

# CHAPTER 5: NUTRITION



# **NUTRITION**

Healthy Eating for Young Children Canada's Food Guide Canada's Food Guide Recommendations for Young Children Feeding Babies, Toddlers and Preschoolers Food Safety for Toddlers Planning Nutritious Menus Guidelines for Selecting Nutritious Foods for the Menu Menu Checklist Sample Menu Template Choking Prevention Tips Food Allergies Picky Eaters Creating a Healthy Eating Environment Recipes Resources

**SEE CHAPTER 9 FOR SAFE FOOD HANDLING** 



# Healthy Eating for Young Children

Caregivers and parents play a key role in developing children's eating habits. Children's eating is influenced by the types of foods provided, how meals are structured, role modeling and the family and social environment. Positive early childhood experiences regarding food and the social environment in which children eat are critical to the development of healthy eating habits later in life.

Caregivers and parents need to provide healthy food choices most of the time for meals and snacks so that children will become used to these as the "normal" food choices. When healthy foods are the usual choice, and when children see their caregivers or parents eating these foods, a child has a better chance of eating well and will perceive these foods to be the normal choice. When unhealthy foods are the norm, a child may not learn how to eat well or develop healthy eating habits.

Children aged two years and older can get the nutrients and calories they need for healthy growth and development by following the healthy eating pattern in Canada's Food Guide.

Go to www.healthcanada.gc.ca/foodguide to check out "Eating Well with Canada's Food Guide."

Because they have small stomachs that tend to fill up quickly, young children need small nutritious meals and snacks each day. Nutritious foods that contain fat, such as milk and peanut butter, can provide a concentrated source of calories for young children. Most prefer meals and snacks on a regular schedule and in familiar surroundings. The amount of food eaten at each meal and snack will vary from day-to-day depending on a child's appetite, activity level and whether they are experiencing a growth spurt. Their appetite may also fluctuate when they are excited or overly tired. Over time, the variations in the amount a child eats tend to average out to provide the calories and nutrients they need. This is especially true if a child is encouraged to eat healthy foods when hungry and to stop when full. Eating foods from each of the four food groups of Canada's Food Guide and including a small amount of unsaturated fats is the best way to make sure children get the nutrients they need. A multivitamin is rarely needed for healthy children who are growing well and following Canada's Food Guide.

#### Here's What Canada's Food Guide Recommends for Young Children:

	Number of servingsAge (yrs)2-34-8		What is One Food Guide Serving?	Make Each Food Guide Serving Count!	
			What is One Food Guide Serving?		
Vegetables and Fruit	4	5	<ul> <li>125mL (1/2 cup) fresh, frozen or canned vegetables or fruit</li> <li>125mL (1/2 cup) cooked or 250mL (1 cup) raw leafy greens</li> <li>125 mL (1/2 cup) 100% unsweetened fruit juice</li> </ul>	<ul> <li>Eat at least one dark green and one orange vegetable each day</li> <li>Choose vegetables and fruit prepared with little or no added fat, sugar or salt</li> <li>Have vegetables more often than juice</li> </ul>	
Grain Products	3	4	<ul> <li>1 slice bread or ½ bagel</li> <li>125mL (½ cup) cooked rice or pasta</li> <li>30g cold or 175mL (3/4 cup) hot cereal</li> </ul>	<ul> <li>Make at least half of your grain products whole wheat each day</li> <li>Choose grain products that are lower in fat, sugar or salt</li> </ul>	
Milk and Alternatives	2	2	<ul> <li>250mL (1 cup) milk or fortified soy beverage</li> <li>175g (3/4 cup) yogurt</li> <li>50g (11/2 oz) cheese</li> </ul>	<ul> <li>Drink skim, 1% or 2% milk each day</li> <li>Select lower fat milk alternatives</li> </ul>	
Meat and Alternatives	1	1	<ul> <li>75g (2½ oz)/125mL (1/2 cup) cooked fish, shellfish, lean meat</li> <li>175mL (3/4 cup) cooked legumes or tofu</li> <li>2 eggs</li> <li>30mL (2 Tbsp) peanut or nut butters</li> <li>60mL (1/4 cup) nuts and seeds</li> </ul>	<ul> <li>Have meat alternatives, such as beans, lentils and tofu often.</li> <li>Eat at least two food guide servings of fish each week</li> <li>Select lean meat alternatives prepared with little or no added fat or salt</li> </ul>	

**Foods to include** are foods from each of the four food groups; vegetables and fruit, grain products, milk and alternatives, meat and alternatives.

