



# Special Olympics Nutrition Modules

### **About the Author**

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# Introduction

Healthy eating and drinking helps fight disease, manage stress, and improve athletic performance. But, knowing what and how much to eat can be confusing and frustrating at times. These series of nutrition modules have been developed as a tool to help coaches and caregivers help their athletes be the best that they can be!

**Special Olympics Coaches:** It can be difficult to teach your athletes about healthy eating and drinking during the limited time you have with them at practices and games. These modules contain simple and quick lesson plans with hands-on activities you could incorporate into practices. Additionally, there are corresponding take-home worksheets for athletes to test their knowledge after the session.

**Special Olympics Athlete Caregivers:** Incorporating healthy foods into your athlete's diet doesn't have to be hard or expensive. The resources provided in this manual will give you some ideas so when your athlete eats or drink, the healthy choice will be the easy choice. This manual also provides an on-a-budget shopping list as well as information on grocery store best buys and recipes.

**Special Olympics Athletes:** Hopefully you find these nutrition modules fun and learn something new! Special Olympics wants to help you choose healthy foods and drinks so you can perform at your absolute best!

# 3 key messages for athletes

1. Eat different fruits as a snack or for dessert instead of cookies, candy or ice cream

2. Eat the rainbow! Eat different colored veggies everyday (especially dark green and orange)

3. Try to eat fresh fruits and vegetables rather than drinking them as juice! You will get more fiber and less added sugar. Ask athletes "why is it important to eat fruits and vegetables?"

Let the athletes answer, but below are some speaking points if they need some help:

-They fight diseases such as heart disease, diabetes and cancer

-They are full of fiber, so they keep you fuller, longer

-They increase your immune system so you stay healthy

-They are lower in calories, and higher in nutrients to keep your body strong

Source: https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/fn-an/alt\_formats/hpfb-dgpsa/pdf/foodauide-aliment/print\_eatwell\_bienmana-ena.pdf

### How much do athletes need?

	Children Teens				ens	Adults				
Age in Years	2-3	4-8	9-13	14-18		19-50		51+		
Sex	G	irls and Bo	ys	Females Males		Females	Males	Females	Males	
Vegetables and Fruit	4	5	6	7	8	7-8	8-10	7	7	

#### What is One Food Guide Serving? Look at the examples below.



Whenever possible, let the athletes know it's best to eat fresh fruits and vegetables. Next best is frozen and then canned. When they are eating vegetables, it's better to have them steamed or grilled, not deep fried.

### Hands on activity: Eating the Rainbow

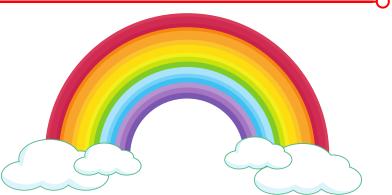
### Materials

If athletes are wearing the same colored uniform you may need: different colored construction paper (red, orange, yellow, green,

blue, purple, white, pink, brown, black)

### Directions

1. Ask athletes to stand in a circle.



2. Tell athletes that when you call out a color, everyone wearing that color should jog to the center of the circle. If the athletes are wearing the same colored uniform, have them hold the different colored pieces of construction paper and call the colors of the construction papers instead.

3. Tell the athletes in the center that they should name a fruit and vegetable that is the same color as what they are wearing or the paper that are holding.

4. Ask athletes outside of the circle to do 5 jumping jacks every time they hear of a food they have eaten before.

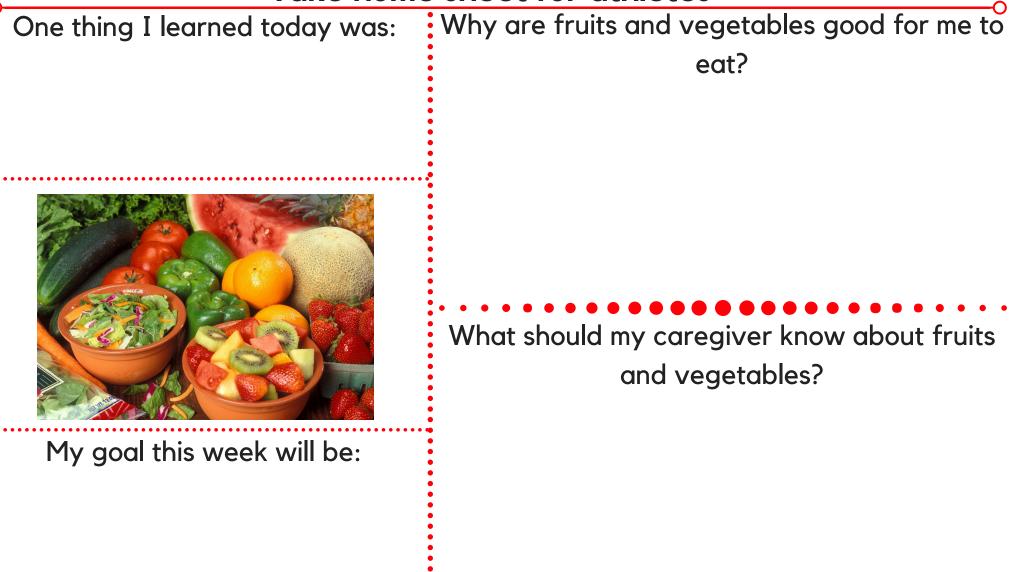
5. Continue calling out different colors until every athlete has had a chance to be in the middle.

6. Tell athletes the importance of eating a variety of fruits and vegetables (the rainbow!)

Some ideas of different colored fruits and vegetables include:

**Red:** peppers, tomatoes, strawberries, raspberries, cherries, apples, pomegranates. **Orange:** oranges, carrots, sweet potatoes, cantelope, squash, peaches. **Yellow:** mangoes, bananas, pineapple, peppers, corn. **Green:** spinach, kale, broccoli, zucchini, apples, avocado, snap peas, string beans, pears, kiwi lettuce, grapes. **Blue:** blueberries, blue corn. **Purple:** cabbage, eggplant, plums, grapes. White: cabbage, coconut, cauliflower, mushrooms **Pink:** grapefruit, watermelon, dragon fruit **Brown:** potatoes. Black: blackberries

Take home sheet for athletes



# Lesson 2: Sneaky Salt

# 3 key messages for athletes

 Instead of eating snacks like chips, pretzels, popcorn and crackers, eat fruits and veggies instead!

2. Try not to eat a lot of processed foods like canned soup, frozen meals and luncheon meats because these foods have a lot of salt.

3. Read the nutrition label on foods to see how much salt they have.

### Ask athletes "what does salt do? why should we limit how much salt we eat?"

-Salt is a mineral that helps with nerve and muscle function and controls water levels in our bodies. But, a lot of salt in our diet can lead to high blood pressure, stroke, stomach cancer and/or cardiovascular disease **"Which foods have a lot of salt?"** 

Let the athletes answer, but below are some speaking points if they need some help:

-Breads and bread-like products -Processed meats -Tomato and vegetable juice -Soups and sandwiches -Crackers, chips, pretzels -Pre-packaged frozen meals -Pizza

# Lesson 2: Sneaky Salt

### How much should athletes eat?

#### Age

1-3 years old
4-8 years old
9-13 years old
14-50 years old
51-70 years old
70+ years old

# 1500 mg is about 0.75 teaspoons (3.75 grams)

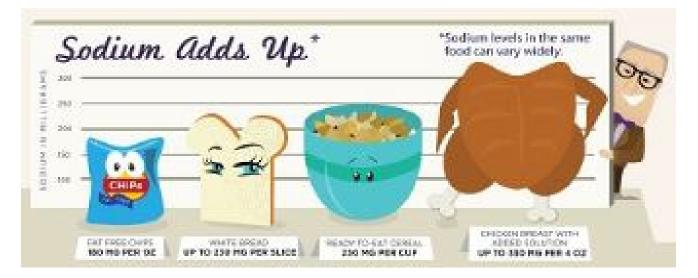
 2300 mg is about 1 teaspoon (6 grams)

#### Adequate Intake

1000 mg/day 1200 mg/day 1500 mg/day 1500 mg/day 1300 mg/day 1200 mg/day

#### **Upper Limit**

1500 mg/day 1900 mg/day 2200 mg/day 2300 mg/day 2300 mg/day



Sources: https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/sodium.html

https://www.healthline.com/nutrition/how-much-sodium-per-day

https://www.cdc.gov/salt/sodium\_infographics.htm

### Lesson 2: Sneaky Salt Hands on activity: A trip to McDonalds

### Materials

#### • Pen

 4 small square pieces of paper per athlete present Everybody has been to McDonalds and has a favourite meal, making it the perfect restaurant for this activity. The goal is to highlight the amount of sodium present in participants favourite meal, and remind them of the importance of watching their salt intake.

Activity

### Directions

 Take the pieces of paper and write a McDonalds food item on each one. (ie. Hamburger, small fries etc) Try to make sure all menu items are represented.
 Tell athletes to pick up papers representing their favourite meal. (fries, burger) Allow them to take as many as they would normally order.

3. Add up the amount of sodium in their meal using the chart, and compare it to the recommended intake for one meal (divide daily limit by three).

