default/files//NEDICBeyondImages%20grade8-lesson1.pdf>

### **Public Health Agency of Canada**

<http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/hbsc-mental-mentale/weight-poids-eng.php>

### **Weight Bias at Home and School**

[https://www.youtube.com/watch?v=BxzejNE0RT8&feature=player\\_embedded](https://www.youtube.com/watch?v=BxzejNE0RT8&feature=player_embedded)

### **Obesity Network** <http://www.obesitynetwork.ca/>

The Canadian Obesity Network (CON) is Canada's largest obesity association, made

up of healthcare professionals, researchers, policy makers and people with an interest in obesity

**Yale Rudd Centre** <http://uconnruddcenter.org/>

The Rudd Center is a non-profit organization devoted to promoting solutions to childhood obesity, poor diet, and weight bias through research and policy.

### Suggested Activities

- Review food labels used in the cafeteria and those offered in the Student Nutrition Programs compared to the School Food and Beverage policy standards and Student Nutrition Program nutrition guidelines.
- Analyze a recipe and modify it as necessary to reflect specific recommendations in Canada's Food Guide (consider linking this to the School Food and Beverage Policy standards)

## LEARNING CHART TOPIC: FOOD CHOICES

Relevant Expectations	Teacher Background information and Links for Students
<p><b><u>HFN20</u></b></p> <p><i>C1. Food Needs: demonstrate an understanding of factors affecting people's food needs and of ways of meeting those needs;</i></p> <p><i>C2. Influences on Food Choices: demonstrate an understanding of various factors that influence food choices;</i></p> <p><i>C3. Media, Advertising, and Food: demonstrate an understanding of how media and advertising messages affect food choices.</i></p>	<p><b>Unlock Food – Budget Friendly Information Tips and Recipes</b> <a href="http://www.unlockfood.ca/en/Articles/Budget/Food-choices-when-money-is-tight-Budget-friendly.aspx">http://www.unlockfood.ca/en/Articles/Budget/Food-choices-when-money-is-tight-Budget-friendly.aspx</a></p> <p><b>Media Smarts</b> – Canada's Centre for Digital and Media Literacy covering a variety of health in the media (e.g. body image, social media, food marketing and etc.) and how do the media construct our perceptions of healthy and attractive bodies? <a href="http://mediasmarts.ca/digital-media-literacy/">http://mediasmarts.ca/digital-media-literacy/</a></p> <p><b>Berkeley Media Studies Group (BMSG) - food and beverage news monitoring newsletter</b> <a href="http://campaign.r20.constantcontact.com/render?m=1114978407061&amp;ca=3093b70c-b097-48b6-921a-12712321bc1e">http://campaign.r20.constantcontact.com/render?m=1114978407061&amp;ca=3093b70c-b097-48b6-921a-12712321bc1e</a></p> <p><b>Stop Marketing to Kids</b> <a href="http://stopmarketingtokids.ca/">http://stopmarketingtokids.ca/</a></p>

**The Irish Heart Association**

<https://irishheart.ie/campaigns/stop-targeting-kids/targeting/>

**Suggested Activities**

- Consider how this class could contribute to marketing and advertising the healthier cafeteria food
- Teacher/students register to receive BMSG food and beverage newsletter and have weekly discussions about food and beverage news topics of interest.
- Consider the Social Determinants of Health and how the determinants impact food choices for various members of our society
- Consider viewing documentary movies about food and facilitate a critical discussion <http://decider.com/2017/07/06/the-10-best-food-health-documentaries-on-netflix/>
- Consider some of the controversial nutrition topics highlighted in the media and have students debate the pros and cons (e.g. Weighty Matters <http://www.weightymatters.ca/>)

