# TEACHING NUTRITION IN SASKATCHEWAN



# Health Education Grades 4 and 5

# 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 based on the Saskatchewan Health Education Curriculum (2010).

The **Nutrition Concepts and Resources** section, found on pages 4-9 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.

The **Nutrition Background Information** section, found on pages 10-34, provides educators with current and reliable Canadian healthy eating information.

#### For more information, contact your local Public Health Dietitian

Visit: <u>www.saskhealthauthority.ca/Services-Locations/Pages/Home.aspx</u> for contact information in your area.



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The 2019 version of Canada's Food Guide provides a different approach to healthy eating recommendations than in the past. Although Canada's Food Guide includes a large suite of online information, there are limited resources available for teaching it to children. In this update of Teaching Nutrition in Saskatchewan, we attempted to include resources that address these general nutrition concepts with limited reference to the 2007 Food Guide.

This document is updated yearly, however, due to the dynamic nature of the Internet, some hyperlinks may no longer be active. If this has occurred, try searching for the name of the resource on the Internet through a search engine such as Google.

The Public Health Nutritionists of the Saskatchewan Health Authority work together to promote support and protect the nutritional health of people living in Saskatchewan. Dietitians who developed this resource are:

Audrey Boyer (La Ronge area), Chelsea Belt (Saskatoon area), Chelsea Brown (Regina area), Cathy Knox (Swift Current area) and Barb Wright (Weyburn area)



# **Teaching Nutrition to Children**

Teaching about food and nutrition is important for the health and wellbeing of students. Below are some tips for teaching nutrition to children:

- Use current and creditable nutrition information. Teaching Nutrition in Saskatchewan and dietitians are
  great sources of reliable nutrition information. When searching for health information on the internet,
  refer to Unlockfood.ca How to find nutrition information you can trust for a few tips to make sure you get
  the best information.
- Include cross-curricular connections in the classroom. For example, when teaching fractions in math, illustrate the lesson using fruit instead of pie. Choose books and projects that show healthy food and eating habits. For examples of how to link nutrition to other Saskatchewan curricula, refer to The <u>Saskatchewan Curricular Outcomes and Nutrition</u>, a resource from <u>Nourishing Minds Eat Well Learn</u> well Live Well.
- Spread healthy eating lessons out throughout the year rather than in a short unit. Connect key messages to special events or classroom celebrations by offering or asking students to bring healthy options.
- Use experiential learning strategies to engage students. Let students work with food in the classroom, visit a grocery store, start a cooking club or a school garden. If you are considering offering taste tests, check out <u>Teaching Nutrition in SK grades 1-3</u> backgrounder on Food Experiences
- Promote healthy eating in a positive way. For example classifying foods as 'everyday' and 'sometimes' foods rather than 'good' and 'bad' foods.
- Emphasize healthy eating and active living for all, regardless of weight and shape, and ensure that <u>all</u> students are equally valued and respected. Enforce that it is not acceptable to make comments about people's size or shape. For more information refer to <u>Weight Bias</u> on page 24.
- Be a healthy role model for students. Demonstrate that you eat a variety of healthy foods. Avoid talking negatively about healthy foods or discuss dieting, weight loss or dissatisfaction of body shape or size.
- Encourage families to send healthy lunches and educate parents on healthy eating. Avoid making comments about student lunches or taking items away if they are not "healthy." Children may have little control over what is in their lunch. Drawing attention to "unhealthy" choices can isolate children from their peers and cause them to feel shame. Remember, no one food or meal defines our eating habits.
- Allow all students to make their own decisions about what and how much to eat and drink from their lunches. There is no benefit to having children eat certain foods before others such as eating a sandwich before a cookie. Children eat better when they can pick from the available options in the order they want.

#### References

- Algoma Public Health. Healthy Living Resources for the Classroom 2017/2018: Healthy Eating Elementary (grades K-8). [cited 2019 July 22]. Available from: <a href="www.algomapublichealth.com/media/2502/healthy-eating-elementary-2017-2018-hyperlinked-sept-2017-2.pdf">www.algomapublichealth.com/media/2502/healthy-eating-elementary-2017-2018-hyperlinked-sept-2017-2.pdf</a>
- 2. Ontario Dietitians in Public Health. Bright Bites: Tips for Teaching Nutrition. [cited 2019 July 22]. Available from: <a href="https://brightbites.ca/tips-for-teaching-nutrition/">https://brightbites.ca/tips-for-teaching-nutrition/</a>
- 3. Ellyn Satter, Nutrition Education in the Schools, 2008. Retrieved from: www.ellynsatterinstitute.org/wpcontent/uploads/2016/03/Secrets-Appendix-H-School-Nutr-Ed.pdf



Health Education Goal 1: Develop the understanding, skills and confidences necessary to take action to improve health. Curriculum **Nutrition Resources: Background Information and Sample Activities Outcome Concepts USC4.1** Assess What is Healthy Nutrition Background Information: Canada's Food Guide 2019 p. 10; what healthy Eating? Healthy Eating for Children p. 12; Water and Other Beverages p. 13; Nutrients for Health p. 19; Label Reading p. 21 eating and Canada Food physical activity Guide Alberta Health Services mean for www.albertahealthservices.ca/nutrition/Page2918.aspx Cinquain Poetry Regular eating pre/adolescence. About Food; Combination Foods Challenge; Vitamins and Minerals; What habits Does Food Mean to You Healthy food Hamilton Public Health Services, Nutrition Resources for After School choices Programs.www2.hamilton.ca/NR/rdonlyres/97ABAF2F-02F4-4195-B5E8- Water and 1AF420A95BA1/0/ActivitiesresourceJan2011.pdf. What Am I; Bean Bag beverages Toss (p. 28, 29) Food Riddles; Tipster (p. 31, 32) Health Canada. food-guide.canada.ca/en/ Canada's Food Guide; Food Choices and Eating Habits Healthy Schools BC healthyschoolsbc.ca/healthy-schools-bcresources/action-schools-bc-resources/ Grade 4: Collect your Colours Vegetables and Fruit Extension Activity; Count the Cubes Activity, Drink Journal Activity; Sodium and Your Health Instructional Example; Sugar Shocker Activity; Super Market Tour Extension Activity; Ophea Teaching Tools teachingtools.ophea.net/activities/level-up/teen-13-15-years Making Healthy Food Choices, Hunger and Thirst Cues The Student Body: Promoting Health at Any Size thestudentbody.aboutkidshealth.ca (Healthy Eating module) teacher background, classroom activities Saskatchewan Health Authority. Unlock the Potential of Food with New Canada Food Guide Toolkit for Educators 2019. http://www.rghealth.ca/department/health-promotion/nutrition-andhealthy-eating Canada's Food Guide p. 3 and My Food Guide Placemat **Nutrition Truths** Nutrition Background Information: Nutrition Truths p. 10; Evaluating Reliable Nutrition Information p. 29 Opportunities for Nutrition Background Information: Factors Influencing Eating Behaviours and Barriers to in Children and Youth p. 16 **Healthy Eating** Healthy Schools BC healthyschoolsbc.ca/healthy-schools-bcresources/action-schools-bc-resources/ Grade Level 4: Food and Drink Marketing Journal Activity Media Smarts mediasmarts.ca: Junk Food Jungle, Looking at Food Advertising, Packaging Tricks