4. For every 100mg the athletes meal is over the limit, they must do 3 pushups

5. Convene and talk about the importance of lowsodium diets and ways to make healthier choices when eating out.

### Sodium guide

- Big mac 460mg
- Hamburger 469mg
- Fillet-o-fish 464mg
- Cheeseburger 626mg
- Quarter pounder 427mg
- Chicken nuggets (10) 900mg
- Small fries 134mg
- Medium fries 221mg
- Large fries 291mg



### Lesson 2: Sneaky Salt

Take home sheet for athletes



My goal this week will be:

# Lesson 3: Sweet Sugar

### 3 key messages for athletes

1. Limit processed foods such as cookies, candy, ice cream, cake.

2. Limit liquid sugar (like soda, energy drinks, hot chocolate) and drink water or low fat milk instead.

3. Use condiments in moderation! Many condiments have high fructose corn syrup, which is liquid sweetener.

### Ask athletes: "Why is it important to limit how much added sugar we eat?"

Let the athletes answer, but below are some speaking points if they need some help:

Diets with too much added sugar can increase the risk of diabetes, obesity, heart disease, high cholesterol, and cavities

Sugar naturally occurs in fruits, vegetables and dairy. These foods are good to eat in moderation because they contain nutrients that are good for our health. Foods with added sugars like cookies, muffins, candy and doughnuts should be limited.

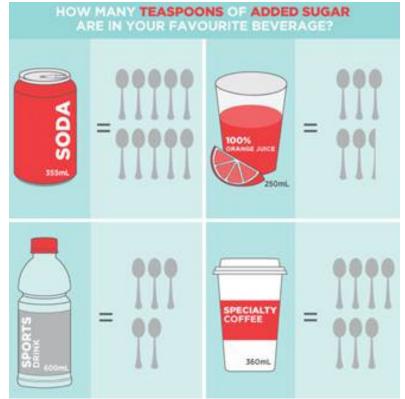
# Lesson 3: Sweet Sugar

### How much should athletes have? The 5% to 10% Rule

Sugar intake should be less than 5% and a maximum of 10% of athlete's daily calorie intake. For a 2000 calorie diet, this would be 12 teaspoons of added sugar.

### What can athletes do to decrease sugar intake?

- Decrease liquid calories like soda, sweetened hot drinks and juice
- Limit processed foods
- Snack on fruits, veggies, nuts instead of cookies, muffins, and candy
- Instead of sugary cereals for breakfast, eat oatmeal or high fiber cereal
- Eat out in moderation
- Read labels on packaged foods so you know how much sugar you're eating



# Lesson 3: Sweet Sugar

#### Hands on activity: Sugar eggs

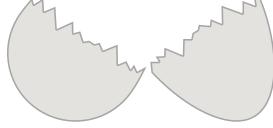
### **Materials**

- Egg shells (just use your leftovers from breakfast)
- Soft drink (Cola)

Jars

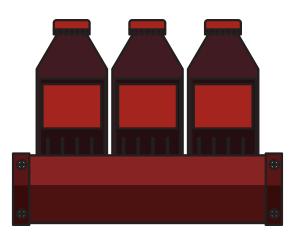
 Water (use more types of liquids, ie. orange juice to enhance the experiment) The point of this activity is to highlight the effects of sugar on ones teeth, and the body more generally. Eggs shells will act as the enamel on an athletes teeth and be placed into jars of various drinks, allowing athletes to see the corrosive effects of each liquid. This is a two part activity that will occur over the course of one week.

Activity

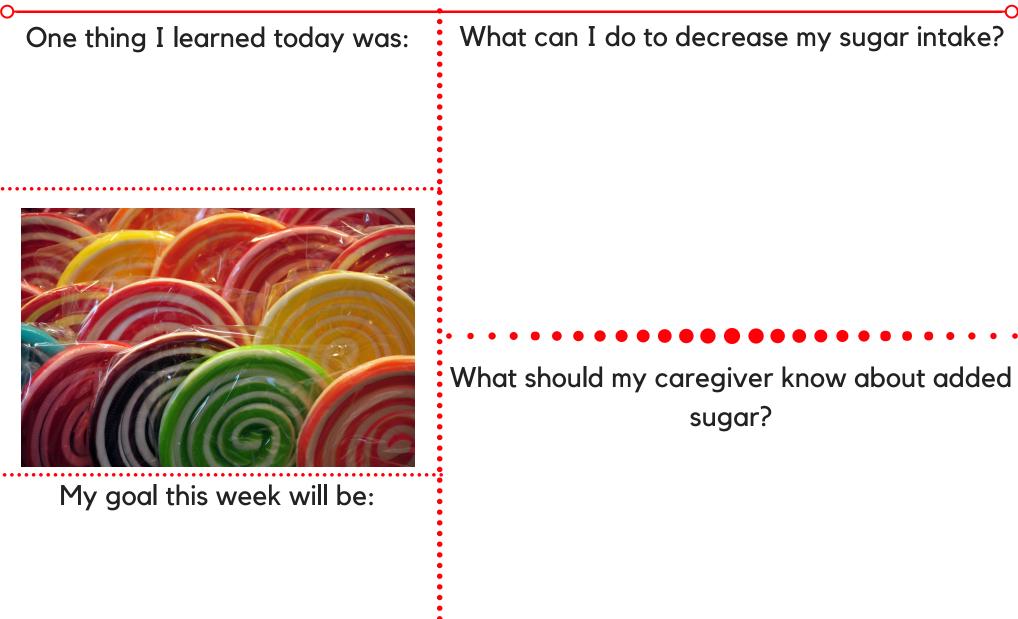


### Directions

- 1. Present athletes with the soda, water (and any other drinks you've added) and explain that the egg shells represent enamel.
- 2. Fill each jar with a single liquid, and place eggs shells in each jar.
- 3. Encourage athletes to try the experiment on their own when they get home and observe any changes they see.
- 4. After keeping the jars at home for one week, bring the jars to the next practice and open them.
- 5. Give athletes the opportunity to feel each egg shell and then discuss how they felt.
- 6. Ask athletes which drinks they believe had the worst effect.



### Lesson 3: Sweet Sugar Take home sheet for athletes



# Lesson 4: Fill Up on Fibre

# 3 key messages for athletes

 Eat more fruits and vegetables because they are full of fibre!

2. Instead of sugary cereals, eat high fibre cereals and oatmeal

3. Try to eat whole grains like brown rice and whole wheat bread instead of white bread and white rice

### Ask athletes: "What is fibre and why is it good for us?"

Let the athletes answer, but below are some speaking points if they need some help:

Fibre is a carbohydrate that cannot be digested found in plant foods. It is an important part of a healthy diet because it:

-Helps you feel fuller longer, so you don't overeat

-Helps promote regular bowel movements and protects against constipation

-Lowers blood cholesterol

-Prevents diabetes and heart disease

# Lesson 4: Fill Up on Fibre

### How much do athletes need?

-Women need 25 grams of fibre per day

-Men need 38 grams grams of fibre per day

-Athletes can increase fibre by eating fruits, vegetables, legumes (peas, lentils,

beans), nuts and seeds & whole grains

### The recommended number of servings for grains are below:

### **Recommended Number of Food Guide Servings per Day**

		Children		Tee	ns		ults ·		
Age in Years	2-3 4-8 9-13			ars 2-3 4-8 9-13 14-18		19-	50	51+	
Sex	Girls and Boys			Females	Males	Females	Males	Females	Males
Grain Products	3	4	6	6	7	6-7	8	6	7



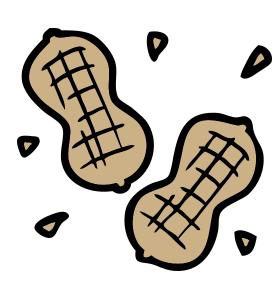
Sources: https://www.canada.ca/en/health-canada/services/nutrients/fibre.html

https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/fn-an/alt\_formats/hpfb-dgpsa/pdf/food-guide-aliment/print\_eatwell\_bienmang-eng.pdf

### Lesson 4: Fill Up on Fibre Hands on activity: High, Low or No Fibre Fun

### **Materials**

- Pictures of foods from all five food groups (vegetables and fruits, grains, milk and alternatives, meat and alternatives, oils and fats)
- Stickers



### Activity

The point of this activity is to help athletes understand what foods have high, low or no fibre.

### Directions

1. Have athletes pull a food picture from the deck. Then have them guess if it is high fibre, low fibre, or no fibre.

2. For every correct answer, give the athlete a sticker.

3. The first to get three stickers, wins.

Questions to ask athletes:

"What foods have fibre?"

-Fruits, vegetables, grains, beans, peas, nuts and seeds "Does meat have fibre?"

-No, fibre is only found in plant foods including those mentioned above

"Are white bread, white rice and pasta good sources of fibre?"

-It is better to eat whole wheat bread, brown rice and whole wheat pasta

# Lesson 4: Fill Up on Fibre

Take home sheet for athletes



My goal this week will be:

# Lesson 5: Dairy

# 3 key messages for athletes

1. Try to drink low fat or fat free milk (skim or 1%) or milk alternatives

2. Have yogurt for a snack or low fat chocolate milk after a game or practice

3. Try to include dairy into each meal to get enough calcium (add cheese to your sandwich)

### Ask athletes: "What foods are in the dairy group?"

Let the athletes answer, but below are some speaking points if they need some help:

-Milk (including powdered and canned)

-Fortified soy beverages

-Yogurt -Kefir

-Cheese

### Why are dairy

### products good for our health?

They provide nutrients like vitamin D and calcium which are important for bone health!

