



**GRADE  
SEVEN**

## ORAL HEALTH CURRICULUM



The dental public health professional association, Ontario Association of Public Health Dentistry (OAPHD), has specially created the following Grade 7 oral health module to align with the new Ontario Curriculum, Grades 1—8: Health and Physical Education, 2009.

OAPHD would like to acknowledge the following Ontario Public Health Units for their collaborative effort in the development of this resource:

Brant County Health Unit  
Chatham-Kent Health Unit  
Public Health Services City of Hamilton  
Haldimand-Norfolk Health Unit  
Haliburton Kawartha Pine Ridge District Health Unit  
Halton Region  
Hastings and Prince Edward Counties Health Unit  
Niagara Region Public Health  
Oxford County  
Region of Peel – Public Health  
Porcupine Health Unit  
Region of Waterloo Public Health  
Simcoe Muskoka District Health Unit  
Sudbury and District Health Unit  
Wellington-Dufferin-Guelph Health Unit  
York Region (Grade 7 Mouth guards)

OAPHD is very interested in your feedback on the following module. Please take a few moments to complete the following survey: <http://www.surveymonkey.com/s/VL2QLV9>



## **General Topic: Grade 7 Personal Safety – Mouthguards**

**This section covers the following expectations from The Ontario Curriculum, Grades 1—8: Health and Physical Education, 2009. (Grade 7)**

- **A3.1:** Demonstrate behaviours and apply procedures that maximize their safety and that of others (e.g., following appropriate procedures and guidelines, demonstrating social responsibility, checking that they have their puffers and/or epinephrine autoinjectors, checking for hazards such as pencils or other objects on the floor or potholes on the field before beginning activities, using mouth guards when necessary during recreational activities in the community, avoiding pressuring a peer to participate in unsafe activities, being respectful of others who may be hesitant to try new skills) in a variety of physical activity settings (e.g., school, community recreational facilities, outdoor recreational venues)

### **Activities**

- **Class discussion**
- **Group discussion**
- **Presentation-Coach or gym teacher**
- **Magazine cover**
- **Athlete interview**
- **Crossword puzzle**

*(Activities can be incorporated into lesson plans for English, Art, Science, Social Science and Health.)*

### **Additional Information**

Canadian Dental Hygienist Association: [www.cdha.ca](http://www.cdha.ca)  
Health Canada: [www.hc-sc.gc.ca/](http://www.hc-sc.gc.ca/)  
Ontario Dental Association: [www.oda.on.ca](http://www.oda.on.ca)

*(Please note the location of the URL's can change over time.)*



## Background

- Oral injuries that occur through sport activities can be painful and costly. Athletes have a good chance of receiving a facial injury during a sport session. The possibilities of facial injury increase over a playing career.
- A mouthguard is a piece of equipment that fits over your top teeth and looks like a model of your teeth.
- Mouthguards can be made in a clear or coloured material.
- Mouthguards help prevent damage to teeth, lips, cheeks, mouth and jaw.
- Mouthguards are recommended for practice and games of all contact sports including basketball, baseball, soccer, hockey, squash, racquetball, lacrosse, rugby, football, wrestling, and martial arts.
- Mouthguards are also recommended for non-contact sports, such as in-line skating, skateboarding and bicycling.

## Types of Mouthguards

There are three basic types of mouthguards to choose from:

- **Stock or ready made mouthguard:**
  - This type is the least expensive and can be bought at most sport stores.
  - It is the least desirable of the three types because it is sold as one size fits all and does not conform to an individual mouth well.
  - Athletes complain that stock or ready made mouthguards do not fit well and interfere with breathing and speaking.
  
- **Boil and bite mouthguard:**
  - This type of mouthguard is placed in hot water for a period of time so that it can soften and be moulded to the teeth.
  - These mouthguards are also sold at sport stores and are relatively inexpensive.
  - This type of mouthguard does not offer a perfect fit, can also be uncomfortable, and can interfere with breathing and speaking.
  
- **Custom-made mouthguard:**
  - This is a mouthguard that is made by a dental professional.
  - This type is a little more expensive, but offers the best fit and is the most comfortable for speaking, breathing and enjoying playing a sport.
  - This is the best choice for a sports mouthguard.

## Mouthguard Care

- Mouthguards must be checked regularly because they wear down over time. When this happens they are less effective at preventing injury.
- If a mouthguard begins to feel loose, has a tear or hole, it must be replaced immediately. Otherwise it should be replaced every 2-3 years.
- Mouthguards should remain on the teeth during the whole practice or game. They should not be removed from the teeth and chewed on.
- Keep it clean! Mouthguards should be washed with soap and water and brushed with a toothbrush, and rinsed with cold water or an antibacterial mouthwash after each use.
- Store the dry mouthguard in a hard, ventilated container.
- Keep mouthguard away from heat and direct sunlight.

## References

American Dental Association. (2009). *Statement on athletic mouthguards*. Retrieved from <http://www.ada.org/1875.aspx>

Canadian Dental Hygienist Association. (2010). *Mouthguard use and care*. Retrieved from [http://www.cdha.ca/Content/NavigationMenu/OralCareCentre/FactsTips/MouthguardUseandCare/Mouthguard\\_Use\\_and\\_C.htm](http://www.cdha.ca/Content/NavigationMenu/OralCareCentre/FactsTips/MouthguardUseandCare/Mouthguard_Use_and_C.htm)

Health Canada. (2010). *Athletic mouthguards*. Retrieved from <http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/life-vie/mouth-dents-eng.php>

Ontario Dental Association. (2010). *Sports and activities*. Retrieved from <http://www.oda.on.ca/sports-and-activities.html>

Harris, N. O., & Garcia-Godoy, F. (Eds.). (2004). *Primary preventive dentistry 6<sup>th</sup> edition*. Upper Saddle River, NJ: Pearson Prentice Hall.