Health Education Goal 1: health.	Develop the understand	ling, skills and confidences necessary to take action to improve
Curriculum Outcome	Nutrition Concepts	Resources: Background Information and Sample Activities
USC4.1 Assess what healthy eating and physical activity mean for pre/adolescence.	Opportunities for and Barriers to Healthy Eating	Ophea Teaching Tools <u>teachingtools.ophea.net/activities/level-up/teen-13-15-years</u> Factors influencing food and drink choices; Who makes your food and drink choices  Bright Bites <u>brightbites.ca/paint-plate-lesson-plan-grade-4-veggies-preferred-easy-choice/</u> Paint Your Plate Lesson Plan Grade 4 – Veggies & Fruit; the Preferred (and Easy) Choice.  Foodshare <u>foodshare.net/program/educator/</u> Stone Soup grade 2-4
USC4.5 Examine how identity (i.e., self-concept, self-esteem, self-determination) is influenced by relationships that are formed with others.	Weight Bias	Nutrition Background Information: Weight Bias p. 24 The Student Body: Promoting Health at Any Size thestudentbody.aboutkidshealth.ca Media and Peer Pressure; Teasing

Health Education Goal 2: Make informed decisions based on health-related knowledge		
Curriculum Outcome	<b>Nutrition Concepts</b>	Resources: Background Information and Sample Activities
DM4.1 Investigate the	Determinants of	Nutrition Background Information: <u>Factors Influencing Eating</u>
importance of personal	Health	Behaviours in Children and Youth p. 16; Determinants of
responsibility and		Health p. 25
communication in		
making informed		
decisions related to		
healthy eating and		
physical activity		

# **Health Education Grade 4**



Health Education Goal 3: Apply decisions that will improve personal health and/or the health of others		
Curriculum Outcome	<b>Nutrition Concepts</b>	Resources: Background Information and Sample Activities
AP4.1 Design and apply, with guidance, two fourday action plans that require communication related to healthy eating and physical activity	Take Action on Healthy Eating	Nutrition Background Information: <u>Take Action on Healthy</u> <u>Eating</u> p.23  Alberta Health Services <u>www.albertahealthservices.ca/nutrition/Page2918.aspx</u> Grade 4: Be a Restaurant Entrepreneur; Using Your Imagination to Meal Plan; Junior Chef Snack Competition Healthy Schools BC <u>healthyschoolsbc.ca/healthy-schools-bc-resources/action-schools-bc-resources/</u> Grade Level 4:  Making Fast Food Healthier Activity



**Health Education Goal 1:** Develop the understanding, skills and confidences necessary to take action to improve health

health.		
Curriculum Outcome	<b>Nutrition Concepts</b>	Resources: Background Information and Sample Activities
USC 5.1 Analyze personal eating practices	Healthy Eating Habits	Nutrition Background Information: <u>Canada's Food Guide 2019</u> p. 10; <u>Healthy Eating for Children and Youth</u> p. 12, <u>Nutrition Truths</u> p. 14, <u>Evaluating Reliable Nutrition Information</u> p. 27; <u>Nutrient Needs in Adolescence</u> p. 34
		Bright Bites Water at School Toolkit <u>brightbites.ca/wp-content/uploads/Water-at-school-toolkit Rev July 2016.pdf</u> Water Scavenger Hunt p.9-10, Water Wheel Game p.14-15.
		Hamilton Public Health Services. Nutrition Resources for After School Programs.  www2.hamilton.ca/NR/rdonlyres/97ABAF2F-02F4-4195- B5E8-1AF420A95BA1/0/ActivitiesresourceJan2011.pdf.
		Grocery Store Safari (p.23); Bones in Vinegar, (p.26); Bag of Bones (p.27)  Health Canada. food-guide.canada.ca/en/ Canada's Food Guide; Food Choices and Eating Habits
		Healthy Schools BC <u>healthyschoolsbc.ca/healthy-schools-bc-resources/action-schools-bc-resources/</u> Grade Level 5: <i>Drink Check Activity, Drink Journal Activity</i> Ophea Teaching Tools
		teachingtools.ophea.net/activities/level-up/teen-13-15- years Taking a Look at Canada's Food Guide The Student Body: Promoting Health at Any Size
		thestudentbody.aboutkidshealth.ca Healthy Eating and Active Living
	Food Environment	Nutrition Background Information: <u>Factors Influencing Eating</u> <u>Behaviours in Children and Youth</u> p.16, <u>Changing Food</u> <u>Practices</u> p.32
		Ophea Teaching Tools <u>teachingtools.ophea.net/activities/level-up/teen-13-15-</u> <u>years</u> Choosing Healthy Eating and Drinking Options; Making Community Connections
	Food Marketing	Nutrition Background Information: <u>Factors Influencing Eating</u> <u>Behaviours in Children and Youth</u> p.16
		Healthy Schools BC <u>healthyschoolsbc.ca/healthy-schools-bc-resources/action-schools-bc-resources/</u> Grade Level 4: <i>Food and Drink Marketing Journal Activity</i>
		Food Ad Tricks: Helping Kids Understand Food Ads on TV www.youtube.com/watch?v=xA14pAGW4UA