# Lesson 5: Dairy

### How much do athletes need?

### **Recommended Number of Food Guide Servings per Day**

	Children			Tee	ens		Adults			
Age in Years	2-3	4-8	9-13	14-18		19-50		51+		
Sex	Gi	irls and Bo	ys	Females Males		Females	Males	Females	Males	
Milk and	2	2	3-4	3-4	3-4	2	2	2	2	
Alternatives	2	2	5-4	5-4	5-4	2	2	2	5	



Products made from milk like cream cheese, cream and butter have little to no calcium. These products are not included in the milk and alternatives suggested foods.

### Lesson 5: Dairy Hands on activity: Dairy Serving Size Relay

### **Materials**

- Dice
- Tennis ball
- Baseball
- 2 9 volt batteries

### Directions

- 1. Have athletes split into two teams and line up 20 meters away from where you are standing.
- 2. Place materials in front of you and have athletes sprint towards you in (team relay format).
- 3. Once each athlete arrives, give them a serving quantity from the list and ask them to guess which material corresponds with the quantity. If the guess is wrong, athletes must do 3 push ups before their next guess. The team to finish last must do 20 jumping jacks.
- 4. Discuss the importance of following serving sizes.

### Activity

Serving sizes listed on packages and in recipes can seem abstract. This activity is aimed at teaching athletes what various serving sizes look like for dairy products in a fun way.



Is equal to 1 ounce of soft cheese



Is equal to 8 ounces of yoghurt



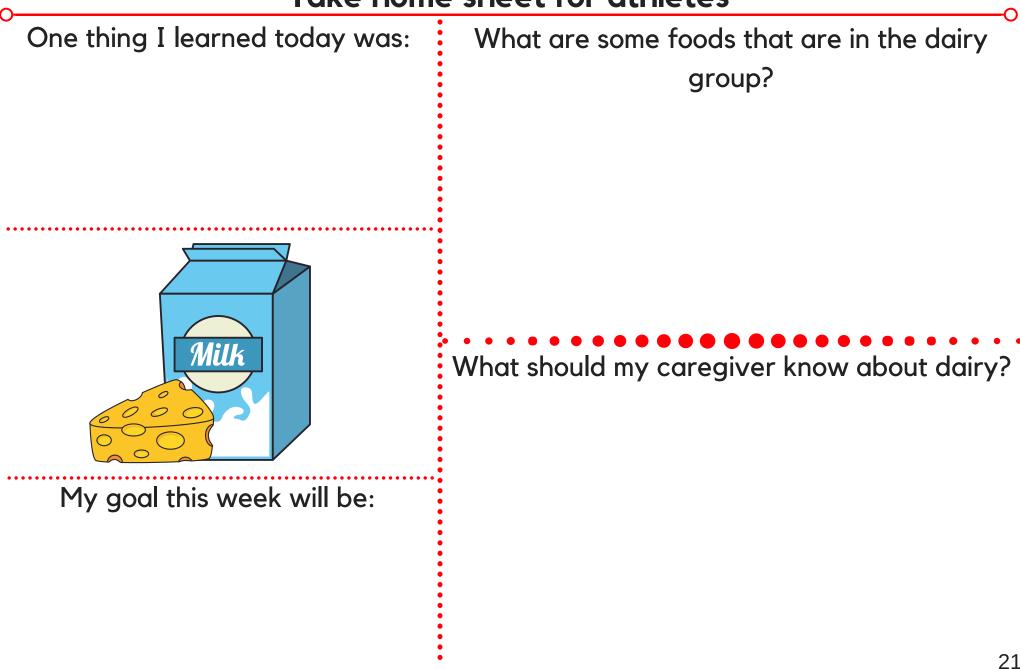
Is equal to 1 cup of milk



Is equal to 1.5 ounces of hard cheese

# Lesson 5: Dairy

Take home sheet for athletes



# 3 key messages for athletes

1. Try to eat lean meats like chicken, turkey, sirloin steak and seafood

2. When you eat meat at a restaurant, order it grilled instead of fried

3. Try meat alternatives like tofu, beans and eggs!

Ask athletes: "Why is it important to eat lean meats and meat alternatives (like beans, eggs and tofu)? "

Let the athletes answer, but below are some speaking points if they need some help:

-Meat and meat alternatives provide good sources of protein

-Protein helps build and repair your muscles

-Protein helps build healthy hair, skin and nails

-Exercise and eating protein can improve your strength!

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Sources: https://www.canada.ca/en/health-canada/services/food-nutrition/canada-food-guide/choosingfoods/milk-alternatives.html

http://www.specialolympics.bc.ca/sites/default/files/SOBC\_HealthandWellnessManual\_May2017\_web.pdf

### How much do athletes need?

**Recommended Number of Food Guide Servings per Day** 

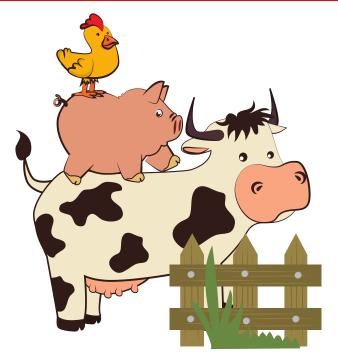
		Children	n	Tee	ens				
Age in Years	2-3 4-8 9-13			14-	18	19-	50	51+	
Sex	Girls and Boys			Females	Males	Females	Males	Females	Males
Meat and Alternatives	1	1	<b>1-2</b> Add a lit	2 tle bit of	<b>3</b> body tex	2 (t	3	2	3



#### Hands on activity: Farmer

### Activity

Different types of meat can have very different nutritious content. 'Farmer' is a fun activity that can teach athletes about what to look for when buying their protein.



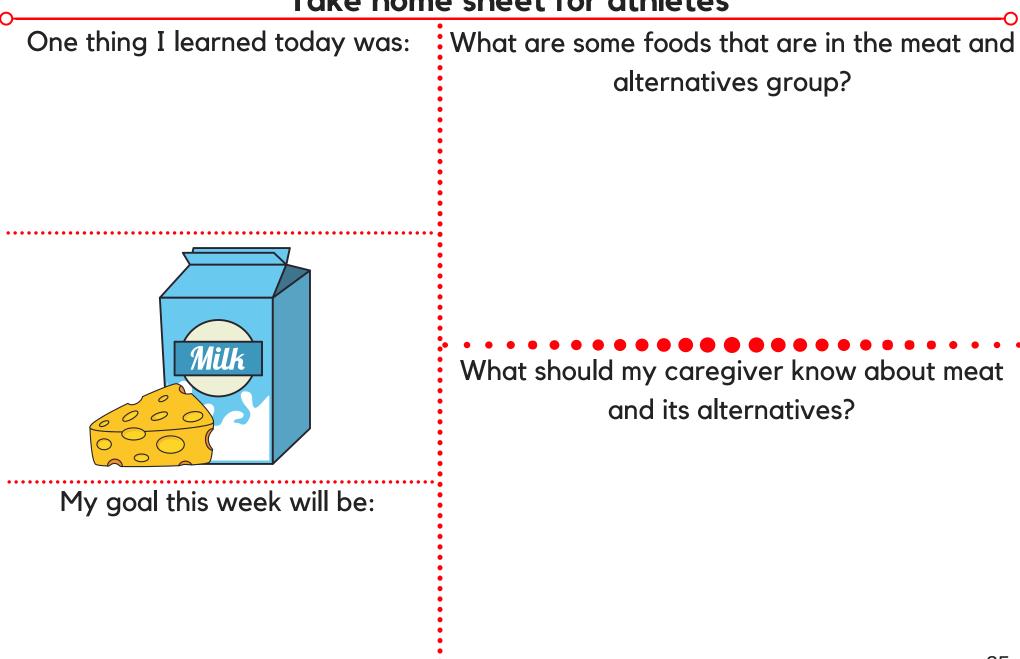
Directions

1. Athletes choose an animal or fish that they like to eat for protein and spread out around the room and begin acting like that animal.

2. The coach yells out a health trait associated with meat, and all the animals/fish that have that trait run to the centre. ie. "Farmer is looking for meat with low levels of mercury" or "farmer is looking for lean meat."

- 3. If an athlete fails to come at the right time, or comes at the wrong time, they must run two laps.
- 4. After several rounds, convene and discuss the different types of nutrition found in the meats they selected.

#### Take home sheet for athletes



# **Lesson 7: Hydration**

# 3 key messages for athletes

 Try to drink water or milk instead of soda or juice. Add fruit to your water if you want!

2. Carry a reusable water bottle with you everywhere you go so you can fill up on tap water often

3. Drink plenty of water before and after physical activities. Sip water every 20 minutes during activities, especially in hot weather or at high altitude.

### Ask athletes: "Why is drinking water important? What can happen if you have poor hydration?"

Let the athletes answer, but below are some speaking points if they need some help:

-Water is about 60% of our body weight -It carries nutrients and waste products between our major organs and helps regulate

body temperature

### Poor hydration can lead to:

fatigue, poor reaction times, risk of heat illness, headaches, nausea, dark yellow or brown urine, constipation, dry mouth and a negative impact on athletic performance

# **Lesson 7: Hydration**

### How much do athletes need?

### It is a myth that you need to drink 8 cups of water a day to stay healthy

- How much fluid athletes need depends on their sex, age and physical activity levels
- Fluids include: water, milk, juice, tea, coffee, soups and stews
- Men (19 years and older) should aim for 3 litres (12 cups) of fluids per day
- Women (19 years and older) should aim for 2.2 litres (9 cups) of fluids per day



### What about caffeine?

-Caffeine affects people differently!