South Carolina Healthy Schools, Office of Adult and Community Education, Division of District and Community Services, South Carolina Department of Education. (2005). *Oral health supplemental curriculum resource – Seventh grade*. Retrieved from [http://www.scdhec.gov/health/mch/oral/docs/curr\\_oral%20Health%20Seventhgrade.pdf](http://www.scdhec.gov/health/mch/oral/docs/curr_oral%20Health%20Seventhgrade.pdf)

## Activity 1: Class Discussion

### Materials Needed:

- Internet for preparation
- Paper, projector, or smart board

### Preparation:

Teachers
<ul style="list-style-type: none"> <li>• Look for pictures of different types of mouthguards</li> <li>• Find pictures on the internet of athletes with missing teeth</li> <li>• Find pictures of athletes playing various sports to facilitate discussion about injury risk</li> </ul>

### Activity:

Teacher Activities	Student Activities	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Ask students to identify the meaning of injury prevention related to dental injuries</li> <li>• Introduce the idea of dental injuries during sports by showing the pictures of athletes with missing teeth and other sports pictures that show risk</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• While showing the pictures of athletes with missing teeth, ask students how the injury could have been prevented</li> <li>• Have an open discussion about times when the students have seen or heard about others</li> </ul>	<ul style="list-style-type: none"> <li>• Students can discuss the definition of injury prevention</li> <li>• Students can identify what it would be like to have a dental injury</li> <li>• Students can discuss teeth that are more likely to be injured (front teeth are at highest risk)</li> </ul>	<ul style="list-style-type: none"> <li>• 20 min</li> </ul>

<p>having dental injuries, or have experienced a dental injury themselves</p> <ul style="list-style-type: none"> <li>• Show pictures of different types of mouthguards and ask students to identify how a mouthguard could help prevent injury</li> <li>• Show pictures identifying teeth in the mouth and ask which teeth are more likely to be affected (front teeth)</li> <li>• Have a discussion identifying when mouthguards should be worn and how to care for them</li> </ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"> <li>• Review which sports are more likely to cause dental injuries and the importance of prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Students can discuss how a person can prevent an injury from occurring</li> <li>• Discuss which athletes would benefit from using a mouthguard</li> </ul>	
--	--	--

## Activity 2: Team Exercise

### Materials Needed:

- Pictures of team and non team sports that are active
- Paper
- Markers

### Preparation:

Teachers
<ul style="list-style-type: none"> <li>• Identify different sports that require a mouthguard</li> <li>• Gather pictures (from newspaper and/or magazine articles) of athletes playing these sports</li> </ul>

### Activity:

Teacher Activities	Student Activities	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Introduce injuries in sports and specifically identify dental injuries</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Have students break into groups and ask them to identify a sport that would pose a dental risk</li> </ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"> <li>• Review dental injuries and sports that are high risk</li> </ul>	<ul style="list-style-type: none"> <li>• Write down on a sheet of paper which sport would be more prone to dental injuries?</li> <li>• Discuss ways to prevent a dental injury from occurring</li> <li>• Ask each group to pick a picture from the ones the teacher has provided and discuss how a dental injury would occur and how it can be prevented</li> </ul>	<ul style="list-style-type: none"> <li>• 20 min</li> </ul>

## Activity 3: Playing Sports Safely Magazine Cover

### Materials Needed:

- Pencil crayons
- Markers
- Paper
- Magazine cover template (provided)

### Preparation:

Teachers	Students
<ul style="list-style-type: none"> <li>• Describe and show a picture of a mouthguard</li> <li>• Discuss purpose of a mouthguard</li> <li>• Discuss different sports where a mouthguard would be beneficial and discuss risks associated with not wearing a mouthguard in the identified sports</li> <li>• Make copies of the attached magazine cover for each student</li> </ul>	<ul style="list-style-type: none"> <li>• Think of sports where you have seen someone wearing a mouthguard</li> <li>• Think of reasons that wearing a mouthguard would be a good idea</li> <li>• Think of sports that would require you to wear a mouthguard</li> </ul>

### Activity:

Teacher Activities	Student Activities	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Introduce a new magazine called —Playing sports safely.” This magazine has all the latest —best” safety equipment an athlete can wear</li> <li>• Students can use this medium to convince other students that wearing a mouthguard during their sport activities is a good idea</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Hand out a copy of the magazine cover to students and</li> </ul>	<ul style="list-style-type: none"> <li>• Students will produce a magazine cover to</li> </ul>	<ul style="list-style-type: none"> <li>• 40 min</li> </ul>

<p>ask them to draw a picture or write a headline about why their favourite athlete wears a mouthguard.</p> <ul style="list-style-type: none"><li>• Optional depending on time-on the back of the magazine cover, have students write a small article that includes an interview with their favourite athlete on the benefits of wearing a mouthguard</li></ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"><li>• Share all the magazine covers with the rest of the class and ask what the students have learned about preventing dental injuries from this exercise</li></ul>	<p>convince other students of the benefits of wearing a mouthguard</p> <ul style="list-style-type: none"><li>• Drawing on personal experience and information you have learned, prepare an interview with your favourite athlete on how a mouthguard has helped in preventing injury</li></ul>	
---	--	--

## Activity 4: Presentation

### Materials Needed:

- Pictures of mouthguards (Internet)
- Pictures of sports related injuries (Internet)

### Preparation:

Teachers
<ul style="list-style-type: none"> <li>• Ask a local coach of a sports team or a gym teacher from your school to discuss injury prevention and the purpose of mouthguards</li> </ul>

