

EATING
MOVING
SMILING



Information and activities to support the
DROP THE POP Challenge

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Introduction

Welcome!

Thanks for being part of the DROP THE POP Challenge and getting your students involved in this project that promotes healthy bodies and minds. This project is brought to you by the Health Promotion Unit of the Department of Health and Social Services and the goal is to encourage students and their families to make healthier drink choices. This year's challenge will see Northerners across Nunavut, the Northwest Territories and the Yukon making healthier drink choices by going pop-free for 5 days.

This manual contains all the resources you need to host the DROP THE POP Challenge. It also has learning units on health, physical activity and dental health which complement the contest and will hopefully inspire your students to drop pop and get their bodies in motion! The information presented in this manual is also consistent with the goals and objectives of the Pan- Canadian Healthy Living Strategy which promotes healthy eating and physical activity in relation to healthy weights. (More detail on this can be found in Unit 1 - Start Your Day the Healthy Way.)

These learning units have been developed for use by teachers and health professionals, including CHR's, nutritionists, dental therapists, and nurses. We encourage partnerships and collaboration so that all members of the community are involved at home, at school and in the workplace. Finally, this manual includes a brief evaluation section. We are always looking for feedback to make this program the best it can be and we would appreciate any suggestions you may have.

Learning Units

There are 4 learning units in this manual:

Unit 1 - Start Your Day the Healthy Way

Unit 2 - My Amazing Body

Unit 3 - Food Choices for Health

Unit 4 - Healthy Smiles

The learning units are designed to help you share information on health, physical activity, and science with your students. The theme of nutrition weaves its way through each unit. We hope you will find these units a helpful addition to teaching the health curriculum on nutrition and hosting the DROP THE POP Challenge.

Each unit is divided into 4 sections:

Learning Goals

Background Information

Learning Strategies

Great Internet Resources

Our goal is to provide you with learning units that are flexible. There should be enough background information for you to choose the degree of detail you feel is appropriate for your class. Each unit has suggested learning strategies for all levels from pre-K to grade 7.

At the end of the manual you will find a glossary of key words. Words included in the glossary are *italicized* in the manual.

Contest

This is the first year that Yukon teachers, students and schools have the opportunity to participate in the DROP THE POP Challenge, March 27-31, 2006.

The contest is easy to participate in. Each day for the 5 days of the challenge you will record which of your students did not drink pop. We have provided a score sheet for you to register this information. The challenge is to have as many students participate as possible on each of the five days of the contest.

Classrooms and schools with the highest participation rates will win prizes to promote healthier drink choices.

Prizes!

There are great prizes up for grabs! Students who participate will get stickers and temporary tattoos. One classroom per school will win a "smoothie prize pack" including a blender, smoothie recipe book and smoothie ingredients. One teacher per school will win a \$50 gift certificate for Scholastic. One school per population category (see below) will win a Classroom Action Bin full of great tools and resources for getting students more physically active.

SchoolCategories (one Classroom Action Bin per category will be awarded)

Chief Zzeh Gittlit Eliza Van Bibber JV Clark Kluane Lake Nelna Bessie John Ross River Del Van Gorder	Golden Horn Holy Family Takhini Johnson Elementary Robert Service
Grey Mountain Hidden Valley St Elias Tantalus Teslin Carcross EET	CKES Elijah Smith Jack Hulland Selkirk WES

Suggested Timeline

Pre and/or post contest

- use the learning units to explore selected wellness issues with your students and to inspire them to adopt healthier habits

Week before the contest (Mar 20-24) -

- announce the upcoming challenge week
- send home healthy beverages information for parents (this material is separate from the DROP THE POP materials)
- prepare class score sheet

Week of contest (Mar 27-31)

- give out tattoos and stickers to students
- Keep track of the students who did not drink pop on a daily basis

After the contest (April)

- Complete contest score sheet for your class
- Give score sheets to the DROP THE POP coordinator for your school
- The coordinator will declare winning class for your school after reviewing class score sheets
- The coordinator will FAX the school results to the Health Promotion Unit who will determine the winning schools and distribute prizes
- The results of the Challenge will be announced and school coordinators will be notified.

THE THEORY BEHIND "DROP THE POP!"

Nutrition

Why Focus on Pop and Drinks? Many parents, teachers and community members are concerned that children drink a lot of pop and other drinks that provide little nutritional value. Pop and fruit drinks (drinks that are not 100% juice) can replace healthier drinks and foods that our bodies need. They can also contribute to weak bones, as pop often takes the place of milk which is needed to build strong bones. Drinking a lot of pop and fruit drinks, and eating foods high in sugar and fat over time can increase the risk of developing Type 2 Diabetes. The long term affects on our health and the financial cost of drinking pop can really add up.

Replaces Healthier Drinks and Foods: Pop and fruit drinks can replace healthier drinks and foods that are found in the four food groups *Canada's Food Guide*. They can fill us up so that we are less hungry for the nutritious drinks and foods that our bodies need. Eating foods from *Canada's Food Guide* helps our bodies grow and also helps us feel good and remain healthy. It is important to eat a variety of foods from each of the four food groups, and limit the amount of junk food, also called 'other foods' that contain a lot of fat and sugar. Pop, fruit drinks and junk food are not "bad" foods. In moderation (not having it every day) all foods can fit into a healthy diet.

Sometimes Foods: *Canada's Food Guide* recommends that we have a total of 1 or fewer servings from the "other" food group each day. Some examples of other foods include pop, powdered drinks, fruit drinks that are not

100% juice, candy, cookies, french fries, cakes, chips and chocolate bars.

Diabetes: Drinking and eating a lot of pop, fruit drinks and other foods that are high in fat and sugar can increase the risk of developing Type 2 Diabetes. Type 2 Diabetes is a disease where sugar is unable to be used by our body effectively and it remains in high levels in the blood. The good news is that choosing healthier drinks and healthier foods, combined with physical activity can help reduce the risk of Type 2 Diabetes. While teaching students directly about Diabetes is helpful, it can be challenging for young people to appreciate the long-term health effects of the choices they are making today. In addition to talking about diabetes, focusing on the immediate benefits of healthy eating can be a great incentive for children and youth to eat well. For example, healthy eating can help us feel better, look better (have healthier skin, hair and teeth), achieve and maintain a healthy weight, have more energy and play sports to our fullest potential.

What is in Pop? Other than filling us up, pop provides virtually no nourishment for our bodies. One can of pop contains between 9-12 teaspoons of sugar. Drinking 2 cans of pop a day for one week would provide a total of 1 pound of sugar a week, which is equal to more than 2 cups of sugar. This rate of consumption would provide over 130 cups of sugar a year from pop alone. This does not even include the sugar from candies, cookies, sweetened cereals, fruit drinks, chocolate and other junk foods. Sugar adds lots of extra calories to our diet and can contribute to obesity, diabetes, heart disease, and cavities. Pop, iced tea, fruit drinks or cocktails, sports drinks, and energy drinks are all high in sugar.

Another consideration is that many types of pop contain caffeine. Caffeine reduces the amount of calcium your body can absorb for building strong bones. Caffeine is

also a diuretic, which means that it promotes urination. This means that drinking pop does not help fill your body's need for fluids and water. Diet pop is not considered a healthy alternative for children because many diet pops still contain caffeine.

Introduction to Other Drinks: Water is one of the best choices for our bodies. 6-12 glasses are recommended per day. Milk, yogurt drinks like Yop, and chocolate milk are also healthy drinks that are included in the milk and milk products category of Canada's Food Guide. 100% pure juice, such as orange juice and apple juice and 100% vegetable drinks, such as V-8 are also healthy choices. These juices are included in the fruits and vegetables category.

Water: We need water to survive. We can live for up to a month without food but we can live only a few days without water. Approximately 75% of our bodies are made up of water. We need to drink it each day because our bodies lose water each day through sweat, urine and bowel movements. Water is always a good choice because it...

- ✓ Keeps your body temperature stable
- ✓ Flushes wastes from your body
- ✓ Keeps all body functions working well
- ✓ Helps digest the food you eat
- ✓ Moisturizes your skin
- ✓ Cushions your joints
- ✓ Lubricates your brain

**When in
doubt,
choose water.**

Tap water is cheap, readily available and always a good choice to meet most of our daily requirements for fluid.

If not water, then what?

When it comes to choosing drinks, variety is the spice of life. Is it possible to have variety and make healthy choices? Absolutely!

Two important factors to consider when making healthy choices are the nutritional value and sugar content of the drink. Drinks that are nutritious have vitamins, minerals and nutrients, like Vitamin C or calcium that are essential for good health. Sugar - both natural and added - is found in many drinks. Glucose, fructose, and maltose are examples of sugars.

Healthier drinks are nutritious and low in sugar - milk, 100% unsweetened fruit or vegetable juice are among the best choices!

