

Teaching Nutrition in Saskatchewan: Concepts and Resources Grades 1 - 3

Developed by:

Public Health Nutritionists of Saskatchewan



The purpose of *Teaching Nutrition in Saskatchewan: Concepts and Resources* is to provide credible Canadian based nutrition information and resources. The Guide was developed using the Saskatchewan Health Education Curriculum (2010) accessed from <http://www.education.gov.sk.ca/health-ed-curricula>.

Within the Curriculum, Comprehensive School Community Health (CSCH) is highlighted as an integral part of a health education program. This is also noted in the Saskatchewan Ministry of Education guidance document, *Nourishing Minds Towards Comprehensive School Community Health: Nutrition Policy Development in Saskatchewan Schools* (<http://www.education.gov.sk.ca/nourishing-minds/>).

One of the four integrated components of CSCH is high quality teaching and learning. *Teaching Nutrition in Saskatchewan* supports the health education curriculum by assisting educators in identifying accurate and high quality nutrition information related to the health education outcomes for each grade.

The **Nutrition Concepts and Resources** section, found on Pages 3-10, in this resource, identifies nutrition concepts and resources relating to grade-specific provincial health education curriculum outcomes. These lists only refer to the curriculum outcomes that have an obvious logical association to nutrition. They are only suggestions and not exclusive. Suggested resources which are mostly Canadian websites or resources that you can borrow are listed on Page 27.

The **Nutrition Background Information** section, found on Pages 11-26, provides educators with current and reliable Canadian healthy eating information. Several content based information sheets are included in this section.

The Public Health Nutritionists of Saskatchewan work together to promote, support and protect the nutritional health of people living in Saskatchewan. To reach a public health nutritionist in your area, contact your local health region. Saskatchewan health region contact information is available at <http://www.health.gov.sk.ca/health-regions-map>.

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Table of Contents

| | Page |
|---------------------------------------|------|
| Nutrition Concepts and Resources | |
| Grade 1 | 4 |
| Grade 2 | 7 |
| Grade 3 | 10 |
| Nutrition Background Information | 11 |
| Eating Well with Canada’s Food Guide | 12 |
| Healthy Daily Eating Habits | 13 |
| Choose Most Often and Sometimes Foods | 14 |
| Food Experiences | 15 |
| Factors Influencing Food Choices | 18 |
| Go, Grow and Glow | 20 |
| Water and Other Beverages | 21 |
| Food Tracking | 22 |
| Vitamins and Minerals and Immunity | 23 |
| Family Meals | 25 |
| Taking Action on Healthy Eating | 26 |
| Nutrition Resources and References | 27 |

Nutrition Concepts and Resources

Grades 1-3

Health Education - Grade 1

Focus: Healthy behaviours, healthy relationships, pedestrian/street safety and healthy sense of self

Perspective: Building on what I already know

| Health Education Goal 1: Develop the understanding, skills and confidences necessary to take action to improve health. | | |
|--|--|--|
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| USC 1.1 Examine healthy behaviours and opportunities and begin to determine how these behaviours and opportunities may affect personal well-being. | What is Healthy Eating? <ul style="list-style-type: none"> ■ “Choose Most Often” and “Choose Sometimes” foods: common and respectful language to talk about healthy behaviours. ■ Healthy Daily Eating Habits: the importance of regularly timed meals and snacks. | Nutrition Background Information: <i>Canada’s Food Guide (page 12); “Choose Most Often” and “Choose Sometimes” Foods (page 14); Healthy Daily Eating Habits (page 13)</i> Power to Play (Grade 1, p. 44-88): <i>Lessons 1-6</i> Mission Nutrition http://www.missionnutrition.ca/missionnutrition/index.html (Grades K-1; Mission 1, Mission 2): <i>Blast of Healthy Eating; Start Your Day the Healthy Way</i> |
| | Food Experiences <ul style="list-style-type: none"> ■ enable children to explore a variety of healthy foods in a positive environment | Nutrition Background Information: <i>Food Experiences (page15)</i> Alberta Health Services http://www.albertahealthservices.ca/2918.asp (Grade 1, p. 21; 28): <i>Designer Cereal Box; Using Your Senses – Try It You My Like It</i> Power to Play (Kindergarten, p.17): <i>The Great Food Experiment</i> |
| | Opportunities for and Barriers to Healthy Eating | Nutrition Background Information: <i>Factors Influencing Food Choices (page 18)</i> Media Smarts http://mediasmarts.ca/ <i>Looking at Food Advertising; Eating Under the Rainbow</i> Alberta Health Services http://www.albertahealthservices.ca/2918.asp (Grade 1, p. 25): <i>Family Food Choices</i> Power to Play (Grade 1, p. 90-92): <i>Its Party Time</i> |

* Nutrition Background Information topics are found starting on page 11. See page 26 for access to other resources