### Activity:

Teacher Activities	Student Activities	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Introduce the coach or gym teacher</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Ask the guest to have a discussion with the students about what sports they play.</li> <li>• Discuss the sports that may require protective equipment for the face and mouth are</li> <li>• Introduce the idea of injury prevention and how it relates to the mouth</li> <li>• Introduce the idea of a mouthguard</li> <li>• Ask students to think of reasons they would wear a mouthguard and what sports would require one</li> </ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"> <li>• Review how injury prevention in sports is a good idea</li> </ul>	<ul style="list-style-type: none"> <li>• Open discussion on injuries to the mouth that students have personally experienced or have seen in the media</li> </ul>	<ul style="list-style-type: none"> <li>• 30 min</li> </ul>

## Activity 5: Crossword Puzzle

### Materials Needed:

- Pictures of different types of mouthguards
- Crossword puzzle and solution (provided)

### Preparation:

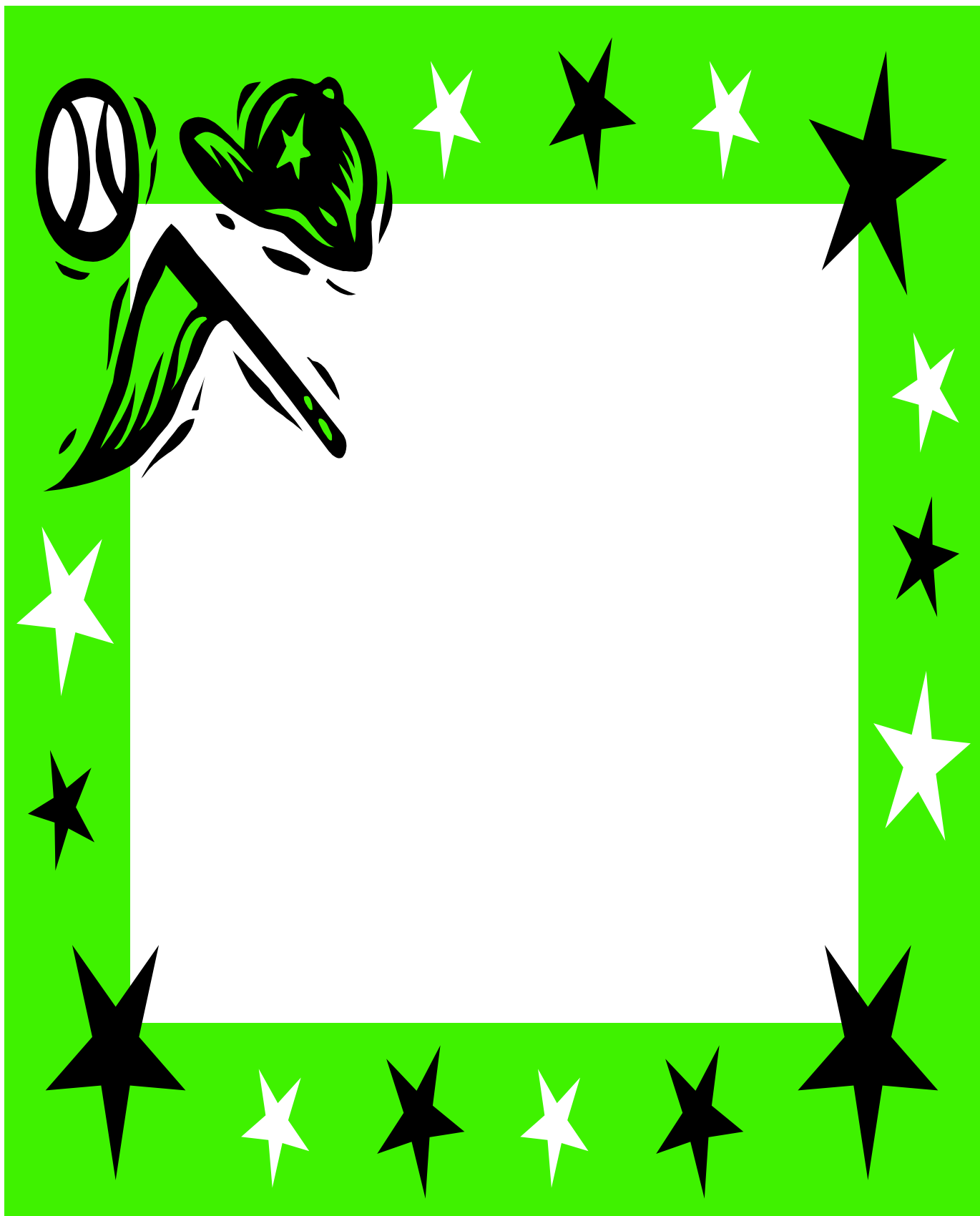
Teachers
<ul style="list-style-type: none"> <li>• Find pictures of different types of mouthguards from the internet</li> <li>• Make a copy of the attached crossword for all students</li> <li>• Read attached article on mouthguards</li> </ul>