Make it milk

Milk is an excellent source of calcium and vitamin D which are needed to build and keep your bones healthy and strong at all ages.

Most bone growth occurs between the ages of 9 and 18 years, which means it is especially important to encourage children and teens to drink milk.

- ✓ Milk tastes better when it is *really* cold.
- ✓ Chocolate milk is just as nutritious as plain milk (but it does contain more sugar).
- ✓ Smoothies are a healthy and attractive way to drink milk.
- ✓ Fortified soy beverages are good substitutes for people who are allergic to milk or lactose intolerant.

A little juice goes a long way

Juice contains nutrients which we need but even unsweetened juice has a fair amount of natural sugar. For this reason it is important to limit the amount of juice you drink each day.

- ✓ Always choose 100% unsweetened juice.
- ✓ Children under two years do not need juice at all.
- ✓ Older children and adults should limit juice consumption to one serving per day (125ml or $\frac{1}{2}$ cup)
- ✓ Substitute whole fruit for juice. Whole fruit has less sugar per weight than juice and contains fiber which helps with digestion. Frozen fruit is always a nutritious choice.

Be wary of fruit *drinks, cocktails, or punch*

Just because it says "fruit" doesn't mean it has nutritional value. In fact, most fruit drinks (beverages or cocktails and punch) contain only a small amount of juice, and have little nutritional value. Sometimes the only fruit in a fruit drink is artificial fruit flavour. Fruit drinks also have lots of added sugar. Adding vitamins, as some manufacturers do, does not make these drinks a healthy choice.

The same can be said of pop, iced tea, sports drinks, and energy drinks. While the ingredients vary from drink to drink, in general they are high in sugar and low in nutritional value. They may also often contain caffeine which is a stimulant (and makes us irritable and nervous) and leads to dehydration because it takes water out of our body. Regular and diet pop also contain acid which is harmful to teeth.

- ✓ Choose water, milk, or juice instead of fruit drinks, beverages, cocktails or punch.
- ✓ Drink sports drinks only when you are training hard for 90 minutes or longer.
- ✓ Have pop or iced tea only as a special treat, and not as your daily fare.
- ✓ There is no reason to ever drink energy drinks which are essentially "super" pops.
- ✓ Buy small quantities of pop and iced teas, and avoid stocking your refrigerator.

In general, drinks with fewer ingredients listed on the label are healthier choices.

Healthy smiles from the first baby tooth on...

Taking care of your teeth and gums is important for overall health. The sugar contained in drinks mixes with the bacteria found in your mouth to produce an acid which can weaken teeth and lead to cavities.

- ✓ Breast milk or formula, and water are better choices for infants under 1 year.
- ✓ Whole cow's milk or breast milk, and water are the best choices to age two and beyond.
- ✓ Wipe baby's gums after drinking milk.
- ✓ Encourage babies and toddlers to drink from a cup instead of a bottle.
- ✓ Don't forget to rinse your mouth with water, or brush your teeth after consuming a sweet drink.

A Word about Evaluation

We want DROP THE POP to continue evolving and improving to suit your needs. To be successful, we need your input,. We hope to measure the degree of change in students' awareness, knowledge and behaviour related to health and wellness.

With these points in mind we are asking you to please complete the evaluation at the end of this manual. It is brief and includes questions on your impressions of the learning units and contest, and your students' opinions. The learning strategies in each unit have an element of evaluation within them, based on the students' output (e.g. collage, song, story, poster, and article). We encourage you to make copies or digital pictures of these creative works and send or email them to:

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Health and Social Services, Yukon Government
#2 Hospital Rd, Whitehorse, YT Y1A 3H8
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These samples of student work will help us get an idea of what the students are learning.

Learning Units

Unit 1 - Start Your Day the Healthy Way

Learning Goals

- a. Healthy Practices - identification of healthy habits to start and follow throughout the day
- b. What Makes Plants, Animals And People Go And Grow - recognition of nutrition needs for energy, growth and learning
- c. Where Healthy Choices Come From - identification of healthy foods from the 4 food groups of Canada's Food Guide

Background information

It is generally accepted that the following healthy practices are key to achieving and maintaining wellness:

1. healthy eating
2. drinking 2 L of water everyday
3. keeping active
4. maintaining a healthy weight
5. getting a good night's sleep
6. brushing our teeth at least 2 times a day

The Pan-Canadian Healthy Living Strategy also considers mental health as key to overall health and wellness. With this in mind they include a social health strategy:

7. Building a wide circle of friends.

Below you will find more details on each practice.

Healthy Eating -

Two issues are particularly important for the children of Yukon: over-nutrition which can lead to obesity and dental caries; and under-nutrition which can lead to *vitamin* and *mineral* deficiencies which affect growth and development.

'Over-nutrition' is leading to an unprecedented level of obesity among Canadian children. This starts **YOUNG**. Preschool children can already be over their healthy weight. This can be the start of a lifetime of obesity and chronic diseases like diabetes. Over-nutrition can be partly attributed to the types of food we eat, particularly those with lots of *fat* and sugar. Babies and children who consume too much sugar can have unhealthy weights and poor dental health (their teeth may become decayed and have to be removed.)

Under-nutrition

Food insecurity is closely tied to geography, and residents of the Territories are particularly vulnerable. Recent results from Statistics Canada have shown that more than 30% of families in Yukon said that they or someone in their household had gone without enough to eat in the past year because of a lack of money [May, 2005 issue of Health Reports by Statistics Canada]. Food insecurity is a priority issue for the families of Yukon. When students are undernourished it is more difficult for them to concentrate in the classroom. Healthy students are better learners.

All foods can fit into healthy eating

To build a healthy diet we need to consider all the food we eat over a period of time. We should take a look at the types of food we eat each day and throughout the week or month. The way we eat as children often affects how we eat as adults. Young children should be encouraged to try new foods and embrace variety so they develop a healthy relationship with food. Traditionally much variety was enjoyed as all parts of an animal were eaten and different plants and animals were harvested at different times of the year. Today with food purchased from stores, grown in gardens, and harvested off the land Yukon's children can potentially have access to a wide variety of healthy foods. Teaching children how to adopt healthy eating habits and appreciate variety is as simple as using Canada's Food Guide.

Quick Review of Canada's Food Guide to Healthy Eating (CFGHE)

First look at the shape of the guide. The rainbow represents the four food groups. The foods represented on Canada's Food Guide reflect the choices available in 1992 when the food guide was last updated. A revision of Canada's Food Guide is currently underway and the new food guide will be released by Health Canada in late April 2006.

Overall Canada's Food Guide encourages variety and moderation to attain a balanced approach to healthy eating. The food guide covers the healthy eating needs for the whole family. The primary theme is that of vitality: to enjoy total well-being by eating well, being physically active and feeling good about yourself.

The rainbow is divided into 4 parts representing the 4 food groups. The 4 parts are not equally sized because we are expected to eat more from some groups than others. The Grains group is the largest section and should comprise a larger percentage of our diet than food from the other groups.

Eating the recommended number of servings gives a balance of **nutrient** intake as follows:

- ✎ providing just enough **protein**- 15-20% of calories
- ✎ encouraging choice of complex **carbohydrates** - 45-50% of calories
- ✎ encouraging choice of healthy **fats** -30-35% of calories

Adopting the recommended number of servings and portion sizes means that **vitamin** and **mineral** needs of healthy people will be met. Children with iron-deficiency anemia or rickets would need extra **vitamins** and **minerals**.

The table below outlines which food groups have which **nutrients** and what these **nutrients** are good for.

Food Group	Nutrient	Function
Meat, Fish, Birds, Eggs and Beans	Protein	Growth and repair of almost all body parts
	Iron	Carries oxygen throughout the body
Milk and milk products	Calcium	Builds strong bones and teeth
	Vitamin D In milk and some yogurts. Other sources of include sunshine, fish and marine mammal oils	Helps get calcium into bones and teeth
Fruits and Vegetables	Vitamin A (dark orange and red choices)	Aids vision and promotes healthy skin
	Vitamin C (berries, citrus fruits, potatoes)	Fights infection Promotes wound healing
	Folate or folic acid (dark green leafy vegetables, orange juice)	Facilitates cell division, which is vital to growth and development
	Iron (dark green vegetables, potatoes with skin)	Carries oxygen in blood (iron from plants is not as well absorbed as from animal sources)
	Fibre (all whole fruits and vegetables)	Promotes healthy digestive system and regular bowel movements (no constipation)

Grain Products		Help body use energy (or calories) from food
	B-vitamins	
	Iron	Carries oxygen in blood (iron from plants is not as well absorbed as from animal sources)
	Fibre (whole grain breads and cereals)	Healthy digestive system and regular bowel movements (prevents constipation)
Other Foods	No nutrients High sugar, fat and salt	Other Foods such as candy, chocolate bars, potato chips, pop and fruit drinks should only be enjoyed in moderation (once a day or less).