Health Education - Grade 1 Continued

| Health Education Goal 1: Develop the understanding, skills and confidences necessary to take action to improve health. | | |
|--|---|---|
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| USC 1.1 Examine healthy behaviours and opportunities and begin to determine how these behaviours and opportunities may affect personal well-being. | Go, Grow and Glow <ul style="list-style-type: none"> ■ describes nutrients in food and how they influence the body and why you need different foods. | Nutrition Background Information: <i>Go, Grow and Glow</i> (page 20) Mission Nutrition http://www.missionnutrition.ca/ (Grade 2-3, Mission 3): <i>Food to Grow, Go and Glow</i> Alberta Health Services http://www.albertahealthservices.ca/2918.asp (Grade 1, p. 22): <i>Body Foods</i> |
| | Beverages to Quench Thirst | Nutrition Background Information: <i>Water and Other Beverages</i> (page 21) Canada's Food Guide - A Resource for Educators and Communicators http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php (p. 28-29): <i>Beverages</i> |
| USC1.5 Explore the association between a healthy sense of self and one's positive connection with others and the environment. | Healthy Bodies Come in Different Shapes and Sizes | Mission Nutrition http://www.missionnutrition.ca/ (Grade k-1, Mission 1): <i>One of a kind Amazing Bodies</i> Alberta Health Services http://www.albertahealthservices.ca/2918.asp (Grade 1, p. 44): <i>This is Me Silhouette</i> |
| | Where Food Comes From | Agriculture in the Classroom - <i>Little Green Thumbs</i> http://www.aitc.ca/ Alberta Health Services http://www.albertahealthservices.ca/2918.asp (Kindergarten, p. 27); <i>How Does Your Garden Grow?</i> Book link: <i>Growing Vegetable Soup</i> by Lois Ehlert |
| | Culture Influencing our Sense of Self | Nutrition Background Information: <i>Factors Influencing Food Choices</i> page 18) Alberta Health Services http://www.albertahealthservices.ca/2918.asp (Grade 1, p. 25): <i>Family Food Choices</i> Book Links: <i>My Mom Loves Me More than Sushi</i> by Filomena Gomes; <i>Yoko</i> by Rosemary Wells |

* Nutrition Background Information topics are found starting on page 11. See page 26 for access to other resources

Health Education - Grade 1 Continued

| Health Education Goal 2: Make informed decisions based on health related knowledge. | | |
|--|---------------------------|--|
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| DM 1.1 Examine initial steps (Stop, Think, Do) for making basic choices regarding healthy behaviours and a healthy sense of self | Food Tracking Activities | Nutrition Background Information: <i>Food Tracking</i> (page 22) Action Schools BC http://www.actionschoolsbc.ca/Content/Quick%20Links/ASBC%20Support%20and%20Resources.asp (p. 23-33): <i>Vegetable and Fruit Diary; Vegetable and Fruit Sticker Competition; Bracelet Fun-Tracking Your Vegetables and Fruit; Tracking Your Colours; Placemat Activity</i> |
| Health Education Goal 3: Apply decisions that will improve personal health and or the health of others. | | |
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| ATP1.1 Apply the steps of Stop, Think and Do (with guidance) to develop healthy behaviours and a healthy sense of self. | | |

* Nutrition Background Information topics are found starting on page 11. See page 26 for access to other resources

Health Education - Grade 2

Focus: Connections related to thoughts-feelings-actions, healthy snacking, affects of illness/disease, respect, safety and diversity

Perspective: Discovering connections between self and wellness

| Health Education Goal 1: Develop the understanding, skills and confidences necessary to take action to improve health. | | |
|--|--|--|
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| USC2.1 Demonstrate a basic understanding of how thoughts, feelings, and actions influence health and well-being. | Healthy Daily Eating Habits | <p>Nutrition Background Information: <i>Canada's Food Guide</i> (page 12), "Choose Most Often" and "Choose Sometimes" foods (page 14) and <i>Healthy Daily Eating Habits</i> (page 13)</p> <p>Action Schools BC http://www.actionschoolsbc.ca/Content/Quick%20Links/ASBC%20Support%20and%20Resources.asp (p. 23-39): <i>Tracking activities</i></p> <p>Power to Play (Grade 2, p. 134): <i>Snacks for an Active Body; Aim for Two</i></p> |
| USC2.2 Determine how healthy snacking practices influence personal health | Role of water in being healthy | <p>Nutrition Background Information: <i>Water and Other Beverages</i> (page 23)</p> <p>Mission Nutrition http://www.missionnutrition.ca/missionnutrition/index.html (Grade 2-3, Mission 3): <i>Food: Food to Grow, Glow and Go</i></p> |
| | Healthy Snacks | <p>Nutrition Background Information: <i>Healthy Daily Eating Habits</i> (page 13)</p> <p>Power to Play (Grade 2, p. 134): <i>Snacks for an Active Body: Aim for Two</i></p> |
| | <p>Food Experiences</p> <ul style="list-style-type: none"> ■ enable children to examine, sample and describe a variety of healthy snacks. | <p>Nutrition Background Information: <i>Food Experiences</i> (page 15)</p> <p>Alberta Health Services http://www.albertahealthservices.ca/2918.asp (Grade 2, p. 23): <i>Snack in the Box; Snack Attack</i></p> <p>Action Schools BC http://www.actionschoolsbc.ca/Content/Quick%20Links/ASBC%20Support%20and%20Resources.asp (p.41-48): <i>Tasting activities</i></p> <p>Power to Play (Grade 2, p. 106): <i>Super Senses Apple Test</i></p> |