### Activity:

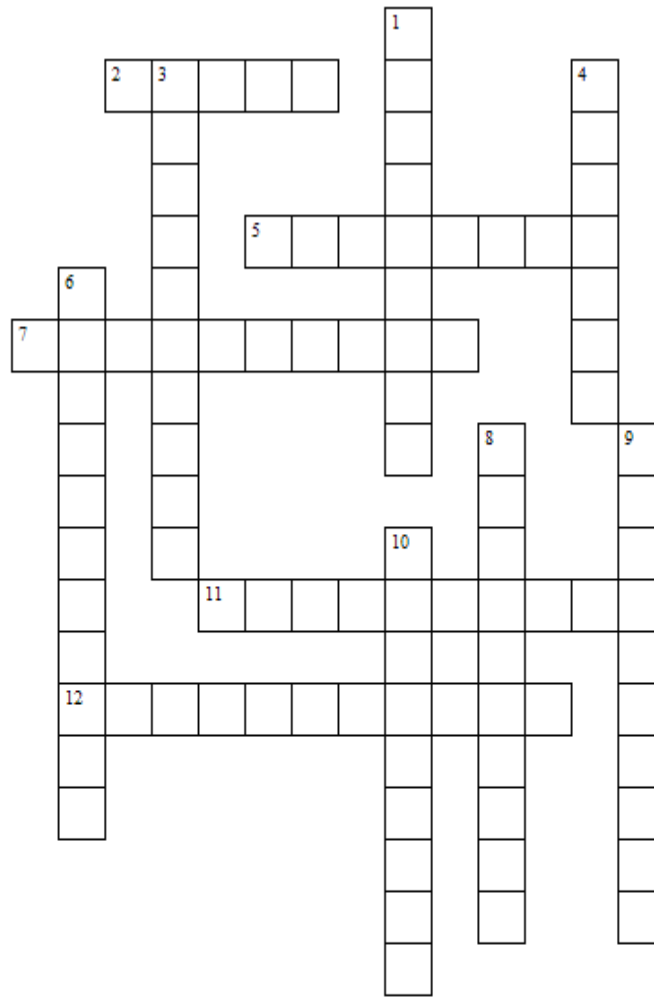
Teacher Activities	Student Activities	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Discuss mouthguard content (attached) with class, encouraging discussion on types of mouthguards, when to wear a mouthguard, and how to care for a mouthguard</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Facilitate discussion on what a mouthguard is and why it is a good idea to wear one</li> <li>• Facilitate discussion on types of mouthguards and where they can be obtained</li> <li>• Facilitate discussion on how to look after a mouthguard</li> <li>• Distribute the crossword puzzle and ask students to complete</li> </ul>	<ul style="list-style-type: none"> <li>• Students can discuss their personal experiences with wearing a mouthguard</li> <li>• Students can view different pictures of different types and not the similarities and differences</li> <li>• Students can discuss why it is important to look after a mouthguard</li> <li>• Students can complete either individually or in</li> </ul>	<ul style="list-style-type: none"> <li>• 30 min</li> </ul>

<b>Conclusion:</b> <ul style="list-style-type: none"><li>• Have students complete the crossword and review solutions</li></ul>	groups	
--	--------	--

# Playing Sports Safely



# Mouthguard Crossword



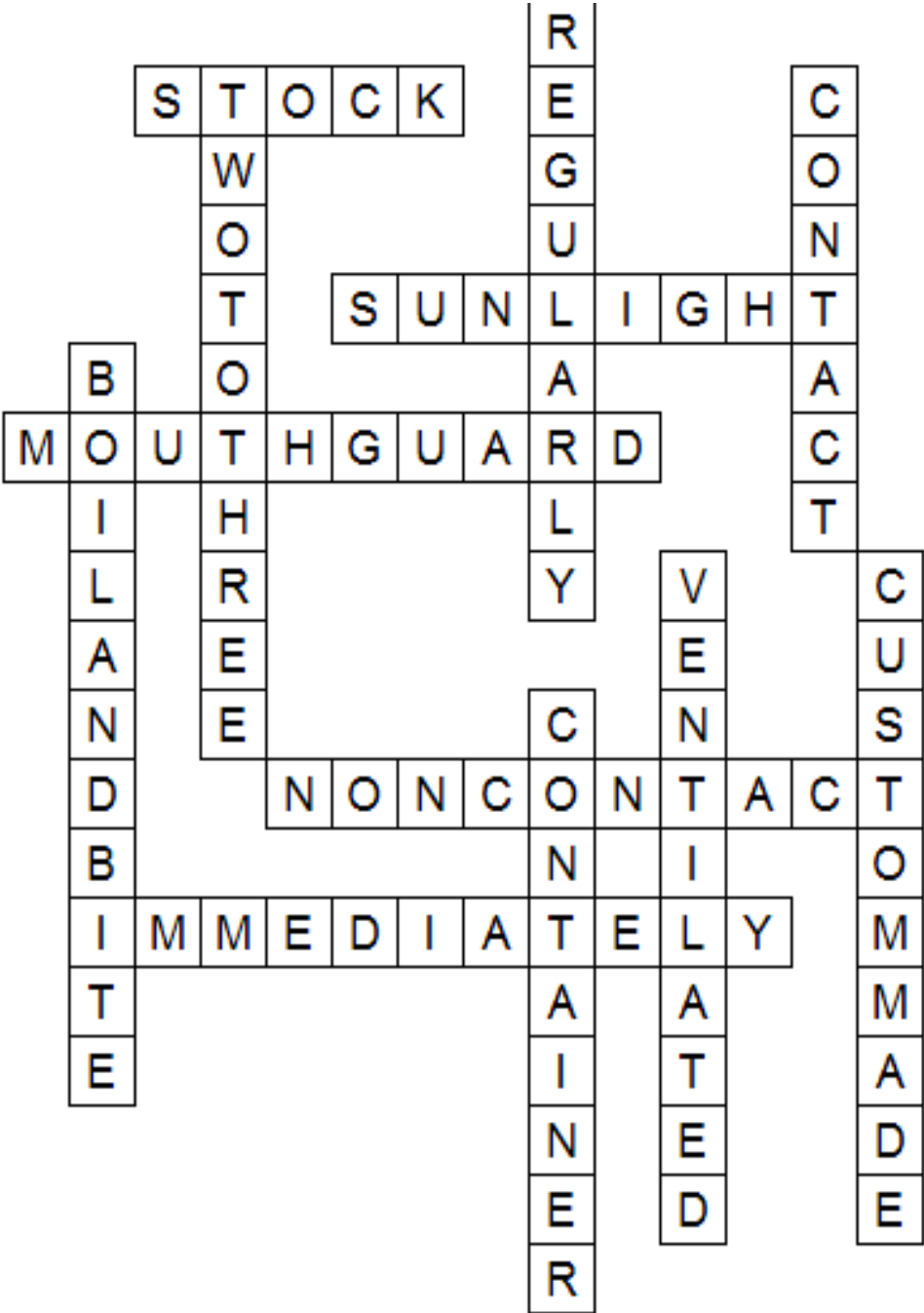
## ACROSS

- 2 A type of mouthguard that you can buy at a sports store
- 5 Something a mouthguard should not be exposed to
- 7 An appliance that you wear for contact and non-contact sports
- 11 It is a good idea to wear one for some of these types of sports
- 12 When a mouthguard should be replaced if it is loose, has a hole or a tear