WATER!

Although it is not found on this table, water is very important. Our bodies are 75% water and adults need 8-10 glasses of water everyday; children need somewhat less. Water can come from the tap, a bottle, broth and 100% juice.

Physical Activity-

Due to a variety of reasons, children are not active enough in their playtime. The goal is to increase children's physical activity every month until they are doing at least **1 ½ hours (90 minutes)** of physical activity EVERYDAY! This means doing more active things like walking to school, running around at recess and being involved in sports. It also means less inactive time, so less time in front of a computer, video game system or TV. School and family have a role to play here. Regular physical activity is a habit that needs to be adopted and enjoyed for a lifetime.

A child's active time should have a balance of 3 different types of activity:

- ☺ Endurance
- ☺ Flexibility
- ☺ Strength Building

Endurance activities strengthen our heart and lungs. They get the heart beating and the blood flowing through our bodies. They result in deep, strong breaths to move oxygen into the lungs and from there throughout our body. These are activities like hiking, drum dancing, jumping and swimming. Flexibility activities encourage children to bend, stretch and reach. They stretch and loosen muscles and joints. These are activities like gymnastics and picking berries. Strength building activities are the ones that build strong muscles and bones. These are activities like climbing and high kick.

For more information on physical activity see Unit 2- Bodies in Motion and Healthy Eating p.29.

Reaching and Maintaining Healthy Weights

Healthy weight should be reached and maintained by a combination of healthy eating and physical activity. Children should not go on diets or be encouraged to lose weight while they are growing. Rather, there should be a focus on eating healthier, *nutrient*-rich foods and less 'empty calorie' foods such as those with lots of *fat* and sugar but no *vitamins* or *minerals*. The other emphasis is on changing daily behaviour patterns to encourage more physical activity and less inactive time.

Results from a recent Canadian study have found two very simple ways to help get and keep children at healthy weights. The strategies involve families and schools. First the study suggests that families should eat dinner together. Eating together as a family creates an atmosphere of pleasure and respect for food and should increase the likelihood of a balanced meal. The contribution schools can make is by recognizing the importance of daily physical activity. A lot of a child's captive time in a day is spent at school. Time must be allotted to ensure that the physical activity needs of children (and teachers!) are met.

Healthy Practices for Children

When it comes to staying healthy, more and more evidence points to the importance of getting a good night's sleep. While sleeping, the immune system remains quite active so there is time for fighting infection and for the body to repair itself. Getting adequate sleep is a healthy practice more in the domain of the family but certainly one that can be encouraged at school.

Healthy teeth and gums allow us to chew and enjoy the food we eat. To keep your mouth in good shape, healthy eating and proper dental care go together. Every time you eat, you are feeding yourself, but you are also feeding the bacteria that live in your mouth! Most bacteria are harmless, but some can multiply and build up on your teeth and gum line to form "plaque". The bacteria produce acids that break down the tooth, eventually forming a cavity. Many of us are aware that eating too many sugary foods and not brushing our teeth enough can lead to dental caries (cavities). Healthy eating can reduce dental carries and have a number of other positive effects on our bodies. For example, keeping teeth and gums healthy may lessen the risk of heart disease, breathing problems, abnormal blood sugar fluctuations for people who have diabetes, and premature and/or small babies.

Wide circle of family and friends -

Mental health is a big part of attaining wellness. Key to a healthy mind is having lots of support from and engagement with family and friends. This helps develop self-esteem and confidence which, in turn, make adopting healthy practices easier. Having a good night's sleep and the right amount of rest also play a big role in both mental and physical health.

For children to adopt healthy habits as a way of life, there first has to be increased awareness of health issues by all members of the community. When the community and its children learn more about healthy habits, they are then better prepared to move to the action stage. Knowledgeable, healthy children are more likely to grow into well-informed, healthy adults who can then lead healthy communities.

Learning Strategies

LEVEL	SUGGESTED ACTIVITIES
Pre-K to 1	<p data-bbox="488 363 883 405">Healthy Habits Collage</p> <ol data-bbox="488 436 1430 1451" style="list-style-type: none"><li data-bbox="488 436 1430 653">1. Have a class talk about the healthy habits listed above and have the children raise their hands if they did one of the healthy habits before coming to school. Talk about how these habits make them feel, and also about who helps them stay healthy.<li data-bbox="488 659 1430 961">2. Provide students with pictures (magazines, newspaper, food flyers) of the healthy habits:<ul data-bbox="574 747 1219 961" style="list-style-type: none"><li data-bbox="574 747 1219 789">· Healthy foods (from Canada's Food Guide)<li data-bbox="574 795 821 837">· Active children<li data-bbox="574 844 1081 886">· Teeth brushing or healthy smiles<li data-bbox="574 892 971 934">· Children napping/sleeping<li data-bbox="574 940 1187 982">· Children playing with families or friends<li data-bbox="488 968 1430 1226">3. Have students draw a large shape (e.g. favourite animal, abstract shape, piece of fruit) and then have them glue the pictures onto their shape creating their own healthy habits collage. If facilities exist, laminate these collages and use them at the school Breakfast Program or donate them to a local day care to use as placemats.<li data-bbox="488 1232 1430 1451">4. The collages can also be used as a chart to record and reward healthy practices. A student can get a star for every healthy practice they try for the 5 days of the DROP THE POP challenge. Once filled up these can be taken home to encourage support and commitment from the family.
2 to 3	<p data-bbox="488 1461 1133 1503">What Makes Plants and Animals Grow</p> <ol data-bbox="488 1514 1430 1900" style="list-style-type: none"><li data-bbox="488 1514 1430 1640">1. Have a class talk about taking care of pets or plants. Talk about what their needs are and who is making sure they get what they need. Compare to healthy habits for people.<li data-bbox="488 1646 1430 1900">2. Do a mini-greenhouse project<ol data-bbox="581 1688 1430 1900" style="list-style-type: none"><li data-bbox="581 1688 1430 1730">a. get a variety of herb seeds, pots, soil and a grow light<li data-bbox="581 1736 1430 1900">b. compare plants' needs (water, light, nutrition in soil) to students' needs (include points about the importance of sunshine <i>vitamin</i> - Vitamin D, and water to both plants and humans)

LEVEL	SUGGESTED ACTIVITIES
4 to 5	<p>Creating a Yukon Wellness Mascot</p> <ol style="list-style-type: none"> 1. Have a class discussion about the healthy habits and what wellness means to them. Compare the health needs of animals to those of people. 2. Provide students with plasticine, construction paper, crayons or other arts and craft supplies and have them create a mascot for wellness. 3. Have each student introduce his/her mascot to the class
6 to 7	<p>Healthy Habits can be fun!</p> <ol style="list-style-type: none"> 1. Have a class talk about the healthy habits listed above and identify which habits the students are responsible for and which ones they must depend on others for. 2. Divide students into teams and have each team create a game, song, story or a visual aid that would help teach younger children about the healthy habits. 3. If possible, have the students use their game, story or visual aid to teach younger students about healthy habits
Activities for more advanced students and classes	<p>Healthy Habits Start Young</p> <ol style="list-style-type: none"> 1. Have a class talk about the healthy habits and the wellness issues for Yukon. Have the students research what other provinces and territories are doing to promote healthy habits among young people (see Resources on the Internet section). 2. Walk through the school or and discuss if and how the set-up encourages healthy habits. 3. Divide the students into groups of 2-3 and have them develop a physical activity menu for younger children. This menu should provide at least 60 of the 90 minutes of physical activity children need everyday. Offer the activity menus to daycares or teachers of younger students.

Great Internet Resources

- Canada's Food Guide
www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html
- Canada's Physical Activity Guide
www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/
- www.phac-aspc.gc.ca/hl-vs-strat/
 - website of the Integrated Pan-Canadian Healthy Living Strategy, the Federal/Provincial/Territorial (F/P/T) initiative to improve the health of Canadians and reduce health disparities.
- www.missionnutrition.ca
 - lesson plans and activities for K-8 created by Kellogg's and Dietitians of Canada
- www.dietitians.ca/healthystart/Active_Living_Planner.pdf
 - activity planner for pre-schoolers
- www.healthyteeth.org/index.html
 - oral health education database (Nova Scotia Dental Association)

Provincial/Territorial Healthy Living Strategies websites:

www.gov.pe.ca/photos/original/hss_hl_strategy.pdf
www.cd.gov.ab.ca/asrpfw/programs/active/strategy/index.asp
www.bchealthguide.org/healthyliving.stm
www.gov.mb.ca/healthychild
www.healthyontario.com
www.hepac.ca
www.gov.nf.ca/health/strategichealthplan
http://www.chebucto.ns.ca/Health/Heart_Health
www.forumscv.qc.ca

Unit 2 - My Amazing Body

Learning Goals

- a) Wellness, Self-Esteem And Body Image - Identify and appreciate similarities and differences between ourselves and others
- b) Nutrition And Growth - Identify body parts and their function
- c) Body In Motion - Describe benefits of healthy eating and a body in motion

Background Information

Wellness, Self-esteem and Body Image -

Learning to appreciate differences and celebrate achievements from a young age is important for developing positive self-esteem, a healthy body image and respect for others. Adopting and keeping healthy habits is easier if you feel good about yourself and your surroundings. To help build a positive self-image, children need to know that they will develop and grow at their own natural rate and that everyone has special characteristics that make them unique. Some of these characteristics are ones that they have little or no control over, like eye colour, size and shape. Other characteristics can be changed or modified, like hair styles and their personal 'look' (clothes, jewellery, and make-up).