* Nutrition Background Information topics are found starting on page 11. See page 26 for access to other resources

Health Education - Grade 2 continued

| Health Education Goal 1: Develop the understanding, skills and confidences necessary to take action to improve health | | |
|---|----------------------------|---|
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| USC2.6 Examine how communities benefit from the diversity of their individual community members | Diversity of eating habits | Nutrition Background Information: <i>Factors Influencing Food Choices (Page 18)</i> Mission Nutrition http://www.missionnutrition.ca/missionnutrition/index.html (Grade 2-3, Mission 1): <i>Appreciating You and Me</i> Power to Play (Grade 2, p.114): <i>Family Food and Fun Creative Story</i> |
| Healthy Education Goal 2: Make informed decisions based on health related knowledge | | |
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| DM2.1 Demonstrate how, why, and when to ask for help and/or advice when discovering healthy connections related to thoughts-feelings-actions and healthy snacking. | | |
| Health Education Goal 3: Apply decisions that will improve personal health and/or the health of others | | |
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| AP2.1 Act upon health-related understandings, skills, and confidences to make healthy connections related to personal thoughts, feelings, actions and healthy snacking. | | Mission Nutrition http://www.missionnutrition.ca/missionnutrition/index.html (Grade 2, Mission 2 and Mission 3): <i>Great Goals for Life, Variety for vitality</i> |

* Nutrition Background Information topics are found starting on page 11. See page 26 for access to other resources

Health Education - Grade 3

Focus: Healthy foods and physical activity, one's "inner self", healthful and harmful substances, healthy family and home, safety at home and the impact of violence.

Perspective: Investigating health knowledge and Information

| Health Education Goal 1: Develop the understanding, skills, and confidences necessary to take action to improve health. | | |
|---|---------------------------------------|--|
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| USC3.1 Determine the role of a variety of healthy foods and physical activity on the health and development of the mind, body and immune system | Immunity and Nutrition | Nutrition Background Information: <i>Vitamins, Minerals and Immunity</i> (page 23) |
| | Canada's Food Guide | Nutrition Background Information: <i>Canada's Food Guide</i> (page 12) |
| | Food and Nutrient Link | Nutrition Background Information: <i>Canada's Food Guide</i> (page 12), <i>Vitamins, Minerals and Immunity</i> (page 23) |
| | Food Choices Influences Mind and Body | Nutrition Background Information: <i>Water and Other Beverages</i> (page 21) Power to Play: <i>Fuel Active Body Study print</i> Canada's Food Guide: <i>My Food Guide Servings Tracker</i> (http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/track-suivi/index-eng.php) |
| USC3.3 Determine how the misuse of helpful and use of harmful substances (including tobacco) affects the health of self and others | Vitamins and Minerals | Nutrition Background Information: <i>Vitamins, Minerals and Immunity</i> (page 23) |
| | Energy Drinks and Caffeine | Health Canada Healthy Living <i>Safe Use of Energy Drinks</i> http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/boissons-energ-drinks-eng.php |
| USC3.4 Understand what it means to contribute to the health of self, family and home. | Family Meals | Nutrition Background Information: <i>Food and Family</i> (page 25) Eat Smart BC: http://www.eatsmartbc.ca/Eat%20Together.htm |

*Nutrition Background Information Topics are found starting on page 11. See page 26 for access to other resources

Health Education - Grade 3 continued

| Health Education Goal 2: Make informed decisions based on health-related knowledge | | |
|---|----------------------------|---|
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| DM3.1 Demonstrate the importance of investigating information for making informed decisions related to healthy foods and physical activity, one's inner self, helpful and harmful substances, healthy family and home, safety at home and impact of violence. | Canada's Food Guide | Canada's Food Guide: <i>My Food Guide</i> http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/myguide-monguide/index-eng.php |
| Health Education Goal 3: Apply decisions that will improve personal health and/or the health of others | | |
| Curriculum Outcome | Nutrition Concepts | Resources: Background Information, Sample Activities, etc* |
| AP3.1 Use the understandings, skills, and confidences related to healthy foods and physical activity, and helpful and harmful substances. | Nutrition Goals for Health | Nutrition Background Information: <i>Taking Action on Healthy Eating</i> (page 26) |
| | | |

*Nutrition Background Information Topics are found starting on page 11. See page 26 for access to other resources

Nutrition Background Information

Grades 1-3

Eating Well With Canada's Food Guide

Healthy eating is a very important part of a healthy lifestyle. Eating Well with Canada's Food Guide is the tool to teach healthy eating patterns and practices. Choosing a variety of foods from each of the four groups is the basis for healthy eating.

