

#### **Dental Health Manual: Pre-Kindergarten to Grade 12**

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This Dental Health Manual was created for use during Nutrition Month (March) and Dental Health Month (April) observed annually in Canada. These educational resources and activities are to assist teachers, parents and public health professionals to support the healthy development of children and youth.

The project was coordinated by the Department of Health & Social Services with funding from the Aboriginal Diabetes Initiative. It is available in print and CD format in English and Inuktitut. For more information or to obtain a copy call (867) 975-5700.

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#### Content prepared by:

Ashley White, Registered Dental Hygienist, Registered Dental Therapist, Oral Health Educator.

#### Advisors:

#### Department of Health & Social Services

Soes Franderson, ADI Coordinator; Carol Gregson, Project Coordinator; Sue Hamilton, Territorial Nutritionist; Raouf Hammoud, Dental Health Specialist; Theresa Koonoo, Community Health Representative; Jude Lewis, Registered Dental Therapist; Yasmina Pepe, Communications Specialist; Lana Pestaluky, Kitikmeot Regional Nutritionist; Claudette Qamanirq, Registered Dental Therapist; Cindy Roache, Regional Health Promotion Officer.

#### **Department of Education**

Sue Ball, Secondary Coordinator; Darlene Gibbons, Elementary Programs Coordinator; Leslie Leafloor, Early Childhood Manager.

#### **Community Partners**

Barry Cornthwaite, Regional Manager, Arctic Co-operatives Limited, Jim Deyell, Regional Manager, Public Affairs, The NorthWest Company.

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Oral Ficartii Maridai for Teachers and	
Health Care Professionals	5
Why do we have teeth?	6
Why are teeth important?	6
How many teeth do we have?	7
What does a tooth look like?	7
The Tooth and its Supporting Structures	8
Why do teeth have different shapes?	8
The Narwhal and its Tusk	9
The Inuit Legend	9
Looking after your Teeth, Gums and Mouth	11
Healthy vs Unhealthy Gums	11
What is tooth decay?	11
Why do we brush our teeth?	12
What is the best kind of brush to use?	12
How long do you take to brush your teeth?	13
Keeping your toothbrush safe from germs!	13
Helpful Hints on Tooth Brushing	13
What is dental floss made of and how does it work?	15
How do I floss my teeth properly?	15
Smoking and Oral Health	16
How Smoking Affects Your Health	19
Smoking is Expensive	21
Staying Smoke Free	21
How does tobacco affect oral health?	21
Sugar in tobacco?	21
Oral Health and Overall Health	22
Healthy Snacks for a Healthy Mouth	22



Cheese takes the bite out of cavities!	. 23
What happens at the dentist's office?	. 24
What does the dentist do?	. 27
Meeting the Dentist!	. 27
Presents from the Dental Office!	. 27
What happens if I have a cavity?	. 27
Part 2	
Oral Health Care for Parents, Adults, and Caregivers	31
How are germs passed on to the baby or child?	. 32
What is early childhood caries (ECC)?	. 33
How do I know if my child has ECC?	. 33
What puts the baby or toddler at risk for ECC?	. 34
How can you protect your child's teeth?	. 34
Are baby teeth important?	. 35
Parents and caregivers must keep their own mouth healthy	. 35
How to reduce the amount of bacteria in their (Parents/Caregivers) mouths?	. 35
What is the best kind of toothbrush to use?	. 36
Keeping your toothbrush safe from germs	. 36
Helpful Hints on Tooth Brushing	. 36
What is dental floss made of and how does it work?	. 38
How do I floss my teeth properly?	. 38
How to Brush your Infant/Toddler/Child's Teeth	. 39
Important Feeding Tips for Infants	. 39
When is a good time to quit using the baby bottle?	. 40
When should the baby bottle be given up completely?	. 40
Selecting the Proper Cup for your Child	. 40
Pacifiers or Soothers	. 40
Teething – What is it?	. 41

<u> </u>	41
Easing the Discomfort or Pain of Teething	42
Here are some tips to keep in mind when your baby is teething	42
Healthy Eating and Oral Health	43
The Effects of Oral Health on Overall Health	43
Health Risks of Poor Oral Health	44
Lower Your Risk	44
Healthy Eating Choices	45
Healthy Eating Tips	45
Healthy Food Choices during Pregnancy	45
Poor Food Choices	46
Vitamin D and Strong Teeth	46
Part 3 – Glossary	49
Part 4 – Suggested Activities	57
Part 4 – Suggested Activities	
	58
Levels: Kindergarten and Grade 1 & 2	58 59
Levels: Kindergarten and Grade 1 & 2  Levels: Grade Three, Four and Five	58 59 62
Levels: Kindergarten and Grade 1 & 2	58 59 62
Levels: Kindergarten and Grade 1 & 2  Levels: Grade Three, Four and Five  Level: grade Five, Six and Seven  Other suggested activities according to abilities of students	58 62 64
Levels: Kindergarten and Grade 1 & 2  Levels: Grade Three, Four and Five  Level: grade Five, Six and Seven  Other suggested activities according to abilities of students	58 62 64 65
Levels: Kindergarten and Grade 1 & 2  Levels: Grade Three, Four and Five  Level: grade Five, Six and Seven  Other suggested activities according to abilities of students  1. Floss is the Boss Experiment	58 62 64 65 66



## Part 1

Oral Health Manual for Teachers and Health Care Professionals

## Why do we have teeth?

Have you ever wondered why you have teeth? Teeth are very important, and we often forget how important they really are to us, and to our over all health!

#### Why are teeth important?

- Teeth bite and chew food so that it is small enough to be swallowed.
- Teeth help you to form words so that you can speak properly.
- They improve overall health
- They help build self-esteem (feel good about ourselves)
- The primary or baby teeth hold spaces for our permanent teeth when they're ready to come in
- The baby teeth help to develop our face shape



Have you lost any front teeth yet?

- Did you find that your words sounded different for a while?
- Maybe you found it hard to say "s".
- Maybe you lisped, eg. "I'd like a thauthage, pleath" instead of "I'd like a sausage please."
- Teeth show when you are happy. Everyone smiles when they're happy. If you have nice clean, healthy teeth you have something to be happy about!

#### How many teeth do we have?

Your first set of teeth are called **deciduous teeth** (dee-sid-you-us). They can also be called milk teeth, baby teeth or primary teeth.

You have 20 deciduous teeth and they start growing into your mouth around 6 months of age. When you are 2 years old, you should have a full set of 20 baby teeth.

At age 6 you will start to lose your baby teeth and this will continue until you are about 12 years old. Even though your mouth is changing, teeth are coming and going, it is still very important to continue to care for your mouth. The baby teeth are holding the space for your permanent teeth, almost like saving a chair for your friend, if they don't have a place; the new teeth won't fit into your mouth very well.

Your second teeth are called **permanent teeth** (perm-an-ent). They can also be called adult teeth.

A full set of adult teeth is 32. They are called your permanent teeth, because this set of teeth must last you an entire life time. They will start to grow out of your gums when you are 6 years old, and usually finish between the ages of 18-25 years. The permanent teeth push out the baby teeth as they grow into place in your mouth.

#### What does a tooth look like?

A tooth is made up of two parts. A **crown** and a **root**. The crown is the part of the tooth that we can see in the mouth, and the root is what keeps the tooth anchored into the jawbone, to keep it steady while it's doing its job

The tooth is made up of three layers. The **enamel**, **dentin**, **and pulp**. Each layer has its own special purpose.

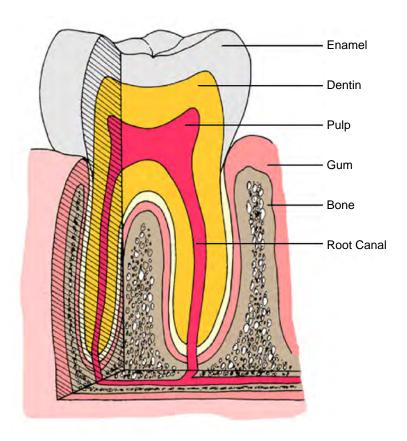
The **enamel** is the outer layer of the tooth. It is very hard, and protects the outer surface of the tooth.

The **dentin** is the second layer of the tooth, and protects the **pulp**, or nerve of the tooth.

The **pulp** is the soft inner layer; it is also called the nerve. It is made up of blood and nerve endings.

The tooth is like an apple. An apple has an outer skin and inner flesh to protect the seeds. A tooth has an outer enamel and inner dentine to protect the pulp.

## **The Tooth and its Supporting Structures**



## Why do teeth have different shapes?

Different teeth do different jobs!

Incisors (in-si-zors) are for cutting, they work like scissors to bite off pieces of food

Canines (cay-nines) are for tearing, they work like a fork to tear food into small pieces.

Molars and pre-molars (mow-lers) grind up food until its small enough to swallow.

Each type of tooth has a special shape so that it can do its job.

#### The Narwhal and its Tusk

The narwhal, *Monodon monoceros*, has long fascinated sea explorers, scientists and aristocracy. The arctic whale is characterized by a single spiraled tusk extending six to nine feet which emerges from the upper jaw and through the lips of adult males. Some females may exhibit a tusk and, in rare instances, a male with two tusks has been observed. Often associated with the horn of the mythical unicorn, the narwhal tooth has found its way into the books of scientific rarities and mythical tales. Researchers have proposed myriad theories to explain the tooth's purpose and function, yet considerable debate surrounds these reports.

Throughout history, the narwhal tooth has inspired legend and lore. So prized was the fabled tooth of the unicorn that Queen Elizabeth in the 16th century paid 10,000 pounds for one, equivalent to the cost of an entire castle. The tooth is revered by many cultures around the world. In Japan, two crossed narwhal teeth adorn the entrance to the Korninkaku Palace. In Denmark multiple teeth comprise the frame of the Danish throne. The royal scepter in England is made from the rare tusk.

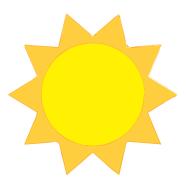


#### The Inuit Legend

A wicked woman lived with her daughter and her son, who was born blind. As the son got older, his sight improved, even though the mother tried to convince him of his helpless state. One day a polar bear came near the house and the mother told the son to aim a bow and arrow at the bear through the window covered with seal skin and strike him down. The boy pulled back the arrow and the mother took aim from him. The arrow struck the heart of the bear and although the boy could hear the groans of the dying bear,

the mother laughed scornfully at him, saying that he had missed the bear. That night the mother and the daughter had fresh polar bear meat while the mother cooked dog meat for the son. Later the boy's sister told her brother that his shot was successful and secretly gave him meat.

Time passed and an old man came to the house for a visit. Before he left, he told the young girl how she could help her brother regain his sight. In the spring, he told them to watch for a red throated loon who would swim trustingly toward them. Once the loon was close enough, the blind brother should wrap his arms around the loon's neck and the loon would take him to the bottom of the lake. Once they came up, his sight would return. The loon told the young man not to tell about his regained sight until later in the summer when he would send a pod of belugas to their campsite.



When summer came and the ice began to break, the belugas began to move. On one occasion, a pod was closer to land than usual. The young man grabbed his harpoon and told his sister to accompany him to help him aim. They went to the shoreline and the mother, seeing the son with a harpoon, became concerned and followed them. Once she was close to them, the son gave the end of the line from the harpoon to his mother, asking her to tie it around her waist to hold the harpooned animal. The concerned mother told her daughter to make sure he was after a small animal as she was tied to the harpoon. The son instead aimed for the largest whale and harpooned him. The mother was cast into the sea. As she submerged she spiraled around the line, with her long hair twisting into a long lance. This is how the narwhal came to be.



### Looking after your Teeth, Gums and Mouth

It is important to look after your first and permanent teeth. Keeping your teeth, gums and mouth clean and healthy can prevent disease and infection, and can help to avoid pain and sickness. Also, a clean healthy mouth feels nice, looks good and keeps your breath fresh.

Your teeth need to be cleaned really well every day. This is because germs or **bacteria** (bak-tee-ria) in your mouth grow on your teeth and around the gums every day. It is called **dental plaque** (pl-ak). Plaque makes acids or poisons that attack the teeth and gums and cause disease. If you keep your teeth clean and healthy every day you will avoid problems like tooth decay, toothache, bleeding gums, yellow teeth and bad breath.

#### **Healthy vs Unhealthy Gums**

Healthy gums are pink and do not hurt or bleed when brushed.

Unhealthy gums are open to the bacteria in plaque causing an inflammation called gingivitis

Sugar plays a harmful role in tooth decay. The bacteria that form together to become plaque use sugar as a form of energy.