## DOWN

- 1 Frequency that a mouthguard should be checked
- 3 A mouthguard should be replaced at this time (number of years)
- 4 You would be wise to wear a mouthguard for this type of sport
- 6 A type of mouthguard that you must heat to mold to the teeth
- 8 Type of container a mouthguard should be kept in
- 9 This is the best choice for a type of mouthguard
- 10 Something a mouthguard should be kept in

# Mouthguard Crossword - Answer Guide



## General Topic: Grade 7 – Tooth Decay

This section covers the following expectation from the Ontario Curriculum, Grades 1—8: Health and Physical Education, 2009. (Grade 7)

- **C2.1:** Demonstrate the ability to make healthier food choices, using information about the role that different foods play as contributing or preventive factors in a variety of health disorders (e.g. tooth decay)

### Activities

- **Make a Menu:** Creating balanced meals and snacks (*This activity can also be linked with a lesson on nutrition.*)
- **Label Reading:** Understanding the contents of food and beverages, and the implications on oral health (*This activity can also be linked with a lesson on nutrition.*)
- **Collage:** Healthy vs. unhealthy food and beverage choices (*This activity can also be linked with an art project.*)
- **Word Search:** Toothy decay
- **Experiment:** What does an eggshell and tooth enamel have in common? (*This activity can also be linked with a Science lesson on pH – acids and bases.*)

### Additional Information

- Canadian Dental Hygienist Association: [www.cdha.ca](http://www.cdha.ca)
- Health Canada: [www.hc-sc.gc.ca/](http://www.hc-sc.gc.ca/)
- Canada's Food Guide: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>
- Dietitians of Canada: <http://www.dietitians.ca/Your-Health.aspx>

*(Please note the location of the URL's can change over time.)*

## Introduction

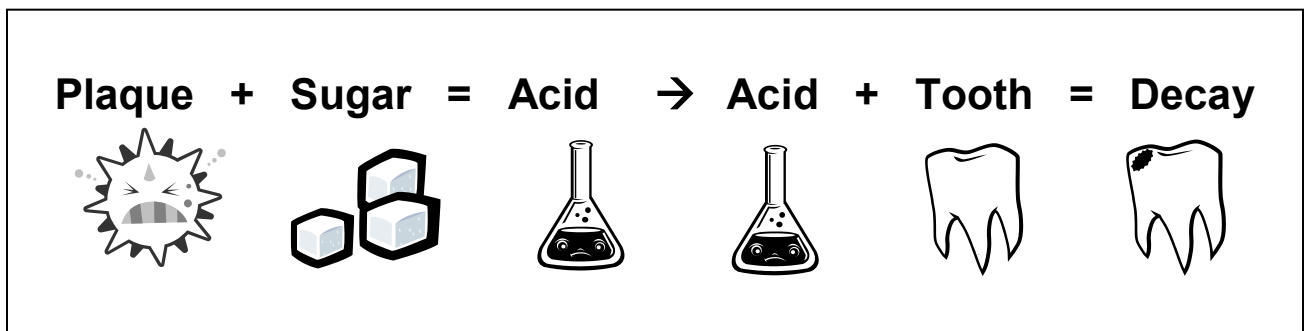
- The following outlines various causes of tooth decay, the overall decay process, and preventive measures students can take to help minimize their risk of tooth decay.
- In addition, you will find a variety of activities designed to reinforce the lessons and enable students to demonstrate their ability to make healthier food choices.

## Causes of Tooth Decay

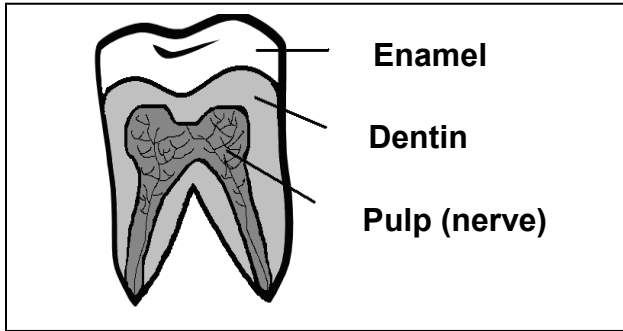
- A main cause of tooth decay is dietary sugar, which mixes with bacteria (plaque) in your mouth to create acid. This acid weakens the hard outer layer of your tooth (enamel).
- Common sources of dietary sugar include: chocolate, cookies, cakes, and pastries, as well as drinks with added sugar, for example, fruit drinks, carbonated beverages (pop), and sports and energy drinks. But, “sugar” doesn’t always appear on your food labels, so it is important to check for these common “hidden sugars”. There are many types of sugars (commonly ending in “-ose”) used in products, a few examples that you may see on a food label include:
  - Corn sweeteners
  - Maltose
  - Dextrose
  - Fructose
  - Glucose
  - Honey
  - Maple syrup
  - Molasses
  - Sucrose
- **Glucose** (dextrose, grape or corn sugar): is less sweet than table sugar and is common in sweet fruit and vegetables, such as berries, oranges, carrots, and corn
- **Fructose** (fruit sugar): is much sweeter than cane sugar and is found in honey and ripe fruit
- **Sucrose** (table sugar): is found in cane or beet sugar, brown sugar, and molasses
- **Lactose** (milk sugar): is produced by animals and is found in milk
- **Maltose** (malt sugar): is found in malted breakfast cereals and some infant formulas