Canada's Food Guide provides age and gender specific recommendations on the number of Food Guide Servings that should be eaten from each food group daily. The Food Guide Serving is a reference amount and not necessarily what would be consumed at one sitting.

By planning to have four food groups at each meal and two food groups at each snack children are more likely to meet their nutrient requirements. This is the recommendation that is made for all provincial meal programs in schools and child care facilities.

Canada's Food Guide provides guidance about the types of foods from each food group that should be chosen to meet nutritional needs, and to limit energy, salt, fat and sugar.

Some foods eaten are considered as "limited" foods and tend to be high in calories, fat, sugar, and salt while provide few if any nutrients. They can be part of healthy eating but only in small amounts occasionally and not daily. These foods are included on the back of the printed Canada's Food Guide. Examples of these foods include: cakes and pastries, chocolate and candies, cookies and granola bars, doughnuts and muffins, ice cream and frozen desserts, French fries, potato chips, nachos and other salty snacks, fruit flavoured drinks, soft drinks, and sweetened hot or cold drinks.

For general information about Canada's Food Guide go to <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php> and also see the Educator Guide.

Healthy Daily Eating Habits

Eating nutritious meals and snacks helps children meet their daily nutrient needs. To help sustain energy throughout the day and to support healthy growth and development, children need to eat small amounts of food on a regular schedule. Healthy daily eating habits include three meals and two to three snacks based on Canada's Food Guide.

Eating Breakfast

It is important to start every day by eating breakfast. Breakfast replenishes energy lost during a night's sleep. The body goes through fasting during sleep and the morning meal is meant to "break the fast". Eating breakfast can become a habit when eaten regularly at a young age and when it's part of the regular household routine. Skipping breakfast may result in missed nutrients which are difficult to make up as the day goes on.

A healthy breakfast includes at least 3 of the 4 food groups. Examples of breakfasts are:

- Whole grain cereal, milk, banana
- Whole wheat toast, scrambled egg, orange
- Plain oatmeal, yogurt, berries
- Whole grain bagel, nut butter, apple
- Whole grain tortilla with beans and cheese

Healthy Snacks

Snacks that include foods from the four food groups help children meet their daily nutrient needs. Healthy snacks include at least 2 out of the 4 food groups of Canada's Food Guide. Examples of healthy snacks are:

- fruit with yogurt dip
- sliced vegetables with hummus (chickpea dip)
- whole grain crackers with cheese
- half of a sandwich and milk
- fruit and yogurt smoothie

Sometimes there is confusion regarding snacks. Some foods are commonly advertised as "snack foods" such as chips, candies, soft drinks, chocolate covered granola bars, cookies, fruit flavoured snacks, and cakes. These are often high in fat, sugar, and salt and should **not** be considered healthy snacks.

References:

Dietitians of Canada (2011). Healthy Eating for Children aged 5-11. Accessed on PEN.

Feeding Our Families. Why Healthy Eating is Important. Accessed August 16, 2012 from <http://feedingourfamilies.org.nz/>

Dairy Farmers of Canada(2003) .Feeding Your Child Ages 2-5. Health Canada (2007).

Saskatchewan Ministry of Education (2009). Nourishing Minds Towards Comprehensive School Community Health: Nutrition Policy Development in Saskatchewan Schools.

Choose Most Often and Choose Sometimes Foods

Eating habits and attitudes about food developed in childhood and the teenage years, often follow through into adult age. Positive language and attitudes regarding healthy food and eating patterns can help children maintain healthy relationship with food and eating.

Sometimes food is described as “good” or “bad”. Less nutritious foods are often referred to as “bad” foods and healthier foods as “good” foods. This type of classification can create a negative association with food. For example, when a child eats what is considered a “bad” food, he/she may perceive himself/herself as “being bad”. This association puts a moral value on food which can lead to unhealthy eating habits.

Instead of the “good/bad” moral wording, choose neutral language to discuss healthy eating. The Ministry of Education nutrition guidance document, *Nourishing Minds: Eat Well, Learning Well, Live Well* classifies foods from the four food groups of Canada’s Food guide in the following categories:

Choose Most Often: *These foods are sources of one or more of the following: vitamins, minerals, protein, carbohydrate, and fibre. They are generally lower in fat, sugar, and salt.*

Choose Sometimes: *Most of these foods are sources of one or more of the nutrients iron, calcium, vitamin A, C, or D, but they are also high in fat, sugar, or salt or low in fibre.*

(Nourishing Minds, 2009)

Using these classifications for foods helps to reduce the moral judgement that is associated with a specific food while classifying it based on frequency of consumption.