**LEARNING CHART TOPIC: EATING PATTERNS AND TRENDS**

<b>Relevant Expectations</b>	<b>Teacher Background information and Links for Students</b>
<p><b><u>HFA4U</u></b></p> <p><i>C1. Nutrition throughout the Lifespan: demonstrate an understanding of food- and nutrition-related issues at different stages in the lifespan;</i></p> <p><i>C2. Nutrition and Disease: demonstrate an understanding of the relationships between nutrition, health, and disease;</i></p> <p><i>C3. Trends and Patterns in Food and Nutrition: demonstrate an understanding of current Canadian trends and patterns in nutritional guidelines and in food production and consumption.</i></p>	<p><b>Unlock Food</b> <a href="http://www.unlockfood.ca/en/default.aspx">http://www.unlockfood.ca/en/default.aspx</a></p> <p><b>Canadian Community Health Survey – Health Canada</b> <a href="http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/index-eng.php">http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/index-eng.php</a></p> <p><b>What's the Best Diet? Healthy Eating 101</b> <a href="https://www.youtube.com/watch?v=fqhYBTg73fw">https://www.youtube.com/watch?v=fqhYBTg73fw</a></p>

## Suggested Activities

- Students are provided with various nutrition related scenarios (or they can brainstorm their own scenarios of interest) and have to research strategies or considerations by calling/emailing local health unit:

**\*Ensure students are accessing credible and reliable nutrition references by having them look for the credentials ‘RD’(Registered Dietitian) after the author’s name.\***

- My mom gets B12 shots. What are these for and do I need to be worried about B12 deficiency? Why do you get a shot and what can I eat instead?
  - My doctor says I have Iron deficiency anemia. What foods can I eat to increase my iron?
  - My grandma was diagnosed with osteoporosis. What can I eat to make sure I don't get that?
  - I'm lactose intolerant. How do I get enough calcium? Do I need to worry breaking my bones?
  - I want to be vegetarian. What can I eat to make sure I'm getting enough protein?
  - I've heard that coconut oil is good for you. Is it better than olive oil?
  - My school is nut free. How do I get enough protein if I'm vegetarian?
  - Is chocolate milk a good recovery drink for after exercise?
  - I heard that soy isn't good for you. Should I be avoiding it? Does that include soy lecithin too?
- Consider discussing how the food offered in the school environment can have an impact on their health – cafeteria, vending machines, celebrations, Student Nutrition Program, classroom rewards with food, etc.
  - Compare Canada’s Food Guide to recommendations/guides from other countries

## LEARNING CHART TOPIC: LOCAL & GLOBAL FOOD ISSUES

Relevant Expectations	Teacher Background information and Links for Students
<p><b><u>HFN20</u></b></p> <p><i>D1. Availability of Food: demonstrate an understanding of where various foods are produced;</i></p> <p><i>D2. Food and Environmental Responsibility: demonstrate an understanding of how various food purchasing choices and food-preparation practices affect the environment;</i></p> <p><i>D3. Food Security: demonstrate an understanding of issues related to food security</i></p>	<p>Foodland Ontario: local food availability guide  <a href="http://www.ontario.ca/foodland/availability-guide">http://www.ontario.ca/foodland/availability-guide</a></p> <p>PROOF Research to identify policy options to reduce food insecurity  <a href="http://nutritionalsciences.lamp.utoronto.ca/food-insecurity/">http://nutritionalsciences.lamp.utoronto.ca/food-insecurity/</a></p> <p>Ontario Agri-Food Education Social Science Resource Library  <a href="http://www.oafe.org/LinkClick.aspx?fileticket=FnkQBwoEMc%3d&amp;tabid=234">http://www.oafe.org/LinkClick.aspx?fileticket=FnkQBwoEMc%3d&amp;tabid=234</a></p>

<p><b><u>HFA4U</u></b></p> <p><i>D1. Food Security: demonstrate an understanding of various factors involved in achieving and maintaining food security;</i></p> <p><i>D2. Food Production and Supply: demonstrate an understanding of various factors that affect food production and supply;</i></p> <p><i>D3. Food Production and the Environment: demonstrate an understanding of the impact of food production on the environment.</i></p>	<p>Sustain Ontario’s Growing Good Food ideas podcasts  <a href="https://sustainontario.com/resources-2/ggfi-podcasts">https://sustainontario.com/resources-2/ggfi-podcasts</a></p> <p>Sustain Ontario’s Growing Good Food ideas videos  <a href="https://sustainontario.com/category/blog/digital-media-videos-infographics-digital-stories/ggfi-videos">https://sustainontario.com/category/blog/digital-media-videos-infographics-digital-stories/ggfi-videos</a></p> <p>Health Canada  <a href="http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/time-temps-eng.php">http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/time-temps-eng.php</a></p>
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**Suggested Activities**

Assess programs and practices that reduce the impact of food production and consumption on the environment – consider the practices used within the school environment and cafeteria practices; is there an eco-schools team in the school?