**Health Education Grade 5** 



**Health Education Goal 1:** Develop the understanding, skills and confidences necessary to take action to improve health

health.		
Curriculum Outcome	<b>Nutrition Concepts</b>	Resources: Background Information and sample activities
USC 5.1 Analyze personal eating practices	Food Marketing (cont'd)	Health Canada. <u>food-guide.canada.ca/en/healthy-eating-recommendations/marketing-can-influence-your-food-choices</u> <u>Marketing can influence your food choices</u>
		Media Smarts <u>mediasmarts.ca</u> Advertising All Around Us, Junk Food Jungle, Looking at Food Advertising
	Food Tracking	Nutrition Background Information: <u>Food tracking</u> p.29  Dietitians of Canada <u>www.eatracker.ca</u> (interactive tool)  EATracker  Healthy Schools BC <u>healthyschoolsbc.ca/healthy-schools-bc-resources/action-schools-bc-resources/grade-level-5/Vegetables and Fruit Journal Extension Activity</u>
	Label Reading	Nutrition Background Information: <u>Label Reading</u> p. 21 Bright Bites. <u>brightbites.ca/grade-5-whats-label</u> Paint Your Plate Lesson Plan Grade 5 — What's on a Label?  Canadian Produce Marketing Association Freggie Tales <u>www.freggietales.ca/htmlPages/parentsTeachers.html</u> (p. 68, 72) Know what you eat! Understanding Food Labels, Being Food Smart! At Fast Food Restaurants Labels  Health Canada. <u>food-guide.canada.ca/en/healthy-eating-recommendations/using-food-labels</u> Using Food Labels  Government of Canada. <u>www.canada.ca</u> Food Label Changes
	Opportunities for and barriers to healthy eating	Nutrition Background Information: Factors Influencing Eating Behaviours in Children and Youth p. 16  Healthy Schools BC healthyschoolsbc.ca/healthy-schools-bc- resources/action-schools-bc-resources/grade-level-5 Super Market Tour Extension Activity Gr K-7  Ophea Teaching Tools teachingtools.ophea.net/activities/level-up/teen-13-15- years Who Makes Your Food and Drink Choices?; Factors Influencing Food and Drink Choices; Healthy Eating Scenarios  Health Canada. food-guide.canada.ca/en/tips-for-healthy- eating/community/ Healthy eating in the community



Health Education Goal 1: Develop the understanding, skills and confidences necessary to take action to improve health. **Curriculum Outcome Nutrition Concepts Resources: Background Information and sample activities Processed Foods** Nutrition Background Information: Processed Foods p. 30 **USC 5.1 Analyze** personal eating practices Health Canada. food-guide.canada.ca/en/healthy-eatingrecommendations/limit-highly-processed-foods/ Limit highly processed foods Nutrition Background Information: Weight bias p. 24; **USC 5.4 Analyze the Weight Bias** connections between Yale Rudd Centre, Schools and Educators personal identity and www.uconnruddcenter.org/schools-families-communities personal well-being and Healthy Schools BC; Being Me – Promoting Positive Body establish strategies to Image healthyschoolsbc.ca/healthy-schools-bcdevelop and support a resources/action-schools-bc-resources/ Stand Up (p. 26) positive self-image. The Student Body: Promoting Health at Any Size thestudentbody.aboutkidshealth.ca Teasing and School Climate

Health Education Goal 3: Apply decisions that will improve personal health and/or the health of others		
Curriculum Outcome	Nutrition Concepts	Resources: Background Information and sample activities
AP 5.1 Design and implement with guidance, two 5-day action plans that embrace health opportunities or address health challenges related to personal eating practices	Taking action on healthy eating	Nutrition Background Information: <u>Taking Action on Healthy Eating p. 23</u> Healthy Schools BC <u>healthyschoolsbc.ca/healthy-schools-bc-resources/action-schools-bc-resources/</u> Grade Level 5:  S.M.A.R.T. Goal Setting Instructional Example



## Canada's Food Guide - 2019

Canada's Food Guide has provided Canadians with healthy eating recommendations since the 1940's. Over the years, the Food Guide provided guidance around the types and amounts of foods to eat for health. Rather than identifying the specific amounts of foods to consume each day, the healthy eating recommendations for the 2019 version of the Guide provide key messages in choosing healthy foods and eating habits.

## **Canada's Food Guide Healthy Eating Recommendations**

## **Healthy Food Choices**

Make it a habit to eat a variety of healthy foods each day.

- Eat plenty of vegetables and fruits, whole grain foods and protein foods. Choose protein foods that come from plants more often. Protein foods include legumes, nuts, seeds, tofu, fortified soy beverage, fish, shellfish, eggs, poultry, lean meat, lower fat milk, lower fat yogurt and cheeses lower in fat and sodium. Choose foods with healthy fats instead of saturated fat.
- Limit highly processed foods. If you choose these foods, eat them less often and in small amounts.

  Prepare meals and snacks using ingredients that have little to no added sodium, sugars or saturated fat. Choose healthier menu options when eating out
- *Make water your drink of choice.* Replace sugary drinks with water. Replacing sugary drinks with water will help reduce the amount of sugars you drink.
- *Use food labels.* Food labels provide information you can use to make informed choices about foods and drinks at the grocery store and at home.
- Be aware that food marketing can influence your choices. Food marketing is advertising that promotes
  the sale of certain food or food products. Many foods and drinks that are marketed can contribute too
  much sodium, sugars or saturated fat to our eating patterns.

#### **Healthy Eating Habits**

Healthy eating is more than the foods you eat. It is also about where, when, why and how you eat.

- Be mindful of your eating habits, taking time to eat and noticing when you are hungry and when you
  are full.
- **Cook more often.** Cooking more often can help you develop healthy eating habits. You can cook more often by planning what you eat and involving others in planning and preparing meals.
- Enjoy your food. Enjoying your food is part of healthy eating. Enjoy the taste of your food and the
  many food-related activities that go along with eating. This includes enjoying culture and food
  traditions.
- **Eat meals with others.** Enjoying healthy foods with family, friends, or neighbours is a great way to enjoy quality time together, share food traditions, across generations and cultures, and explore new healthy foods that you might not normally try.



Several tips, resources and recipes to implement Canada's Food Guide recommendations into daily habits are available at <u>food-guide.canada.ca/en</u>

#### References:

Government of Canada. Canada's Dietary Guidelines for Health Professionals and Policy Makers. 2019 Jan [cited 2019 Jul 25].
 Available from: food-guide.canada.ca/en/guidelines



# **Healthy Eating Habits for Children**

Eating nutritious meals and snacks helps children meet their daily nutrient needs for healthy growth and development. To help sustain energy, children need to eat small amounts of food on a regular schedule.

## **Eating Breakfast**

It is important to start every day by eating breakfast. Breakfast replenishes energy lost during a night's sleep. Skipping breakfast may result in missed nutrients, and fatigue.