For more information regarding *Nourishing Minds* see <http://www.education.gov.sk.ca/nourishing-minds/> . For more information regarding choosing healthier foods in schools see Healthy Foods for my School <http://www.health.gov.sk.ca/healthy-foods-for-my-school>

Food Experiences

Food experiences at school and in the classroom provide children with opportunities to try nutritious foods in a positive environment. Children are more likely to try healthy foods when they see adults and other children enjoying these foods. The more often children are offered a new food, the more likely they are to try and enjoy the food.

When offering foods in the classroom, proper hand-washing is very important.

Tips for Success

- The goal of a food experiences is to introduce students to new foods. Offer small tastes, not large portions.
- Children are very proud and happy to be involved in food preparation. Touching, feeling and smelling the food before tasting it helps overcome caution.
- New foods may be more acceptable when offered with a familiar food.
- Allow and instruct students to refuse trying a food by saying “no thank-you” and discourage negative comments.
- Offer foods with a napkin and instruct to politely spit food into the napkin if they do not want to swallow it. Even having it in the mouth is a food experience and have water available to drink .
- Have a discussion about the food experience. Ask the children to describe the food (i.e. the taste, texture and appearance). The attached “Food Tasting Chart” (page 17) can be used. Because food acceptability changes over time, avoid asking whether they liked the food or not.
- Have students keep track of new foods they have tried. When students share this with their families it encourages them to try these foods at home.

About Children’s Food Acceptance

- Children may need to be exposed to a new food eight or more times before they will taste the food. (Dietitians of Canada, 2007)
- Children who have very keen sense of taste or smell may find strong tastes or smells not initially appealing.
- The “mouth feel” of a food can vary among people.
- The colour, shape and presentation of a food can influence whether a child wants to try a food.
- Past experiences and whether they were negative or positive can affect food acceptance.
- It is normal for some children to be more cautious than others to try foods.

Information on this topic for parents can be found at <http://www.ellynsatter.com/how-children-learn-to-like-new-food-i-37.html>

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Food Experiences (continued)

Safety

- Some children need to avoid some foods due to medical, cultural, religious or familial reasons. Send a note to parents/caregivers to inform them that you will be doing food experiences and ask them to respond with any food restrictions.
- During the shopping, handling, storing and preparation of foods, food safety needs to be considered. For general information and for information about specific foods, go to <http://www.inspection.gc.ca/food/consumer-centre/> and <http://www.canfightbac.org/en/>

References:

Region of Peel (2009). *Discover Health Eating! A Teacher's Resource for Grades 1-8 (2009)*. Accessed May 14, 2012 from: www.peelregion.ca/scripts/school/health101.pl?action=search&selection_12=12

Action Schools BC (2008-2011). *Classroom Healthy Eating Action Resource* available at: www.actionschoolsbc.ca/

Dairy Farmers of Ontario (2003). *Nutrition P.I.*

Dietitians of Canada. What is the evidence to show that preschoolers will eat, without being strongly encouraged or forced to eat? In: *Practice-based Evidence in Nutrition [PEN]*. 2007 October 30 [cited 2012 24 January]. Available from: <http://www.pennutrition.com>. Access only by subscription.

Food Tasting Chart

Food Tasting Chart

Name:

| Name or picture of food | How does it look? (shape, colour, size) | How does it feel when you touch it? | How does it taste (ie sweet, salty, sour, bitter)? |
|-------------------------|---|-------------------------------------|--|
| | | | |
| | | | |
| | | | |
| | | | |

Factors Influencing Food Choices

Children's eating habits are continually developing and changing under the influence of family, peers, adult role models and social environments such as media and marketing.

Social Environments

Food is an important aspect of social life. Food is often served during social occasions and during celebrations.

Social acceptance in a peer group can depend on eating, liking and doing the same things as others. If children see their friends enjoying healthy foods, they will be more likely to like those foods. Adult role modeling is also extremely important in shaping children's eating habits.

Advertising of Food and Beverages

Many foods that are often advertised are high in calories, fat, sugar and salt. Studies show the foods children ask their parents/caregivers to buy and foods children eat are influenced by advertising.

Culture

Food can be thought of as an aspect of culture. Culture can influence what foods are selected, how they are prepared and served, and how and when foods are eaten.

Hunger and fullness

We are born with the ability to feel hunger and fullness, however many things can interfere with children's ability to sense hunger and fullness. Some of these things can include irregular meal patterns and parents' expectation for children to eat a certain amount of food.

Rewarding children with food can interfere with their ability to eat in response to hunger and fullness cues. This can teach children to eat as a way to reward themselves instead of eating when they are hungry and stopping when they are full.

Emotions

Sometimes food is eaten in response to emotions. This may lead to over eating, under eating or eating different foods. For example, in times of celebration or sadness some people may eat more or less or eat different foods than they usually eat. The association between emotion and food is normal, but it can be problematic if it becomes the usual way to deal with emotions.

Availability

Food availability depends on what is grown locally as well as food transportation and distribution systems. A variety of foods may not be accessible to all people due cost and geographic location.