- What does it mean to buy-local? Why would someone choose to do this?
- How can I eat healthy on a budget?

Have the class walk through the activity- [Make the Month](#)

- Make the Month is an interactive digital poverty simulation that enables Canadians to experience living in poverty and face decisions that will either make or break the month.

**LEARNING CHART TOPIC: FOOD PREPARATION SKILLS**

Relevant Expectations	Teacher Background information and Links for Students
<p><b><u>HFN20 / HFA4U</u></b></p> <p><i>E1. Kitchen Safety: demonstrate an understanding of practices that ensure or enhance kitchen safety;</i></p> <p><i>E2. Food Safety: demonstrate an understanding of practices that ensure or enhance food safety;</i></p> <p><i>E3. Food Preparation: demonstrate skills needed in food preparation;</i></p>	<p>Be Food Safe - Canadian Partnership for Consumer Food Safety Education  <a href="http://befoodsafe.ca/">http://befoodsafe.ca/</a></p> <p>Food Safety and You  <a href="http://healthycanadians.gc.ca/eating-nutrition/healthy-eating-saine-alimentation/safety-salubrite/tips-conseils/food-steps-precautions-aliments-eng.php?_ga=1.81885909.2139902165.1468865007">http://healthycanadians.gc.ca/eating-nutrition/healthy-eating-saine-alimentation/safety-salubrite/tips-conseils/food-steps-precautions-aliments-eng.php?_ga=1.81885909.2139902165.1468865007</a></p>

E4. Kitchen Literacy and Numeracy: demonstrate the literacy and numeracy skills required in food preparation.

Bake it up! Healthier baked goods recipes

<http://www.unlockfood.ca/en/Articles/School-Health/Ontario-s-School-Food-and-Beverage-Policy/Bake-It-Up!.aspx>

Serve it up! Recipes that meet the school food and beverage policy nutrition standards for Ontario Schools

<http://www.edu.gov.on.ca/eng/healthyschools/recipes/ServeItUp.pdf>

Dietitians of Canada App

<http://www.cookspiration.com/home.aspx>

Unlock Food Kitchen Tips and Food Handling videos

<http://www.unlockfood.ca/en/Videos/Kitchen-Tips-and-Food-Handling.aspx>

How to Make the Perfect Hard-cooked Egg

<http://www.eggs.ca/eggs101/view/6/how-to-make-the-perfect-hard-cooked-egg>

How to cut a bell pepper <https://www.youtube.com/watch?v=o28yI1XTQQU>

Serious eats

<http://www.serious eats.com/tags/knife%20skill>

### Suggested Activities

- Identify various sources of recipes - consider apps and making a video recipe. Consider various target audiences and which sources would be most appropriate for various reasons.
- Research in pairs or small groups how to cut up a particular vegetable or fruit effectively and safely (i.e. onions, mango, pepper, cauliflower). Demonstrate to the class techniques learned and relevant kitchen safety considerations.
- Offer a Chopped Canada competition in the classroom, where students are given a box of various food items and have to prepare a healthy meal (include 4 food groups, emphasize fruit and vegetables, whole grains, etc.). Consider improvisation skills and whether students are able to prepare a meal without a recipe using ingredients on hand.
- Prepare beet hummus. Would this appeal to different populations? <http://www.unlockfood.ca/en/Recipes/Snacks/Beet-hummus.aspx>
- Consider how to make fruit and vegetables fun. Prepare a creative, themed vegetable or fruit tray. Check out Pinterest for some ideas <https://www.pinterest.com/brightbitesca/celebrations/>
- Prepare various smoothie recipes. Compare the energy and nutrients in various recipes.

- Prepare overnight oatmeal recipes. Consider how to modify the recipe and improvise with what you have on hand. Have the students prepare a survey that students can use to collect feedback from peers about the recipe - Did you like it? Was it easy to make? Would you make it at home? etc.
- Consider supporting the cafeteria with developing recipes (smoothies, soup, salads, egg, etc.) making sure they meet the school food and beverage criteria and marketing them as per the curriculum documents.
- Consider what skills will be needed to eat a healthy diet and make balanced meal choices when graduate high school and go to college/University?