A healthy breakfast includes vegetables or fruit, whole grain and protein foods. Examples of breakfasts include:

- 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 vegetables and fruit, whole grains and protein foods help children meet their daily nutrient needs. Healthy snacks include food from Canada's Food Guide. Examples of healthy snacks include:

- 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 advertised as "snack foods" are high in fat sugar and salt such as chips, candies, soft drinks, chocolate covered granola bars, cookies, fruit flavoured snacks, and cakes. These are not healthy snacks and should not be served or sold in schools.

#### References:

1. Government of Canada. Canada's Dietary Guidelines for Health Professionals and Policy Makers. 2019 Jan. [cited 2019 Jul 25]. Available from: food-guide.canada.ca/en/guidelines/



## **Water and Other Beverages**

Water is the largest part of the human body and is vital for life (1). Water is a structural component to all cells and is essential to all bodily fluids. Water transports nutrients and removes 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, during physical activity and during illness. Fluids need to be replaced for the body to function well and prevent dehydration. Some symptoms of dehydration include thirst, fatigue, weakness, headache, irritability, and dizziness.

Canadas Food Guide recommends water as the beverage of choice to support health and hydration without adding calories or sugar found in other beverages.

## Other beverages

Sugary drinks, including 100% juice, are associated with dental cavities in children. Sugar sweetened beverages and foods have been associated with weight gain and type 2 diabetes. To help reduce the intake of sugar, it is important to limit or avoid sugary drinks (1). Sugar drinks include 100% unsweetened fruit juice, chocolate or flavoured milk, sports and energy drinks and sweetened flavoured or vitamin waters.

## **Energy Drinks**

Energy drinks claim to give extra energy, improve concentration and enhance performance. These claims are not proven and in fact, there is more proof that they can be harmful. Caffeine is one of the main ingredients of energy drinks. One beverage will likely have more caffeine than what a child will or teen should have in a day. Caffeine can cause trouble sleeping, increased heart rate, restlessness, irritability, nervousness and headache.

Energy drinks also contain sugar, herbs, B vitamins, amino acids, and flavourings. There is no proof that these added ingredients will provide any benefits.

Energy drinks are NOT the same as sports drinks. Energy drinks can actually decrease sports performance because they contain large amounts of sugar and carbonation, which can cause an upset stomach during activity and dehydration.

Energy Drinks are not recommended for children or teens. The amount of caffeine they contain is often higher than the limit for children and youth.

#### References:

Government of Canada. Canada's Dietary Guidelines for Health Professionals and Policy Makers. 2019. [cited 2019 Jul 25].
 Available from: <a href="mailto:food-guide.canada.ca/en/guidelines/">food-guide.canada.ca/en/guidelines/</a>



## **Nutrition Truths**

It seems there is a new diet that comes out every year, each claiming to be the best. Nutrition information is found everywhere including the internet, radio, news, magazines, and from parents, friends, colleagues, athletes, movie stars, doctors, and talk show hosts. The hard part is knowing which source to believe. Listed below are the truths developed by Dietitians of Canada about some common nutrition misconceptions.

#### **Detox Diets**

The Truth: There is no scientific evidence to support the need for detoxification diets. Detox diets claim to "cleanse" the body of toxins, but the liver, kidneys and intestine already do this effectively. Detox diets typically involve fasting (going without food for a period of time) followed by a strict diet which includes a restricted number of foods. Fasting frequently or fasting for several days may cause unhealthy side effects such as headaches, dehydration, low blood pressure or an irregular heartbeat. Some detox diets include intestine-clearing supplements that have a laxative effect and can be more harmful than healthful.

## **Carbohydrates**

The Truth: Carbohydrates get a lot of negative media attention. There are many 'low carb' diets and meal plans claiming to be the best and easiest way to lose weight. The truth is most people who try to follow drastic diets like these may lose weight initially but often regain the weight as well as more weight following the diet. Because so many nutritious foods contain carbohydrate, people following these strict "low-carb" diets miss out on the nutritional benefits of healthy carbohydrate rich food choices like whole grains, fruit, starchy vegetables, and legumes.

#### Wheat and Gluten

The Truth: Wheat and gluten also get a lot of negative attention. A gluten-free diet is the only healthy way of eating for people with celiac disease or gluten sensitivity, but it is not necessary for everyone else. Gluten-free diets take a lot of work, can be restrictive and expensive and should be discussed with a registered dietitian. Gluten is a type of protein found in grains like wheat, barley and rye, and any foods made with these grains. Unless you have celiac disease or gluten sensitivity, or you are allergic to one of these grains, you do not need to avoid them. Whether the grain you choose is gluten-free (such as corn, rice, millet or quinoa) or not, enjoying more whole grains is a healthy choice.

#### **Superfoods**

**The Truth:** No food has superpowers to keep you healthy on its own. Even if a food is bursting with a few popular nutrients, it will be missing many nutrients necessary for health. There is no official definition of a "superfood", and the term is sometimes used to market trendy, expensive and unique foods. Many



common foods are equally as nutritious, less costly, and more widely available however receive less attention.

## **Sugar and Diabetes**

The Truth: Eating too much sugar does not cause diabetes. Diets with too many calories can lead to weight gain, and being overweight is one of the main risk factors for type 2 diabetes. Other risk factors such as family history, age (40 and older) and ethnicity also play a role. You can reduce your risk of developing type 2 diabetes by eating a healthy diet, maintaining a healthy weight and being physically active. It is recommended that all people eat foods that have little or no added sugar, fat and salt. Foods that are high in sugar, such as cookies, candies and soft drinks, are often low in nutrients and high in calories.

## **Weight Loss Diet**

**The Truth:** Weight loss diets have been shown to increase fatigue and irritability, reduce metabolism, reduce muscle mass, and weaken the immune system. Obviously, none of those attribute to good health! For good health it is important to have a healthy eating and exercise pattern you can maintain.

## **Vegetarian Diet**

The Truth: A well-planned vegetarian diet can be healthy for people of any age. Including foods from Canada's Food Guide will help vegetarians meet their nutritional requirements. A registered dietitian can provide guidance in meal planning.

Health is a complex issue and there are many factors that affect it. Your best bet to keep your body healthy is to eat a variety of foods, be physically active, and manage stress.

Dietitians of Canada is a trusted source of accurate and reliable nutrition information. For more information about Dietitians of Canada go to <a href="https://www.dietitians.ca">www.dietitians.ca</a>



# **Factors Influencing Eating Behaviours in Children and Youth**

As children become older, influences on eating behaviours increase. At a young age, adults provide all meals and snacks for children. As kids get older, they tend to shop and prepare more of their own foods and their food choices are influenced by other youth. In order to fit in, youth may feel they need to eat the same foods as their peers.