Food is often available at nontraditional locations such as bookstores, hardware stores, and gas stations. Many foods purchased in these locations are high in fat, salt, sugar and low in vitamins and minerals.

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Factors Influencing Food Choices (continued)

Time

Various time commitments and competing priorities influence the types and locations of foods eaten. Some families may turn to fast-food restaurants, ready-to-serve dinners and packaged foods. These foods tend to be less nutritious than foods prepared at home with basic ingredients.

Family Income

There are many reasons why families may not have enough money to obtain enough food or the healthy foods. The rising costs of basic expenses such as transportation, childcare and housing sometimes leave families with less money for food.

Taste Preferences

People experience the taste, texture, and smell of food differently. Some people have keener senses than others. A food that looks, smells, and tastes appealing to one person may be disliked by another.

For more information see Fact Sheet on *Food Experience* on page 15 -17.

Go, Grow and Glow

The concept of “Go, Grow and Glow” foods helps students understand that:

- The foods we eat play a role in a variety of body functions that keep us healthy.
- We need to eat a variety of foods to be healthy.

“Go, Grow and Glow” simplifies the concept that nutrients in foods play important functions in our bodies. Keep in mind this is an oversimplification and in fact, foods in each of the food groups provide a variety of nutrients. It is not necessary to introduce the four food groups at this time. Discussion can be centred on the foods from each of the food groups without talking about food group names.

| Food | How these foods keep us healthy | Food Groups |
|-------------|---|--|
| Go Foods | These foods help us run, jump and play all day. | Grain Products |
| Glow Foods | These foods help our hair to be shiny, help our eyes to see and help keep us from getting sick. | Vegetables and Fruits |
| Grow Foods | These foods help us grow tall and build strong bones and muscles. | Meat and Alternatives Milk and Alternatives |

Water and other beverages

Importance of water to health

Water is the largest part of the human body with about 60% of body weight being from water (Institution of Medicine of the National Academies, 2006). Water is a structural component to all cells and is essential to all bodily fluids. Water is used to transport nutrients and remove wastes from the body.

Our bodies naturally lose water throughout the day through breathing, urine, bowel movements and sweat. Water losses increase in hot environments and during physical activity. Water is also lost during illness such as fever and diarrhea.

Water needs to be constantly replaced for us to function and live well. Dehydration can occur when inadequate water intakes are not replaced. Some symptoms of dehydration include thirst, fatigue, weakness, headache, irritability, and dizziness.

Drinking water is one way to make sure the water lost is replaced. Other sources of water include food such as vegetables and fruit, soups and other beverages such as milk and juice. Canada's Food Guide recommends people drink water to quench thirst.

Other beverages

Sugar sweetened beverages such as soft drinks, sports drinks, and fruit beverages can add calories and may contain large amounts of caffeine and sodium. Although 100% fruit juice contains nutrients, it has no fibre. Canada's food Guide recommends consuming vegetables and fruit more often than drinking juice.

Reference:

Dairy Farmers of Canada, Ontario (1998). *Nutrition P.I.: Primary Ideas for Active Learning*. (Nutrition Communications, Mississauga, Ontario)

Health Canada (2007). *Eating Well with Canada's food Guide: A Resource for Educators and Communicators*

Institute of Medicine of the National Academies (2006) *Dietary Reference Intakes: the Essential Guide to Nutrient Requirements* (National Academies Press, Washington, DC).

Food Tracking

Food tracking such as counting how many vegetables and fruits are consumed in a day helps students become more aware of their eating habits. Comparing students eating patterns with those noted in Canada's Food Guide can help to affirm healthy eating behaviours and identify areas that could improve. When doing food tracking activities with students, it is important to note that complete accuracy and showing perfect eating habits are not the ultimate goals.

Remind students that one day of record keeping is not expected to reflect usual eating habits. Eating habits vary from day to day. Habits over a number of days make up usual eating patterns. Food tracking for one or two days allows students to reflect on current eating habits without being too overwhelming.

Creating a non-judgemental climate will encourage students to be honest. Remind students that there are no right or wrong answers. By completing the activity with the students you model how to do the activity accurately.

Be sensitive about the possibility that a child's family may not be able to provide enough nutritious foods at home. You may want to do tracking activities on days that students can participate in a snack or meal program at school or in the community.

Vitamins, Minerals and Immunity

Almost all vitamins and minerals play a role in a healthy immune system. Certain nutrients such as vitamin C and zinc are often promoted in the popular literature to provide protection against seasonal illness like colds and flues. Current scientific research does not justify taking extra amounts of these nutrients beyond what is recommended for general health.

Vitamins and Minerals

Vitamins and minerals help the body utilize other nutrients such as carbohydrate, protein and fat for energy. They are also involved in body repair, immunity, maintenance and growth.

There are two types of vitamins: fat soluble and water soluble.