They multiply faster and the plaque grows in size and thickness. Some of the bacteria turn the sugar into a kind of glue that they use to stick themselves to the tooth surface.

This makes it harder for the bacteria to get washed away with your saliva.

#### What is tooth decay?

The plaque that forms on your teeth and does not get washed away by saliva or brushed away by your toothbrush produces acid as it eats up sugar. This acid is produced inside the plaque and can not be easily washed away by your saliva. The acid dissolves the minerals that make your tooth enamel hard. The surface of the enamel becomes porous and tiny holes appear. After a while, the acid causes the tiny holes in the enamel to get bigger until one large hole appears. This is a cavity.

It is important to see your dentist before a cavity forms so that the plaque you can not reach with your toothbrush or floss can be removed.

While the acid is attacking the enamel, you can not feel a thing, because there are no nerve fibers present in enamel.

Once the acid has begun to create a cavity and attacks the dentin under the enamel, the nerve fibers begin to send out a message that something is wrong. But by then, you have **tooth decay**.



**Severe Tooth Decay on Primary Teeth** 

#### Why do we brush our teeth?

Brushing your teeth is one of the most effective ways of removing plaque.

#### What is the best kind of brush to use?

Contrary to what you might think, a gentle brushing with a soft-bristle toothbrush is just as effective (and less damaging!) than a vigorous scrubbing with a stiff-bristle toothbrush.

Your tooth enamel is relatively thin. Years of aggressive or rough brushing can begin to wear away the enamel and make the teeth sensitive. Remember, the enamel on your teeth does not contain nerve fibers, but the dentin layer underneath does. Brushing too hard can also damage your gums.

There are different styles of tooth brushing. The important thing to remember is that an effective brushing cleans all sides of the tooth surface in a gentle, massaging motion.

#### How long do you take to brush your teeth?



Most people think they brush for at least a minute or two, but in reality they brush for 30 seconds or less.

Time yourself and see how you do. An effective brushing takes 2 - 3 minutes.

#### Keeping your toothbrush safe from germs!

After brushing, rinse your toothbrush with hot water after each use to remove leftover tooth paste.

Store your tooth brush standing up.

Store your toothbrush in a clean dry place.

Never store your tooth brush in a cup filled with water.

Do not share your toothbrush, as this can spread germs from one mouth to another.

Replace your toothbrush every three months, or when the bristles are splayed, and no longer stand up on their own.

Replace your tooth brush following an illness (such as a cold or flu).

#### **Helpful Hints on Tooth Brushing**

The following toothbrush technique is commonly recommended by dental hygienists and dental therapists. You should see your dental professional to ensure that you are using proper technique to clean all of your teeth effectively.

Use a soft bristled brush. Be sure it is the right size (generally smaller is better than larger).

Place the bristles at a 45 degree angle to the teeth. Slide the tips of the brush under the gums.

 Jiggle the bristles very gently so that any plaque growing under the gum will be removed.

## **Dental Health Manual**

- Be sure to brush the outside, the tongue side and the chewing surfaces of your teeth.
- For the front teeth, brush the inside surfaces of the upper and lower jaws by tilting the brush vertically and making several up and down strokes with the front part of the brush over the teeth and gum tissues.
- Brushing your tongue will help freshen your breath. Debris and bacteria can collect on your tongue and cause bad breath.



Your toothbrush will only clean one or two teeth at a time. Change its position to properly clean each tooth.

To prevent plaque damage, be sure to brush at least once every day, preferably at bedtime.

Do not rush your brush.

A thorough brushing should take at least 3 minutes.

Brushing the teeth too vigorously or using a hard bristled toothbrush causes the gums to recede and exposes root surfaces. It also wears down the tooth structure. Both of these conditions can lead to tooth sensitivity.

A pea-sized amount of fluoridated toothpaste is all you need, should you choose to use toothpaste.

Replace your brush when the bristles begin to spread. A worn out toothbrush will not properly clean your teeth.

#### What is dental floss made of and how does it work?

Brushing alone isn't enough to clean all of the plaque from the surfaces of your teeth. **Interproximal** areas (those places in between your teeth) and below the gum line are two spots where the toothbrush can not reach and plaque can build up. These are areas that are more susceptible to cavities. Daily flossing and regular visits to your dentist/dental professionals are the only effective ways to remove this plaque.

#### Did you know?



Did you know that failing to floss means up to 35% of your tooth surface goes uncleaned?

Dental floss is a man-made fiber (usually made of nylon) that comes on a spool. Ask your parents or your dentist/dental therapist how to correctly use dental floss if you're not sure.

#### How do I floss my teeth properly?

#### Step 1

Take about 18 inches (50cm) of floss and loosely wrap most of it around each middle finger (wrapping more around one finger than the other) leaving 2 inches (5cm) of floss in between.

#### Step 2

With your thumbs and index fingers holding the floss taut, gently slide it down between your teeth, while being careful not to snap it down on your gums.

#### Step 3

Curve the floss around each tooth in a "C" shape and gently move it up and down the sides of each tooth, including under the gum line. Unroll a new section of floss as you move from tooth to tooth.



# Dental Health Manual

At first, flossing might feel awkward. But stick with it! With just a little patience and practice, it will begin to feel as natural as brushing your teeth!



http://www.oralb.com/learningcenter/dailycare/cleaning.asp

#### **Smoking and Oral Health**

Do you smoke? If you do not, you probably know some friends or see other students at school who do. Too many young people today are getting addicted to tobacco, and the results are showing up in their mouths!

When your parents were young, people could buy cigarettes and smoke pretty much anywhere - even in hospitals and airplanes! Ads for cigarettes were all over the place. Today we are more aware about how bad smoking is for our health. Smoking is restricted or banned in almost all public places and cigarette companies are no longer allowed to advertise on buses or trains, billboards, TV, and in many magazines.



Almost everyone knows that smoking causes cancer, emphysema, and heart disease; that it can shorten your life by 14 years or more; and that the habit can cost a smoker thousands of dollars a year. So how come people are still lighting up? The answer, in a word, is addiction.

Most smokers start before they become adults. Statistics show that about 9 out of 10 tobacco users start before they are 18 years old. Some teens who smoke say they start because they think it helps them look older (it does - if yellow teeth and wrinkles are the look you want). Others smoke because they think it helps them relax (it does not - the heart actually beats faster while a person is smoking). Some light up as a way to feel rebellious or to set themselves apart (which works if you want your friends to hang out someplace else while you're puffing away). Some start because their friends smoke - or just because it gives them something to do.

Some people, especially girls, start smoking because they think it may help keep their weight down. The illnesses that smoking can cause, like lung diseases or cancer, do cause weight loss - but that's not a very good way for people to fit into their clothes!

Another reason people start smoking is because their family members do. Most adults who started smoking in their teens never expected to become addicted. That is why people say it is just so much easier to not start smoking at all.

The cigarette ads from when your parents were young convinced many of them that the habit was glamorous, powerful, or exciting - even though it is actually a turnoff: smelly, expensive, and unhealthy. Cigarette ads from the 1940s even showed doctors recommending cigarettes to their patients as a way to relax!

Cigarette ads still show smokers as attractive and hip, sophisticated and elegant, or rebellious and cool. The good news is that these ads are not as visible and are less effective today than they used to be: Just as doctors are more educated about smoking today than they were a generation ago, teens are more aware of how manipulative advertising can be. The government has also passed laws limiting where and how tobacco companies are allowed to advertise to help prevent young kids from getting hooked on smoking.

**Table 1 Smoking Statistics** 

Group	Canadian Arctic Inuit Population		Total Canadian population (excluding Territories)	
Age group	% of men smoking daily	% of women smoking daily	% of men smoking daily	% of women smoking daily
15 to 19	61	68	16	17
20 to 24	73	76	27	22
25 to 34	71	72	24	18
35 to 44	67	68	23	18

<sup>\* &</sup>quot;Arctic" is made up of communities in all 4 Inuit regions except *Hopedale*. *Happy Valley – Goose Bay* is included.

Source: 9

Inuit are much more likely than other Canadians to be daily smokers. For example, 18% of Canadian women aged 25-34 smoked daily compared to 72% of Inuit women.

Statistics Canada data show that despite these high rates, smoking in Nunavut is on the decline.

#### **Table 2 Smoking Statistics**

## Number of persons aged 12 and over by type of smokers, Nunavut's ten largest communities, 2005

	Number of persons aged 12 and over
Total population for the variable type of smoker	14 948
Current daily or occasional smoker	7 896
Daily smoker	6 892
Occasional smoker	1 003
Former smoker	4 137
Never smoked	2 846
Type of smoker, not stated	(F)

Note: (F)=Too unreliable to be published

#### Definitions:

Current smokers: are those who smoke on either a daily or an occasional basis.

Daily smokers: refers to those who reported smoking cigarettes every day

Occasional smokers: refers to those who reported smoking cigarettes occasionally.

This includes former daily smokers who now smoke occasionally.

**Former smokers:** are those who previously smoked either daily or occasionally and are now non-smokers.

Source: Statistics Canada, Health Indicators, CANSIM table # 105-0427

Prepared by: Nunavut Bureau of Statistics, January 4, 2008



#### **How Smoking Affects Your Health**

#### **Table 3 Smoking Statistics**

Cancer causing deaths: 49% - lung cancer

4% - cancer of the esophagus

	2003	2005
Current Smokers	64.9%	53.1%
Households that are smoke free	54%	68%
Exposure to second hand smoke	21%	11%

18% of Canadian women aged 25-34 VS. 72% of Inuit women are daily smokers. Also of pregnant women, 62% of them smoked daily.

Source: http://www.inchr.org/Doc/February05/Cancer\_NunavutEng.pdf

There are no physical reasons to **start** smoking - the body does not need tobacco the way it needs food, water, sleep, and exercise. In fact, many of the chemicals in cigarettes, like nicotine and cyanide, are actually poisons that can kill in high enough doses. The body's smart and it goes on the defense when it is being poisoned. For this reason, many people find it takes several tries to get started smoking: First-time smokers often feel pain or burning in the throat and lungs, and some people feel sick or even throw up the first few times they try tobacco

The consequences of this poisoning happens gradually. Over the long term, smoking leads people to develop health problems like cancer, emphysema (breakdown of lung tissue), organ damage, and heart disease. These diseases limit a person's ability to be normally active - and can be fatal. Each time a smoker lights up, that single cigarette takes about 5 to 20 minutes off the person's life.

Smokers not only develop wrinkles and yellow teeth, they also lose bone density, which increases their risk of osteoporosis (ahs-tee-o-puh-row-sus), a condition that causes older people to become bent over and their bones to break more easily). Smokers also tend to be less active than nonsmokers because smoking affects lung power.

The consequences of smoking may seem very far off to many teens and youth, but long-term health problems are not the only hazards of smoking. Nicotine and the other toxins in cigarettes, cigars, and pipes can affect a person's body quickly, which means that teen and youth smokers experience many of these problems:

#### **Bad skin**

Because smoking restricts blood vessels, it can prevent oxygen and nutrients from getting to the skin - which is why smokers often appear pale and unhealthy.

#### **Bad breath**

All those cigarettes leave smokers with a condition called halitosis, or persistent bad breath.

#### **Bad-smelling clothes and hair**

The smell of stale smoke tends to linger - not just on people's clothing, but on their hair, furniture, and cars. And it is often hard to get the smell of smoke out.

#### Reduced athletic performance

People who smoke usually can not compete with their nonsmoking peers because the physical effects of smoking - like rapid heartbeat, decreased circulation, and shortness of breath - impair sports performance.



#### **Increased risk of illness**

Studies show that smokers get more colds, flu, bronchitis, and pneumonia than nonsmokers. And people with certain health conditions, like asthma, become more sick if they smoke (and often if they're just around people who smoke). Because teens who smoke as a way to manage weight often light up instead of eating, their bodies lack the nutrients they need to grow, develop, and fight off illness properly.

#### **Smoking is Expensive**

Not only does smoking damage health, it costs a lot. Depending on where you live, smoking a pack of cigarettes a day can cost about \$1,800 or more dollars year.

#### **Staying Smoke Free**

All forms of tobacco - cigarettes, pipes, cigars, and smokeless tobacco - are dangerous. It does not help to substitute products that seem like they are better for you than regular cigarettes - such as filter, low-tar cigarettes or smokeless tobacco.

The only thing that really helps a person avoid the problems associated with smoking is staying smoke free. This is not always easy, especially if everyone around you is smoking and offering you cigarettes. It may help to have your reasons for not smoking ready for times you may feel the pressure, such as "I just don't like it" or "I want to stay in shape for soccer" (or football, basketball, or other sport).