**Foods to limit** are foods that are low in nutrients and high in calories, fat, sugar and salt such as cakes, 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, sports and energy drinks, and sweetened hot or cold drinks.

Most children, if provided with access to a variety of foods from each of the food groups from Canada's Food Guide, will consume the nutrients and energy they need to grow and develop. However, if they do not have access to foods from all food groups on a regular basis, they will not be able to consume a nutritionally adequate diet. Providing healthy food choices is the parents/caregiver's responsibility. The child needs to be given responsibility for how much he or she eats. Forcing a child to eat can upset their natural appetite control system and may lead to overeating and possibly overweight. It is important for parents and caregivers to support children in developing healthy food choices by providing healthy foods as the normal choice and by being positive role models for healthy eating.

#### For more information check out the following resources on feeding young children:

Feeding Your Baby from Six Months to One Year

This is an excellent resource on feeding babies from six months to one year of age.

#### How to Build a Healthy Toddler or Preschooler

These resources contain good information on healthy eating for toddler or preschoolers.

#### Nutrition A-Z (under "children")

Dietitians of Canada has resources on promoting good eating habits in children.

# <u>BusyBodies</u> Creative food and play ideas for preschoolers (ages 3-5)

Feeding Your Toddler: 12 months to 3 years

Food Safety for Toddlers



#### Planning Nutritious Menus

The Day Nurseries Act (1990), Section <u>39</u>, <u>40</u>, <u>41</u>, <u>42</u>, <u>43</u> stipulates the serving size and number of servings to be offered to children in daycares. These recommendations do not reflect the current Canada's Food Guide (2007).

#### **Planning Meals and Snacks**

#### Serving sizes for children one to six years

There is a wide variation in portions of food consumed by children. For example, a two year old may eat half a slice of bread, whereas a four year old is more likely to eat a whole slice.

#### Serving sizes for children one to six years

Canada's Food Guide Food Group	Child is between 1 and 6 years old
Vegetables and Fruit	1/4 to 1 whole fruit or 1/3-1/2 cup (80-125 mL)
Grain Products	1/2 to 1 slice or 1/4 to 1/2 cup (50-125 mL)
Milk and Alternatives	1/2 to 3/4 cup (125-175mL)
Meat and Alternatives	1 to 2 oz. (30-60grams)

#### Total amount of food to offer to children one to six years

Canada's Food Guide Food Group	Amount of Food to be Served to Children in Attendance for 6 hours or more			
Vegetables and Fruit	2 – 2 ½ whole fruits or 1-1 ¼ cup (250-300mL)			
Grain Products	1 1/2-2 1/2 slices or 3/4 -1 3/4 cup (175-450mL)			
Milk and Alternatives	1 to 1 ½ cups (250-375mL)			
Meat and Alternatives	2-3 oz. (60-90grams)			

#### Planning Meals

The Day Nurseries Act requires that each child who is in attendance at meal time is provided with a meal consisting of:

Canada's Food Guide Food Group	Number of Servings To Be Offered At Meals			
Vegetables and Fruit	<b>2 servings</b> (e.g. mashed potatoes, apple sauce, carrot sticks)			
Grain Products	<b>1 serving</b> (e.g. bread, cereal, pasta, rice)			
Milk and Alternatives	<b>1 serving</b> (e.g. milk, yogurt, cheese, fortified soy beverage)			
Meat and Alternatives	<b>1 serving</b> (e.g. beef, chicken, egg, tofu, peanut butter)			



# Planning Snacks

Snacks should:

- Consist of at least 2 of the 4 food groups.
- Complement the lunch meal to meet the food requirements for the day (refer to Amount of Food to be Served to Children in Attendance for Over 6 hours).
- Be served at 1 ½ to 2 two hours before the next meal.