Children need to understand that diversity makes the world interesting. Nature is a prime example of the power of diversity. Animals, for instance, come in all shapes, colors, and sizes—and all are beautiful. To help foster self-esteem and positive body image, it is important to establish a dynamic atmosphere within your school and classroom that embraces and supports diversity.

Children who are not at their healthy weight or who do not follow the current fashions can find themselves the target of prejudice, harassment or bullying. At a young age, children can learn that it is acceptable to dislike and deride children who are different. This can lead to psychological stress, shame, embarrassment, low self esteem, and even hatred towards their growing bodies. An important part of creating a positive classroom and school environment is establishing that it is not appropriate to make negative comments about another person's body shape, body size, athletic ability, or 'style'.

Here are some ideas to support diversity and encourage positive body image:

- ☺ Emphasize each student's positive attributes and talents that are unrelated to their physical appearance
- ☺ Teach the students that a rewarding life has everything to do with their own attitude and self-image.
- ☺ Share information that will help them deal with the media's obsession with thinness.
- ☺ Help students learn assertive ways of responding to someone who makes negative comments or teases them about their own body or who is teasing another student .
- ☺ Emphasize that attractive people come in assorted shapes, sizes, and colors.
- ☺ Talk about traditional values concerning body shape and size.

Nutrition and Growth

First please refer to the basic nutrition information provided in Unit 1 - Start your Day the Healthy Way (pp 11-14).

Children, because they are growing, have some special needs that adults do not have. However, by following Canada's Food Guide to Healthy Eating it is easy to build a healthy eating plan for all members of the family. The recommendations for children are designed to promote optimal growth and development. A wide variety of foods rich in essential *nutrients* are necessary for growing bodies and form the basis of these recommendations. The following *nutrients* are key to proper growth and development:

Nutrient	Food
Energy-rich complex carbohydrates	Grain products like: <ul style="list-style-type: none"> • Bannock • Breads • Rice • Cereal • Pasta • Muffins WHOLE GRAIN CHOICES ARE BEST (e.g. 100% whole wheat)
Vitamins and Minerals	Berries Fruits Vegetables CHOOSE A VARIETY OF COLOURS (e.g. orange fruits and vegetables are a source of Vitamin A; dark green vegetables are a source of iron and folate)
Calcium and Vitamin D (strong growing bones)	Dairy Products like: <ul style="list-style-type: none"> • Milk • Yogurt • Cheese *** soups and stews made with bones are also sources of Calcium***
Protein and Iron (growing muscles)	Meats like: <ul style="list-style-type: none"> • Caribou, moose, salmon, grouse, char • Beef, chicken, fish • Eggs (store or from the land) • Peanut butter, dry beans

Most children will grow about two inches and gain about four to seven pounds per year. Between the ages of six to twelve, youngsters will grow an average of one to two feet and almost double in weight. The adolescent growth spurt will begin in girls at ages 10 or 11, reach its peak at age 12 and is complete by about age 15. In boys, it begins at 12 or 13 years of age, peaks at age 14 and ends by about age 19.

To meet energy and *nutrient* needs, children and teens should eat at least three meals a day, beginning with breakfast. Schools that host breakfast programs or provide healthy mid-morning snacks often have students who are more alert and better able to learn and perform sports or other physical activities. Snacks also form an integral part of meal patterns for children and teens. Young children generally cannot eat large quantities of food at one sitting and often get hungry long before the next regular mealtime. Mid-morning and mid-afternoon snacks are generally advised for this age. Fast-growing, active teens may have tremendous energy needs. Even though their regular meals can be substantial, they still may need snacks to supply energy between meals and to meet their daily *nutrient* needs.

Many things affect the growth of children. Small changes in growing patterns are normal, especially during the first 2 years of life and during the teenage growth spurt. Growth spurts are part of normal growth and development. Children may be short or thin because their parents are short or thin. If children do not eat enough, growth and weight gain may slow down. They may also become more tired, cranky and have less energy and strength than before. If a child is overeating and doesn't get much exercise, they might gain weight quickly. A child who shows a significant change in growth pattern could benefit from a visit to a health professional.

Bodies in Motion and Healthy Eating

First please refer to the section on physical activity in Unit 1- Start Your Day the Healthy Way (p. 17).

The current national goal is to increase physical activity for all Canadian children and youth. The suggested strategy is to:

1. Increase the time currently spent on physical activity starting with at least 30 minutes or more more per day.
2. Reduce "non-active" time spent on TV, video, computer games and surfing the Internet, starting with a reduction of at least 30 minutes per day.
3. Encourage daily accumulation of physical activity throughout the day in periods of at least 5 to 10 minutes.

This increase in physical activity should include:

*Moderate activities like brisk walking, skating, or bike riding

**Vigorous activities like running, basketball or soccer

The following chart¹ shows how this can be done:

Month	Daily Increase in Moderate Activity (minutes) +	Daily Increase in vigorous Activity (minutes) =	Total Daily Activity (minutes)
1	At least 20 +	10 =	30
2	At least 30 +	15 =	45
3	At least 40 +	20 =	60
4	At least 50 +	25 =	75
5	At least 60 +	30 =	90

Students should be encouraged to total up their daily and weekly minutes of physical activity, then progress gradually from there until they reach at least 90

¹ Chart adapted from Public Health Agency of Canada's Physical Activity guidelines for youth

minutes of daily physical activity. Youth who are already quite active should record all their moderate and vigorous activities for a few days. They may not need to change their routines.

There are many reasons why it is important to keep children active. Physical activity:

- Builds strong bones and strengthens muscles
- Maintains flexibility
- Helps to achieve and maintain a healthy weight
- Promotes good posture and balance
- Improves fitness
- Strengthens the heart
- Improves self-esteem
- Increases relaxation, reduces stress
- Enhances healthy growth and development
- Provides opportunities to meet new friends, set goals and learn teamwork

To achieve and maintain these positive outcomes, physical activity needs to be matched with healthy eating. Our bodies are like snow mobiles; they will not work well if they are given poor-quality fuel. Athletes are well aware of the need for the right fuel to help them perform their best. This high grade fuel consists of the right blend of *carbohydrate*, *protein* and *fat* as well as good sources of *vitamins* and *minerals*.

Simply knowing that physical activity and healthy eating are good for you will not initiate behaviour change. Research shows that the following five steps work together to change behaviour and establish new lifestyles:

1. **Develop Awareness:** Involve children in the process. They will be far more motivated if they play a part in the decision-making process. Help them become aware of how much activity they do now and how inactive they may be.
2. **Set Goals:** Goal-setting helps children check their own progress. In a classroom situation it might be helpful to set a goal to which all children can contribute. Encourage small steps.
3. **Give Feedback and Praise:** Talk about what the child did to be active everyday and praise and reward small steps.
4. **Get Children to Agree to the Plan:** Talk often about physical activity goals with the whole class to encourage the children to do what they said they would do and develop team spirit.
5. **Reward and Recognize Change:** Reinforce new behaviour and celebrate successes through rewards and recognition.

These 5 steps can be discussed in class. Working together, a handout could be developed that can be taken home to bolster family support and encouragement.