-Watch what you add to your tea of coffee (choose skim milk instead of cream, and stevia instead of sugar)

-Limit caffeine to 400 to 450 mg per day (3 to 4 eight oz cups of coffee)

Sources: https://www.dietitians.ca/Your-Health/Nutrition-A-Z/Water/Why-is-water-so-important-for-my-body---Know-when-.aspx

 $https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/fn-an/alt_formats/hpfb-dgpsa/pdf/food-guide-aliment/print_eatwell_bienmang-eng.pdf$ 

# **Lesson 7: Hydration**

### What about sports drinks?

- Sports drinks contain a lot of refined sugar, artificial coloring and additives
- Unless you are exercising for more than 90 minutes, it is best to drink fresh water during games and practices
- If you are exercising more than 90 minutes, it may be helpful to drink a sports drink with electrolytes during exercise but try to make your own!
- Electrolytes are electricity conducting salts that help with muscle function and fluid levels

### Make your own sports drink

- 1 (4 inch) piece of ginger, peeled
- 1/4 cup fresh lemon juice
- 2 tablespoons fresh lime juice
- 2 teaspoons agave nectar or honey
- 1/8 teaspoon sea salt
- 2 3/4 cups mineral or coconut water

Finely grate ginger and, using a flexible spatula, press solids into a fine-mesh sieve

Set over a small bowl; discard pulp. You should have about 1 tsp. ginger juice. Combine ginger juice, lemon juice, lime juice, agave, and salt in a large measuring cup or bowl. Stir in mineral or coconut water. Pour over 2 glasses filled with ice.

### Lesson 7: Hydration Hands on activity: Rethink your drink

### **Materials**

- Gatorade
- Soda
- Orange juice
- Energy drink
- Sugar
- Measuring spoon (tsp)

### Directions

1. With the athletes, check the nutrition labels of each drink to determine the sugar content for a standard drink. Feel free to add more drinks as you desire.

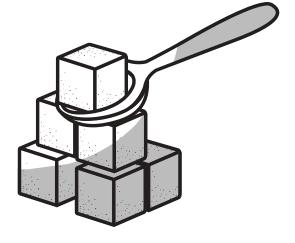
2. Divide the amount of sugar in grams by 4.2 to determine the amount of teaspoons. ie. 64 grams of sugar is equal to 15.2 teaspoons.

3. Measure out the corresponding amount of sugar in each drink and place it in a pile for everybody to see.

4. Convene and discuss healthier options for drinks before, during and after competition.

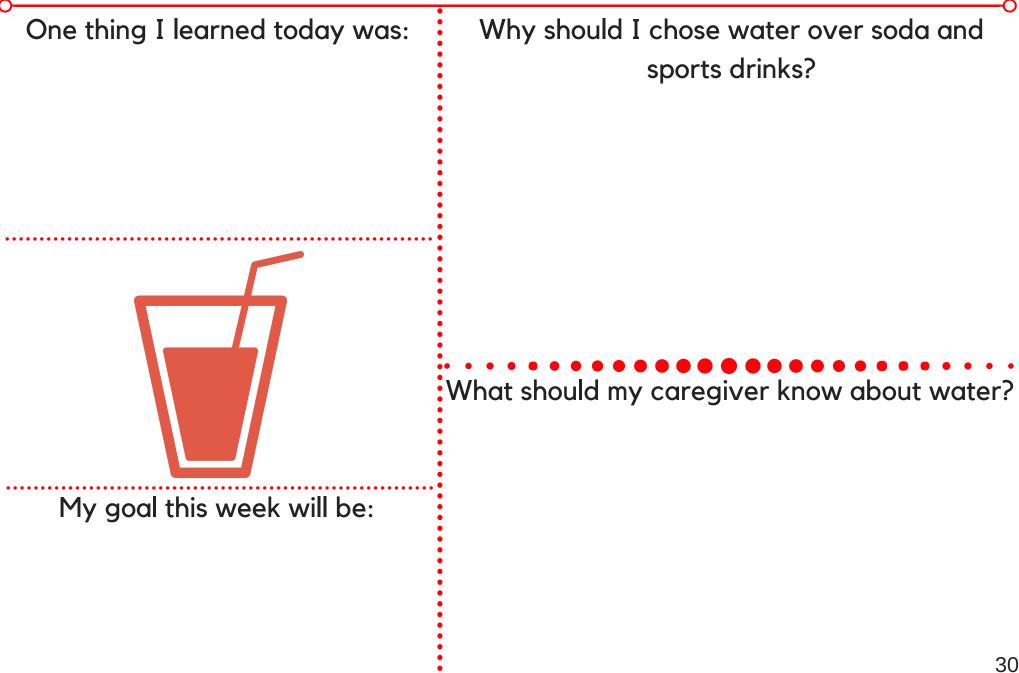
### Activity

Athletes are often marketed sports drinks that aren't very conducive to athletic performance. This activity is designed to show athletes just how much sugar is in the drinks they consume.





Take home sheet for athletes



# Lesson 8: Reading Labels

# 3 key messages for athletes

1. Ingredients on a nutrition label are listed in order from the most used to the least used.

2. Try to read labels at the grocery store before buying foods or before you eat

3. Practice makes perfect! The more you try reading labels, the easier it will get!

### Ask athletes: "What information can you get from a nutrition facts label?"

Let the athletes answer, but below are some speaking points if they need some help:

-Serving size, calories and % Daily Value Nutrition facts labels also provide information on 13 core

nutrients:

- 1. fat
- 2. saturated fat
  - 3. trans fat
- 4. cholesterol
  - 5. sodium
- 6. carbohydrate
  - 7. fibre
  - 8. sugars
  - 9. protein
  - 10. vitamin A
  - 11. vitamin C
  - 12. calcium

# Lesson 8: Reading Labels

#### How to read labels: Nutrition Facts Per 3/4 cup (175 g) 1. Look at the serving size Amount % Daily Value Is it for the whole item? Or just a portion of it?' Calories 160 Fat 2.5 g 4 % Saturated 1.5 g 2. Use the % Daily Value to see if the food has 8 % + Trans 0 g a little or a lot of a nutrient Cholesterol 10 mg Sodium 75 mg 3 % Carbohydrate 25 g 8% 3. Find food products that have more the Fibre 0 g 0% Sugars 24 g nutrients you want and less of what you don't Protein 8 g want! Vitamin A 2% Vitamin C 0% Calcium 20 % 0 % Iron When making an informed food choice 15% here are some nutrients you may want... is a is a a lot of

5% Daily Value or less is a little 15% Daily Value or more is a lot

lot

little

#### a little of

- Saturated and trans fats
- Sodium
- Fibre
- Vitamin A Calcium
- Iron

Source: https://www.canada.ca/content/dam/canada/healthcanada/migration/healthy-canadians/alt/pdf/publications/eatingnutrition/label-etiquetage/serving-size-fact-sheet-portion-fichedinformation-eng.pdf

This applies to all nutrients with a % Daily Value

### Lesson 8: Reading Labels Hands on activity: Granola bars and Chocolate

### **Materials**

- Chocolate bar (3)
- High-sugar granola bar (3)
- Cliff bar (3)
- Low sugar granola bar (3)
- High-fibre granola bar (3)

### Activity

Working in teams, athletes will be required to read nutrition labels for several popular sports snacks and figure out the differences. Some granola bars that are labelled healthy often have more sugar than a chocolate bar, learning how to read the labels is very important.

### Directions

1. Split participants into groups of three, and give groups one of each of the five bars.

2. Tell each group to place bars in order of sugar content. The first group to finish is exempt from five sit ups.

- 3. Tell each group to place bars in order of sodium content. The first group to finish is exempt from five push ups.
- 4. Tell each group to place bars in order of protein content. The first group to finish is exempt from five jumping jacks.

5. Convene and discuss which bar would be the best to eat after practice.



### Lesson 8: Reading Labels

#### Take home sheet for athletes

I ake nome sheet for athletes	
One thing I learned today was:	What information can I get from reading a nutrition facts label?: What should my caregiver know about reading nutrition facts labels?
Nutrition Facts       Per 3/4 cup (175 g)       Amount     % Daily Value       Calories 160       Fat 2.5 g     4 %       Saturated 1.5 g     8 %       + Trans 0 g     8 %       Cholesterol 10 mg     3 %       Carbohydrate 25 g     8 %	
Carbohydrate 25 g         8 %           Fibre 0 g         0 %           Sugars 24 g         9           Protein 8 g         1           Vitamin A         2 %           Vitamin C         0 %           Calcium         20 %           Iron         0 %	
My goal this week will be:	

Photo Source: https://www.canada.ca/content/dam/canada/health-canada/migration/healthy-

canadians/alt/pdf/publications/eating-nutrition/label-etiquetage/serving-size-fact-sheet-portion-fiche-dinformation-

### 3 key messages for athletes

 Practice moderation: it's okay to treat yourself sometimes, but limit the quantity of what you eat to the suggested serving size

2. Measure foods with measuring cups and use smaller plates and bowls when you can so you don't overeat

3. Ask yourself when you want more food if you are hungry or if you eating for another reason

### Ask athletes: "What are portion sizes and why are they important?"

Let the athletes answer but below are some speaking points if they need help:

- Portion sizes are how much you eat in a meal while recommended serving sizes are how much you are supposed to eat.
- Larger portions mean more calories.
- People are more likely to eat more when they are served larger portion sizes.
- People underestimate how much they have eaten when the portion size is larger.
- Not all portions are equal, a plate of steamed veggies is healthier than fried chicken!
- Eating adequate portion sizes is key to maintaining a healthy weight and to enhancing athletic performance.