#### **Food environment**

Many meals and snacks are eaten outside of the home. The food choices that are available where youth live, learn and play influence what they eat. This includes foods in schools, childcare facilities, recreational facilities and foods sold in their neighbourhood.

Children may rely on the food available at school to provide or supplement their breakfasts, lunches and snacks. The implementation of nutrition policies in schools is associated with healthier food consumption patterns among students (1).

Recreational facilities provide a space for physical activity but unhealthy food choices are often readily available (2). Food provided many not be consistent with what is needed before, during and after physical activity

Fast food restaurants and convenience foods are common in school neighbourhoods and recreational facilities. Youth often walk and eat at to such establishments during their free time.

#### **Time**

Studies tell us that there is a decline in breakfast consumption with increasing age (3). Eating breakfast is related to having an overall healthier diet (4). As youth become busy with activities and increases in responsibilities there may be less time to plan, prepare and eat healthy meals and snacks, especially breakfast.

#### **Family Meals**

Children and youth who participate in family meals on a regular basis tend to eat better than those who do not. Enjoying regular family meals is associated with a higher consumption of vegetables and fruits, milk products and overall nutrients (5). In addition, family meals have been associated with enhancing family relationships, supporting healthy choices and improving school performance (6).

## **Food Marketing**

Advertising targeting children and youth often promotes low nutrient foods and rarely promotes healthy food choices such as vegetables and fruit. Studies show that children are more likely to request, buy or consume foods that are advertised on television (7). Often food marketing provides misleading or incomplete information about food which can lead to youth misunderstanding the nutritional value of foods that are marketed (8).



A recent Canadian survey found that 45% of youth in grades 6-12 in the Prairie Provinces reported over 2 hours of screen time each day. Screen time included watching T.V. or videos; playing video games and playing games or surfing the Internet on a computer (9). Both television and internet are sources of food advertising. Food companies use these media to market their products through interactive websites, online games and entertaining videos. Also, food product placements during movies and television programming entice children and youth to desire the placed product.

## **Body Image**

A Canadian survey found that only a third of young people aged 11-15 years who are of normal weight feel that their body is about the right size (10). Media images of unrealistic body sizes and shapes along with comments from family, friends, role models and peers about weight can influence youths' body image and can in turn increase the risk of unhealthy dieting behaviours. Adult role models that are themselves dieting or have poor body image may also influence the emergence of dieting and unhealthy weight control practices.

## **Sport**

Participation in sports and other physical activities can influence youth's eating habits. As they learn about the role of healthy eating and exercise, youth may choose healthier food options. Unfortunately, many unnecessary products such as energy drinks and soft drinks are marketed by professional athletes or promoted by some coaches and can influence youth's choices.

In addition, sports such as wrestling, football, gymnastics and dance in which body size plays a role due to aesthetics of weigh-ins also affect youth's eating habits.

## **Food Skills**

Recent literature indicates that there has been a decrease in food skills over the years (11). Therefore, youth and families may rely on less healthy pre-packaged and convenience foods. In addition there is the concern that opportunities for children and youth to gain 'traditional', basic or 'from scratch' cooking skills from family members may be limited. When kids are involved in food preparation and cooking, it encourages healthy habits that can last a lifetime.

## **Food Selection**

The foods that are currently available in our communities, homes and schools have changed drastically over the last 30 years. The Food Selection Generations Ago project on the next page can illustrate how our eating environment has changes in the last generation.



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## **Nutrients for Health**

The body requires nutrients and energy from food to live, grow and function. Carbohydrate, protein and fat are nutrients that provide energy for the body. The amount of energy that a specific food supplies is called a calories.

## Carbohydrate

Sugar and starch are different types of carbohydrate, which are broken down to glucose in the body. The body and brain use glucose to function. Carbohydrate is the body's preferred source of energy.

About half of the number of calories eaten should come from carbohydrates each day. Carbohydrate is found in grain products, vegetables, fruit and some milk products. Dried peas and beans also contain carbohydrate.

#### **Protein**

Protein is made up of amino acids. Protein helps the body grow and develop. The protein in food is broken down to help build and repair tissue like muscle, organs, skin, hair and nails. It can also be used to make glucose for energy; however, this only happens when there isn't enough carbohydrate available to be used for energy. Although protein is used in the development and repairing of muscle tissue, eating a lot of meat and high protein foods does not help build a muscular body. Exercise and a balanced eating pattern are required to build extra muscle.

Foods such as meat, poultry, fish, eggs, nuts and seeds, milk, cheese, and yogurt are good sources of protein. Grain products also provide some protein in smaller amounts. Most Canadians get enough protein by eating a variety of foods based on Canada's Food Guide.

#### Fat

The fat found in food plays an important role in the growth and development of children. Fat is a key source of energy and helps the body absorb vitamins A, D, E and K. Everyone needs some fat. However, eating too much fat, particularly saturated and trans fats, can contribute to heart disease, some cancers, obesity and other conditions. It is important that children eat foods naturally low in fat such as vegetables and fruit, grain products and low fat meats. Nutrient rich foods that are high fat such as peanut butter and cheese should not be restricted during childhood.

## **Vitamins and Minerals**

Vitamins and minerals are nutrients that work with carbohydrate, protein and fat to help the body grow and function. The nutrients that are of particular importance for children are:



#### Calcium and Vitamin D

Calcium and vitamin D play important roles in bone health. Foods such as milk, yogurt, and cheese contain calcium. The body can produce some vitamin D when exposed to sunlight but the process can be affected by many things such the use sunscreen and the time of the year. Food is an important source of vitamin D although few foods are naturally rich in the nutrient. Milk, fortified soy beverages, fatty fish, fish oils and margarine are sources of vitamin D.

#### Iron

Iron is a nutrient that helps carry oxygen in the blood throughout the body. Not eating enough iron can cause anemia, which can leave the body tired and make it hard to concentrate and learn. The best sources of iron include lean meats, poultry, fish, green leafy vegetables, dried fruit and cereals. However, plant sources of iron are not absorbed as well as animal sources. Consuming foods high in vitamin C (oranges, strawberries, kiwis, tomatoes, red peppers, etc.) along with plant sources of iron can improve absorption.