Learning Strategies

LEVEL	SUGGESTED ACTIVITIES
Pre-K to 1	<p>Body Parts in Two Languages</p> <ol style="list-style-type: none">1. Have the students form 1 large circle.2. Have everyone touch their heads and say the name of this body part in English and possibly another language if more than one is spoken in class. Continue down the body until you reach your toes.3. Do the first round slowly, and then repeat picking up the pace.
2 to 3	<p>Who's Who in Classroom_____.</p> <ol style="list-style-type: none">1. Have children bring in pictures of themselves as babies with their names on the back. Have each student stick his/her picture on a poster board.2. Play a guessing game to see who's who. Discuss how students could identify each other (characteristics).3. Look at different body parts (e.g. hands, feet, legs) and talk about how much they have grown and changed since they were babies.4. Discuss how each student is special and unique on their own and then discuss the advantages of being part of a bigger community (e.g. classroom -school-community-Yukon-Canada-World)
4 to 5	<p>Cultural Foods and Games/Sports</p> <ol style="list-style-type: none">1. Give each student a profile of a child from another part of Canada or the world. Have the student research the cultural foods and games/sports of their counterpart.<ul style="list-style-type: none">• Include sports from Arctic Winter Games and Winter Olympics2. Divide the class into 3 or 4 groups and have each student share a story about their counterpart by comparing:<ol style="list-style-type: none">a. their favourite traditional foods and gamesb. the cultural food and games/sports

LEVEL	SUGGESTED ACTIVITIES
6 and 7	<p data-bbox="488 233 849 275">Active Time Mapping</p> <ol data-bbox="488 306 1409 1140" style="list-style-type: none"> <li data-bbox="488 306 1409 569">1. Give each student a chart on which they can record their minutes of active time and inactive time for 5 days OR If facilities exist, give each student a pedometer and allow them to register for the Canada on the Move research project (www.canadaonthemove.ca) where they can join other Canadians tracking their physical activity. <i>[Alternately, a few students could get pedometers and be responsible to 'map' out the community in terms of footsteps (e.g. 200 steps from the bus drop off to the school). All students can then track their steps once they have the map of the community.]</i> <li data-bbox="488 793 1409 877">2. Ask students to compare each day's total with the goal of eventually reaching 90 minutes of active time everyday. <li data-bbox="488 884 1409 1140">3. Have a class discussion on their findings looking at: <ul data-bbox="537 926 1409 1140" style="list-style-type: none"> <li data-bbox="537 926 1409 968">• did they reach 90 minutes each day (why or why not) <li data-bbox="537 974 1409 1058">• did they start to change their habits as the days went by (why or why not) <li data-bbox="537 1064 1409 1140">• what got in the way or what helped them to be more active

Great Internet Resources

www.ayn.ca/health/en/wellness/wellness_self_esteem.asp

Aboriginal youth network page on wellness and self-esteem

www.city.ottawa.on.ca/city_services/yourhealth/youth_en.shtml

Site on youth and health, including page on self-esteem

www.keepkidshealthy.com/growthcharts/

A pediatrician's guide to keeping children healthy, includes information on nutrition, growth and growth charts

www.dietitians.ca/news/downloads/Child_Growing_Well_english.pdf

fact sheet by Dietitians of Canada on children's growth

www.dietitians.ca/child/

Support teachers, health intermediaries and parents in their efforts to provide an environment that fosters healthy eating and active living in school age children and youth

www.teachnutrition.org

Continuing education site for Preschool to Grade 10 teachers in Ontario

www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/

Homepage for **Canada's Physical Activity Guides for Children and Youth**

www.dietitians.ca/news/downloads/2000_sports_nutrition_factsheet.pdf

www.dietitians.ca/news/downloads/sport_nutrition_file_english.pdf

2 fact sheets on sports nutrition by Dietitians of Canada

www.awg.ca/

home page of Arctic Winter Games

www.olympic.org/uk/index_uk.asp

home page of the Olympic Winter Games

Unit 3 - Choices for Health

Learning Goals

- a) "A Look At Food In The Store" and Label Reading - recognize the key messages delivered by food labels and marketing strategies used by store
- b) A Look At Country Food And Its Health Benefits - recognize the pure and natural benefits of country food
- c) Tying It All Together With Canada's Food Guide - identify healthy practices on food guide (store and country food; drinking water; little or no Sometimes Foods)

Background information -

Food Labels

All packaged foods are required by law to have an ingredient list unless the food has only one ingredient. All ingredients are listed by weight from most to least, so the first ingredient is in the product in the largest amount. Generally speaking a healthy food would not have sugar, *fat* or salt (sodium) as one of the first four ingredients. The tricky part is that words like sugar, *fat* and salt are usually not used and not all *fats* are unhealthy. The general health recommendation is to stay away from saturated and hydrogenated *fats* (*trans-fats*). Please see the table below for the words to watch for on a label:

These words...	...mean the same as this word
<p>Glycerides Glycerol Esters Lard Coconut oil Cocoa butter Palm or palm kernel oil Tallow Beef fat Suet</p> <p>Hydrogenated vegetable oil Vegetable oil shortening</p>	<p>Saturated Fat</p> <p>Trans Fat</p>
<p>Monosodium Glutamate Disodium phosphate Brine Garlic, onion or celery salt Soy sauce Sodium alginate Sodium benzoate Sodium proprionate</p>	<p>Salt</p>
<p>Fructose Sucrose Maltose Lactose Galactose Dextrose Dextrin Corn syrup solids molasses Honey Liquid sugar Syrup</p>	<p>Sugar</p>

Much confusion has arisen over the amount of *fat* in food and its role for health. *Fats* found in food harvested from the land especially those from marine mammals and fish are considered very healthy. *Fats* of plant origin (e.g. olive oil, canola oil) are also considered healthy. Problems arise when these healthy *fats* are changed in a food laboratory to hydrogenated fats. These man-made *trans fats* are considered to be quite unhealthy and should be avoided. Until recently it has been hard to identify which foods have *trans fats* despite the fact that they are found in many foods. Food manufacturers have relied on *trans fats* as they have such a long shelf life and are inexpensive. However, the recent changes in our labelling laws have now made it clear where the *trans fats* are by virtue of the new (as of 2003) Nutrition Facts Table.

The newly designed Nutrition Facts Table must contain the following 13 *nutrients* (like in this nutrition facts table for partly skimmed milk):

Nutrition Facts			
Per 250 mL			
Amount	%Daily Intake		
Calories 110			
Fat 2.5 g	4%		
Saturated Fat 1.5 g	+	8%	
Trans Fat 0.1 g			
Cholesterol 10 mg			
Sodium 130 mg	5%		
Carbohydrate 12 g	4%		
Fibre 0g			
Sugars 11g			
Protein 9 g			
Vitamin A	10 %	Vitamin C	6%
Calcium	30%	Iron	0%
Vitamin D	45%		

Key to understanding how much of a *nutrient* is in the food is to first look at the serving size listed. Since 2003 the serving size must be realistic and of a size likely to be *consumed*. Prior to this, some companies would base the nutrient profile on a serving size smaller than what most people would eat (e.g., 13 potato chips). This would result in a more favourable profile with less *fat* than the average, more realistic serving.

Nutrients like *carbohydrates*, *fats* and *protein* are listed by weight (grams or milligrams) and % Daily Value (DV). *Nutrients* like *vitamins* and *minerals* are only listed as % DV. % DV is a scale from 0% to 100%. It helps you see if there is a little or a lot of a *nutrient* in the food, and how much that serving will contribute to meeting the daily requirement. Generally speaking a food with 15% DV or more of a certain *nutrient* is thought of as having a lot of that *nutrient*. For healthy eating we should try to choose foods that have a lot of fibre, Vitamin A and C, Calcium and Iron. We also should try to eat foods with little *trans-fats* and sodium.

Sugar doesn't have a Daily Value so it doesn't fit within these guidelines. One way to measure sugar content is to calculate the number of teaspoons of sugar in various foods. 4 grams of sugar equals 1 teaspoon. So a typical can of pop with 40 grams of sugar will contain 10 teaspoons of sugar. The same calculation can be used for *fat*. A small bag of chips (85g) with 30 grams of *fat* has about 7 teaspoons of *fat*. This is almost half of the fat an adult needs in a day (45%DV).

A couple of other features of food labels became regulated in 2003: *Nutrient* Content Claims and Health Claims. Both of these claims are usually found on the front of the label as a kind of advertisement.

The *Nutrient* Content Claim focuses on just one *nutrient* (e.g. "cholesterol free"). This gives you only a small insight into the nutrition profile of the food. The claim must be true in order to print it on the product, but it does not give you a complete picture of how nutritious the food is (e.g., something that is "cholesterol free" can still be high in *trans-fat*). When making decisions about food, it's important to consider the nutrition facts table as well as the claim on the front before deciding if it is a healthy option.

Health Claims describe the relationship between a food or a *nutrient* and a health condition. The following 4 claims are the only ones allowed by Health Canada:

- a. A healthy diet low in sodium and high in potassium may reduce the risk of high blood pressure
- b. A healthy diet adequate in calcium and *vitamin* D may reduce the risk of osteoporosis
- c. A healthy diet low in *saturated* and *trans fat* may reduce the risk of heart disease
- d. A healthy diet rich in a variety of vegetables and fruit may help reduce the risk of some types of cancer

Health Canada sets the regulations for the wording of these claims and they must be true. To make a health claim the food must have a specified amount of the desired *nutrient(s)*.