### **Eat Well Plate**



The Eat Well plate is a good example of how you should be dividing your plate to ensure you have a healthy and balanced meal

## Here are some portion size recommendations for fruits and vegetables:



**Vegetables and Fruit:** Canada's Food Guide recommends 7 to 10 servings of Vegetables and Fruit a day depending on your age and gender. Here's what a Food Guide serving looks like.



Fresh, frozen or canned fruit 1/2 cup (125 mL) = 1/2 fist



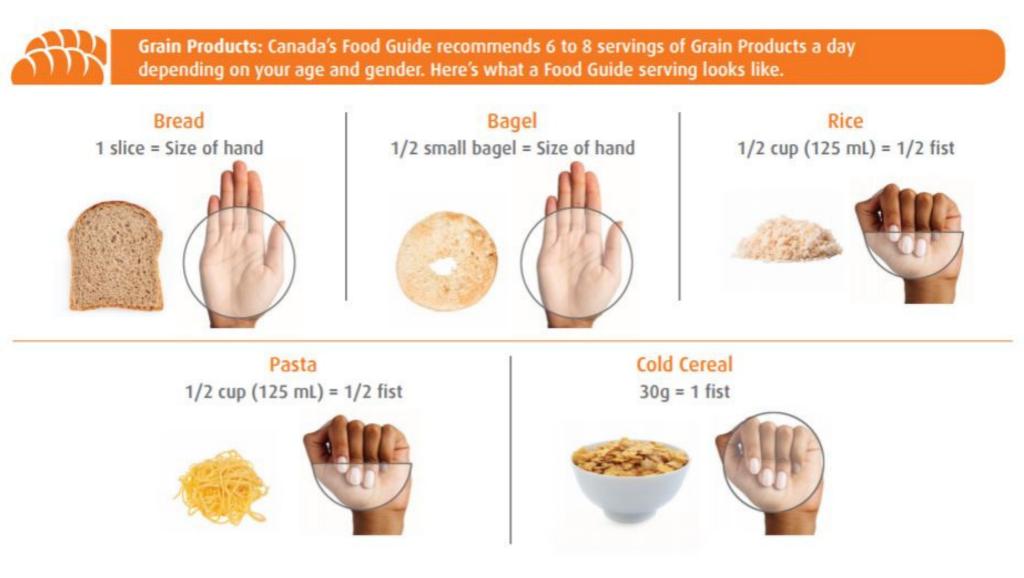
Dried fruit 1/4 cup (60 mL) = Cupped hand



100% fruit juice 1/2 cup (125 mL) = 1/2 fist



Here are some portion size recommendations for grain products:



## Here are some portion size recommendations for milk and alternatives:



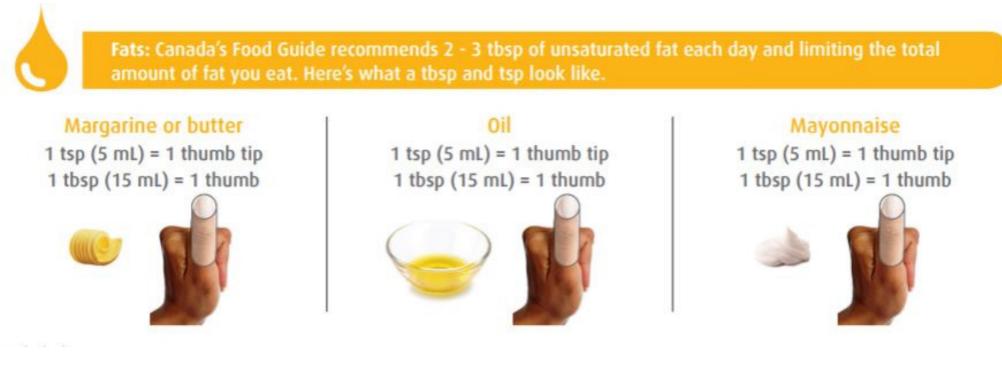
## Here are some portion size recommendations for meat and alternatives:



Source: https://www.eatrightontario.ca/getmedia/255dbbe6-23cd-4adf-9aba-f18310f09e3d/Handy-Servings-Guide-English-for-web-FINAL-October-2015.aspx

40

Here are some portion size recommendations for fats:



## Here are some portion size recommendations for sweet and salty foods:



Sweet and Salty Foods: Canada's Food Guide recommends limiting foods that are high in sugar, salt and fat. These can add a lot of calories without a lot of nutrition.

#### Chocolate

If you enjoy chocolate, have a few pieces once in a while. Buy a small chocolate bar instead of a large one. Avoid buying a large bag of single serving chocolates.



#### Baked goods

Cookies, muffins, tarts, croissants, brownies and cake slices from bakeries and coffee shops are often high in calories. Buy one as a treat only once in a while and share it with a friend.

#### Salty snacks

Put a handful of chips, pretzels or nachos on a plate instead of eating out of the bag. This will help you control how much you eat. Try to avoid second helpings of salty snacks.



#### **French fries**

It's easy to overdo it when eating fries. At restaurants, ask for a small portion or share one plate of fries with friends.



#### Here are some portion size recommendations for beverages:

Beverages: Canada's Food Guide recommends limiting beverages that are high in fat and sugar. These can add a lot of calories without a lot of nutrition.

#### Water

Quench your thirst with water. Add extra flavour with cucumber slices, mint, berries, lemon, lime or orange wedges.



#### Coffee

Sweetened coffee beverages can be high in sugar and fat. Ask for a plain latte or cappuccino with skim, 1% or 2% milk.



#### Рор

Try to avoid drinking pop. If you occasionally drink pop, limit how much you drink.



#### Fruit drinks

Fruit punch, fruit drink, fruit cocktail and fruit flavoured beverages are high in sugar and are not part of Canada's Food Guide. Limit or avoid these drinks.



#### Hands on activity: Musical Food Groups

#### Activity

This activity is designed to help athletes understand the five different food groups

#### **Materials**

- Pictures of foods from all five food groups (vegetables and fruits, grains, milk and alternatives, meat and alternatives, oils and fats)
- Paper, marker and tape to label and post the five different food groups around the room
- Music and speaker

#### Directions

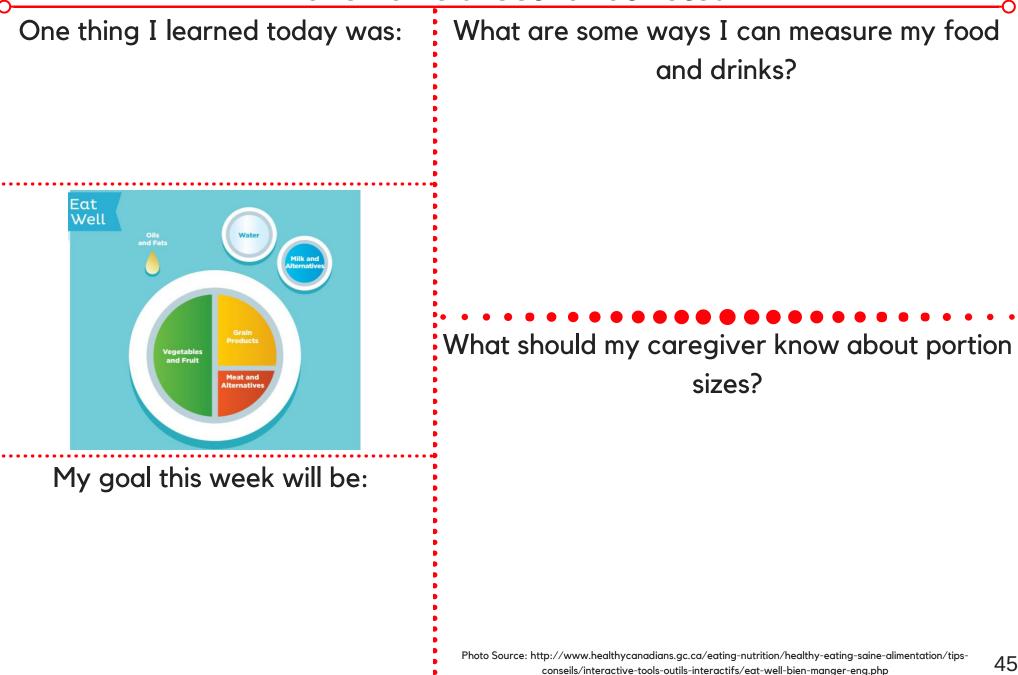
1. Designate and label five different food groups around the room:

- -vegetables and fruits
- -grain products
- -milk and alternatives
- -meat and alternatives
- -oils and fats.

2. Ask athletes to draw a picture from the deck but do not look at it until you start the music. Once you start the music, athletes can look at their picture and must walk or run around to the different food groups. When the music stops they have to quickly find their way to the food group that their food card belongs to. Go around the room to see if the athletes guessed correctly. If they did not, let them know which food group their card belongs to and why.

3. Have the athletes select another picture from the deck and continue playing.





## Lesson 10: Go, Slow and Woah Foods

3 key messages for athletes

1. GO: these are foods that are good to eat anytime!

2. SLOW: these kinds of foods should only be eaten sometimes or in the right amounts

3. WOAH: these foods are oncein-a-while foods and should be avoided most of the time

### Ask athletes: "What does go, slow and woah mean?"

Ask the athletes to think of a stoplight. Green is go, yellow is slow and red is stop: GO: these are healthy foods like fruits and vegetables, skim or 1% milk, whole grains. You should eat these foods all the time!