Staying smoke free will give you a whole lot more of everything - more energy, better performance, better looks, more money in your pocket, and, in the long run, more life to live!

#### How does tobacco affect oral health?

Tobacco contains many substances known to be **cytotoxic** (destructive to your body's cells and tissues). Smokers have more calculus (hardened plaque) than nonsmokers. Blood circulation, a very important thing has been shown to decrease by as much at 70% in your mouth during the smoking of a cigarette. Futhermore, smoking also affects your body's defense system. New studies are even showing the possibility that second-tobacco smoke (the smoke from someone else's cigarette) causes periodontal disease (gum disease).

### **Sugar in tobacco?**

We all know that sugar is a major cause of tooth decay. More than one-fifth of the content of some brands of smokeless "chewing" tobacco is sugar, and causes a much greater risk of developing cavities.

#### **Oral Health and Overall Health**

Why a healthy mouth is good for your body?

Taking good care of your mouth, teeth and gums is a worthy goal in and of itself. Good oral and dental hygiene can help prevent bad breath, tooth decay and gum disease — and can help you keep your teeth as you get older.

What does the health of your mouth have to do with your overall health? In a word, plenty.

Your mouth is a window into what is going on in the rest of your body. It acts as a radar for detecting the early signs and symptoms of systemic disease — a disease that affects or pertains to your entire body.

If you do not brush and floss regularly to keep your teeth clean, plaque can build up along your gum line, creating an environment for additional bacteria to live and grow in the space between your gums and your teeth. This gum infection is known as **gingivitis**. Left unchecked, gingivitis can lead to a more serious gum infection called **periodontitis**.

Long-term gum infection can even result in the loss of your teeth. Recent research suggests that there may be a link between oral infections — and poorly controlled diabetes, cardiovascular disease and preterm birth.

If you did not already have enough reasons to take good care of your mouth, teeth and gums, the relationship between your oral health and your overall health provides even more. Practice good oral hygiene every day. You are making an investment in your overall health, not just for now, but for the future, too.

#### **Healthy Snacks for a Healthy Mouth**

Food nourishes or feeds the body and gives us energy to get through each day. Healthy eating is very important to good health and is a key element in healthy human development. Healthy eating is equally important in reducing the risk of many chronic diseases.

Think about the human body as a complex machine that needs daily attention if it is to run well. Without exercise and a balanced diet, it doesn't get the fuel it needs to perform efficiently or effectively and it may be less able to ward off disease or infection.



There are things you can do to beat plaque. In addition to good oral hygiene and regular dental visits, limit eating and drinking between meals and, when snacking, make healthy food choices. Be mindful of the effects of frequent consumption of sugary beverages and non-nutritious snack foods.

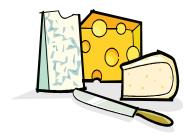
To protect your teeth against decay and erosion, try to keep pop, drinks crystals, natural fruit juices, sweets and cakes to a minimum. It is especially important to avoid sugary food and drinks as snacks between meals or before bedtime.

Fruit, vegetables, cheese and milk are all healthy snacks. These are much less likely to cause decay. You can help to protect against decay by finishing a meal with food such as milk or cheese. This will neutralize the acid in your mouth.

#### Cheese takes the bite out of cavities!

A growing number of studies suggest that eating a piece of cheese after a meal or snack may actually protect against cavities.

As well, eating cheese stimulates the production of saliva, which helps to reduce and clear away sugars. Saliva also aids in neutralizing acids and remineralizing or strengthening teeth. So enjoy dishes made with cheese! The most effective way to eat cheese is to nibble some after meals, or as a snack. It will help take the bite out of your visit to the dentist.



Cheeses such as Cheddar, Swiss, Blue, Monterey Jack, Brie, Gouda, Mozzarella and Roquefort, exhibit a potential protective effect against tooth decay. The chemical or physical characteristics of cheese responsible for its protective action against tooth decay are not completely understood.

Cheese's beneficial effect may be explained in part by its texture, which increases saliva flow. This in turn reduces the increase in cavity-causing acids by plaque bacteria and increases the removal of sugars from the oral cavity. Parts of cheese such as protein, calcium, and phosphorus may prevent enamel erosion and enhance strengthening of tooth enamel.

www.nationaldairycouncil.org/NationalDairyCouncil/Health/Digest/dcd73-5Page4.htm

## What happens at the dentist's office?

After your name is called in the waiting room, you'll go into an exam room and sit down in a big, comfortable chair that is like a huge recliner. The chair will have a place to rest your head and lots of room for you to stretch out your legs. Next to the chair may be a little sink with a cup that you can use to rinse out your mouth as your teeth are being cleaned.

During the exam, your teeth will be cleaned, flossed, and checked for cavities. Here is what will happen:

#### **Cleaning and Flossing**

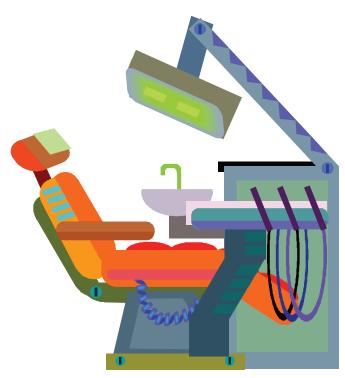
One of the first people you will meet at the dentist's office is the **dental hygienist**: (hi**jeh**-nist). or dental therapist. A dental hygienist is a person who knows all about keeping teeth and gums clean and healthy. A dental therapist a person who can do some of the things a dentist does.

The dental hygienist or dental therapist will look inside your mouth to make sure your teeth are growing properly and your gums are healthy. A bright, overhead light will shine down into your mouth like a giant flashlight so the dental professional can get a good look inside your mouth.

The dental hygienist or therapist will clean and polish your teeth, using tiny dental tools like a tooth scaler, mirror, and special toothbrush. The tooth scaler removes **plaque** (**plak**) from your teeth. Plaque is a thin, sticky layer that coats your teeth and contains **bacteria** (bak-**teer**-ee-uh) that grow on your teeth over time. Plaque that is not removed from your teeth can cause decay, or cavities.

Next comes brushing and flossing. The dental hygienist or dental therapist will brush your teeth with a special toothbrush and toothpaste. The toothbrush has a small, round tip that moves around and around to clean your teeth. The toothpaste might taste like your own toothpaste at home, but it will feel a little grittier - almost like sand.

Then the dental hygienist or dental therapist will floss your teeth and show you the proper way to brush and floss your teeth at home. Flossing involves using a piece of waxy string called dental floss to get in between your teeth and remove food particles that your brush can not reach.



#### **Checking for Cavities**

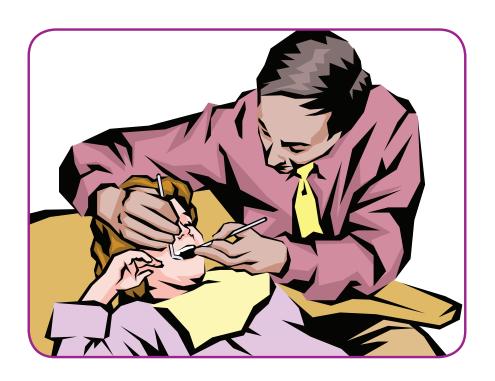
During your visit, the dental hygienist or dental therapist will take X-rays, or pictures, of your teeth. X-rays are like superhuman vision. They can show cavities hiding between your teeth and problems beneath your gums. A cavity is a decayed, or rotted, part of a tooth.

It does not hurt to get an X-ray and it takes only a few seconds. The dental hygienist or dental therapist, will place a thick blanket over your chest (to protect your body from the high-energy waves) and put a piece of plastic (that holds the X-ray film) into your mouth. As you gently bite down on the plastic, you'll have to be very still for a few seconds while the dental hygienist or therapist snaps the picture.

#### **Fluoride Treatments**

Next it's time for your **fluoride** (say: **floor**-eyed) treatment. Fluoride is a natural mineral that makes your teeth strong and helps prevent cavities. At the dentist's office, a fluoride gel or foam will be applied to your teeth. Most dental offices offer fluoride treatments with a flavour, like bubble gum or grape.

The fluoride treatment will take about 1 to 4 minutes. The dental hygienist or therapist will probably tell you not to eat or drink anything (including water) for 30 minutes after the fluoride treatment.



#### What does the dentist do?

The dentist is a doctor who is specially trained to care for teeth. When you visit your dentist for a checkup, he or she will look at your teeth and gums to check for any problems. The dentist also wants to make sure your teeth are developing properly as you grow. It is important to visit your dentist every 6 months to make sure you are taking good care of your teeth and that your teeth and gums are healthy.

#### **Meeting the Dentist!**

The dentist will look at all of your teeth and check your gums to make sure they are strong and healthy. The dentist will also check the way your top and bottom teeth fit together. This is called your **bite**. If he or she thinks you have a problem with your bite, you may be referred to an **orthodontist** (say: or-tho-**don**-tist). This is a doctor who specializes in correcting the shape or positions of all your teeth together with **braces**.

The dentist will study your X-rays (looking for cavities or other problems) and ask if you have any questions about your teeth. Your dentist may also prescribe fluoride drops or tablets for you to take every day at home.

#### **Presents from the Dental Office!**

When your checkup is over, the dentist usually will have a present for you! The gift is often a free toothbrush or dental floss to use at home or some sugar-free gum.



#### What happens if I have a cavity?

If you have a cavity, you'll probably have to come back to the dentist/dental therapist's office for another visit. At that time, the dentist/therapist will remove the decayed part from your tooth with special dental tools. Then the decayed area will be filled with materials that will keep your tooth strong and healthy, like tooth-colored or silver fillings.

## Dental Health Manual

As soon as you sit down in the dental chair, the dentist/therapist will give you a tiny shot of an anesthetic (say: ah-nus-**theh**-tik), a medicine that numbs the area around the tooth. Your mouth may be numb for a little while after you leave the dentist/therapist's office, but the anesthestic will soon wear off and you'll be left with a beautiful smile!

#### Did you know?



- If you look after your teeth you can keep them forever.
- · Teeth are the hardest part of your body.
- Sharks have three rows of teeth and they grow new ones if they lose any. People do not grow new teeth if they loose a tooth, so take good care of the ones that you have.
- Fluoride was added into toothpaste in the 1970s.
- In the year 1770 the first toothbrush was invented and so were the first false teeth (made out of porcelain) by William Addis in England.
- In the year 1790 John Greenwood of U.S.A invented the dental drill. It was very big and heavy and the dentist had to turn a handle [like using a hand drill for drilling holes in wood] to drill out all the bad bits in the tooth. It was a very slow and painful process and people only went to the dentist when they could not stand the pain of toothache any longer!
- The toothbrush as we know it today was not invented until 1938. However, early forms of the toothbrush have been in existence since 3000 BC. Ancient civilizations used a "chew stick," which was a thin twig with a frayed end.
- Toothpaste was used as long ago as 500 BC in both China and India; however, modern toothpastes were developed in the 1800s.

Part 1 – Oral	Health I	Manual f	or Teachers and	l Health Care	professionals



## Part 2

Oral Health Care for Parents, Adults, and Caregivers



http://www.greenpeace.nl/raw/image\_full/photosvideos/photos/inuit-moeder-en-geadopteerde-d

#### How are germs passed on to the baby or child?

Parents and caregivers can pass on bacteria (germs) which cause tooth decay to babies and children without even knowing when they:

- Test the temperature of the liquid in the baby bottle by tasting the nipple
- Share forks and spoons with their children
- Clean a pacifier or a bottle nipple with their mouths and give it back to the baby or child
- Blow on the baby's food to cool it down
- Chew the food before giving it to the baby



Babies and children can also pass on germs which cause toothdecay when they:

- Put their fingers in their parent/caregiver's mouth and then back into their own mouth
- Share forks and spoons
- Drink from someone else's cup or bottle
- Share toothbrushes
- Store their toothbrush in an area where it may touch other toothbrushes



AS A PARENT/CAREGIVER, YOU NEED TO MAKE SURE YOUR MOUTH IS CLEAN AND HEALTHY SO YOU DO NOT PASS ON GERMS THAT MAY CAUSE TOOTH DECAY TO YOUR CHILD.

#### What is early childhood caries (ECC)?

ECC is a very common infectious disease that affects baby teeth of very young children and infants. Another name for ECC is Baby Bottle Tooth Decay (BBTD).