Tying it Together with Canada's Food Guide

Nutrition problems can arise if students follow an unbalanced eating pattern. Often too many servings are eaten from the 'Other Foods' group such as pop, chips and other food that is high in calories from sugar or fat but low in nutritional value. Canada's Food Guide suggests that all people should only choose foods from this group once per day or less. These foods are loaded with calories from sugar and unhealthy *fats*. This can fill a student up without providing any of the needed *vitamins* and *minerals* that are so important for growth and development. There is some evidence suggesting that we have a biological pre-disposition to eating these foods because they respond to our natural instinct that tells us sweet, salty and rich foods will be good for us (e.g. a sweet plant is unlikely be rotten or toxic; salt helps preserve food that might otherwise go bad). Another problem is that foods that are very sweet or very salty can over-stimulate our taste buds and make it harder to appreciate the subtle (in comparison) tastes of healthier foods.

Changing to healthier eating habits can be done in a slow, gradual manner, so new foods are appreciated and enjoyed. If we change to healthy eating slowly but surely we are more likely to enjoy new foods and there is a better chance that we will stick to it. Healthy eating is a habit to encourage!

Food from the Land: Traditional Yukon Food

(excerpt from *Food From the Land; health for the body, mind and spirit*, produced by Council of Yukon First Nations)

Traditional Foods are Healthy Foods

You don't have to be a scientist to practice good nutrition - Yukon First Nations people traditionally did this naturally. They ate food from the land that kept them strong and healthy. Early white fur traders and prospectors were impressed by the good health and strength of Yukon First Nations people. This came from the good foods which the Yukon gave them. The waters offered rich catches of fish. Caribou, moose, sheep, along with other big and small game were hunted and trapped. The land offered a variety of berries, roots, wild greens, and edible barks.

Traditional First Nations people understood that good health depended on eating a wide variety of these foods. They thought about what they ate, and they did not eat just a few things. Scientists now understand better why eating a variety of foods is important. Our bodies need over 50 different nutrients in specific amounts for good health. Eating the right nutrients for health is something like following a recipe. You can't mix any old thing in a bowl and expect to get bannock - you need the right amounts of each ingredient: flour, salt, baking powder, and water.

Your health depends on following the right recipe. Nutrients - protein, fat, carbohydrate, vitamins, minerals, and water - are the basic ingredients. You practice good nutrition when you eat the foods which give you the right amounts of each ingredient.

Modern Times

In the last twenty years, good nutrition and healthy eating habits have slipped ever further away for many Yukon First Nations people - especially younger ones. Many families do not live as close to the land anymore. More store-bought foods are eaten than ever before, some traditional foods are no longer gathered at all, and once productive gardens and greenhouses are no longer planted.

The stores today offer nutritious food, but they also sell more junk than ever before. Potato chips, soft drinks, Cheezies, candy, sugary cereals, processed dinners laced with chemicals - too many young people seem to eat more of these junk foods than they do of Yukon's real foods.

Blending the Old and the New

What should people eat today - traditional foods or store-bought, modern foods? To enjoy good health you don't have to choose all of one or all of the other. Many people don't have the time, the skills or the tastes to eat exactly like their great-grandfather did. On the other hand, store-bought foods are not as nutritious, and are often not as satisfying as traditional foods. Many store foods are also more expensive and not as wholesome.

Many Yukon First Nations people want to blend the old and the new. So what is a good way to blend traditional and modern ways of eating? Ask the elders. Many of the First Nations people who grew up between 30 and 60 years ago had one of the best diets in the Yukon. They ate most of the traditional foods, but many also got good fresh vegetables from their own gardens. Their local food was rounded out by wholesome grains, flour, dried peas, beans and fruits from the store. They ate a balanced variety of natural foods (no chemicals), and they did not know what "junk food" was.

TRADITIONAL YUKON FOODS

NUTRIENT (and Sources)	ROLE
Fat (Trout, whitefish, salmon, beaver, big game intestines, marrow, ducks, geese, oolican grease)	<ul style="list-style-type: none"> - supplies energy - carries vitamins A,D,E and K
Protein (Meat and fish, all varieties and parts)	<ul style="list-style-type: none"> - builds and repairs body tissues - builds antibodies to fight infection
Carbohydrate (Berries, roots, bark, stomach contents of big game)	<ul style="list-style-type: none"> - supplies energy - helps burn fat
Calcium (Fish heads and bones, hooves, soft bones, antlers, ptarmigan, lambs quarters, berries)	<ul style="list-style-type: none"> - helps build strong bones and teeth - promotes healthy nervous system and normal blood clotting
Iron (Meats and fish, especially organs , marrow and blood)	<ul style="list-style-type: none"> - essential for transport of oxygen and carbon dioxide in the body
Vitamin C (Greens, berries, especially currants, ptarmigan, fish eggs)	<ul style="list-style-type: none"> - maintains healthy teeth and gums - maintains strong blood vessel walls - helps to absorb iron
Vitamin A (Eggs, goose, liver, caribou stomach contents, pike, bear, moose, muskrat, high bush cranberry,.)	<ul style="list-style-type: none"> - helps bones and teeth develop - promotes night vision - helps keep skin and membranes healthy - helps fight infection
Vitamin D (Fish liver, fish eggs, organs, animal fat)	<ul style="list-style-type: none"> - prevents rickets - helps body use calcium and phosphorous in growing and repairing bones and teeth
Thiamin (Meats, marrow, fish, greens, berries)	<ul style="list-style-type: none"> - releases energy from carbohydrates - aids normal growth and appetite
Riboflavin (Meats, organs, marrow, stomach contents)	<ul style="list-style-type: none"> - Promotes healthy skin, eyes and nervous system - helps release energy to body cells
Niacin (meats, blood, organs, fish)	<ul style="list-style-type: none"> - promotes normal growth and development - maintains nervous system and digestive tract

Learning Strategies

LEVEL	SUGGESTED ACTIVITIES
Pre-K to 1	<p>Let's Go Camping</p> <ol style="list-style-type: none">1. Talk about the 4 food groups, naming food choices from each group2. Use story boards to set the stage for a family camping trip3. Divide the students into groups and provide each group with pictures of store and traditional foods using choices from <i>Canada's Food Guide</i>. Give each group a large picture of a picnic basket4. Have each group choose foods they think the family should take on their camping trip by placing the food pictures on the picnic basket5. Go around and talk with each group about the foods they chose

LEVEL	SUGGESTED ACTIVITIES
2 to 3	<p>Where does our Food Come from?</p> <ol style="list-style-type: none"> 1. Arrange a trip to one of the stores in your community (see resources: Planning a Store Tour for Students). 2. At the store point out different foods from the 4 food groups <ol style="list-style-type: none"> a. Ask the students to name the food and its food group b. Help out when an unknown food is picked. If possible let the students try this new food (make sure to wash carefully all fresh fruits and vegetables before eating) c. For fresh produce find out where it came from (e.g. province, country). You might need the manager's help. 3. In the classroom use a large map of Canada and the world <ol style="list-style-type: none"> a. Have the students name foods they saw at the store and have them place a pin on the map indicating where they came from (e.g. potatoes-pin on PEI; apples pin on ON or BC; oranges pin on USA) 4. After all the foods from the store have been mentioned talk about the foods that come from the Yukon. Pin the names of the foods on the map.

LEVEL	SUGGESTED ACTIVITIES
4 to 5	<p>Find the Fat, Source the Sugar</p> <ol style="list-style-type: none"> 1. Divide the class into small groups and give each group 4 or 5 food packages to use as a reference. Have healthy and not so healthy products (e.g. yogurt, milk chips, pops). 2. As a class talk about the information you get from reading a food label (i.e. ingredient list, nutrition facts table, health claims). Have each group follow along with the labels in front of them. 3. Show the class how to tell if a food has a little or a lot of the following <i>nutrients</i> (see the fact and activity sheets in the resource section): <ol style="list-style-type: none"> a. Calcium b. Iron c. Sugar d. Fat 4. Have each group compare their products looking for the above <i>nutrients</i>. Each group should discuss: <ol style="list-style-type: none"> a. How often they should eat these foods b. What happens when the amount they eat is bigger than the serving size listed on the nutrition facts table 5. Have a reporter from each group share their group's findings with the class 6. Share the "Traditional Yukon Foods" table with the class and compare the nutrients provided by traditional food to some typical store-bought food such as pop and chips..

LEVEL	SUGGESTED ACTIVITIES
6 to 7	<p>Is There Truth in Nutrition Advertising?</p> <ol style="list-style-type: none"> 1. As a class talk about the information you get from reading a food label (i.e. ingredient list, nutrition facts table, health claims). 2. Divide the students into small groups and provide each group with copies of magazines, newspapers and/or flyers 3. Ask each group to choose a nutritional product from the advertisements. 4. Write the following questions on the board and have each group prepare their answers for their product: <ul style="list-style-type: none"> • Are there promises made for quick fixes or instant cures? • Does the claim sound too good to be true? • Is the claim based on personal stories or testimonials? • Does the information contradict Canada's Food Guide and labeling rules? 5. Have a reporter from each group share their group's findings with the class.
Activities for more advanced students and classes	<p><i>Nutrient</i> Content and Health Claims for Traditional Foods</p> <ol style="list-style-type: none"> 1. As a class talk about the information you get from reading a food label (i.e. ingredient list, nutrition facts table, <i>nutrient</i> content and health claims). 2. Using the "Traditional Yukon Foods" table, review the nutritious benefits of some traditional Yukon foods 3. Divide the students into small groups. Have each group choose a traditional food and an unhealthy store bought food. Based on the information found on a typical nutrition fact table, challenge each group to come up with an original way to illustrate how the nutritious content of the traditional food compares to the unhealthy store-bought food.