SLOW: these kinds of foods are more processed and higher in sugar, fat and calories like hamburgers and pancakes. These foods should only be eaten sometimes.

WOAH: Ask yourself "Woah! Should I be eating this?" These foods are once-in-a-while foods and should be avoided most of the time like french fries and candy

## Lesson 10: Go, Slow and Woah Foods

#### **GO FOODS**

#### Eat anytime!

- Fresh, frozen or canned fruits
- Fresh, frozen or canned vegetables
- Whole grain bread, pasta, brown rice and cereals
- Skim and 1% milk, low fat yogurt, reduced fat cheese
- Chicken and turkey without skin, extra lean ground
   beef, fish and shellfish (not fried), beans, tofu, egg

whites

- Ketchup, mustard, vinegar, fat-free salad dressings
- Water

#### **SLOW FOODS**

#### Eat sometimes

- Vegetables in added sauces, avocados
- 100% fruit juice, dried fruit
- White bread and pasta, waffles, pancakes, granola
- 2% milk, cheese spreads
- Lean ground beef, hamburgers, chicken and turkey with the skin on, low-fat hot dogs,
- Peanut butter and nuts
  - Whole eggs
- Low fat frozen yogurt, baked chips, pretzels
- Vegetable and olive oil, low fat salad dressings
- 2% milk. 100% juice, sports drinks

#### **WOAH FOODS**

- Once in a while
- Any fried vegetable like french fries
- Canned fruits in syrup
- Doughnuts, muffins, sugary cereals
- Whole milk, cream cheese, full fat cheese
- Fried chicken, bacon, fried fish and shellfish, hot dogs,
- chicken nuggets, pepperoni, lunch meats, sausage
- Cookies, cakes, pies, cheesecake, ice cream, chips, buttered popcorn
- Butter, gravy, mayonnaise,
- sour cream, cream cheese
- Whole milk, soda, juice with
- less than 100% fruit juice 47
   Source: http://kidshealth.org/en/kids/go-slow-whoa.html#

### Lesson 10: Go, Slow and Woah Foods

#### Hands on activity: Go-Go-Go-Stop!

#### **Materials**

#### Activity

- 12 large sheets of paper
- Black marker

We all know the game go-go-go-stop, where players line up and race to the finish line based on the directions of the activity leader. If the leader says go, participants can run. If the leader says stop, participants must immediately stop or return to the beginning of the race. This is a fun version of the game based on go, slow, and woah foods..

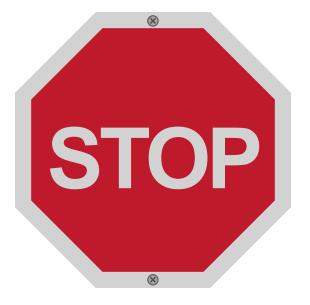
#### Directions

1. Write the names of go, slow and woah foods on separate pieces of paper (3 for each category).

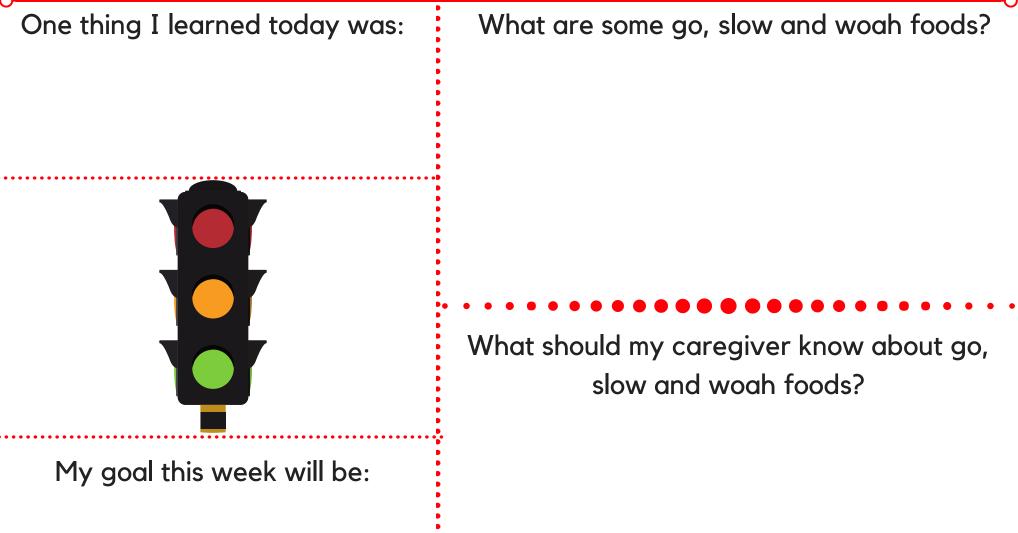
2. Have participants line up at the end of the room, and explain the rules.

3. If you hold up the name of a go food, participants can run. A slow food means they can only walk. Raising a woah food means they must stop still, if they don't, they must return to the starting line. Play the game until one participant reaches the finish line. Repeat a few times in necessary.

4. Convene and recap the key messages for lesson 10.



### Lesson 10: Go, Slow and Woah Foods Take home sheet for athletes



## Lesson 11: Eating Out

### 3 key messages for athletes

1. Try and plan what you will order at the restaurant before you get there

2. When you get your meal, pack half of it in a take-out container to eat it later

3. Instead of french fries as a side, order a small salad or fruit instead. Don't upsize!

### Ask athletes "Why is eating healthy when at a restaurant is important?"

Let the athletes answers but here are some talking points if they need help:

-It is fun to treat ourselves with a meal at a restaurant or fast food. Or if you are on the road for competition, a lot of the time fast food is the fastest and most convenient option.

-Even though it tastes really good, food at restaurants and fast food chains is usually higher in calories, fat and salt than food prepared at home.

-By choosing healthier options when you eat out, you will feel better when you practice and compete!

## Lesson 11: Eating Out

Tips for healthier ways to eat out:

#### When eating out at sit down restaurants:

- -don't order appetizers
- -skip dessert, or if you get dessert, order frozen yogurt or fresh fruit
- -don't order fried foods, have foods grilled or sauteed instead
- -get veggies or salad instead of french fries as a side
- -ask for dressing on the side if you order a salad
- -put half your meal in a take home box right away
- -order water as your drink instead of soda or juice
- -check the menu before you go so you can plan your healthy meal before you arrive

#### When eating at fast food restaurants:

- -if you order a sandwich or burger, don't get a combo
- -don't upsize if you do get a side and drink
- -order a side salad, fruit slices or yogurt instead of fries as a side
- -if you order a soda, ask for a small or medium size and don't get a refill
- -ask for no mayonnaise on your sandwich

### Lesson 11: Eating Out Hands on activity: Server

#### Activity

Eating out can be one of the most difficult times to stick to your nutritional goals. This activity tests the athletes ability to recognize unhealthy habits when eating out.



#### Directions

1. Split athletes into groups of 6 and identify one to be the server, and five to be patrons in a diner.

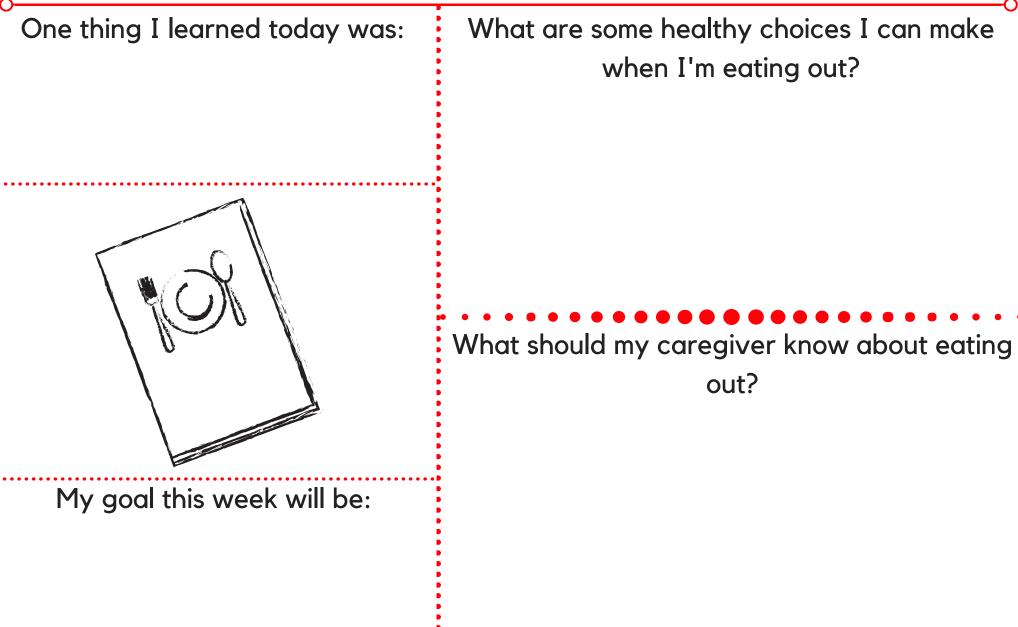
2. Give each patron an example of an unhealthy eating habit at a restaurant. For example, ordering a soft drink, adding bacon to a burger or asking for extra dressing for a salad.

3. The server comes to the table and takes each athletes order. If they catch the unhealthy habit and suggest an alternative, the athlete who ordered the meal must do 5 push ups. If the server misses the unhealthy order, or does not suggest a healthier alternative, they must do 3 sit ups. Continue until the server has taken all orders. Give several athletes the chance to be server.