# Steps to Planning a Menu

#### 1. Gather menu planning tools

- Guidelines for selecting nutritious foods for the menu including the Day Nurseries Act
- Old sample menus for ideas
- Recipes
- A list of allergies/intolerances/food avoidances for children in your daycare

# 2. Select the lunch meal for each day of the week

- Select a Meat or Alternative for each day
  - a) Choose a different meat or alternative serving for each day
  - b) For variety, include at least one meat alternative per week (legumes, tofu or other soy products, peanut or other nut butters)
  - c) Recommended fish include light canned tuna\*, salmon, cod, haddock, catfish, sole and tilapia. \*Health Canada advises that children 1-4 years old have no more than 75 grams a week (1 Food Guide Serving) of canned <u>albacore</u> (white) tuna. Children 5-11 years old should have no more than 150 grams a week (2 Food Guide Servings). This advice does not apply to canned light tuna which is relatively low in mercury. For the most up-to-date advice on fish consumption, check Health Canada's website.
  - d) Remember, cheese is NOT a meat alternative
- Select a Grain Product
  - Choose a different grain product each day
  - Choose at least one serving
  - Serve primarily whole grains
- Select a Vegetable
  - Choose a different vegetable each day
  - Include both cooked and raw vegetables for variety
  - Choose dark green and orange vegetables more often
  - Consider various shapes and textures (grated, chopped, mashed, sliced, cubed, sticks, wedges, etc.)
- Select a Fruit
  - Choose fruit more often than fruit juice to increase fibre intake
- Select Milk or Milk alternatives
  - Serve milk as a beverage, added to soup or in dessert
  - Include milk alternatives such as cheese, yogurt, milk pudding or fortified beverages for those who cannot consume cow's milk (soy or rice beverage)

# 3. Plan the morning and afternoon snack to complement the lunch meal

- Each snack should include food from 2 food groups from Canada's Food Guide
- Snacks should be high in nutrients, but low in sugar, salt and fat and should not be sticky to the teeth
- Keep portion sizes small
- Serve snacks 1½ to 2 hours before meals
- Snacks should provide food to complete the requirements of the Day Nurseries Act

# 4. Add up food groups and compare to Day Nurseries Act

- Complete the Menu Checklist
- Fill in the Menu Template and total the servings of each food group to ensure adequate intake of each group
- Make adjustments and substitutions where necessary to meet requirements
- Aim for a three to four week menu cycle and try not to repeat items within that rotation

# **Guidelines for Selecting Nutritious Foods for the Menu**

Choose from the following foods **daily**:

Every Day Foods						
Vegetables and Fruit	Grain Products	Milk and Alternatives	Meat and Alternatives			
<ul> <li>All fresh and frozen fruits</li> <li>All fresh and frozen vegetables</li> <li>Unsweetened fruit juices</li> <li>Unsweetened fruit juice bars</li> <li>Canned fruit in juice</li> <li>Vegetable juices</li> <li>Salads</li> </ul>	<ul> <li>Whole grain bread</li> <li>Rolls</li> <li>Bagels</li> <li>English muffins</li> <li>Whole grain muffins</li> <li>Pita bread</li> <li>Corn and flour tortillas</li> <li>Unsweetened cereals</li> <li>Pasta</li> <li>Rice</li> <li>Rice cakes</li> <li>Melba toast</li> <li>Soda crackers</li> </ul>	<ul> <li>2% milk (above 2 years of age)</li> <li>Whole milk (under 2 years of age)</li> <li>Plain yogurt</li> <li>Cheese</li> <li>Cottage cheese</li> <li>Milk based soups</li> </ul>	<ul> <li>Lean beef, veal, pork or lamb</li> <li>Lean ground beef</li> <li>Skinless boneless chicken and turkey</li> <li>Fresh, frozen and canned fish</li> <li>Legumes (beans, peas, lentils)</li> <li>Eggs</li> <li>Tofu</li> <li>Peanut butter or other nut butters</li> </ul>			

The following foods should be served **no more than once per week** because they are higher in fat, salt and sugar:

Once a Week Foods					
Vegetables and Fruit	Grain Products	Milk and Alternatives	Meat and Alternatives		
<ul> <li>Vegetables with sauces (cheese or cream)</li> <li>Canned fruit in light syrup</li> <li>Dried fruit (no not serve as a snack)</li> <li>Sweetened frozen fruit juice bars</li> </ul>	<ul> <li>Fruit loaves</li> <li>Homemade cookies</li> <li>Pancakes</li> <li>Waffles</li> <li>Enriched white bread and rolls</li> <li>Fruit crisps, cobblers</li> <li>Croissants</li> </ul>	<ul> <li>Milk pudding</li> <li>Canned pudding</li> <li>Chocolate milk</li> <li>Milk shakes</li> <li>Ice cream (no more than 10% milk fat)</li> <li>Processed cheese (slices and spread)</li> <li>Hot chocolate made with milk</li> <li>Frozen yogurt (no more than 4% milk fat)</li> <li>Fruit flavoured yogurt</li> </ul>	<ul> <li>Homemade fish sticks</li> <li>Regular ground beef</li> <li>Cooked ham</li> </ul>		

The following foods should be served **rarely** (once per month) as they are not part of Canada's Food Guide and have little nutritional value:

Once a Month Foods
Sherbet
Ice cream novelties
Cream cheese
• Jell-O
• Syrup
Honey
Cakes and pastries
<ul> <li>Processed lunch meats and cold cuts</li> </ul>
Wieners
Sausages
Bacon
Commercial fish sticks
<ul> <li>Chips, cheesies, nachos or other salty snacks</li> </ul>
Cookies and donuts

# Menu Checklist

Use this checklist as a guide when planning menus, and again when you are finished to recheck the menus you have planned.

- Foods within each food group are varied daily.
  - O A different meat and alternative is served each day of the week
  - O A variety of grain products are served
  - O In season fruit and vegetables are served
- 100% Fruit juice is served NO MORE THAN once a day.
  - O Sweetened foods (i.e. cake, cookies, drinks), sticky foods (i.e. dried fruit), high fat and high salt foods (ex. Processed meats, chips) are limited.
- Each lunch includes:
  - O 1 serving of Vegetables
  - O 1 serving of Fruit
  - O 1 serving of Grain Products
  - O 1 serving of Milk and Alternatives
  - O 1 serving of Meat and Alternatives
- Each snack includes foods from at least two food groups.
- There is a drink included with every meal and snack (milk, juice or water).
- Foods with different colours, shapes, textures, flavours and temperatures are served.
- The food served is size appropriate and easy for children to eat (i.e. finger foods).
- New foods are periodically introduced.
- There is adequate time and personnel to prepare the food.
- Menu items are within the budget.



# Sample Menu Template

Week of	to _					
		Monday	Tuesday	Wednesday	Thursday	Friday
Morning snack (include 2 groups)						
Vegetables and Fruit						
Grain Products						
Milk and Alternatives						
Meat and Alternatives						
Foods to limit						
Lunch Meal (include 4 groups)						
Vegetables						
Fruit						
Grain Products						
Milk and Alternatives						
Meat and Alternatives						
Foods to limit						
Afternoon snack (include 2 groups)						
Vegetables and Fruit						
Grain Products						
Milk and Alternatives						
Meat and Alternatives						
Foods to limit						
Total required		Total	Total	Total	Total	Total
Vegetables and Fruit (2-4)						
Grain Products (3-4)						
Milk and Alternatives (1-2)						
Meat and Alternatives (1-2)						
Meets requirements?						

# Additional Menu Planning Tips

- Child care providers who will be cooking, preparing, serving or shopping for food should be involved in developing the menu.
- Consider the cost of all the foods on your menu. Balance higher-cost foods with lower-cost foods.
- Plan to have a different menu for winter and summer, and if possible, spring and fall, using a 3 or 4 week cycle.
- Post menus for the current and following weeks in a prominent place for parents to see.
- Allow for substitutions for children with allergies and special diets or encourage parents to supply their own substitutes.
- Keep meals and snacks fairly simple. Children prefer them that way.
- Involve the children in food selection and preparation where possible and allow them to practice feeding themselves.
- Introduce new foods one at a time in small quantities. Serve them with foods that are wellliked. Encourage children to try them, but do not force them to do so. If a new food is not well received the first time it is offered, try it again at a later date.
- Remember you're a role model and children pick up on your comments, gestures and attitudes toward food. Sit with the children during snack and meal times to help create relaxing and enjoyable experiences.
- Take advantage of vegetables and fruit that are in season and locally grown.
- Consider growing some of your own vegetables on site. Involve children in selecting, planting and caring for a variety of vegetables and fruits.
- Celebrate different cultures by introducing varied food choices that represent the ethnic diversity of your child care centre. Involve parents in helping you identify appropriate choices.