Great Internet Resources

www.healthyeatingisinstore.ca

Project of Dietitians of Canada and the Canadian Diabetes Association to help consumers understand nutrition labelling. The following resources are downloadable from the site:

- Look At The Label
- All About Health Claims
- Nutrient Content Claims
- Get More Or Less
- Serving Size
- Figure Out The Facts
- Compare Foods Using Percent Daily Value

www.healthystores.org

Project aims to improve health and prevent obesity and disease in low-income communities through culturally appropriate store-based interventions that increase the supply of healthy foods and promote their purchase.

Unit 4 - Healthy Smiles

Learning Goals

1. The ABC's of Dental Health - recognize the basic principles of dental health
2. The Mouth - Body Health Connection - identify the diseases that can be prevented by keeping our mouth healthy

Background Information

Your mouth is the door to your body

Your mouth is a busy place; so many important things happen there. Our teeth, gums, tongue and cheeks make it possible for us to talk, smile, laugh and chew our food. Besides being home to your smile, your mouth can also be a home to other living things called bacteria (groups of living organisms so small you can't see them). Bacteria are constantly on the move on your teeth, gums, lips and tongue. This is normal and some of these bacteria are even helpful. But some bacteria are harmful, and this is where problems can begin.

Feeding the bacteria

The relationship between bacteria, healthy eating and dental health is complex. A good place to start is how bacteria can thrive in our mouths.

1. Harmful bacteria can attach themselves to hard surfaces like the enamel that covers your teeth.
2. If the bacteria are not removed (by brushing and flossing), they multiply and grow in number until a colony forms.
3. The colony also grows because other types of bacteria attach themselves to the colony.

Sugar is a source of energy for bacteria. Bacteria multiply faster when sugar is available. Sugar is found in healthy foods (like fruits and milk); it is also found in foods that have little or no nutritional value, like pop and juice drinks. All types of sugar, whether found in healthier foods or other foods, provide energy for bacteria and ultimately contribute to tooth decay.

Bacteria and tooth decay

Some bacteria convert sugar into a kind of glue that helps the bacteria stick to the tooth surface. This makes it harder to get rid of the bacteria, and your saliva (spit) alone may not be able to wash them away.

Proteins that are present in your saliva mix with the bacteria colony to make a whitish film on the tooth. This film is called plaque. The plaque that forms on your teeth and doesn't get washed away by saliva or by brushing or flossing your teeth produces acid as it eats up sugar. This acid dissolves the *minerals* that make your tooth enamel hard. The surface of the enamel then becomes porous - tiny holes appear. The acid eats away at the enamel, causing the holes to become bigger and bigger, until one large hole is formed - this is a cavity. The decay equations are:

Bacteria in plaque + Sugar = Acid and

Acid + Tooth enamel = Tooth decay

We can break this equation by brushing and flossing daily to prevent the build up of plaque, and reducing the amount of sugar we eat.

The relationship between pop and tooth decay

Many kinds of pop contain sugar, lots of it - which is broken down by bacteria to produce acid. The acid attacks teeth, and each acid attack lasts about 20 minutes. Every sip causes another acid attack. It's pretty easier to see how drinking pop contributes to tooth decay. But that's not all. Many kinds of pop also contain acid. So there are two sources of acid that attack tooth enamel: the acid that is produced by

bacteria in the mouth and the acid that is contained in pop. Remember drinking diet or "sugar-free" pop can still promote tooth decay because it contains acid.

Other drinks such as juice, fruit cocktails or drinks, or iced teas also contain sugar and acid and can have a similar effect on tooth enamel. But 100% vegetable and fruit juice contains vitamins and minerals that your body needs, whereas fruit cocktails or drinks, or iced teas have little or no nutritional value. Even though juice is a healthier drink choice, it is still wise to limit juice intake to $\frac{1}{2}$ cup per day. (See *Drink to your health* for a fuller discussion of healthier drink choices.)

The table below lists the amount of acid and sugar found in common drink choices. Drinks that have higher amounts of sugar and/or acid attack tooth enamel more aggressively than drinks with lower concentrations

As you can see,

- Water is always a good choice - it is neutral and it contains no sugar!
- All other drinks contain acid, and some more than others.
- Many drink choices are high in sugar.
- Even drinks that contain no sugar contain acid which can promote tooth decay (except for water, that is).

	Acid Amount* (low number = bad for teeth)	Sugar Amount** Per 12 ounces or 1 can
Pure Water	7.00 (Neutral)	0.0
Barq's	4.61	10.7 tsp.
Diet 7Up	3.67	9.0 tsp.

Diet Dr. Pepper	3.41	0.0
Diet Coke	3.39	0.0
Diet Mountain Dew	3.34	0.0
Minute Maid Grape Soda	3.29	11.9 tsp.
Mountain Dew	3.22	11.0 tsp.
Fresca	3.20	0.0
Orange Slice	3.12	11.9 tsp.
Diet Pepsi	3.05	0.0
Nesta	3.04	5.0 tsp.
Surge	3.02	10.0 tsp.
Gatorade	2.95	3.3 tsp.
Dr. Pepper	2.92	9.5 tsp.
Hawaiian Fruit Punch	2.82	10.2 tsp.
Coca-Cola	2.53	9.3 tsp.
Pepsi	2.49	9.8 tsp.
Battery Acid	1.00 (yikes)	0.0

It's not only the amount of sugar and acid contained in these drinks that make them poorer drink choices. When and how we drink them is also important in determining the effect on our teeth. The longer or more frequently you sip a drink, the greater the number of acid attacks and therefore the greater potential for damage to your teeth. It is better to drink pop with a meal than on its own. This may be because the saliva that is produced when eating helps to neutralize the acid or wash it away so that it cannot eat away at the tooth enamel. Certain foods such as aged cheese, peanuts, or sugar-free chewing gum, may also be "friendly" to the teeth. Eating these foods along with, or after, drinking pop may help to counter the effect of acids produced by the bacteria.

Healthier drink choices promote oral health

Healthier drink choices will help maintain good oral health. For some people, achieving better oral health may require changes in drink choices. Here are some

recommendations based on current knowledge of how pop and other drinks high in sugar and acid affect teeth.

- ✓ Reduce the amount of pop you drink - drink it occasionally, not on a daily basis.
- ✓ Learn how to read the nutrition facts tables and try out other beverages that are lower in sugar.
- ✓ When you do drink pop, choose pop that is lower in sugar and drink pop with meals instead of in-between meals.
- ✓ Don't sip on a pop, and use a straw when you drink to keep the sugar away from your teeth, and rinse your mouth with water or brush your teeth after you drink a pop.
- ✓ Remember: Water contains neither sugar nor acid, and is therefore always a good choice.

In addition to reducing sugar consumption - both in the beverages we drink and the foods we eat, there are other steps we can take to keep our mouths and teeth healthy:

- Using a soft bristle toothbrush, brush your teeth and tongue with fluoridated tooth paste at least twice a day. Choose a toothbrush whose size and shape allows you to reach all the way to your back teeth.
- Floss everyday. If you don't floss, you are missing more than one-third (1/3) of your tooth surface.
- Regular check-ups with a dentist or dental therapist, and professional cleaning are very important. Checkups can prevent problems from developing, or keep problems from getting worse
- Look for warning signs of gum disease such as red, shiny, puffy, sore or sensitive gums; bleeding when you brush or floss; or bad breath that won't go away. Report any of these warning signs to your dentist.
- Stay tobacco-free. Smoking is a major cause of tooth loss through gum disease, and can lead to more serious problems like cancer of the mouth.