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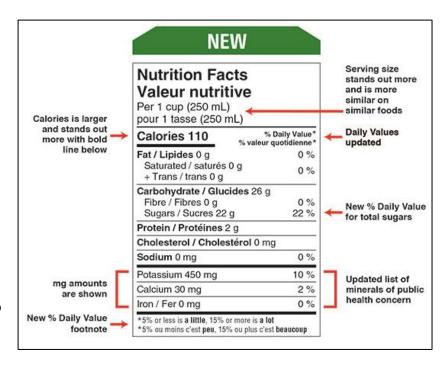


# **Label Reading**

Food labels found on packaged foods include the Nutrition Facts table and ingredient list.

#### **Nutrition Facts table**

The Nutrition Facts table makes it easier to answer questions about the foods we buy. It includes information on the amount of calories and core nutrients based on the listed serving size. It also includes the Percent Daily Value (%DV) to help compare the nutrient content of different food products.



The Nutrition Facts table can help people to:

- Learn about a food's nutritional value (calories and nutrients).
- See if a food contains a little (5% DV or less) or a lot (15% DV or more) of a nutrient.
- Compare two products to make better food choices.
- Better manage special diets (for example, a low-sodium diet).
- Eat more or less of a nutrient.

## **Serving Size**

All of the nutrition information in the <u>Nutrition Facts table</u> is based on a specific amount of food called a "serving size." The serving size is listed at the top of the Nutrition Facts table. The serving size is not necessarily a suggested portion of food to eat. It is a reference amount for the calories and nutrients on the Nutrition Facts table. It is important to compare the serving size at the top of the Nutrition Facts table to the amount usually eaten. For example, if the amount usually eaten is twice the amount of the suggested serving size, it is necessary to double the values for calories and the nutrients to estimate the nutrients consumed.



## Percent Daily Value (% DV)

The % Daily Values (%DV) section of the Nutrition Facts table provides a quick overview of nutrients in the food. It can be used to compare the nutrient content between two or more foods.

DAILY VALUE LS a Lot

If a food provides close to 5%DV of a specific nutrient it is considered to contain "a little" of the nutrient. If a food provides about 15% or more of a nutrient it is considered to contain "a lot" of the nutrient.

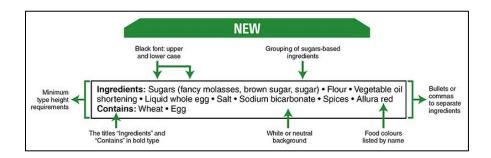
When comparing foods, choose the one with more calcium, iron, vitamins and fibre. Choose the food with less fat, saturated fat and sodium.

## **Ingredient list:**

The ingredient list shows all the ingredients in a packaged food.

Ingredients are listed in order of weight, beginning with the ingredient that weighs the most and ending with the ingredient that weighs the least. This means that a food contains *more* of the ingredients found at the beginning of the list, and *less* of the ingredients at the end of the list.

Reading the ingredient list can help people to check if a food product has a certain ingredient and to avoid specific food ingredients in the case of a food allergy or intolerance.



To learn more about food labels list visit www.canada.ca/en/services/health/food-labels.html

#### References:

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# **Taking Action on Healthy Eating**

As part of the Saskatchewan Health Education curricula students are to make decisions to enhance their personal health. Try to gear the focus on positive healthy eating actions such as choosing to drink water or trying a new vegetable rather than restrictive actions like avoiding candy or soft drinks. Focusing on the positive aspect of eating to help maintain or develop a good association with healthy foods.

Have students brainstorm specific ideas to improve their eating habits. Below are a few examples:

- eat vegetables or fruit at meals or choose to try at least one new vegetable a week
- try a few whole grains like brown rice or whole grain bread
- choose to eat breakfast at least 3 times a week
- drink water at each meal

Often children's access to food is dependent on their parents or caregivers. Some students will struggle to make changes to their eating habits based on what type of foods are available to them. Having access to healthy food at school can assist students in taking action on healthy eating. Here are a few ideas to help keep the school and classroom inclusive to all students:

- Have free drinking water available in the school
- Consider keeping a fruit basket in the school office or library for students who do not have access to these foods
- Offer white milk at no or low cost at school
- Approach organizations and businesses for financial donations to offset the cost of emergency foods in the school.
- Highlight a vegetable or fruit in the classroom each month provide small taste tests and encourage children to try something new.



# **Weight Bias**

### What is weight bias?

Weight bias refers to negative attitudes towards individuals due to their weight. These negative attitudes result in stereotypes, prejudice and unfair treatment towards these people. This can be expressed through teasing, physical aggression, cyber-bullying, rejection, and rumors. Not only can this be embarrassing for a child, youth or adult, it can also have serious consequences on their physical, social and psychological health.

#### Why does weight bias occur?

Weight bias occurs because we live in a culture where there is a perception that being thin is desirable. We are exposed to misleading messages about weight from various means such as television, movies, books, magazines and the internet. These false messages tell us people are "bad if they are fat" or "good if they are thin". A consequence of these messages is that it is socially acceptable to judge people's characters, personalities and behaviours based on weight. For example, overweight people are often perceived as being lazy, lacking will power, and being unreliable. When family members, friends, and education professionals reinforce these false messages, individuals can be stigmatized and hurt.

## How does weight bias affect students?

Children and youth who experience weight bias are vulnerable to many consequences that can affect their emotional and physical well-being. Students who experience teasing or discrimination because of their weight can have low self-esteem, poor body image, and are more likely to experience symptoms of depression and anxiety. A student's physical health may also be affected in various ways. Children who experience weight biases are more likely to try unhealthy weight control or binge eating behaviours and avoid physical activities at school where teasing often occurs.

### **Taking action**

All people deserve safety, respect, and acceptance in their community and classroom. Just as we should not tolerate racial or gender bias toward others, we should not tolerate weight bias. If you witness weight bias occurring in your school, intervene right away. To learn how to address weight bias within your classroom and school, refer to the resources "Teachers: How to Address Weight Bias in Your Classroom" and "Tips for Reducing Weight Bias" that can be found at www.YaleRuddCenter.org

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# **Determinants of Health: Factors Influencing Health Decisions**

Personal decision-making is an important factor for overall health. In the preadolescent and adolescent years, youth can gradually make more decisions regarding the types of foods to eat or drink and where they will consume these foods. In most cases, providing healthy foods for youth to choose from continues to be the responsibility of parents, caregivers or school community.

It is important to recognize that decisions about what foods to eat and how much to eat are not simply matters of personal choice. There are also many other factors that influence health behaviors. These are called the Determinants of Health.