#### **ECC** can cause

- Pain
- · Early loss of primary (baby) teeth
- Infection
- Trouble eating
- Speech problems and difficulty concentrating at school
- Poor self esteem and self image



Healthy primary (baby) teeth



Mild decay



Moderate decay



Severe decay

#### How do I know if my child has ECC?

Early stages of tooth decay or cavities appear as chalky white spots on the teeth. A more advanced stage may look like brown staining and the enamel could be eroded or pitted. The more advanced stages appear as dark brown or black with the crown of the tooth partially or completely gone exposing the root of the tooth at the gum line.

Infection may be present in the form of a bubble or abscess, on the "gum" near the decayed tooth. Sometimes infection or pus can be seen draining from the abscess.



#### What puts the baby or toddler at risk for ECC?

- Not cleaning their clean teeth properly on a daily basis
- Putting the baby to bed at night or naptime with a baby bottle or sippy cup with anything other than water inside it
- Dipping pacifiers or soothers in sweeteners such as sugar, corn syrup or honey
- A diet that contains of foods high in sugar (candy, cookies, cake, ect.)
- Frequent drinking of sweet drinks like pop, drink crystals and juice.

#### How can you protect your child's teeth?

#### Your child should not

- Go to bed with a bottle filled with milk, formula, juice or sweetened drink
- · Fall asleep on the breast
- Use a pacifier if it is dipped in honey, syrup or anything sweet, such as, pop, fruit juice, sugar water, milk or formula

#### Your child should

- Start drinking from a cup at 6 months of age and be weaned from his or her bottle by 1 year of age
- Go to bed without a bottle. If your child must have a bottle to sleep, fill it with plain water. You may need to mix the drink in their bottle with water, a little more water each night, until your child is drinking plain water.
- Have his or her teeth cleaned after each feeding with a clean washcloth, gauze pad or a soft infant toothbrush.



## Are baby teeth important?

Baby teeth are important for chewing food and speaking properly. They also give your child a nice appearance and help to promote a good self image. If they are lost too early, the permanent teeth can come in crowded or out of line. Be sure your child visits a dentist before 2 years of age. These early efforts will be the key to your child's future dental health!

## Parents and caregivers must keep their own mouth healthy because:

- · Adults may have a high amount of germs that cause tooth decay in their mouths
- Germs or bacteria can be passed from parents/caregivers to babies/children through saliva (spit)
- Parents, caregivers or siblings who have had tooth decay in the past 12 months
  have a greater chance of spreading the germs to their children, or children they
  are caring for

## How to reduce the amount of bacteria in their (Parents/Caregivers) mouths?

- Regular visits to your dental professional, especially pregnant mothers. It is very
  important to keep your mouth free from tooth decay, and existing cavities or holes
  in your teeth should be fixed
- Brushing and flossing is something your entire family can do on a regular basis to keep your mouths clean and healthy

#### What is the best kind of toothbrush to use?

A gentle brushing with a soft-bristle toothbrush is just as effective (and less damaging!) than a rough scrubbing with a stiff-bristle toothbrush.

Your tooth enamel is pretty thin. Years of rough brushing can begin to wear away the enamel and make the teeth sensitive. Brushing too hard can also damage your gums.

There are different styles of tooth brushing. The important thing to remember is that an effective brushing cleans every tooth surface in a gentle, massaging motion.

How long do you take to brush your teeth? Most people think they brush for at least a minute or two, but in reality they brush for 30 seconds or less.

## Keeping your toothbrush safe from germs

- After brushing, rinse your toothbrush with hot water after each use to remove leftover tooth paste
- Store your tooth brush standing up
- Store your toothbrush in a clean dry place
- Never store your tooth brush in a cup filled with water.
- Do not share your toothbrush, as this can spread germs from one mouth to another
- Replace your toothbrush every three months, or when the bristles are splayed, and no longer stand up on their own.
- Replace your tooth brush following an illness (such as a cold or flu)

### **Helpful Hints on Tooth Brushing**

The following toothbrush technique is commonly recommended by dental professionals.

Use a soft bristled brush. Be sure it is the right size (generally smaller is better than larger).

Place the bristles at a 45 degree angle to the teeth. Slide the tips of the brush under the gums.

## Part 2 – Oral Health Care for Parents, Adults, and Caregivers

Jiggle the bristles very gently so that any plaque growing under the gum will be removed.

- Be sure to brush the outside, the tongue side and the chewing surfaces of your teeth.
- For the front teeth, brush the inside surfaces of the upper and lower jaws by tilting the brush vertically and making several up and down strokes with the front part of the brush over the teeth and gum tissues.
- Brushing your tongue will help freshen your breath. Food and bacteria can collect on your tongue and cause bad breath.



Your toothbrush will only clean one or two teeth at a time. Change its position to properly clean each tooth.

To prevent plaque damage, be sure to brush at least once every day, preferably at bedtime.

Don't rush your brush. Tooth brushing should take at least 3 minutes.

Brushing the teeth too vigorously or using a hard bristled toothbrush causes damage to the gums. It also wears down the teeth. Both of these conditions can lead to tooth sensitivity.

A pea-sized amount of fluoridated toothpaste is all you need, should you choose to use toothpaste.

Replace your brush when the bristles begin to spread. A worn out toothbrush will not properly clean your teeth

#### What is dental floss made of and how does it work?

Brushing alone isn't enough to clean all of the plaque from the surface of your teeth. Interproximal areas (those places in between your teeth) and below the gum line are two spots where the toothbrush can not reach and plaque can build up. These are areas that are more susceptible to cavities. Daily flossing and regular visits to your dentist are the only effective ways to remove this plaque.



#### **Dental Fact**

Did you know that not flossing means up to 35% of your tooth surface goes uncleaned? Dental floss is a man-made fiber (usually made of nylon) that comes on a spool. Ask your dental professional how to correctly use dental floss if you are not sure.

## How do I floss my teeth properly?

#### Step 1:

Take about 18 inches (50cm) of floss and loosely wrap most of it around each middle finger (wrapping more around one finger than the other) leaving 2 inches (5cm) of floss in between.

#### Step 2:

With your thumbs and index fingers holding the floss taut, gently slide it down between your teeth, while being careful not to snap it down on your gums.

#### Step 3:

Curve the floss around each tooth in a "C" shape and gently move it up and down the sides of each tooth, including under the gum line. Unroll a new section of floss as you move from tooth to tooth.

## Part 2 – Oral Health Care for Parents, Adults, and Caregivers

At first, flossing might feel awkward. But stick with it! With just a little patience and practice, it will bgin to feel as natural as brushing your teeth.



#### How to Brush your Infant/Toddler/Child's Teeth

- Lay your child down on the floor, with his/her head on your lap
- As you brush their teeth, ask the child to move their head as you brush different sections of their mouth
- As the child gets older, allow him/her to brush their teeth first. You can go back over their teeth with the toothbrush to ensure no spots were missed.
- A soft cloth can be used to wipe a baby's gums and front teeth after feedings. It can be used until the baby's back teeth (molars) start to grow into the mouth. At this time, you can start to use a baby toothbrush.

#### **Important Feeding Tips for Infants**

- BREASTFEED your baby when ever possible
- Breast milk, water or formula are the only liquids that should be in a baby bottle
- Remove the nipple from the baby's mouth after he/she has finished feeding
- Babies should never sleep with a baby bottle, unless it contains water only



CHILDREN WHO ARE LEFT ALONE WITH BABY BOTTLES COULD CHOKE ON THE LIQUID INSIDE THE BOTTLE

CHILDREN WHO ARE BREASTFED LAYING DOWN OR WHO ARE LEFT WITH A BOTTLE LAYING DOWN HAVE A HIGHER CHANCE OF DEVELOPPING PAINFUL EAR INFECTIONS

### When is a good time to quit using the baby bottle?

- Encourage your child to start drinking out of a cup around 6 months of age
- Once your baby can properly drink from a cup, try to use it at every meal



## When should the baby bottle be given up completely?

- · All children are different, but the average age is 1 years old
- If your child is able to drink 2-4 cups of milk a day from a cup
- · If your child is eating three solid meals of food

#### **Selecting the Proper Cup for your Child**

- Choose a two handled plastic cup that is easy for your child to hold
- Do not use cups with built in straws that require the child to suck, as they are difficult to keep clean, and may also damage your child's teeth

#### **Pacifiers or Soothers**

- A proper pacifier should have an ORTHODONTIC seal of approval on the outer packaging
- Has a large hard shield with a flexible or hinged ring
- Has a nipple that is soft enough that it flattens when it is against the roof of your baby's mouth

## Part 2 – Oral Health Care for Parents, Adults, and Caregivers

- Is the appropriate size for your baby, the size of the pacifier depends on your baby's age, they are age appropriate
- It is important to keep the pacifier clean at all times. With young babies, sterilize the pacifier the same way you would for baby bottles. For older babies, wash the pacifier with warm soap and water regularly.



#### Replace the pacifier if the nipple:

- has any cracks or tears (check by pulling on the nipple)
- has any changes in the color of the nipple
- texture feels odd (cracked, torn or feels sticky)

#### **Teething – What is it?**

Teething is the growth of the first baby teeth through a baby's gums. It can be a frustrating time for many babies - and their parents. It helps to know what to expect when your child is teething, and what you can do to make the process a little less painful for you and your child.

### **The Teething Process**

Teething can begin as early as 3 months and continue until a child's 3rd birthday.

Typically between the ages of 4 and 7 months, you will notice your child's first tooth pushing through the gum line. The first teeth to appear are usually the two bottom front teeth, also known as the central incisors.

These are usually followed 4 to 8 weeks later by the four front upper teeth (central and lateral incisors). About 1 month later, the lower lateral incisors (the two teeth flanking the

bottom front teeth) will appear. Next to break through the gum line are the first molars (the back teeth used for grinding food), then finally the eye teeth (the pointy teeth in the upper jaw).

Most children have all 20 of their primary teeth by their third birthday.

In some rare cases, children are born with one or two teeth or have a tooth grow within the first few weeks of life. Unless the teeth interfere with feeding or are loose enough to pose a choking risk, this is usually not a cause for concern. If you have any questions it is a good idea to talk to your child's doctor or nurse.

## **Easing the Discomfort or Pain of Teething**

Whenever your child begins teething, you may notice that your child seems to drool more, and seems to want to chew on things. For some babies, teething is painless. Others may experience short periods of irritability, and some may seem cranky for weeks, experiencing crying episodes and disrupted sleeping and eating patterns. Teething can be uncomfortable, but if your baby seems very irritable, contact your child's doctor.

Although tender and puffy gums could cause your baby's temperature to be a little higher than normal, teething, as a rule, does not cause high fever or diarrhea. If your baby does develop a fever during the teething phase, it is probably due to something else and your child's doctor should be contacted.

#### Here are some tips to keep in mind when your baby is teething

- Wipe your baby's face often with a cloth to remove the drool and prevent rashes from developing.
- Give your baby something to chew on. Make sure it is big enough so that he or she can not swallow it and that it can not break into small pieces. A wet washcloth placed in the freezer for 30 minutes makes a handy teething aid - just be sure to wash it after each use. Rubber teething rings are also good, but avoid the ones with liquid inside because they may break. If you use a teething ring, be sure to take it out of the freezer before it becomes rock hard - you do not want to bruise those already puffy gums!
- Rub your baby's gums with a clean finger.
- Never tie a teething ring around a baby's neck, as it could get caught on something and strangle the baby.

## Part 2 – Oral Health Care for Parents, Adults, and Caregivers

- If your baby seems irritable, Tylenol may help but always consult your child's doctor or nurse first. Never place an aspirin against the tooth, and do not rub alcohol on your baby's gums.
- Avoid teething biscuits that may cause choking and tooth decay due to high sugar content. Also avoid gels that numb the gums. They can numb the throat which can cause choking while feeding the baby.



#### **Healthy Eating and Oral Health**

#### Why is it important to eat well?

- Prevent Tooth Decay
   Control Weight
- Live Longer
- Prevent Illness

#### The Effects of Oral Health on Overall Health

Oral health is not only important to your appearance and sense of well-being, but also to your overall health. Cavities and gum disease may cause many serious conditions, including heart disease, diabetes, respiratory diseases, and premature and low weight babies. Untreated cavities can also be painful and lead to serious infections.

Maintaining good oral health includes keeping teeth free from cavities and preventing gum disease. Poor oral health can affect your appearance and self-esteem, and has been linked to sleeping problems, as well as behavioral and developmental problems in children. Poor oral health can also affect your ability to chew and digest food properly.

Good nutrition is important to helping build strong teeth and gums that can resist disease and promote healing.

Smoking is a major risk factor for oral and dental disease, including oral cancer. Tobacco reduces blood flow to the gums therefore, the gums do not get the oxygen and nutrients needed to stay healthy and prevent bacterial infection.