- Although white milk, chocolate milk, and 100% fruit and vegetable juice are healthy beverage choices, they do contain naturally-occurring sugar that can also cause tooth decay if they come in contact with teeth for a prolonged amount of time. With regard to the affect it has on teeth, naturally-occurring sugar is no different than added sugar.
- How often you consume sugar (**frequency**: i.e., continuously sipping drinks with added sugar like pop and fruit drinks or with naturally-occurring sugar like milk or 100% fruit juice) and how long sugar lingers in your mouth (**duration**: i.e., continuously sucking on hard candies) affects tooth decay. The more sugary foods you eat and drink, and the longer these foods and drinks stay in your mouth, the more likely you are to develop tooth decay.
- Sugary foods and carbohydrates that are sticky (i.e., dried fruit, granola bars, gummies, and toffee) cling to your tooth's surface, increasing the duration of sugar on the tooth and the tooth's exposure to decay-causing acid.

## Decay Process



- Tooth decay occurs when sugary foods are frequently left on your teeth. The bacteria (plaque) already in your mouth feed on the sugar and produce acid. This acid attacks the hard outer layer of your tooth (enamel), which weakens it and causes tooth decay.
- If the affected tooth is left untreated, the decay can spread into the dentin, which is the slightly softer layer under the enamel that forms the bulk of the tooth.
- If still not treated, the decay penetrates to the pulp, which is the soft centre tissue of the tooth containing blood vessels and nerve tissue. An abscess (infection) may form at the root of the tooth. At this point, if the tooth is not treated by root canal therapy, the tooth may be destroyed.



## Impacts of Tooth Decay

- Tooth decay, especially if left untreated, can negatively impact many facets of your life, including:
  - **Overall health** → bacteria in your mouth can spread to the rest of your body, which may lead to infection or illness
  - **School performance** → pain from tooth decay can affect concentration and school attendance, and can cause sleep loss and disruptive behaviour
  - **Emotional health** → pain from tooth decay may impact your ability to speak; pain and/or visible decay may also affect the look of your smile, as well as your self-esteem and self-confidence
  - **Growth and development** → pain from tooth decay can affect your ability to chew (i.e., difficulty chewing hard vegetables), making it difficult to achieve a balanced diet

## Preventing Tooth Decay

- Choose foods that are nutritious and do not contain added sugars. These foods are beneficial for both your dental and overall health:
  - Cheese (recommend  $\leq 20\%$  M.F [Milk Fat])
  - Plain yogurt (recommend  $\leq 2\%$  M.F)
  - Vegetables
  - Eggs
  - Nuts (at home snacks)
  - Seeds (sunflower and pumpkin)

- Choose foods that increase saliva flow to help cleanse your teeth and dilute the sugar in your mouth, for example, hard and crisp foods (e.g., broccoli, celery, and apples), cheese, and sugarless gum.
- Limit sugary foods, for example sweets, and serve them only at mealtime, when your saliva levels are high. Again, your saliva will help cleanse your teeth and dilute the sugar in your mouth.
- Watch for hidden sugars (e.g., corn sweeteners, corn syrup, dextrose, fructose, glucose, honey, maple syrup, molasses, and sucrose) and limit your consumption of foods and drinks that contain these sugars.
- Avoid sticky foods, for example dried fruit, granola bars, gummies, and toffee, because they cling to your teeth longer and increase your exposure to decay-causing acid.
- Snacking between meals, when saliva levels are low, can leave your teeth susceptible to acid. Choose nutritious snacks between meals that work to cleanse your teeth (listed above). Also, drink water between meals to keep your body hydrated. Water is a sugar-free way to keep hydrated; it is also good for both your dental and overall health.
- Limit how often (frequency) you consume sugar and how long (duration) sugar is in your mouth. Avoid sucking on hard candies (duration) and sipping drinks with added or naturally-occurring sugar (frequency), as these can increase your risk of tooth decay.
- Avoid drinks with added sugar (e.g., fruit drinks, pop, sports drinks, and energy drinks). These drinks should only be consumed occasionally and at mealtime when saliva levels are high; this will help neutralize the acid caused by the high sugar contents. Drinks with naturally-occurring sugars, like 100% juice or milk should also be saved for mealtimes.
- Proper oral hygiene is the best way to prevent tooth decay. Brush your teeth twice daily for two minutes each time with fluoridated toothpaste, and floss your teeth once daily.

## Financial Assistance for Oral Care

There are limited programs available in Ontario for children and youth with no dental insurance. The following list provides a description of what is available.

- **Children In Need Of Treatment (CINOT)** dental program provides emergency dental treatment for children 0-17 years of age whose families are not on social assistance, do not have insurance, and cannot afford to pay for their dental treatment (<http://www.mhp.gov.on.ca/en/healthy-communities/dental/default.asp>).
- **Healthy Smiles Ontario (HSO)** is a new program for children and youth 0-17 years of age who do not have access to any form of dental coverage. This is a preventive and basic dental care program. Children and youth who are members of a household with an Adjusted Family Net Income of \$20,000 per year or below may be eligible (<http://www.health.gov.on.ca/en/public/programs/dental/>)

## References

American Dental Association. (2005). *Watch your smile*. Retrieved from <http://www.ada.org/3257.aspx#top>

American Dental Association. (2002). Diet and tooth decay. *Journal of the American Dental Association*, 133, 527.