- Fat soluble vitamins include vitamin A, D, E, and K. They dissolve in fat and can be stored in the body tissues and organs.
- Water soluble vitamins include biotin, vitamin B complex (vitamin B6, B12, thiamin, niacin, riboflavin, and folate) and vitamin C. Water is required to absorb these vitamins. They cannot be stored in the body. Extra is lost from the body through urine.

| Some nutrients in Canada's Food Guide | | | | | |
|---------------------------------------|--------------|----------------------|----------------|-----------------------|-----------------------|
| Key Nutrient | | Vegetables and Fruit | Grain Products | Milk and Alternatives | Meat and Alternatives |
| Basic Nutrients | Protein | | | √ | √ |
| | Fat | | | √ | √ |
| | Carbohydrate | √ | √ | √ | |
| Water Soluble Vitamins | Thiamin | | √ | | √ |
| | Riboflavin | | √ | √ | √ |
| | Niacin | | √ | | √ |
| | Folate | √ | √ | | |
| | Vitamin B6 | √ | | | √ |
| | Vitamin B12 | | | √ | √ |
| Fat Soluble Vitamins | Vitamin C | √ | | | |
| | Vitamin A | √ | | √ | |
| Minerals | Vitamin D | | | √ | |
| | Calcium | | | √ | |
| | Iron | | √ | | √ |

Adapted from: Eating Well with Canada's Food Guide: A Resource for Educators and Communicators (2007).

(continued . . .)

Vitamins, Minerals and Immunity (continued)

Vitamin and Mineral Supplements

Most healthy people are able to get the nutrients needed by following the recommendations of Canada's Food Guide. Some people, such as those over the age of 50, women of childbearing age and those with medical conditions may require a vitamin and mineral supplement. Individuals who are unable to or choose not to eat certain foods may be at risk for not getting enough vitamins and minerals and a supplement might be recommended. Vitamin and mineral supplements do not contain carbohydrates, protein or fat so do not provide energy.

Vitamin and mineral supplements can be dangerous when taken in large amounts. For example vitamin A, vitamin D, niacin, calcium, and iron are toxic when taken in high doses.

It is best to get all vitamins and minerals needed through the food instead of a supplement.

Reference:

Eat Right Ontario. *Vitamins and Minerals FAQ*. Accessed May 14, 2012 from: <http://www.eatrightontario.ca/en/Articles/Frequently-Asked-Questions/Vitamins-and-Minerals-FAQs.aspx>

TeensHealth.org. *Vitamins and Minerals*. Accessed May 14, 2012 from: http://kidshealth.org/teen/food_fitness/nutrition/vitamins_minerals.html

Family Meals

Children and parents can benefit from eating meals together. Family meals have been associated with enhancing family relationships and supporting healthy choices and improving school performance.

Eating together can promote conversation and laughter that allow families to reconnect each day. This becomes even more important as children get older. Research has shown that families who eat together have stronger relationships and communication. By enjoying meals together and sharing conversations, children can learn important family values and traditions. As families come together to eat, it provides the child with a sense of belonging and security.

Research has shown that children who partake in family meals are less likely to engage in risky behaviors such as the use of alcohol, tobacco, and other drugs. This may be due to the relationship between participating in family meals and children's ability to resist negative peer pressure. Participating in family meals has also been linked to positive mental health.

Children who eat meals with their families are more likely to develop healthy eating habits that can continue into adulthood. Family meals have been associated with children eating more foods with fiber, calcium, iron, and essential vitamins and drinking less soft drinks.

Eating together as a family can be a great opportunity for parents to demonstrate healthy behaviours to their children. Including children in meal preparation and clean up allows the child to feel included and learn valuable lifelong skills.

Information for families can be found at

<http://bettertogetherbc.ca/>

<https://www.eatrightontario.ca/en/Articles/Adolescents-teenagers/Family-Meals-with-no-TV.aspx>

<http://www.heartandstroke.com/site/c.iklQLcMWJtE/b.3484291/>

References:

Better Together (2013). *A Hands on Approach to Family, Food and Fun: The Modern Psychology of Family Meals*. Accessed May 20, 2013 from: <http://www.interiorhealth.caYourHealth/ChildrenYouth/Documents/EatTogetherEatBetter.pdf>

British Columbia Medical Association. *Eat Together, Eat at Home*. Accessed May 20, 2013 from: https://www.bcma.orgfiles/Eat_Together.pdf

The J.M Smucker Company. *The Power of Family Meals*. Accessed May 20, 2013 from: <http://poweroffamilymeals.comMealtime%5FMatters/>

Kids Health (2013). *Family Meals*. Accessed May 20, 2013 from: http://kidshealth.orgparent/nutrition_center/healthy_eating/family_meals.html#

Interior Health. *Eat Together and Eat Better*. Accessed May 20, 2013 from: <http://www.interiorhealth.caYourHealth/ChildrenYouth/Documents/EatTogetherEatBetter.pdf>

Taking Action on Healthy Eating

As part of the *Inquiry for Healthy Decision Making* process in the Provincial Health Education Curricula, students will have the opportunities to enhance their personal health. Students will need to decide on actions that are unique to their needs.