# Dental Health Manual

Oral health needs to be important throughout all stages of life, especially since older adults and seniors are keeping their teeth longer than ever before.

#### **Health Risks of Poor Oral Health**

Gum disease is a swelling of the gums, which may also affect the bone supporting the teeth. Plaque is a sticky colorless film of bacteria that constantly builds up, thickens and hardens on the teeth. If it is not removed by daily brushing and flossing, this plaque can harden into tartar and may contribute to infections in the gums.

Left untreated, gum disease can lead to the loss of teeth and an increased risk of more serious diseases, including heart disease and stroke. There is also a link between diabetes and gum disease. People with diabetes are more susceptible to gum disease, and it can put them at greater risk of diabetic complications.

Oral health is also important for pregnant women. Studies show that pregnant women with gum disease might be at a higher risk of delivering pre-term, low birth weight babies than women without gum disease. Babies who are pre-term or low birth weight have a higher risk of developmental complications, asthma, ear infections, birth defects, behavioral difficulties and a higher risk of infant death.

#### **Lower Your Risk**

#### To maintain good oral health, you should take the following steps:

- Brush and floss your teeth daily.
- Visit your dental professional regularly to have your mouth examined. See your dental professional immediately if you notice any problems.
- Eat a healthy diet according to Canada's and Nunavut's Food Guide to Healthy Eating.
- Do not smoke. If you do smoke, make sure to visit your dental professional regularly.
- If you are pregnant, be sure to eat healthy foods and maintain good oral health.
- Brush your children's teeth for them, until they are able to write their own name (not print). At this time, they should then be able to brush their own teeth with your help.

## Part 2 – Oral Health Care for Parents, Adults, and Caregivers

## **Healthy Eating Choices**

Use the Canada and Nunavut's Food Guide for Healthy Eating for great food choices. Be sure to include the proper number of servings from all of the necessary food groups into your diet



### **Healthy Eating Tips**

- · Choose healthy snacks such as fruit and vegetables
- · Have regular eating times
- Eat well balanced meals that include foods from all of the food groups suggested in Canada's and Nunavut's Food Guide to Healthy Eating
- Limit the amount of sugar in your diet or snacks that have added sugar
- Avoid snacks and foods that can stick to your teeth

#### **Healthy Food Choices during Pregnancy**

- While pregnant, the baby gets his/her vitamins and nutrients from the mother, so it is important that she chooses healthy foods
- During the 5<sup>th</sup> 6<sup>th</sup> week of pregnancy, the baby teeth start to form, while the adult teeth start to form during the 16-20<sup>th</sup> week. Proper nutrition will ensure the proper growth and formation of the teeth in uteri.

#### **Poor Food Choices**

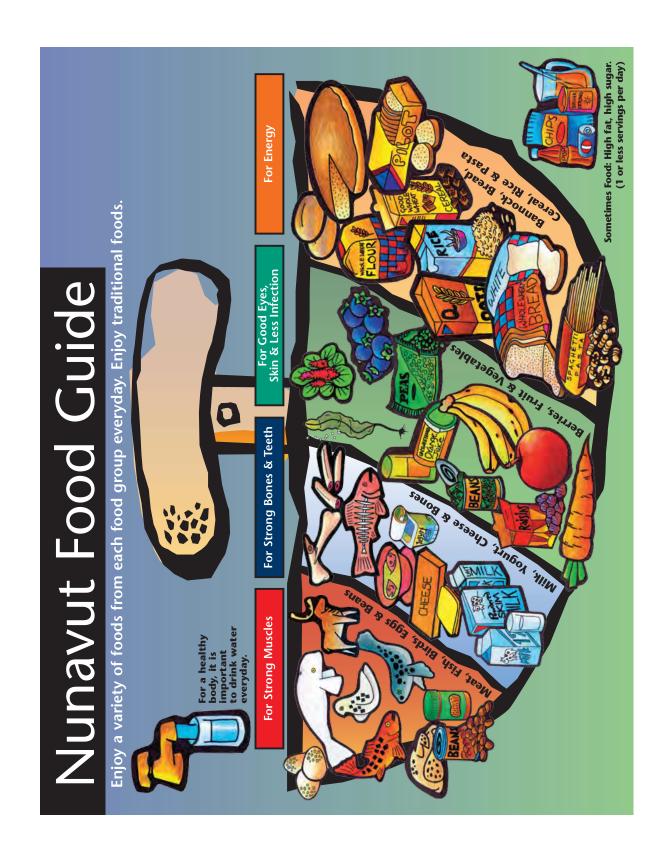
- · Chocolate bars, chips, and candy
- Doughnuts, cakes, pies and cookies
- Sticky snacks such as fruit leathers, licorice or gummy candies, these are very difficult to remove from the teeth
- Pop and sugary drinks such as Kool Aid and Tang

## **Vitamin D and Strong Teeth**

Vitamin D is needed to make strong teeth and bones. If teeth are not strong it is easier for them to become decayed. Getting enough vitamin D may protect babies and children's teeth from decay.

Our bodies make vitamin D when the sun hits our skin. Vitamin D can also be found in some foods. Country foods such as fish, fish eggs, liver and blubber are rich in vitamin D; store-bought foods such as milk, canned fish, eggs and margarine also contain vitamin D.

In Nunavut, we might not get enough vitamin D because sometimes we don't get any sun or the right intensity of sun. And we may not be eating enough foods rich in vitamin D. This is why a vitamin D supplement is recommended for pregnant and nursing mothers as well as for breastfed babies and babies receiving formula. If you are pregnant or nursing or have babies and young children at home, talk to your nurse or doctor about how much vitamin D you need.





## Part 3

Glossary

ABSCESS-Immatsimajuq: abscesses in and around the mouth are similar to those anywhere else in the body, they are an area that is infected

**ACID** — Auniruqpalliatitsisuuq: a harmful chemical, germs in the mouth make acid from sugar and it is this acid which damages the teeth and causes cavities. Acid can also come from some foods (lemons, pop, ect.)

**ALVEOLAR – Kigutsirvik:** The bone which surrounds and supports the teeth. This bone may also be called the alveolar process. Alveolar bone can be destroyed by diseases of the gums; if this is not treated and enough bone is destroyed the teeth get loose and might even fall out. When teeth are taken out, the body changes the shape of alveolar bone and after a time the body

**ANAESTHETIC** – *Ippinniaguniirjuti*: Anaesthetics can be general, which puts the patient unconscious, or local, when only a small area is "frozen". Both of these are used to prevent the patient from feeling pain while an operation is done. Local anaethetics are used more in dentistry than in any other type of medical practice. Local anaesthetics are usually given with a needle in the gum next to the tooth to be worked on, and the drug soaks through the bone to reach the nerve of the tooth. In some areas of the mouth the bone is too thick for this to work and then injection is given at a place where it will stop the pain is a much bigger area.

**ANTERIOR** – Sivua: The front. The front teeth may also be called the anterior teeth

**BICUSPID** – *I qsirparusiq*: see premolar

**BITEWING** – *Iqsirpannut Tarraliuruti:* An x ray. Bitewings are x-ray films that show the teeth of one side of the mouth. The patient bites on a little paper tab that is stuck on the film. This type of x-ray is used to find cavities in between the teeth where the dentist cannot see. These films can also give an idea of the condition of the bone around the teeth.

**BRUSHING** – *Kigutisiuq*: What you have to do to keep your teeth clean! Brushing the teeth thoroughly three times a day is the most important thing you can do to stop gum disease. It removes the germs and plaque from the teeth and gums.

**CALCULUS** – *Kiukalus*: Hard deposits on the teeth. If the teeth are not cleaned properly the plaque that is left on them becomes hard; this is called calculus or tarter. Calculus is too hard to be removed with a toothbrush. It can be yellow or brown, and only removed by a dental professional. Calculus can cause gum disease if it's not removed.

**CANINE** – *Tuluriat:* Also known as the eye tooth or the cuspid. Counting from the center of the teeth, the canine is the third tooth. There are four canine teeth in the first set of teeth, and four in the permanent teeth. The upper canines are the longest teeth in the mouth. They start to grow a long way away from the mouth and because of this they sometimes do not come into the mouth in the right place and may need to be taken out or corrected with braces. This happens most often in children who have had their first teeth taken out a very young age there is no room left for the canine teeth.

#### CAP - Ikpinniajjutimut Simik: see crown

**CARIES** – *Auniqtaarnaqtuq*: Tooth decay or the disease that causes cavities in teeth. Caries is caused by germs in the mouth and sugar in the food. There are several ways of preventing caries. Keeping the teeth clean gets rid of a lot of the germs and also gets rid of food particles, which the germs break down to make *acid*. Fluoride helps to make the teeth stronger. Eating less sugar and drinking less pop means the germs cannot make as much acid to damage the teeth. Plastic coatings on the teeth also help.

**CAVITY – Auniq:** A hole in a tooth. Cavities are caused by germs in the mouth attacking the teeth (see caries). A small hole in the enamel of the tooth can lead to a much bigger hole in the dentine which is underneath the enamel. A small cavity does not usually cause any pain and if a cavity does start to give pain it may already be too late to fill a tooth. This is why regular check-ups by the dentist are so important. Even if there is no decay, any hole in the tooth is called a cavity. When the dentist fills a tooth, he takes away all the caries and then fills the tooth.

**CEMENTUM** – *Manngungata Qaaruvianga*: A thin layer of bone like tissue that covers the surface of the root of the tooth. In the cementum are the ends of the ligaments that hold the tooth to the bone of the jaw.

**CROWDING** – *Ninniuqtut*: Not enough space to fit all the teeth in the mouth. This can happen if a person has big teeth and small jaws, but it is more likely to happen to a child who has had to have their teeth taken before they were ready to fall out naturally. When the first teeth are taken out too early, the permanent molars (which erupt at age 6) drift towards the front of the mouth. This takes up some of the space for the other teeth which erupt later. In severe cases there is so much space lost that the other teeth cannot erupt and may have to be removed by surgery. In milder cases the teeth are not straight, making it difficult to clean them properly and difficult to fill them if they get cavities. Crowding can be treated by removing more teeth to make space or it can be treated by orthodontics (braces).

**CROWN** – *Kigutiup Ulinga*: A crown is an artificial (false) tooth that is fitted over a natural tooth when the natural tooth is broken or decayed. Crowns can be made from gold or porcelain or both. The tooth to be crowned is prepared by drilling it until it is shaped like a cone and the crown is made in the laboratory to fit over this cone like a thimble.

**CLINICAL CROWN** – *Kigutiup Takutsauninga:* The part of the tooth that appears above the level of the gum.

**ANATOMICAL CROWN – Kigutiup Qakurninga**: The part of the tooth that is covered by enamel

**CUSP** – *Kigutiup Qatsinningit*: If the biting surface of a back tooth is thought of as having hills and valleys, a cusp can be considered as a hill. The cusps of upper teeth fit into the valleys of the lower teeth, and the cusps of the lower teeth fit into the valleys of the upper teeth.

**CYST** – *Piruqtuq Immatsimanirmut*: An abnormal area in the body filled with liquid and lined with a skin. Most cysts start around a tooth that has not erupted. Cysts usually get bigger guite slowly and do not cause much pain.

**DECAY** – *Auniqtanartuq*: (See also caries) Decay describes all the changes that occur in a tooth that is attacked by caries. Decayed enamel looks discolored and is very easily broken. Decayed dentine looks yellow or brown, and is soft.

**DENTAL THERAPIST** – *Kigutilirijituinaq*: A person who can do some of the things a dentist does. Therapists are not as highly trained. They work mainly in the schools treating children.

**DENTINE** – *Kigutiup Sauniujanga*: The hard bone-like substance that makes up most of a tooth.

**DENTURES** – *Kigutinnguat*: False teeth. Dentures are usually described as being either full (if they replace all of the natural teeth) or partial (if they replace only some of the natural teeth).

**EDENTULOUS** – *Kigutiqangittuaq*: Having no natural teeth. This term can be used to mean the whole mouth or just part of the mouth. If for instance, a patient has no back teeth, they can be said to be partially edentulous.

**ENAMEL** – *Kigutiup Sitiniqpaanga*: The hard outer layer of the teeth. Enamel is the hardest tissue in the body.

**ERUPTION** – *Kigusisaniq*: To break through the gum into the mouth. When a tooth first appears in the mouth, it is erupting. The first teeth to erupt are the lower front teeth at about six months of age; the last teeth to erupt are the wisdom teeth at about twenty years of age.

**EXFOLIATION** – *Kigutaijarniq*: The way the teeth fall out naturally. The first teeth are replaced by permanent teeth. For the permanent teeth to come into the mouth the first teeth must fall out. This is exfoliation.