Dietitians of Canada: <http://www.dietitians.ca/Your-Health/Nutrition-A-Z/Food-Labels.aspx?categoryID=23>

Ministry of Health and Long-Term Care. (2010). Healthy Smiles Ontario. Retrieved from <http://www.health.gov.on.ca/en/public/programs/dental/>

Ministry of Health Promotion and Sport. (2010). Dental Health (CINOT). Retrieved from <http://www.mhp.gov.on.ca/en/healthy-communities/dental/default.asp>

South Carolina Healthy Schools, Office of Adult and Community Education, Division of District and Community Services, South Carolina Department of Education. (2005). Oral Health Supplemental Curriculum Resource – Seventh Grade. Retrieved from [http://www.scdhec.gov/health/mch/oral/docs/curr\\_oral%20Health%20Seventhgrade.pdf](http://www.scdhec.gov/health/mch/oral/docs/curr_oral%20Health%20Seventhgrade.pdf)

## Activity 1: Make a Menu

### Materials Needed:

- Copies of attached menu template

### Preparation:

Teacher
<ul style="list-style-type: none"> <li>• Print attached menu template for each group</li> </ul>

### Activity:

Teacher	Students	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Divide the class into small groups (3 to 4 students)</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Have students work together to make a menu (template included) of three balanced meals and three snack options that are healthy for both their dental and overall health</li> <li>• Encourage students to consider drinks with added sugar and sticky foods that can cling to teeth</li> </ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"> <li>• Discuss the students' choices, and how nutritious foods benefit their dental and overall health</li> </ul>	<ul style="list-style-type: none"> <li>• Students will be divided into small groups</li> <li>• Students will work together to make a menu of three balanced meals and three snack options that are healthy for both their dental and overall health</li> <li>• Students will discuss their menus and explain how the meal and snack options are healthy for both their dental and overall health</li> </ul>	<ul style="list-style-type: none"> <li>• 1 hour (30 minutes for group work and 30 minutes for discussion)</li> </ul>

## Activity 2: Label Reading

### Materials Needed:

- Food and beverage labels (assorted)
- Copies of the attached —Look at the label” handout

### Preparation:

Teacher	Students
<ul style="list-style-type: none"> <li>• Bring to class additional food and beverage labels for variety (ensure to collect labels for sticky sweet foods and drinks with added sugar)</li> <li>• Print attached —Look at the label” handout for each student</li> </ul>	<ul style="list-style-type: none"> <li>• Bring to class one food or beverage label</li> </ul>

### Activity:

Teacher	Students	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Divide the class into small groups (3 to 4 students)</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Distribute the —Look at the label” handout.</li> <li>• Have students work together to analyse their food and beverage labels, considering their oral health and overall health</li> </ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"> <li>• Discuss the food and beverage labels, and how these items affect their dental and overall health (i.e., hidden sugars [1 tsp or sugar = 4 grams of sugar])</li> <li>• Discuss how the consumption of</li> </ul>	<ul style="list-style-type: none"> <li>• Students will be divided into small groups</li> <li>• Students will work together to analyse their food and beverage labels using the —Look at the label” handout</li> <li>• Students will discuss which food and beverage labels contained the most sugar and identify hidden sugars (i.e.,</li> </ul>	<ul style="list-style-type: none"> <li>• 1 hour (30 minutes for group work and 30 minutes for discussion)</li> </ul>

these foods and beverages (i.e., frequency and duration) can have further implications on their oral health	honey, molasses, sugars ending in —os”)	
---	---	--

## Activity 3: Collage

### Materials Needed:

- Magazines/newspapers
- Scissors
- Glue
- Heavy paper or poster boards

### Preparation:

Teacher	Students
<ul style="list-style-type: none"> <li>• Bring the materials listed above to class</li> </ul>	<ul style="list-style-type: none"> <li>• Bring magazines/newspapers to class</li> </ul>

### Activity:

Teacher	Students	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Distribute materials to students to work independently</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Have students cut out magazine/newspaper words and images representing healthy and unhealthy foods and beverages, as it relates to both dental and overall health</li> <li>• Have students paste these words/images onto heavy paper or poster board</li> </ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"> <li>• Have students present their</li> </ul>	<ul style="list-style-type: none"> <li>• Students will work independently</li> <li>• Students will search a variety of magazines and newspapers for words and images that represent healthy and unhealthy foods and eating habits as it relates to dental and overall health</li> <li>• Students will arrange the words (as desired) onto heavy paper or poster board</li> <li>• Students will present</li> </ul>	<ul style="list-style-type: none"> <li>• 2 hours (1 hour for students to assemble collages and 1 hour for students to present their collages)</li> </ul>

<p>collages to the class and ask them to explain the link between nutrition and oral health, and how it links to their overall health and lifestyle (refer to Impacts on Tooth Decay section)</p>	<p>their collages to the class and explain their choices as it relates to dental and overall health</p>	
---	---	--

## Activity 4: Word Search

### Materials Needed:

- Copies of the attached word search

### Preparation:

Teacher
<ul style="list-style-type: none"><li>• Print attached word search for each student</li></ul>

### Activity:

Teacher	Students	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"><li>• Distribute the word search to students to work independently</li></ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"><li>• Link the words in the word search to the lesson on tooth decay and healthy eating choices for their dental and overall health</li></ul>	<ul style="list-style-type: none"><li>• Students will work independently</li></ul>	<ul style="list-style-type: none"><li>• 15 minutes</li></ul>

## Activity 5: Tooth Enamel Experiment

### Materials Needed:

- 2 eggs
- 2 small glass bowls
- Water
- Vinegar

### Preparation:

Teacher
<ul style="list-style-type: none"> <li>• Bring to class the materials listed above</li> </ul>