# **Choking Prevention Tips**

Always watch babies and young children while they are eating. They sometimes gag on a new food or new textures. This is normal. They gag to avoid choking, but this is not choking. Choking is when food gets stuck in the throat and stops air from getting into the lungs.

# Foods that can cause choking in babies and young children

- whole grapes
- cherry or grape tomatoes
- melon balls
- olives
- fish with bones
- fruit with pits (like cherries)
- fruit with tough skins
- hard pieces of raw fruit or vegetables such as carrots and apples
- raisins
- popcorn
- peanut butter or other nut butters on a spoon or spread thickly
- chunks of meat or cheese
- hard chips (like nacho chips)
- whole nuts or seeds (alone or in foods)
- wieners
- chewing gum
- hard candies
- hard cookies
- fruit leathers

#### Tips for feeding safely

- Cut grapes, melon balls, grape/cherry tomatoes and olives in half
- Cut wieners into small pieces
- Grate or cook carrots and other hard vegetables or fruit
- Spread peanut butter and nut butters thinly on toast and crackers
- Soak raisins in water to soften them
- Remove skins or pits from fruit and vegetables

#### Tips to prevent choking

- Watch babies and children while they are eating, even snacks
- Make sure babies and young children are sitting upright, not walking, talking, laughing, running or lying down
- Make sure children chew their food well
- Give children time to eat slowly and carefully
- Be very careful with the foods you choose if feeding children in a car

Check out the Nutrition Services handout "Food Safety for Toddlers."



# Food Allergies

The Day Nurseries Act stipulates "the day nursery must post a list of every child that has a food allergy and their respective allergy in each cooking and serving area of the day nursery."

# What is a food allergy?

Food allergies are sensitivities caused by a reaction of the body's immune system to specific proteins in a food. Current estimates are that food allergies affect as many as 6% of young children. Symptoms can range from mild to severe or even life threatening.

# Some symptoms that may be produced by an allergy include:

- hives
- nausea
- eczema
- diarrhea
- anaphylactic shock
- sleep disturbances
- coughing
- swelling of the throat
- nasal congestion
- sneezing
- inflammation of the eye
- asthma

A confirmed food allergy is treated by strict dietary avoidance. Do not serve food or recipes containing a food to which a child has an allergy. Caregivers should obtain a detailed list of all ingredients that the child should avoid eating. Some terms can be easily identified, whereas others are not so obvious. For example, if a child has an egg allergy, it is obvious that they should avoid egg white, but not as obvious to avoid ovomucoid or lecithin. It is important to find out from the parent what the consequences will be if the child consumes an allergenic food.

Nutrients that are deficient due to excluding one food or food group need to be identified and supplied by other foods or supplements. Caregivers should be instructed on how to replace the food or food group with safe, alternative choices.

The 9 most common food allergens are: milk, eggs, peanuts, tree nuts, wheat, soy, sesame seeds, seafood (fish, crustaceans and shellfish) and sulphites. Here are the links to fact sheets on each allergy.

# Algoma PUBLIC HEALTH Santé publique Algoma

Health Canada has fact sheets on each of these common food allergens that indicate foods to avoid.