Learning Strategies

LEVEL	SUGGESTED ACTIVITIES
Pre-K to 1	<p>A Trip To Explore Our Mouth</p> <ol style="list-style-type: none">1. Talk about healthy teeth and mouths with the children2. Ask the students what they do to keep their mouth clean3. Give each student a hand-held unbreakable hand mirror.4. Instruct the children to look inside their mouth.5. Ask the children what they see inside their mouth (encourage responses such as "white teeth," "pink or brown gums," pink or red tongue").6. Have the children feel their teeth and lips with their finger. Ask the children questions such as:<ol style="list-style-type: none">a. What do you see in the mirror when you smile?b. What do your lips feel like?c. What do your teeth feel like?d. Are your teeth wet or are they dry?e. Are parts of your teeth smooth?f. Are parts of your teeth rough or bumpy?g. Are your teeth hard or are they soft?h. Are there any spaces between your teeth?i. Point to the top of your mouth?j. Point to the bottom of your mouth. What's at the bottom of your mouth?(tongue)k. Point to the sides of your mouth. What's at the side of your mouth? (cheeks)

LEVEL	SUGGESTED ACTIVITIES
2 to 3	<p data-bbox="378 233 821 275">Who Cleans Their Teeth?</p> <ol data-bbox="427 321 1393 800" style="list-style-type: none"> <li data-bbox="427 321 1101 363">1. Talk about the concepts raised in this unit <li data-bbox="427 367 1393 579">2. Give children old magazines. Have them find pictures of people who are eating, talking, or smiling. Have them find pictures of animals eating or showing their teeth. Cut or tear the pictures out and glue them to pieces of construction paper. <li data-bbox="427 583 1393 711">3. With their collages in front of them, talk about all the important things teeth help us and animals do (e.g. talk, chew, smile, hunt). <li data-bbox="427 716 1393 800">4. Brainstorm on the ways children and animals can clean their teeth and reinforce the concept of dental health.
4 to 5	<p data-bbox="378 856 878 898">My First Visit to the Dentist</p> <ol data-bbox="427 957 1393 1434" style="list-style-type: none"> <li data-bbox="427 957 943 999">1. Review the concepts in this unit <li data-bbox="427 1003 1393 1131">2. Ask your students to share what their first impressions of going to the dentist or dental therapist were and how they feel now. <li data-bbox="427 1136 967 1178">3. Divide the class into small groups <li data-bbox="427 1182 1393 1310">4. Have each group prepare a story or song that explains going to the dentist or dental therapist for the first time for younger children <li data-bbox="427 1314 1393 1434">5. If possible, arrange to have the students read their stories or sing their songs to the students in pre-K, kindergarten and grade 1.

LEVEL	SUGGESTED ACTIVITIES
6 to 7	<p data-bbox="378 233 1127 275">Bright Smiles from the Past to the Present</p> <ol data-bbox="427 310 1393 1003" style="list-style-type: none"> <li data-bbox="427 310 951 344">1. Review the concepts of this unit <li data-bbox="427 352 1393 611">2. Have the students research what the traditional practices were for cleaning teeth for aboriginal people around the world. Try and find information on the traditional practices of Yukon First Nations people (visit the elder's center; review archival photos of elders; interview traditional knowledge experts). <li data-bbox="427 619 1393 1003">3. Ask each student to prepare an essay, newspaper or magazine article or a radio piece on changes in dental health practices considering the following: <ul data-bbox="521 751 1393 1003" style="list-style-type: none"> <li data-bbox="521 751 1292 827">✎ What were the traditional practices for cleaning teeth? <li data-bbox="521 835 1357 869">✎ Why do elders in old photographs have strong teeth? <li data-bbox="521 877 1333 953">✎ Why do you think dental health has become such an issue for Yukon children and families? <li data-bbox="521 961 1393 1003">✎ How might the dental health of everyone be improved?
Activities for more advanced students and classes	<p data-bbox="378 1045 1000 1087">Tooth Brushing Marketing Campaign</p> <ol data-bbox="427 1123 1393 1381" style="list-style-type: none"> <li data-bbox="427 1123 1105 1157">1. Review the concepts presented in this unit <li data-bbox="427 1165 1260 1241">2. Review the marketing strategies from unit 6 Healthy Practices Marketing Strategies p.79 <li data-bbox="427 1249 1393 1381">3. Divide students into groups of 2 and have each group prepare a tooth brushing marketing campaign aimed at encouraging children to brush their teeth.

Great Internet Resources

www.cda-adc.ca/en/oral_health/fags_resources/teaching_resources/games_activities.asp

Dental Health Activity Sheets, like Connect The Dots é Word Search / Find Your Way / Crossword Puzzle

www.healthyteeth.org/index.html

interactive dental health site made in association with the Nova Scotia Dental Association

http://www.mndental.org/dental_health/sip_decay/

interactive quiz about pop and tooth decay

www.ada.org/public/games/games.asp#dental

site for interactive games and quizzes

GLOSSARY OF TERMS

carbohydrate

Like [proteins](#) and *fats*, *carbohydrates* are one of the three main nutrients in food. Carbohydrates are the body's major source of energy. There are two main types of carbohydrates - sugars (like the kinds in milk, fruit, table sugar, and candy) and starches, which are found in grains, breads, crackers, and pasta. The body breaks down carbs into the sugar glucose, which the body's cells need. Glucose is absorbed into the bloodstream, which makes the sugar level in the blood go up. As the sugar level rises in the body, the pancreas releases a hormone called insulin. Insulin is needed to move glucose from the blood into the cells, where it can be used as a source of energy.

fat

One of the three main components of the food we eat. The body uses fat as a fuel source, and fat is the major storage form of energy in the body. Fat also has many other important functions in the body. You need some fat in your diet for good health. Too much fat or too much of the wrong type of fat can be unhealthy. Oil and butter contain fat. Nuts, meat, fish, and some dairy products contain fat, too.

unsaturated fats: These are found in plant foods and fish. These may be good for heart health. The best of the unsaturated fats are found in olive oil, peanut oil, canola oil, albacore tuna, and salmon.

saturated fats: These fats are found in meat and other animal products, such as butter, cheese, and all milk except skim. Saturated fats are also in palm and coconut oils, which are often used in commercial baked goods (the kind you buy at the store). Eating too much saturated fat can raise blood cholesterol levels and increase the risk of heart disease

trans fats: These fats are found in margarine, especially the sticks. Trans fats are also found in certain foods that you buy at the store or in a restaurant, such as snack foods, baked goods, and fried foods. When you see "hydrogenated" or "partially hydrogenated" oils on an ingredient list, the food contains trans fats. Like saturated fats, eating too much can raise cholesterol and increase the risk of heart disease.

minerals

Just like *vitamins*, minerals help your body grow, develop, and stay healthy. The body uses minerals to perform many different functions - from building strong bones to transmitting nerve impulses. Some minerals are even used to make hormones or maintain a normal heartbeat. Calcium, iron, potassium and zinc are examples of minerals that our body needs.

nutrients

Components of food that have nutritious qualities and promote growth. Vitamins, minerals, carbohydrates, protein and fat are examples of nutrients.

protein

Like *fats* and *carbohydrates*, *protein* is one of the three main nutrients in food. Protein builds up, maintains, and replaces the tissues in your body. Your muscles, your organs, and your immune system are made up mostly of protein.

vitamins

Vitamins, like *minerals*, are substances that are found in foods we eat. Your body needs them to work properly, so you grow and develop just like you should. When it comes to vitamins, each one has a special role to play. For example:

Vitamin D in milk helps your bones.

Vitamin A in carrots helps you see at night.

Vitamin C in oranges helps your body heal if you get a cut.

B vitamins in leafy green vegetables help your body make protein and energy.

The human body doesn't make its own vitamins. That's where food comes in. The body gets the vitamins it needs from the foods we eat because different foods contain different vitamins. Though some kids take a daily vitamin, most kids don't need one if they're eating healthy foods.

Evaluation

Evaluation of DROP THE POP Challenge

We hope the DROP THE POP's teacher's manual is suited to your needs and relevant to your health curriculum requirements. With this in mind we ask you to please fill out the teacher's evaluation on the following pages.

If you would like to share any creative projects your students produced in conjunction with *Drop the Pop*, please forward copies to:

Health Promotion Unit
#2 Hospital Rd
Whitehorse, YT, Y1A 3H8
Health.promotion@gov.yk.ca

Thank You!

PLEASE TELL US WHAT YOU THOUGHT OF THE *DROP THE POP CHALLENGE* AND THE *DROP THE POP TEACHER'S MANUAL*

1. What grade/s do you teach?
2. Did you use any of the units in the teacher's manual?

YES (please go to question 4)

NO (please go to question 3)

3. If "no", please tell us why not?

Please go to question 5

4. (A) Please rate the units you worked with for usefulness on a scale of 1-5 (1 being "not useful", 5 being "extremely useful"):

Unit	Rating
Unit 1 - Start Your Day the Healthy Way	
Unit 2 - My Amazing Body	
Unit 3 - Food Choices for Health	
Unit 4 - Healthy Smiles	

(B) please rate the units you worked with for impact and engagement of students on a scale of 1-5 (1 being "no impact or engagement", 5 being "excellent engagement and impact):

Unit	Rating
Unit 1 - Start Your Day the Healthy Way	
Unit 2 - My Amazing Body	
Unit 3 - Food Choices for Health	
Unit 4 - Healthy Smiles	

Please share with us any suggestions or comments you have regarding the Teacher's Manual and/or the *Drop the Pop Challenge* in general