**EXTRACTION** – *Kigutaiqtauniq*: Taking a tooth out of the mouth. A simple extraction refers to a tooth taken out with forceps (pliers). A surgical extraction is when a tooth will not come out easily and the dentist has to cut the gum to get the tooth out.

**FLOSS** – *Kukkilliuti Ivaluujaq*: Thread for cleaning the teeth. Dental floss is used to get rid of plaque from places where a toothbrush cannot reach. It is also very useful for getting out meat that is stuck between the teeth. Dental floss should be used to carefully so as not to damage the gums. Dental floss is made with or without wax and may be flavoured. All types work well but waxed floss may be easier to get in between teeth if they are tightly together.

**FLUORIDE** – *Kigutinut Sanggiliqsaut*: Fluoride is a chemical in the same family as iodine and chloripine. When a child eats or drinks anything with fluoride in it the chemical becomes part of the teeth that are growing in the child. Fluoride strengthens the teeth. After all the teeth have grown, fluoride is still useful because it can strengthen the outside parts of the teeth. Fluoride that is put in the water is a very easy way to ensure children get fluoride in their diet. The ratio used is very small, 1 part in a million part of water.

**FLUOROSIS** – *Kigutinut Sanngiliqsautiqaluaqtuq*: If a child gets too much fluoride this can cause white or brown spots on the teeth. The teeth are still strong. This can happen in some parts of the world because there is fluoride naturally happening in the water. In other cases it happens because the child is getting fluoride in the water, eating toothpaste or getting fluoride tablets given to them. This amount of fluoride is too much. The spots can sometimes be made to look better by a dentist.

**GINGIVA** (**GINGIVAE**) – *Ikkiq Kigutimuungajuq*: The gums. The gingivae are the parts of the gums that are tight on the jaw bone, next to the teeth.

**GINGIVITIS** – *Ikkiiluktuq Kigutimuunngajumik*: A gum disease around the edges of the gum next to the teeth. Gingivitis is caused by not properly cleaning the teeth. Plaque that is left next to the gums irritates the gums. The first signs of gingivitis are red-looking gums that might bleed when the teeth are cleaned. Gingivitis can be treated by

the dentist or hygienist cleaning the teeth to get rid of any scale; then the patient must keep the teeth clean. If gingivitis is not treated the infection spreads down the side of the tooth under the gum and after a time teeth can get loose and might even fall out.

**GUMS** – *Ikkiq*: The skin that covers the jawbone and holds the teeth in. The same term is also used even if there are no teeth. To remain healthy the gums must be kept clean. (See also periodontal disease)

**INCISOR** – *Sivuat*: A front tooth. Humans have four upper and four lower incisors in both the first teeth and the permanent teeth.

MILK TEETH – Immumut Kigutiit Nungunningit: The first set of teeth a child gets (also known as deciduous teeth). There are twenty milk teeth-eight incisors, four canines and eight molars. All these teeth are replaced by permanent teeth while the child is growing between the ages of six and twelve. The first molars are replaced by the permanent premolars.

**MOLARS** – *Iqtiqpait*: - The back teeth used for grinding up food. The third molar is the wisdom tooth. There are twelve permanent molars, three in each quadrant, and eight first molars.

**PERIODONTAL DISEASE** – *Ikkiluttuq*: Gum disease. When gum disease spreads down the side of the root of a tooth is starts to destroy the bone and ligaments that hold the tooth in the jaw. Many people suffer from periodontal disease and it is one of the reasons that a lot of teeth are taken out. Periodontal disease can be treated by different methods depending on how severe it is. Dentists who specialize in these treatments are periodontists.

**PERIODONTIUM** – *Attatilimaangit Kigutiit*: All the parts of the body that hold the teeth in the jaw bone. They are the alveolar bone, cementum, gingivae and the periodontal ligaments.

**PLAQUE** – *Kaniup Sururninga*: A sticky layer of germs and very small bits of food that builds up on the teeth. Everybody has plaque and it can be removed with a toothbrush. If it is left on teeth, it causes gingivitis first and then more serious gum diseases. It also causes cavities.

**PULP – Kigutiup Niqinga:** The nerve of the tooth. The pulp is in fact more than just a nerve; it also contains blood vessels and connective tissues and the cells that make the dentine. These cells are very important.

**QUADRANT** – *Alliruit Aviktunnguaqsimaninga*: One quarter of the mouth. There are four quadrants, upper right, upper left, lower right, and lower left. This system can be used to describe the position of each tooth. For example, the upper right first premolar is at the top, on the right and behind the canine tooth.

**ROOT – Kiguitiup Atajjutinga**: The part of the tooth below the gum.

**SALIVA** – *Nuvak*: The liquid the body makes to keep the inside of the mouth wet. Saliva is produced by the salivary glands and is very important to wash away bits of foods and to keep food moist to help swallowing. Less saliva is made when we are asleep. This is the reason why it is so important not to give babies bottles with sweet things in them when they are sleeping with less saliva the sugars stay on the teeth and cavities start very quickly.

**SCALE** – *Kigutiup Qijullirninga*: Hard deposits on the teeth. It may also be called tartar or calculus. Scale is plaque that has gone hard. When it is hard it cannot be cleaned off with a toothbrush and a dental hygienist has to remove it using special tools.

**SEALANTS (Pit and Fissure Sealants)** – *Kiguitup Qaaksangit Amiagait*: Plastic coatings for teeth. The surfaces of the back teeth are not smooth, so food and germs can get in the grooves and crack and cause tooth decay. To prevent this, the teeth can have plastic coating put on them to keep the germs out.

**TEETHING** – *Kigusisaniq*: The word used to describe the time when the first teeth are coming into the mouth.

**WISDOM TEETH** – *Iq & Ukpaaq Kingulliqpaaq*: The third molar. These are the last teeth to erupt into the mouth at about age twenty. If there is room for them and the teeth are straight, there is no need to take them out. Many people do not have enough room in the mouth for these teeth and then they do need to be taken out. They can be very difficult to keep clean, depending on their position in the mouth. In other people the teeth may not even grow. It is quite common for a patient to be missing one, two, three or all of the wisdom teeth.



## Part 4

**Suggested Activities** 

#### Levels: Kindergarten and Grade 1 & 2

• Learn and sing: The New Tooth Song" by Helen Balanoff (to the tune of London Bridge is falling down)

Once I had a wobbly tooth
Wobbly tooth
Once I had a wobbly tooth
Growing in my mouth

Then one day my tooth fell out
Tooth fell out
Tooth fell out
Then one day my tooth fell out
Out of my mouth

Now I have a small new tooth

Small new tooth

Small new tooth

Now I have a small new tooth

Growing in my mouth

- Invite a dental therapist or dental hygienist to your classroom to demonstrate proper tooth brushing. If a dental professional is not available, demonstrate to your students yourself
- Explain what a toothbrush and toothpaste is for, have samples for the students to see and touch. A large tooth model and tooth brush are excellent visual resources for children
- Handout a toothbrush to each student and have them practice proper tooth brushing technique on their own mouth.
- Encourage students to brush 3 times a day and have their parents help them at home
- Visit a dental office or Health Center in your community. A tour of the office is an
  excellent way for students to observe a dental office or health center in a setting.
  This can be an excellent exercise for small children with dental anxiety as the
  dental professional or nurse explains all the different things that happen at the
  dental office or health center.
- Complete the dot to dot work sheet (p.70)

#### **Levels: Grade Three, Four and Five**

- Invite a dental therapist or dental hygienist to your classroom to demonstrate proper tooth brushing. If a dental professional is not available, demonstrate to your students yourself
- Explain what a toothbrush and toothpaste is for, have samples for the students to see and touch. A large tooth model and tooth brush are excellent visual resources for children
- Handout a toothbrush to each student and have them practice proper tooth brushing technique on their own mouth.
- Encourage students to brush 3 times a day and have their parents help them at home
- Visit a dental office or Health Center in your community. A tour of the office is an
  excellent way for students to observe a dental office or health center in a setting.
  This can be an excellent exercise for small children with dental anxiety as the
  dental professional or nurse explains all the different things that happen at the
  dental office or health center.
- Complete the dot to dot work sheet (p.70)
- Learn and sing the song "This is the way we Brush Our Teeth" Song (to the tune of Here We Go Round the Mulberry Bush) (p.71)
- Have students keep a record of dental health behaviours for one week. At the end
  of the week, students will return the calendar to school to compare their habits
  with fellow students. See who had a perfect score!
- See attached sample of a brushing calendar, or have your students create and design their own calendar as an art activity. Be creative! (p.76)
- Practice daily brushing in the classroom. If you have a dental therapist in your school, this can be something they can incorporate throughout the entire school as part of their dental program. If not, it is very easy to design your own brushing program to be carried out during the school year. Each student can have their own weekly/monthly record to record their brushing behaviours. Sparkles, stickers or smelly markers can be used to record the progress. This activity can also be used to reward your students for healthy oral health behaviours.
- Introduce the Canada and Nunavut Food Guide to Health Eating. Discuss the importance of eating foods from all of the groups to maintain a healthy diet.

# Dental Health Manual

- Discuss why teeth are important in relation to eating country food. Provide a snack of caribou, muqtaaq or seal meat. Have students imagine and discuss their thoughts about what it would be like to have a non traditional Inuit diet because they didn't have teeth to properly chew and enjoy country food.
- Make a class collage of healthy and unhealthy foods
- Make two large teeth, one happy, and one sad
- Have students find healthy and unhealthy foods and food labels from magazines.
   Get the students to identify whether the food is a healthy or unhealthy food choice, and have them attach the choice onto the happy or sad tooth
- Dentally safe foods are NOT STICKY and LOW IN SUGAR
- Read the story "The story of the Easter Bunny and the Tooth Fairy" (p.72)
- Complete the work sheet "Unscramble the dental words" (p.77)
- Complete the Dental Word Search work sheet (p.80)
- Have students examine their teeth with a partner. Using disposable mouth mirrors, identify three kinds of teeth and their locations in their partners mouth.
- Prior to using the mouth mirrors, have students identify the types of teeth on a diagram or on a mouth model
- Complete the worksheet "Label the teeth" (p.74)
- Discuss the three layers that make up tooth (enamel, dentin and pulp) and the different parts of the tooth (crown and root).
- Complete the work sheet "Label the tooth and it's supporting structures" (p.75)
- Discuss the importance of teeth and the role they play
  - 1. Teeth bite and chew food so that it is small enough to be swallowed.
  - 2. Teeth help you to form words so that you can speak properly.
  - 3. To improve overall health
  - 4. To help build self-esteem (feel good about ourselves)
  - 5. The primary are baby teeth hold spaces for our permanent teeth when they're ready to come in
- Invite an elder from the community to discuss the use of teeth in maintaining a traditional inuit life style. Have the elder demonstrate the softening a seal skin. Also have the elder discuss with the students how they would clean their teeth without tooth brushes (bones and sinew) and toothpaste like we have today.

## Part 4 – Suggested Classroom Activities

- Invite a dental hygienist or dental therapist to the classroom to demonstrate
  proper brushing and flossing techniques to the students. The use of disclosing
  tablets brought by the dental professional is an excellent teaching tool to show
  students where they have plaque in their mouths, and what areas need more
  attention when brushing.
- Have students keep a record of dental health behaviours for one month. At the end
  of the month, students will return the calendar to school to compare their habits with
  fellow students. Discuss the effectiveness of this activity. See who had a perfect score!
- See attached sample of a brushing calendar, or have your students create and design their own calendar as an art activity. Be creative! (p.76)
- Practice daily flossing and brushing in the classroom. If you have a dental therapist in your school, this can be something they can incorporate throughout the entire school as part of their dental program. If not, it is very easy to design your own brushing and flossing program to be carried out during the school year. A Community Health Representative is also an excellent resource for these sort of activities. Each student can have their own weekly/monthly record to record their brushing/flossing behaviours. Sparkles, stickers or smelly markers can be used to record the progress. This activity can also be used to reward your students for healthy oral health behaviours.
- Have students participate in the "Floss is the Boss" experiment. The purpose of this activity is to teach students the importance of flossing, and how it reaches areas the tooth brush cannot.