Peanuts

Eggs

Milk

Tree Nuts

Wheat

Soy

Sesame

Seafood

**Sulphites** 

# **Tips for Dealing with Food Allergies**

- Establish a written policy on parent/caregiver responsibilities
- Develop a plan with the parent or guardian to meet the child's special dietary needs, inform other children and their parents (if necessary) and have a plan in place to respond to an emergency due to exposure
- Wash hands regularly to prevent cross-contamination when preparing foods
- Use separate cooking equipment and utensils and keep work surfaces clean to avoid crosscontamination between foods
- Read all food labels carefully. Ingredients in processed foods change over time
- Become familiar with the terms on food labels which identify ingredients made from problem foods
- Never assume that foods are free of a problem ingredient
- If in doubt, do not use a suspected food or product
- If homemade treats are brought from home, ask parents to attach an ingredient list to ensure the food is safe for allergic children
- Teach the children not to share their food or utensils by explaining about allergies and the importance of this health issue
- Review the use of food in crafts or activities that involve touching the food
- Wash all surfaces, such as table tops or toys that may come in contact with problem foods



# Picky Eaters

Caregivers are responsible for what, when and where food is offered.

Children are responsible for how much they eat and whether or not they eat.

# Tips for Dealing with the Picky Eater

- Keep it simple and serve child-size portions
- Serve foods separately and attractively
- Include finger foods
- Include a variety of foods
- Avoid day/food association: If it's Tuesday it must be meatloaf!
- Do not use sweets or desserts as a reward for finishing a meal. This will teach children that dessert is the most desirable part of the meal, increases their preference for sweet foods and may reduce acceptance of non-sweet foods
- Introduce new foods often and serve them with a food they already like
- Never assume what a child will or will not like to eat. Offer it to them and let them decide
- Never force a child to eat a food. Simply offer new foods often. Remember that it may take more than 10 exposures to a new food before a child will eat it
- Be a good role model! If you eat a variety of foods, children will likely want to try them too!

Check out the Nutrition Services handout below for more ideas on how to encourage children to eat specific foods.

How to Deal with a Fussy Eater

# Creating A Healthy Eating Environment

#### Make sure children are comfortable by:

- having comfortable chairs that allow the child to reach the table
- using cups that are easy to hold
- using the proper utensil size

#### Create a special place at the table by:

- having them design their own place mat or centerpieces
- using special cups or dishes or straws

#### Practice proper hygiene by:

- washing hands before eating
- brushing teeth after meals

#### Eating with the children will:

- give them a role model to teach them healthy eating habits
- help them develop social skills
- set a good example

#### Consider the child's development by:

- offering age appropriate foods
- setting appropriate limits and expectations

#### Offer child-size servings:

- offer small amounts of food, too much can be overwhelming
- allows you to offer a greater variety of foods

#### Be consistent with expectations:

- decide upon table manners and stick to them
- have a list of table expectations and make sure the children know what they are

#### Do not use bribes:

• children who are bribed or coaxed to try a new food are less likely to go back to that food than those allowed to accept or reject it on their own

#### <u>Recipes</u>

"Cooking Up Some Fun" is a resource from Region of Peel Public Health for parents and caregivers of young children. Check out the resource below which has some fun and simple recipes to try.

http://www.peelregion.ca/health/obesity/resources/pdfs/cookbook.pdf



#### **Resources**

For more information on nutrition contact a Registered Dietitian at Algoma Public Health Nutrition Services at 705-942-4646 or toll-free at 1-866-892-0172.

You can also speak to a Registered Dietitian at EatRight Ontario which provides free information on nutrition and healthy eating. Call toll-free in Ontario at 1-877-510-5102. Service is available from 9 a.m. to 5 p.m., Monday to Friday with evening hours Tuesday and Thursday to 9:00 p.m.

#### Check out these books and websites

#### Books

- Secrets to Feeding a Healthy Family (2008) by Ellyn Satter
- Child of Mine: Feeding with Love and Good Sense (2000) by Ellyn Satter
- Raising Happy, Healthy, Weight-Wise Kids (2001) by Judy Toews and Nicole Parton
- Your Child's Weight: Helping Without Harming (2005) by Ellyn Satter

#### Websites

- Algoma Public Health
- Dietitians of Canada
- Health Canada
- <u>Canadian Pediatric Society</u>
- EatRight Ontario
- Anaphylaxis Canada
- <u>Canadian Food Inspection Agency: Food Recalls/Allergy Alerts</u>
- <u>Allergy/Asthma Information Association</u>
- Region of Peel, Childhood Obesity