4. Convene and talk about the choices that were made as well as some of the suggestions that were given to make the meal healthier.

### Lesson 11: Eating Out

Take home sheet for athletes



## **Lesson 12: Sports Nutrition**

3 key messages for athletes

- 1. Be prepared! Pack pre and post game snacks
- 2. Stay hydrated! Bring plenty of water to your workout
  - 3. Don't eat heavy meals right before training

## Eating before, during and after

a game

#### Before

- Eat foods that are familiar to avoid upsetting your stomach
- Foods that are high in carbs, moderate in protein and low in fat

#### During

- Drink 7 to 10 oz of fluid every 10 to 15 minutes
- Replenish lost sodium through electrolyte drinks (avoid high sugar)
- Avoid dense, solid foods if snack is needed

#### After

- Eat or drink carbs as soon as possible
- Drink at least 20oz of water per pound of weight lost from sweat
- Eat a high-carb meal that is high in protein within two hours of finishing your workout or athletic performance

### Lesson 12: Sports Nutrition

#### What should an athletes meal plan look like?

#### BEFORE

4-6 hrs before: eat a meal high in carbs like pasta

1-2 hrs before: preworkout snack with carbs and some protein

30 mins before: preworkout snack like fruit

5-10 mins before: fluid only

#### DURING

Drink water!

If you are working out intensely for longer than 1 hr or if it is really hot: fluid carbohydrates may help replenish lost sodium

#### AFTER

30 mins after: ratio of 3:1 or 4:1 carbs to protein to help body recover

2-3 hrs after: post workout meal with complex carbs and good quality protein

Drink 20oz of water for every pound lost to sweat

### Lesson 12: Sports Nutrition Hands on activity: Daily diet

#### **Materials**

#### Activity

• Paper

 $\cap$ 

- Pens
- Water bottle
- Low-sugar electrolyte drink
- High carb meal (or a picture)
- High protein meal (or a picture)

This activity is aimed at getting athletes to consider their current sports nutrition habits and compare them to ideal habits. Encourage athletes to prepare a daily meal strategy for their next workout based on what they learn in this activity.

#### Directions

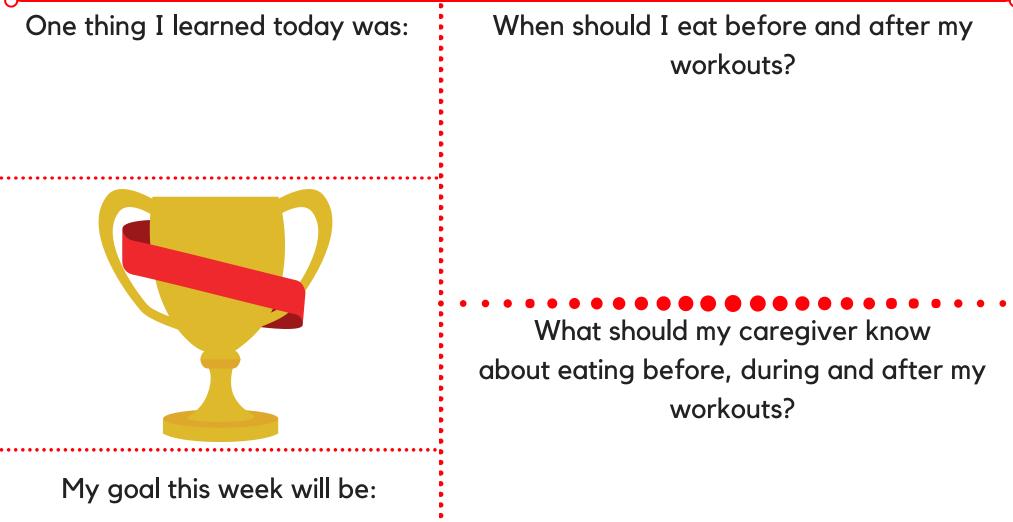
 Give each athlete a pen and piece of paper, and ask them to write down what they have already eaten that day and when they ate it. Then ask them to list what they have brought to the practice to eat or drink. Lastly, athletes should write down what they plan to eat afterwards.
 Present the foods/drinks to the athletes and explain what they should eat and when to enhance their athletic performance and maintain their health.

3. Go around in a circle and ask athletes to suggest one change they could have made to have been better prepared athletically.

4. Throughout the season, remind athletes of the need for proper sports nutrition and point out when better choices could be made.



### Lesson 12: Sports Nutrition Take home sheet for athletes









# Information for Caregivers

### **Additional Information on Portion Sizes**

Studies show people eat more when confronted with bigger portion sizes

- Skipping meals leads to overeating
- Measure and weigh food, looks can be deceiving
- Know your rules of thumb, ie. a tbsp of butter = 1 poker chip



#### **Use Portion Control Plates**

Portion Control Plates can help provide guidelines for a balanced and well-portioned diet and help trick your brain into thinking you're full. - If you're at a restaurant, ask the server for smaller plates - If it's a buffet, use the smaller plates available to avoid overeating

Photo Source: http://www.healthycanadians.gc.ca/eating-nutrition/healthy-eating-sainealimentation/tips-conseils/interactive-tools-outils-interactifs/eat-well-bien-manger-eng.php 59

## Grocery Shopping Tricks and Tips Intro

Modern supermarkets know how consumers operate, and design their stores to maximize profit without always considering the health of their customers. This section will provides tips for avoiding the traps and finding healthy, affordable food.

### The Biggest Tip - Avoid the Center!

Most grocery stores follow the same layout, with packaged foods in the middle, and whole foods on the outside.

- Buy most of your food on the outside

In the frozen and packaged sections,
 look for products made with whole foods
 with lower salt, sugar and fat content



### Grocery Shopping: Before you go

#### When to go

- Once per week more time spent in store means more unneeded purchases
- 2. When you have energy it's easier to focus on making good choices when you're not tired
- 3. When your stomach is full you'll buy fewer snacks

#### Make a Plan

1. Create a list and stick to it

- 2. Clean your fridge and cupboard to make sure you use what you have
- 3. Organize your food storage to make inventory easier
- 4. Look for coupons and check sale prices at the stores you commonly visit
- 5. Return your recyclables, empty cans can add up

#### Running Late?



If you're stressed, late or just in a hurry, visit grocery stores that you're familiar with. It will save you time and energy as you know where everything is!

## Grocery Shopping: When you are there

1. Visit the reduced section at the back of the store

2. Avoid packaged or pre-cut "convenience foods", chop up your carrots and cheese yourself

3. Skip the snack and soda aisle

4. Stock up on items when they're on sale, just make sure they won't expire before you use them

5. It's not always cheaper to buy in bulk, bring a calculator and do the math

- 6. Read the store flyer to find deals
- 7. Be weary of the word "special", it might not be on sale
- 8. Buy non-food items like detergent at discounts stores







### Grocery Shopping: After you leave

Food prep Sunday! Plan meals for the week to keep your athlete healthy!

#### Make your meals for the week at once

- 1. Prepare your lunches for the week every Sunday. You'll eat out less.
  - 2. If you're making dinner, plan to make enough for leftovers.

3. When you buy in bulk, pre-cook or marinate it and then freeze it. The less work making dinner when you get home, the more likely you'll avoid the fast food drivethrough.

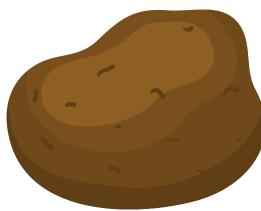
4. Pre-cut fruits and veggies once a week, it will save time when preparing dinner

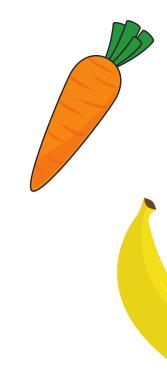


## Fruits and Vegetables: Best buys

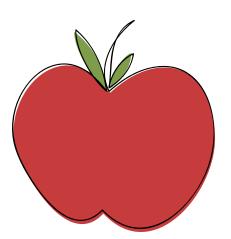
The following are some of the best fruits and vegetables to buy for affordable nutrition. Don't forget to buy locally produced, in-season products to save!

- Frozen vegetables
- Canned tomatoes
- Onions
- Squash
- Potatoes





- Cabbage
- Bags of whole carrots
- Fresh fruit in season
- Canned fruit
- Bananas
- Apples



### Grains: Best buys

The following are some of the best grains to buy for affordable nutrition. Grains won't spoil quickly so be sure to buy in bulk if your favorite product is on sale. Look for products without added fat and sodium.

- Pasta
- Pot barley
- Rolled oats (not individual oatmeal

portions



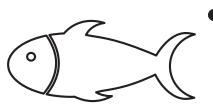
- Rice
- Store branded whole grain cereals
- Bread (check the
  - discount section)
- Quinoa (seed, although high in protein)



## Meat and Alternatives: Best buys

The following are some of the best meat and alternatives to buy for affordable nutrition. Avoid eating too much processed or red meats and look for alternatives with less added sodium and fat. Cheaper cuts taste great when slow-cooked!