### Level: grade Five, Six and Seven

- www.kidshealth.org/kid/closet/ Complete the Mission Nutrition quiz online and see how well you score!
- www.kidshealth.org/kid/closet/ Have students complete the "Focus on Food Quiz", see how well you know your fruits and veggies!
- Describe the different roles of each dental professional
  - 1. Dentist
  - 2. Dental Hygienist
  - 3. Dental Therapist
- Write a story about a past dental experience at school or at the dental office.
   It can be a positive or negative experience. Encourage students to share their experiences with the class afterwards.
- Complete the Giant Tooth Crossword Puzzle (p.79)
- Discuss how the health of your mouth determines the overall health of your body. Encourage students to define what health means to them, and how their life would be affected if they had poor overall health. Could you carry out your normal daily activities?
- Visit the website www.mouthpower.org/mouthpower.cfm, have each student create a game code and let them explore the dental lab and learn about dental hygiene, tobacco hazards and nutritional choices.
- Discuss tobacco in relation to oral health and in relation to overall health.
- Divide the students into small groups. Have each group calculate how much a person can spend on smoking in one year with the current price of cigarettes if they smoke: 1. a pack a day 2. a pack every three days 3. a pack every 5 days 4. a pack in 7 days. Get students imagine how much they could be saving by not smoking, disucss what they would like to save up for with the money they saved.
- Here is an activity that will have students excited about being tobacco free. Organize a race for your students, and show them how cigarettes can affect their athletic performance. At the beginning of the race, have the students participate in this quick activity. Give everyone, including teachers, a straw and have them hop on one foot for 30 seconds while breathing through the straw. This simulates how it feels for a smoker to breathe while participating in physical activities. Tell the students to keep this in mind while they are running their races.
- Participate in a "Get Rid of that Cigarette as Fast as you Can!" Relay

## Part 4 – Suggested Classroom Activities

- The first thing the students need to do is decorate their batons. They can decorate track batons or empty paper towel rolls (these are less sturdy) with paper or paint so that they look like cigarettes. They can then cover the cigarette batons with warning labels. Encourage creativity! Students can use poison warning stickers with skull and cross bones, or tobacco package warnings from the Internet, or they can draw big red X's on the baton. Tell the students that during the relay, they need to get rid of the "cigarette" as fast as they can by passing it to their teammates. Please warn the last runner not to throw the baton as he or she crosses the line.
- The most common relays are: 4x100 meter (400 m), where each team member runs a quarter of the track. One lap is 400 m.
- 4x200 meter (800 m), where each team member runs half a lap.
- 4x400 meter (1,600 m / 1 mile), where each team member runs a full lap.
- 4x800 meter (3,200 m / 2 miles), where each team mate runs 2 laps.

## Other suggested activities according to abilities of students

- Visit a dental office of Health Center with your students. Have a dental professional or nurse give you a tour of their office and explain to the students all the different things that happen in the dental office or Health Center.
- Have students brainstorm ways they can prevent dental disease
- 1. removing plaque daily by brushing and flossing
- 2. making healthy food choices from Canada/Nunavut 's Food Guide for Health Eating
- 3. regular dental checkup's with your dental professional
- 4. avoiding foods that are sticky and high in sugar
- Complete work sheet "Why You Should Brush and Floss your Teeth" (p.78)
- Take The Floss.Com Oral Health Quiz and Test Your Knowledge About Oral Health
   www.floss.com/st badbreath.html
- Discuss the decay process. For tooth decay to develop the following must be present:

teeth sugar bacteria (found in plaque)

• Define plaque – sticky coating that forms on teeth. It is made up of bacteria. When bacteria mix with sugar, they produce a harmful acid, which attacks the outer surfaces of the tooth (enamel).

SUGAR + BACTERIA = ACID ACID + TOOTH = TOOTH DECAY

• Have your students participate in the Acid Attack experiment. This experiment simulates an acid attack on bones (bones are rich with calcium, just like your teeth).

### 1. Floss is the Boss Experiment

#### What you'll need:

A rubber glove, a jar of peanut butter and something to spread it with, a container of dental floss, a toothbrush and some toothpaste.

#### What to do:

- 1. Put the glove on one hand and hold your hand with the fingers extended but tightly together, pointing upward (your hand with the glove should look like you are going to give your friend a high five:, or how a policeman holds his hand up to stop traffic).
- 2. Spread your fingers apart and have someone spread peanut butter between your fingers make sure to get the peanut butter deep between your finger joints. Tighten your fingers together again.
  - In this experiment, your fingers represent your teeth, and the peanut butter between them is food that gets trapped between your teeth when you eat.
- 3. With your fingers still tightly together and held upward, use the toothbrush and toothpaste to try and scrub the peanut butter away (remember not to move your fingers apart!).
- 4. Have someone else try to remove the peanut butter using the dental floss between your fingers. Which does a better job the toothbrush and paste or the floss?

#### What will happen:

A toothbrush simply can't reach all the places between your teeth. Dental floss can do a much better job of removing food between your teeth. If it's not removed, it can cause gum disease and cavities.

### 2. The Acid Attack Experiment

#### What you'll need:

2 clean chicken bones (ask your parents to save them for you the next time you have chicken for dinner)

- 1 container
- 1 bottle of white vinegar

#### What to do:

Pour several inches of vinegar into the container. Soak the clean chicken bones in the vinegar overnight.

#### What will happen:

Check out the bones after they've soaked in the vinegar overnight. Are they softer or harder? Be sure to throw the bones away in the garbage after you're finished.

- Have students discuss the results the following day after they examine the bones
- Conduct the Egg Experiment. It is very similar to the Acid Experiment but more time consuming.

#### What you will learn:

Egg shells and teeth have something in common; both can be weakened by acid. When you put an egg in vinegar (a weak acid similar to what causes cavities), it attack the shell, making it soft and weak.

When teeth are exposed to acids in your mouth, your teeth become vulnerable to cavities. This experiment shows how you can help lock in the calcium in an eggshell – and your teeth by protecting them with a fluoridated tooth paste.

You will need five to six days to complete this experiment. It is best to start on a Thursday or Friday afternoon.

#### 3. The Fluoridated Tooth Paste Experiment

#### What you will need:

- Plastic wrap
- Marker
- · Clear nail polish
- Paper towel
- Teaspoon
- · Glass measuring cup
- 4.6 oz tube of fluoridated toothpaste
- Fresh egg(s) without cracks
- Table vinegar

#### What to do:

- 1. Warm the eggs to room temperature. With clean hands, wash the egg with warm water and then dry it with paper towel.
- 2. Empty the tube of toothpaste into the glass measuring cup. Pat down the toothpaste with a teaspoon to level it, and remove any air bubbles.
- 3. Mark one side of the egg with a marker and cover this mark with clean nail polish to protect it from the vinegar.
- 4. Place the egg into the measuring cup, marked side down, so that the tooth paste covers half the egg. Make sure that the egg does not touch the bottom of the cup.
- 5. Cover the cup tightly with plastic wrap and leave it in a safe place at room temperature for at least four full days (96 hours).
- 6. Empty the tube of toothpaste into the glass measuring cup. Pat down the toothpaste with a teaspoon to level it, and remove any air bubbles.
- 7. Mark one side of the egg with a marker and cover this mark with clean nail polish to protect it from the vinegar.

## Dental Health Manual

- 8. Place the egg into the measuring cup, marked side down, so that the tooth paste covers half the egg. Make sure that the egg does not touch the bottom of the cup.
- 9. Cover the cup tightly with plastic wrap and leave it in a safe place at room temperature for at least four full days (96 hours).
- 10. With clean hands, rinse off all the toothpaste off the egg with warm tap water, and let the egg dry over night.
- 11. Pour enough vinegar into the measuring cup to cover the egg and then carefully place the egg in the vinegar with the spoon. Rest the spoon on the egg to keep it under the vinegar. Cover the cup with plastic wrap. Watch as bubbles form on the unprotected side of the egg.
- 12. Leave the egg in the vinegar until the unprotected side of the egg softens (the unmarked side). This will take 7-13 hours.
- 13. After 7 hours in the vinegar, remove the egg and check if the unprotected side has softened by tapping it very lightly with your finger or a pencil. If it is soft, go onto step 11.
- 14. If the unprotected side is still hard, put the egg back in to the vinegar. Check the egg every couple of hours until the unprotected shell has softened.
- 15. When the unprotected side of the egg is soft, remove the egg, and gently wash it with warm water. Handle the egg carefully as it is very fragile now.

#### Conclusion:

Acids, like vinegar weaken the protective shell of the egg. This weakening is very similar to the damage caused to the outer layer of your teeth by plaque.

The fluoride in the toothpaste protected the side of the egg with the x. This same protection is given to your teeth by toothpaste with fluoride when you brush regularly.

- Discuss food choices in relation to oral health. Have students brain storm the dental benefits of a traditional Inuit diet in relation to a diet full of high sugar foods.
- Have students conduct the experiment "Hidden Sugar"

### 4. The Hidden Sugar Experiment

This experiment identifies the sugar content in food. Sugar is a major factor in the growth of plaque and tooth decay. Note: an adult must supervise this experiment.

#### What you'll need:

1 bottle of Benedict's solution (ask the school Science department) assorted small pieces of food (cookies, crackers, bread, fruit) several glass test tubes

1 heat source (burner, gas or electric) tongs

#### What to do:

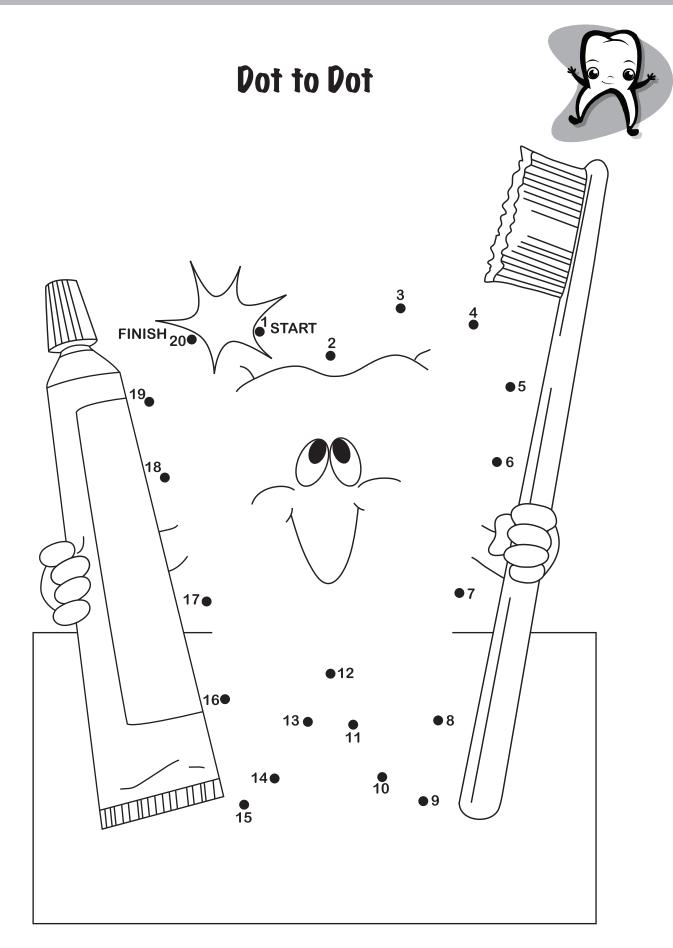
Place a piece of food in each test tube and then pour 30 - 40 ml of Benedict's solution over the food. Heat the test tubes one at a time over the burner, using the tongs to hold the test tubes.

#### What will happen:

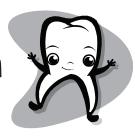
Benedict's solution is blue. The presence of sugar will turn the solution to orange. Are there some foods you thought were sugar-free that have sugar?

- Have students discuss the outcome of the experiment and what they learned from the activity.
- Have students complete a food diary for one week. Record all meals, snacks and drinks. At the end of the week, return their food diaries, and have them evaluate their food choices for each day. Did they meet the guidelines set for each food group as suggested by Canada/Nunavut's Food Guide to Healthy Eating? Get students to assess and evaluate their level of health.

## **Classroom Activities Handouts**



# This is the Way We Brush Our Teeth



This is the way we brush our teeth

Brush our Teeth

Brush our Teeth

This is the way we brush our teeth

Every Single Day

We gently brush them up and down
Up and down
Up and down
We gently brush them up and down
Every single day

We gently brush them round and round
Round and round
Round and round
We gently brush them round and round'
Every single day

We count to ten and brush each tooth

Brush each tooth

Brush each tooth

We count to ten and brush each tooth

Every single day

# The story of the Easter Bunny and the Tooth Fairy



The Tooth Fairy's wings were wilting, - her spirits were sinking low. "Easter Bunny business," she said, "will surely have to go." The boys and girls get jelly beans and pink marshmallow chicks and chocolate eggs and lemon drops and gooey licorice sticks.