## **Key Determinants of Health**

- Income and Social Status
- Social Support Networks
- Education and Literacy
- Employment/Working Conditions
- Social Environments
- Physical Environments

- Personal Health Practices and Coping Skills
- Healthy Child Development
- Biology and Genetic Endowment
- Health Services
- Gender
- Culture

Although personal health practices are determinants of health, it is important to consider other factors that influence personal health decisions. Below is a simple story that shows that health is impacted by a complex set of factors or conditions that determine the level of health of every Canadian.

"Why is Jason in the hospital?"

- Because he has a bad infection in his leg.
  - o But why does he have an infection?
- Because he has a cut on his leg and it got infected.
  - o But why does he have a cut on his leg?
- Because he was playing in the junk yard next to his apartment building and there was some sharp, jagged steel there that he fell on.
  - o But why was he playing in a junk yard?
- Because his neighbourhood is kind of run down. A lot of kids play there and there is no one to supervise them.
  - o But why does he live in that neighbourhood?
- Because his parents can't afford a nicer place to live.



- o But why can't his parents afford a nicer place to live?
- Because his Dad is unemployed and his Mom is sick.
  - o But why is his Dad unemployed?
- Because he doesn't have much education and he can't find a job.
  - o But why ...?"

For more information on the determinants of health see www.phac-aspc.gc.ca/ph-sp/determinants/

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# **Evaluating Reliable Nutrition Information**

Everyone has to eat; so many people are interested in the newest nutrition trends. The science of food and nutrition, however, seems to be changing all the time, and as a result it is hard to keep up-to-date with new findings. Also, nutrition information is available everywhere, particularly on the internet and social media, so it can be hard to know what to believe.

Because there is so much nutrition information out there, it is important to know that a lot of it is untrue and misleading. The information can be based on personal beliefs rather than proven fact. Also inappropriate conclusions are gleaned from poor research studies. This means that the information may not be accurate and may actually be harmful. When selecting resources or sharing nutrition information, consider the following:

- 1. Where is the information coming from? The most creditable nutrition expert is a Registered Dietitian (R.D.). Professional organizations (e.g. Dietitians of Canada), government or health agencies (e.g. Health Canada, Public Health Agency of Canada) or non-profit organizations (e.g Canadian Diabetes Association) are also sources of reliable nutrition information.
- 2. Is the information Canadian? Nutrition recommendations in Canada are different from those in the United States and other countries. Canada's Food Guide is uniquely designed to address nutrition issues in Canada. Using Canada's Food Guide in the classroom reinforces the importance of referring to Canadian recommendations. Avoid using food guides and resources from other countries such as MyPlate or MyPyramid from the United States.
- 3. **Are they trying to sell something?** Avoid using resources that promote a certain food product or use of supplements.
- 4. **Is it a scientific fact or a personal opinion?** Reliable and accurate nutrition information should be based on research evidence. Make sure the resource has references at the end. If there are no references or you are uncertain from where the information comes, it may be based on personal opinion and not facts. Personal stories can be misleading and are not reliable sources of nutrition information.
- 5. How old is the resources? Always check the date of the information or resources to make sure it is current.
- 6. Does the resource or information recommend avoiding certain foods or food groups from Canada's Food Guide (e.g. no bread diets)? Studies show that we need a variety of foods from all four food groups to meet our nutritional needs. No food has all the nutrients needed and avoiding certain food groups can increase risks of nutritional deficiency.

Adapted from: Nutrition Tools for Schools. Evaluating Nutrition information: what should you believe? (2007). Retrieved July 15, 2014 from www.healthunit.org/school/resources/Evaluating%20Nutrition%20Information%20What%20Should%20You%20BelieveLGL.pdf



# **Food Marketing**

Studies have shown that food marketing to children and youth strongly influences food preferences, food requests and eating habits. Unfortunately, the foods that are heavily marketed are often highly processed and fast foods high in fat, sugar, salt and calories while containing few nutrients. Unprocessed highly nutrient dense foods, like vegetables, fruit and whole grains are rarely promoted.

For years, food companies have targeted children and youth with a wide variety of unhealthy food products.

Television commercials during Saturday morning cartoons and advertisements in youth magazines were common place years ago. Recently, unhealthy food is marketed in a many other ways, some more obvious than others. For example, food companies market to children and youth through entertaining videos on social media, downloads and games on branded websites, in apps for cell phones and tablets, and in contests and gifts within some schools.

Although all children and youth are vulnerable to these marketing tactics, research notes that 8-12 year old children are more susceptible to it than younger age groups since they watch more television, are more likely to have their own money and spend more time away from their parents.

It is becoming difficult to limit the exposure of children and youth to this type of marketing. Helping children to become aware of the different ways in which food companies market products to them is one way to decrease the impact of these marketing techniques. Some studies note that children who are 11 years of age can understand the intent of food advertisements. Unfortunately, teaching media literacy has not been proven to balance the effects these food advertisements have. It is important, therefore, to decrease access children and youth have to marketing by decreasing screen time and avoiding marketing within the school community environment. Marketing within the school environment includes accepting sports or educational equipment with food company logos on them and accepting funding from or promoting food or beverage companies.

#### Reference:

 Dietitians of Canada. (2010). Advertising of Food and Beverages to Children: Position of Dietitians of Canada. Retrieved August 7, 2014 from www.dietitians.ca/Dietitians-Views/Children-and-Teens/Advertising-of-food-and-beverages-to-children.aspx



# **Food Tracking for Children and Youth**

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-judgmental 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.



## **Processed Foods**

What do whole grain breads, orange slices and potato chips have in common? They are all processed foods.

Processed foods have received a bad reputation over the years. Often these foods are blamed for the increased number of people with chronic disease and weight issues. It is important to know that processed foods are more than potato chips and TV dinners. Although we need to be cautious of some processed foods, many can be part of a positive healthy eating pattern.

## What is a processed food?

Almost all of the food and beverages we consume have been processed to some degree. Changing foods in any way from how they are found in nature is food processing. Peeling, chopping, cooking, and pasteurizing are all food processing methods, so it is almost impossible to find many foods in our diet that have not been processed in some way. Foods are processed for many reasons. Milk is pasteurized to destroy harmful bacteria, fresh vegetables are frozen to preserve them for another time, and grains are milled into flour to make various breads. Some foods are fortified to enhance or replace vitamins lost in processing such as Vitamin D which is added to low fat milk. Food processing itself is not an issue and can actually be the healthiest option, the concern is the amount of processing and what other foods are added during the processing. Typically processed foods are grouped in categories similar to those below.