- Stewing meat
- Chuck steaks
- Whole chicken
- Ground beef (look for lean)
- White fish (sole, halibut)



- Beans, tofu and lentils
- Canned tuna



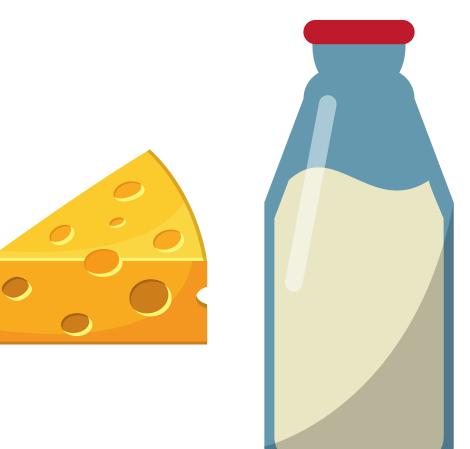
(skipjack is cheaper and has less mercury than albacore)

Peanut butter (raw has less sugar)

## Milk and Alternatives: Best buys

The following are some of the best milk and alternatives to buy for affordable nutrition. It's possible to save quite a bit by buying in bulk as long as you will finish it before expiry. Avoid buying individually packed items as they often cost far more. Recent trends have seen an increase in nut-based alternatives which can be costly without providing substantially enhanced nutrition.

- Milk (buy in bulk and avoid heavily filtered products to save)
- Cheese (cut or grate yourself to save)
- Yogurt (look for products with less sugar added)



## Shopping List on a Budget

Having a shopping list is crucial to sticking to a budget and ensuring that nutritious food is in the fridge. The following is an example of a balanced shopping list for a week.



#### Fruits/Dairy/Grains/Vegetables

- Seasonal fruits
- Seasonal vegetables
- Frozen stir fry
- Skim milk
- Low-fat/suger yogurt
- Low fat block cheese
- Whole grain cereals
- Brown rice
- Whole grain pasta



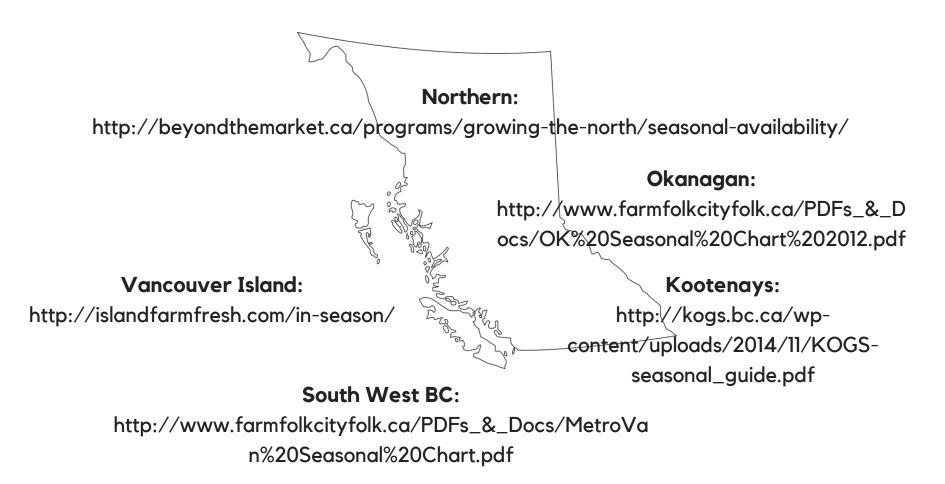
#### Protein/Snacks

- Beans (black, kidney
- Eggs
- Whole chicken
- Skipjack tuna
- Low-sugar peanut butter
- Oatmeal cookies
- Low-fat/sugar frozen yogurt

### Foods in Season Intro

Buying foods that are out of season is the quickest way to rack up a hefty bill. The added need for refrigeration or transport simply make it more expensive to get these items on the shelf. In BC, regions vary greatly in climate and therefore have different foods that are 'in season'. Check out the link below for your

region!

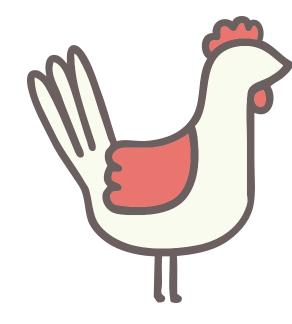


### Foods in Season: Spring

Late March and April is when Canada sees its first crops of the season. BC is less prone to frost than other parts of the country, making produce available earlier here.

#### Produce

- Asparagus
- Rhubarb
- Carrots
- Cabbage
- Kale
- Leeks
- Mushrooms
- Onions
- Sweet potatoes
- Radishes



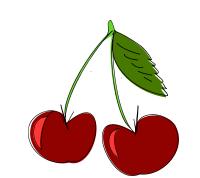
- Milk cows produce the most when they are expecting offspring
- Eggs chickens, ducks and more all produce the most in the spring
- Meat leaner animals like chicken and lamb are best in the spring

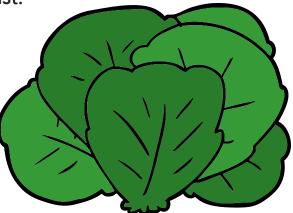
### Foods in Season: Summer

In the early summer (May/June) berries start to appear on shelves and leafy greens become more plentiful. July and August brings cucumbers, tomatoes and other produce from the Prairies as well as raspberries and cherries from the coast.

#### Produce

- Cherries
- Strawberries
- Watermelon
- Potatoes
- Squash
- Cucumber
- Turnips
- Peppers
- Onions
- Mushrooms
- Sweat peas
- Corn





- Milk cows are still producing high quantities of milk
- Eggs eggs are still widely available as chickens still produce
- Meat lamb and chicken are slowly becoming out of season



### Foods in Season: Fall

The end of the summer and early fall is one of the best times of the year for fruits like grapes and apples. However, it is your last chance to get summer vegetables like corn in season. Root vegetables start to sweeten up as frost comes and animals like deer and cows come into season.

#### Produce

- Apples
- Cherries
- Blueberries
- Pears
- Cranberries
- Carrots
- Eggplant
- Fennel
- Garlic
- Mushrooms
- Celery

- Milk/Eggs traditionally milk and eggs are less available in the fall, although modern farming techniques have reduced the discrepancy
- Meat Cows and deer who have been eating grass are now widely available and affordable



### Foods in Season: Winter

As you can imagine, not much grows in the cold Canadian winter. That's why it's best you make the most of the foods that store well like beans, carrots and potatoes.

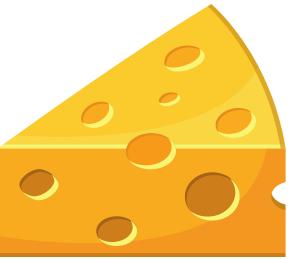
#### Produce

- Pumpkins
- Carrots
- Potatoes
- Apples
- Pears
- Turnips
- Parsnips
- Peas
- Kale
- Leeks
- Cabbage
- Brussel sprouts





- Butter and Cheese the rich creamy dairy from the spring has now been converted into butters and cheese
- Meat Turkey and ham, two festive holiday traditions appear on shelves



### Recipes

#### Out of ideas for what to make?

**Special Olympics** offers a series of healthy, affordable and easy-to-prepare recipes for the aspiring athlete:

nutritionguide.specialolympics.ca

**BBC Good Food** has an entire section just for cheap and healthy recipes: https://www.bbcgoodfood.com/recipes/collection/cheap-and-healthy

**Budget Bytes** is a blog and website filled with recipes and information catering to the cost-conscious chef: https://www.budgetbytes.com/

**Greatist** recently published this great list of more than 400 healthy and affordable recipes:

https://greatist.com/health/cheap-healthy-recipe-collection



### Safe Food Storage

Hot and cold food storage - key tips

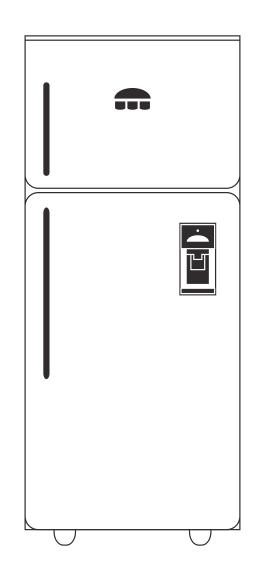
**Temperature** - refrigerator set at 4 °C (40 °F) or lower and your freezer at -18 °C (0 °F) or lower to avoid the buildup of bacteria

**Expiry** - visit this Health Canada website for a detailed breakdown of how long it takes for different foods to go bad at ideal temperatures:

https://www.canada.ca/en/healthcanada/services/general-food-safety-tips/safe-foodstorage.html

**Shopping** - buy cold or frozen foods at the end of your shopping trip and keep raw meat, seafood and poultry away from other foods in your cart

**Cleaning** - wash your hands thouroughly before and after handling food products. Make sure you use a different cutting board for produce and raw meats



### **Additional Resources**

#### Want to learn more?

**Special Olympics** offers a series of excellent learning activities for athletes and caregivers alike: *nutritionguide.specialolympics.ca* 



**Special Olympics** British Columbia

**Food Banks Canada** runs a website resource bank focused on healthy and affordable nutrition for Canadians:

https://www.foodbankscanada.ca/Our-Work/Nutrition-Resources.aspx

**Farm Folk City Folk** is an NGO that aims to cultivate a local and sustainable food system. Their Knowledge Pantry is a great place to learn about options in your town: http://www.farmfolkcityfolk.ca/resources/knowledge-pantry/

**Meals and More** is a nutrition manual designed by the provincial government and acts as a nutrition guide for those in a group home setting:

http://www.health.gov.bc.ca/library/publications/year/2008/Meals\_and\_More\_Manual.pdf

**BC Farmers Market** is a great place to check to see what's in season around the province: *http://www.bcfarmersmarket.org/fresh-market/whatsinseason*