"Then they lose some precious teeth they really cannot spare. This keeps me tired and overworked – I think it's quite unfair." She found a tiny pencil, thought, and then she wrote in squiggly little letters this urgent warning note:

BEWARE of the Easter Bunny with his cuddly, winning way. He brings you yummy candyand a lot of tooth decay.

If you can't really avoid him (He's always very quick), ask him to give you celery, or a crunchy carrot stick.

Each time a child gave her a tooth, she copied out her rhyme and left if with some money, a looney or a tooney.

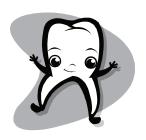
The Easter Bunny heard about her message with alarm. He hadn't known his sticky gifts were doing any harm. He wrinkled up his forehead and scratched his rabbit ears. The Easter Bunny thought about his problem, and then he got out his shears. He found some new paintbrushes he's been saving for years. The Easter Bunny could make the children happy!! He could dry the Tooth Fairy's tears!!

The Easter Bunny painted pretty handles. Then, he glued on paintbrush bristles to make the first TOOTHBRUSHES to bring the Tooth Fairy's cheers and whistles!!

One of Bunny's new inventions went to every single child. It was tucked inside a basket. The happy kids went wild!! The children loved the Easter Bunny's gift. Their parents loved it too. The Tooth Fairy soon discovered she had much less work to do.

The Tooth Fairy thought it clever how the Easter Bunny made amends. The Easter Bunny and the Tooth Fairy are now best friends!

Each year, the Easter Bunny leaves the Tooth Fairy a treat on Easter day. She thoroughly enjoys it – and brushes it right away!!



# The Tooth Fairy

When the Tooth Fairy heard you lost a tooth, do you know what she did?

She made a map to visit you 'cause you're a special kid!

First she got your home address and checked her fairy map,
Then she flew to your place where she saw your brand new "gap".

Of course, she took your worn-out-tooth, just like she's always done.

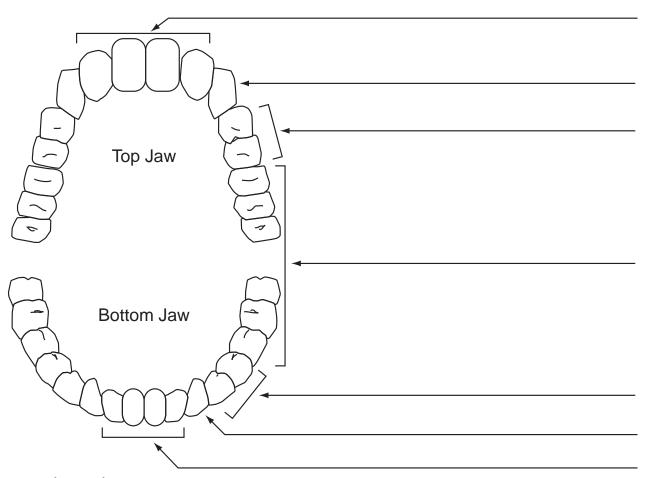
But she's left you something nice instead to help you have some fun!

- Author Unknown

# Label the Teeth

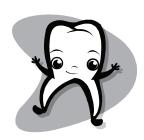


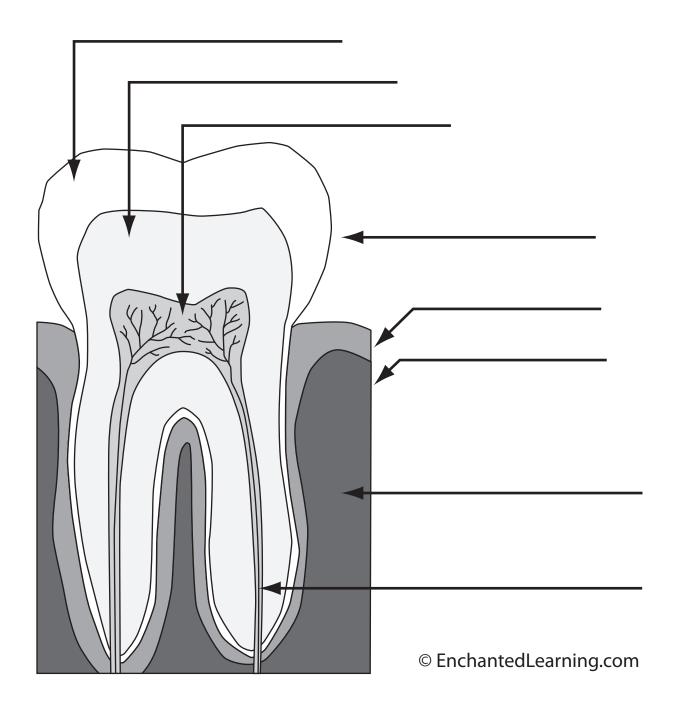
Color the INCISORS red Color the CUSPIDS blue Color the MOLARS green

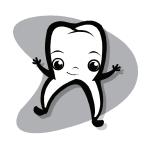


 $\\ @\ Enchanted Learning.com$ 

# Label the Teeth and its supporting structures







Student's Name:

"SMILES" HOME TOOTHBRUSHING CALENDAR

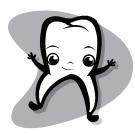
Color the sun () after you brush in the morning.
Color the moon ()) after you brush at night.
Have an adult sign the calendar at the end of the month, and return to your teacher.

|--|

	5		Sunday
			Monday
			Tuesday
			Wednesday
5			Thursday
5			Friday
5			Saturday

Parent/Guardian Signature: \_

# Unscramble the Dental Words



1.	viytac	
2.	sbpicidu	
3.	imesl	
4.	ugalh	
5.	bgtirh	
6.	amrlo	
7.	rebasc	
8.	Ineadt	
9.	elhayht	
10.	grosnt	

# Why You Should Brush and Floss Your Teeth!

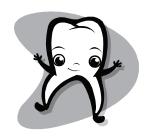


1. Yo	ou sho	uld			\	our t	eeth a	after	eating	<b>]</b> .					
2. Tł	ne har	d, wh	ite pa	rt of	your 1	teeth	is the	tootl	h			·			
3. A	thin la	ayer d	of gerr	ns th	at for	ms or	n teet	h is _							
4. To	othpa	ste sl	nould	have				_ in it	to fig	ht to	oth de	ecay.			
5. To	get ri	id of <sub>l</sub>	plaque	e betv	veen	your	teeth,	, you	shoul	d use					
			·	(2 w	ords)										
6. Yo	ou sho	uld bi	rush v	vith a				_ that	t has	fluorio	de in	it.			
7. A	hole t	hat fo	orms v	vhen	tooth	enan	nel is	eater	n awa	y is a			 		
	1. 2.		3.	4.		<b>☆</b>	,								
		_											<del></del>	7	
	ſ	5.													
	6.														
							Ì	-	•	-		•			

## Giant Tooth Crossword Puzzle

SEALANTS WHITE STRONG TEETH PREVENT
DECAY HEALTHY SMILE SAFE ENAMEL

PROTECT MOLAR SUGAR

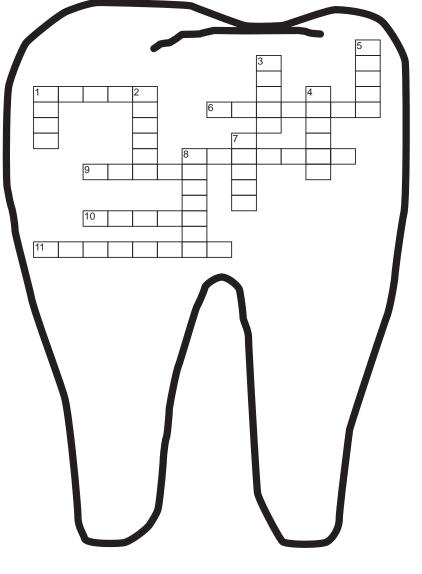


#### **Across**

- A healthy mouth makes a pretty
   \_\_\_\_\_
  .
- 2. Fresh fruits and vegetables keep you \_\_\_\_\_\_.
- 3. Sealants \_\_\_\_\_ cavities.
- 4. A back chewing tooth is a
- 5. Sealants can be clear or
- 6. \_\_\_\_\_ prevent cavities on back teeth.

#### Down

- 7. Mouthguards and sealants help keep your teeth \_\_\_\_\_\_.
- 8. \_\_\_\_\_ is the hardest substance in your body.
- Avoid foods with too much in them.
- 10. Sealants and fluoride work together to keep your teeth
- 11. Eating junk food causes your teeth to \_\_\_\_\_\_ .
- 12. \_\_\_\_\_ are for chewing, talking, and smiling.
- 13. Brush and floss your teeth every day to \_\_\_\_\_\_ your teeth from decay.







S	E	Α	L	Α	N	Т	R	х
О	M	0	L	Α	R	0	С	E
G	R	ı	M	S	S	0	L	F
R	Р	K	L	F	Z	т	Ε	U
ı	Υ	Α	С	Ε	D	н	Α	N
N	С	Α	V	1	Т	Υ	N	Α
M	0	U	Т	н	S	U	R	В
Q	D	E	N	Т	ı	S	Т	L

Dentist	Smile	Molar	Cavity	Clean
Brush	Tooth	Fun	Decay	
Grin	Sealant	Floss	Mouth	

#### **Answers**

_					
Answers	to work s	heet "Unsc	cramble th	e dental	words"

1. cavity

5. bright

8. dental

2. bicuspid

6. molar

9. healthy

7. braces

10. strong

smile
 laugh

#### Answers to work sheet "Why Should You Brush and Floss your Teeth"

1. brush

4. fluoride

6. toothpaste

9. b

10. b

2. enamel

- 5. dental floos
- 7. cavity

3. plaque

Hidden word = healthy

#### Answers to work sheet "The Floss.Com Oral Health Quiz"

- 1. c 2. c 3. a 4. a 5. b 6. c 7. b 8. a
  - www.floss.com/st\_badbreath.html

#### Answers to work sheet "Giant Tooth Crossword Puzzle"

#### **Across**

- 1. A healthy mouth makes a pretty <u>SMILE</u>.
- 2. Fresh fruits and vegetables keep you <u>HEALTHY</u>.
- 3. Sealants PREVENT cavities.
- 4. A back chewing tooth is a <u>MOLAR</u>.
- 5. Sealants can be clear or <u>WHITE</u>.
- 6. <u>SEALANTS</u> prevent cavities on back teeth.

#### Down

- 7. Mouthguards and sealants help keep your teeth <u>SAFE</u>.
- 8. <u>ENAMEL</u> is the hardest substance in your body.
- 9. Avoid foods with too much \_\_\_SUGAR\_\_ in them.
- 10. Sealants and fluoride work together to keep your teeth <u>STRONG</u>
- 11. Eating junk food causes your teeth to <u>DECAY</u>.
- 12. <u>TEETH</u> are for chewing, talking, and smiling.
- 13. Brush and floss your teeth every day to PROTECT your teeth from decay.
  - www.dentistry.about.com/gi/dynamic/offsite.htm?zi=1/XJ/Ya&sdn=dentistry&cdn=health&tm=265&gps=153\_687\_1276\_577&f=10&tt=14&bt=0&bts=0&zu=http%3A//www2.state.tn.us/health/kids/oral/xpuzzle.stm



# Part 5

Additional Resources and Websites



# Dental Health Manual

#### CDC

www.cdc.gov

#### Colgate

www.colgate.com/appt/Colgate/US/HomePage.cvsp

#### Dairy Farmers of Canada

www.dairyfarmers.org/engl/producers/index.asp

#### Health Teeth

www.healthyteeth.org

#### Kellogg's

www.kelloggs.com/us/

#### National Center for Maternal and Child Health

www.mchoralhealth.org

#### National Clearinghouse

www.guideline.gov

#### Northwest Company

www.northwest.ca/BackOffice/DesktopDefault.aspxtabindex=5&tabid=10016

#### National Diabetes Information

www.diabetes.org/home.jsp

#### National Institute of Health

www.nih.gov

#### National Institutes of Nutrition

www.ccfn.ca

#### Ontario Association of Public Dentistry

www.oaphd.on.ca

## **Part 5 – Additional Resources and Websites**

#### Oral B

www.oralb.com/learningcenter/teaching

#### Proctor and Gamble

www.dentalcare.com

#### Texas Dental Health Program

www.tdh.state.tx.us/dental/dental\_month\_planner.htm

#### **Tobacco Facts**

www.tobaccofacts.org

#### The Tooth Fairy

www.toothfairy.org

#### Inuit Tapiriit Kanatami (ITK)

www.itk.ca/publications/StatisticalProfile\_Inuit2007.pdf