The focus on healthy eating actions should be positive (i.e. eating more vegetables, fruits, milk or yogurt) instead of restrictive (i.e. limiting high fat and high salt foods). By focusing on the positive, the hope is children will consume less healthy options less frequently.

Canadian survey data indicate many children are not eating adequate amounts of vegetables, fruits and milk products: (nourishing minds page 7 (Garriguet, July 2006)

- Seven out of 10 children aged 4 to 8 years of age do not meet the minimum recommended five daily servings of vegetables and fruit.
- More than a third (37%) of children aged 4 to 9 years do not consume the recommended two daily servings of milk products.

Below are ways children can take action for healthier eating and ways classroom education can support those actions:

- If a student is currently consuming only one serving of Milk Alternatives per day, he/she could take action by adding one more serving of Milk Alternatives every day for 1 week. Have students brainstorm specific ideas to increase their intake (e.g., drink milk with dinner, bring yogurt or cheese for a snack). If your school doesn't have a milk program, consider starting one. Selling milk at school is a great way to offer a nutritious and refreshing drink to students at school and to raise money for school programs and extra-curricular activities.
- For school-aged children, *Eating Well with Canada's Food Guide* recommends 5 to 8 servings of vegetables and fruit per day, depending on age and gender. A student could decide to try tasting two new vegetables or fruit. In the classroom, try highlighting a vegetable or fruit each month and encourage students to try something new.
- Since there is a strong link between eating breakfast and learning, student actions can focus on breakfast. Students could aim to include 3 out of the 4 food groups at breakfast for 5 days. Have students list quick breakfast ideas (e.g., yogurt, fruit, and cereal) or encourage students to attend your school's breakfast program if available. If your school doesn't have a breakfast program, consider keeping a snack basket in the school office for students who come to school without breakfast.

When asking students to take action on healthy eating, it is important to consider students may not be able to control the types or amounts of foods that are available to them.

References:

TeachNutrition.org http://ontario.teachnutrition.org/bulletin-board/pages/news/12-01-20/Helping_your_Students_Meet_their_Nutrition_Goals.aspx

Accessed August 17, 2012.

Healthy Eating and Active Living for ages 13 to 18 Years http://www.healthyalberta.com/Documents/HEAL_Brochure_13to18.pdf August 17, 2012.

Nutrition Resources and References

List of Resources

- Action Schools BC –Classroom Healthy Eating Action Resource Grades K—7 (2012) available at: www.actionschoolsbc.ca/Content/Quick%20Links/ASBC%20Support%20and%20Resources.asp
- Agriculture in the Classroom available at: www.aitc.ca
- Alberta Health Services – Curriculum Based Resources available at: www.albertahealthservices.ca/2918.asp
- *Canada's Food Guide - A resources for Educators and Communicators* (2007) available at www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php
- Eating Well with Canada's Food Guide (2007) available at: www.healthcanada.gc.ca/foodguide
- Educator Nutrition Information Package (2012) available from your local Public Health Nutritionist
- Media Awareness Network www.media-awareness.ca/english/teachers/index.cfm the activities are not necessarily updated to the 2007 Canada's Food Guide
- Mission Nutrition www.missionnutrition.ca/missionnutrition/index.html
- Book Links: *My Mom Loves Me More than Sushi* by Filomena Gomes; *Yoko* by Rosemary Wells; *Growing Vegetable Soup* by Lois Ehlert
- Portion Size Activities for the Alberta Nutrition Guidelines for Children and Youth Portion Size Kit www.albertahealthservices.ca/2927.asp
- Power to Play: contact your local Public Health Nutritionist
- Public Health Nutritionist: Saskatchewan Regional Health Authorities have Public Health Nutritionists who can assist educators in accessing accurate and up to date nutrition information. A provincial list of all health authorities is available at: www.health.gov.sk.ca/health-region-list

Additional activities and links:

- Being Active, Eating Well: A Resource for ACTION in Peel! www.peelregion.ca/health/baew/index.htm

Educators' Nutrition Information References

- Health Canada, *Eating Well with Canada's Food Guide* (2007) available at: www.healthcanada.gc.ca/foodguide. Information regarding ordering copies of Canada's Food Guide is available at this link.
- Saskatchewan Ministry of Health, *Healthy Foods for My School* (2009) available at: www.health.gov.sk.ca/healthy-foods-for-my-school
- Saskatchewan Ministry of Education, *Inspiring Movement Towards Comprehensive School Community Health: Guidelines for Physical Activity in Saskatchewan Schools* (2010) available at: www.education.gov.sk.ca/physicalactivity
- Saskatchewan Ministry of Education, *Nourishing Minds Towards Comprehensive Community Health: Nutrition Policy Development in Saskatchewan Schools* available at: www.education.gov.sk.ca/nourishing-minds/