### Activity:

Teacher	Students	Time Required
<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Have students write down their observations of the eggshells at the beginning of the experiment</li> <li>• Ask students what the purpose of an eggshell is (if needed, prompt them to answer that it protects the inside)</li> <li>• Ask students what they think will happen to the eggshell 1) when the eggshell is soaked in vinegar and 2) when the eggshell is soaked in water</li> </ul> <p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Ask for two students to volunteer to crack an egg and clean the eggshells (with water – assist students to safely dispose of the egg yolks)</li> <li>• Have the two students place</li> </ul>	<ul style="list-style-type: none"> <li>• Students will record their observations of the eggshells at the beginning of the experiment</li> <li>• Students will indicate their thoughts as to what will happen to the water- and vinegar-soaked eggshells</li> <li>• Two students will volunteer to assist with the experiment</li> <li>• Remaining students will follow the experiment</li> </ul>	<ul style="list-style-type: none"> <li>• 2 days (total)</li> <li>• 2 hours (1 hour on the first day for the experiment and initial discussion, and 1 hour on the second day for the final observation and discussion)</li> </ul>

<p>their respective eggshells in one of the two small glass bowls</p> <ul style="list-style-type: none"> <li>• Have one student pour water over the top of the shell and set aside</li> <li>• Have the other student pour vinegar over the top of the shell and set aside</li> <li>• Leave both eggshells for 48 hours</li> </ul> <p><b>Conclusion:</b> Note: The vinegar-soaked eggshell will be softer than the water-soaked eggshell</p> <ul style="list-style-type: none"> <li>• Have students write down their observations of the eggshells</li> <li>• Highlight the link between the vinegar-soaked eggshell and the enamel of their teeth when exposed to acid; this highlights the concept of duration – continuous exposure to sugar weakens the enamel of the affected tooth</li> <li>• Reinforce that eating too many sugary foods and beverages will create acid that weakens their tooth enamel and can lead to tooth decay</li> </ul>	<ul style="list-style-type: none"> <li>• Students will record their observations of the eggshells at the end of the experiment</li> <li>• Students will make the link between the water- and vinegar-soaked eggshells and discuss how, like the vinegar-soaked eggshell, their teeth can weaken and decay from too much exposure to acid</li> </ul>	
--	---	--



# Make a Menu

In small groups, design a menu (breakfast, lunch, dinner, and three snack options) that includes healthy foods and beverages that benefit your dental and overall health.

Breakfast	Lunch	Dinner
Snack 1	Snack 2	Snack 3

# Look at the label

## Nutrition information on food labels...

- Helps you make informed food choices
- Helps you follow Canada's Food Guide
- Is required on most packaged foods
- Is based on Health Canada's regulations



### Nutrition claims

There are two types of nutrition claims:

- 1) **Nutrient content claims** tell you about one nutrient such as sodium, fat or sugar.
- 2) **Health claims** tell you how your diet can affect your health.



### Nutrition Facts table

The Nutrition Facts table provides you with information on the Calories and 13 nutrients for the serving size shown.

#### Nutrition Facts

Per 1/2 cup (125 mL)

Amount	% Daily Value
<b>Calories 70</b>	
<b>Fat 0 g</b>	<b>0 %</b>
Saturated 0 g	0 %
+ Trans 0 g	0 %
<b>Cholesterol 0 mg</b>	
<b>Sodium 5 mg</b>	<b>0 %</b>
<b>Carbohydrate 17 g</b>	<b>6 %</b>
Fibre 3 g	12 %
Sugars 14 g	
<b>Protein 0 g</b>	
Vitamin A 0 %	Vitamin C 4 %
Calcium 0 %	Iron 4 %

### Ingredient list

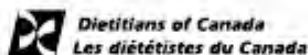
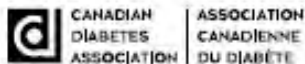
The ingredient list tells you what ingredients are in a packaged food.



Healthy Eating is in Store for You  
Faites provision de saine alimentation

Fact Sheet #1

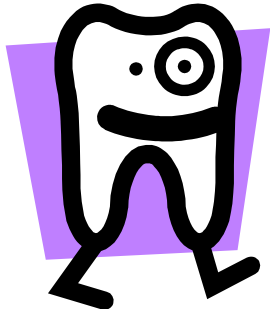
[www.healthyeatinginstore.ca](http://www.healthyeatinginstore.ca)



#### ADVISORY COMMITTEE:

- Canadian Council of Food & Nutrition • Canadian Council of Grocery Distributors • Canadian Home Economics Association
- Canadian Public Health Association • Consumers' Association of Canada • Food and Consumer Products of Canada
- Heart and Stroke Foundation of Canada - Health Check™ Program • Kraft Canada Inc. • Shop Smart Tours Inc.

© 2007 Canadian Diabetes Association and Dietitians of Canada. Reprint permission not required.



Name: \_\_\_\_\_

## Tooth Decay Word Search

A T O U T E O R E C X T O L K M  
A F D C T C S P S R O I X D N W  
E A I K W P D O D A M E M Z I E  
E F L O S S E I T I V A C E D T  
L E M A N E S O R C U S D A X R  
N L N A S O L O I T U R I E T J  
E R T I I T R B F E M R E U S N  
S R S U G A R E A E E D F Q F S  
O P Z N D S L R E T A W P A L A  
N E E E D Y W T C H E F H L O P  
O I T C Z H R A Z H J G L P T D  
S T M T C V B Y A C E D E R R H  
T F T R C A L Z A S I E F V N L  
C H C P C N S N I C T H S U R B  
O I L I N C O W A Q F L B E D N  
T Z M E R X S C Q A I E R T I E

**Find the following words:**

Plaque  
Bacteria  
Sugar  
Fructose  
Vegetables

Cheese  
Enamel  
Acid  
Sucrose  
Decay

Brush  
Floss  
Cavities  
Water  
Teeth