- Minimally processed: These foods have had some processing but it does not significantly change the
  nutritional makeup of the food. The processing makes these foods more accessible, convenient and often
  safer to eat. Examples of minimally processed foods would be chopping vegetables to make a salad,
  butchering an animal to make fresh meat, freezing vegetables to store for later, and pasteurizing milk to kill
  bacteria. These foods do not have the addition of additives such as sugar, flour or salt.
- Processed ingredients: Some foods are processed to create food ingredients such as flour, sugar, salt and
  oil. These ingredients are not consumed as is but are added to foods. For example, wheat is processed into
  whole wheat flour to make bread. Oil is extracted to be used in foods such as baked goods and salad
  dressing.
- Ultra-processed (also called highly processed): These foods are created when minimally processed foods
  are combined with processed ingredients. They do not have any resemblance to the food they are made
  from. Examples of these foods include chicken nuggets, hot dogs, fruit snacks, ice cream, and some
  breakfast cereals.

Ultra-processed, or highly processed foods, are the items of most concern. Highly processed foods tend to be high in fat, sugar, salt and calories while contain few vitamins, minerals or fibre. They are often designed to be "ready to eat", reheated or be portable. These foods are highly marketed and are often easily accessible in canteens, convenience stores and schools. This availability enables them to be consumed at anytime, anywhere and while doing other things such as driving a vehicle, working on a computer or watching television. These types of eating behaviours lead to mindless eating and can cause over consumption of these foods. Research



has shown that our modern excess eating is a normal response to an over accessible and marketed food environment. It is inappropriate to consider that eating habits are simply a matter of personal choice.

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# **Changing Food Practices**

#### **Our Food Environment**

Our food environment influences how and what we eat and is quite different now than it was in the past. Today, not only do we have more types of food available, it is available in more places, comes in larger packages and serving sizes, and is advertised to us everywhere we turn. All of these things influence our behaviours, causing us to eat more, even when we are not hungry and to eat different foods than what was consumed years ago. We live very busy lifestyles and our food environment has adapted accordingly. Fast food drive-thrus, take-out restaurants and convenience stores are on almost every street corner. As a result, we rarely cook meals from scratch, know less about how to prepare our food, or even where it is grown or what happens to it when it is thrown away.

- Access, Availability and the Environment: Generations ago where people got their food from was limited. Either they gathered, grew, raised or hunted it themselves or purchased it from a local market. Food was prepared and eaten at home or shared with family and friends in their community. Today, food is much more readily available where we live, learn, work and play. Food is sold in schools, recreation centres, gas stations, hardware stores, movie theatres, and shopping malls.
  - Not only is food everywhere but there is also an ever increasing variety of foods available for those who can afford it. In the past, the type of food people ate depended on the kind of food available in that specific region and on the growing season at that time. Now, we import food from all over the world, so most items are available at the nearest grocery store year round, from grains and produce to an overwhelming abundance of processed foods. Although it is nice to have a variety of food available at our fingertips, when it travels such great distances and produces so much waste, there is an environmental cost to this convenience. This is one good reason to seek out locally produced foods in the community when possible.
- Food Skills: Today, compared to in the past, we lead busier lifestyles. As a result, we depend on quicker, more convenient foods. Some examples include fast food restaurant meals and individually packaged ready-to-eat/heat meals and snacks. We rarely cook from scratch and eat less fresh, whole foods like vegetables and fruit. These convenience foods are often less nutritious and more heavily packaged, creating a great deal of garbage and waste. Since people cook less, many are losing some of these food skills, which are an important part of developing healthy eating habits. Food skills include knowledge about food and healthy eating, cooking and nutrition; planning for healthy meals, adjusting recipes and using leftovers; cooking and food preparation; gardening and raising food and an understanding about where our food comes from.



#### **Food Practices**

- Traditional Food Practices: Traditional food practices are often associated with healthier eating, more affordability and a passing on of cultural knowledge. Today, compared to the past, we see less use of and knowledge about traditional foods in many cultures. As a result, there is often is an increased reliance on more expensive and less nutritious commercial foods, and a loss of skill and cultural knowledge.
- Family and Communal Meals: Eating meals together without TV, cell phones and computers, provides the opportunity to bond with others, share in conversation and enjoy meals together. They are also associated with better health. In the past eating together with few distractions was the norm, but unfortunately today we are getting away from this practice and need to start bringing it back!
- Food Waste: In the past when there were food shortages and we were solely responsible in producing some of our food, there was this notion about food being precious, valued and not to be wasted. Although for some, this still holds true, for others it is less of a concern. Canadian households throw out almost 40% of their food. Food wastes placed in plastic garbage bags does not break down and produce harmful substances rather than good fertilizer found in compost. It is important to limit food waste not by forcing ourselves or others to always finish our plates, but rather to buy only what we need, cook and serve just enough, use or give away what is left, and compost what cannot be used.

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## **Nutrient Needs in Adolescence**

During adolescence, teens grow rapidly and as a result have increased energy and nutrient needs. Total nutrient needs are higher during adolescence than at any other time in the lifecycle. Nutrition and physical growth are related; good nutrition is necessary for youth to grow well. Poor eating habits during the adolescence can influence physical growth and can increase the risk for developing chronic diseases, such as heart disease, cancer, and osteoporosis.

During growth spurts youth will probably be hungrier than usual. Typically though, this hunger slows down once an adolescent has stopped growing. Offering adolescents a variety of foods from *Canada*'s *Food Guide*, will help youth get all the nutrients they need.

Active youth generally need extra calories to fuel their activity levels, performance **and** their growth. If teens don't eat enough, their bodies are less likely to work to the best of their ability and may even break down rather than build up muscles. Extreme diets and calorie restrictions could lead to growth problems and other serious health risks for both girls and boys, so are not recommended. Sports drinks, vitamin waters and energy drink are marketed and sold to youth. Sports drinks are only useful in very specific circumstances. Vitamin waters are unnecessary and could be harmful if consumed in large amounts. And energy drinks are not recommended for youth due to the high amount of caffeine they contain. In most cases, water is the best choice.

When talking about nutrition with adolescents, it is important to focus on healthy eating habits and physical activity to achieve and maintain a health and not on body weight or shape.

#### Reference

- Story, M., J. Stang. (Eds.). (2005). Nutrition Needs of Adolescents. Retrieved July 15, 2014 from www.epi.umn.edu/let/pubs/img/adol ch3.pdf
- 2. Canada's Food Guide. Healthy Eating for Teens. 2019. food-guide.canada.ca/en/tips-for-healthy-eating/teens/

