

Dental Bytes

Newsletter from the N.C. Oral Health Section

Spring 2011

FROM THE DESK OF DR. REBECCA KING

Protecting our oral health is more than practicing good oral hygiene. It is also important to eat healthy foods to provide our bodies with the nutrition to build and maintain healthy teeth and gums. A diet that includes a low amount of sugary foods and drinks, is low in refined carbohydrates and high in fruits and vegetables helps to reduce tooth decay. In this edition of Dental Bytes, we provide suggestions to assist students in making healthy choices for their oral health and overall health.

As spring begins, so does the baseball season. This is a good opportunity to explore students' attitudes about smokeless tobacco and how it may lead to oral cancer. There have been many professional athletes speaking out

against the use of smokeless tobacco, but many players still use tobacco products and influence our youth. In the 2009 N.C. Youth Tobacco Survey, 10.6 percent of middle school students and 19 percent of high school students reported using smokeless tobacco at least once. One of the best ways to prevent oral cancer is never to use smokeless tobacco or smoke cigarettes. Included in this edition are resources to develop lesson plans to address smokeless tobacco use in youth.

Spring is also a good time to teach mouth protection for summer sports. Mouthguards protect the teeth and mouth while playing a variety of sports, and not necessarily just contact sports. They help to prevent or reduce painful

injuries, loss of teeth and expensive dental bills if an injury occurs.

Wishing each of you a safe and fun spring and summer!



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Smokeless Tobacco: The Real Facts

School-age children are faced with making many decisions everyday. Whether they are at home or at school, peer pressure can have a major impact on their choices. At some point they may be introduced to smokeless tobacco. The message that is often used to persuade people to try smokeless tobacco is that "smokeless tobacco is not as bad as cigarettes." So, let's look at what smokeless tobacco is.

Smokeless tobacco is known by several different names, such as chew, wad, chaw, dip and plug. It mainly comes in three forms: snuff, chewing tobacco and snus. Snuff is a fine grain tobacco that often comes in pouches. Users put a "pinch" or "dip" between their lower lip and gum. Chewing tobacco comes in shredded, twisted or bricked tobacco leaves that users also place between their cheek and gum. Both snuff and chewing tobacco are designed to sit in your mouth while you suck on the tobacco juices, spitting often to get rid of the saliva buildup. Snus is a fairly new product in America. It is a fine grain, moist tobacco that comes in small pouches which users place between their upper lip and gum. It is marketed as a spit-free tobacco. All forms of smokeless tobacco allow nicotine to be absorbed into the bloodstream through the tissues in your cheek, gums and tongue. (continued on page 2)

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Nicotine is the addictive drug found in tobacco. A Centers for Disease Control and Prevention (CDC) study of the 40 most popular brands of snuff showed that the amount of nicotine per gram of tobacco ranges from 4.4 milligrams to 25.0 milligrams. In comparison, each cigarette contains about 10 mg of nicotine. Even after the tobacco is removed from the mouth, nicotine continues to be absorbed into the bloodstream. Some people erroneously believe that smokeless tobacco is a safe alternative to smoking. The truth is, smokeless does not mean harmless. So, what's in it that is so bad? Here are a few of the more notable ingredients found in smokeless tobacco: Polonium 210, also known as nuclear waste; formaldehyde, which is used as an embalming fluid; Cadmium, which is used in car batteries and a general grouping of cancer causing Nitrosamines; along with lead, arsenic and cyanide.

So, what's the big deal? According to the CDC, there are approximately 12 to 14 million American users. The majority of these users are under the age of 21. Of these users, about half developed the habit before they were 13 ([See this fact sheet from the NC Tobacco Prevention and Control Branch](#)). Nicotine use can lead to dependence on the drug.

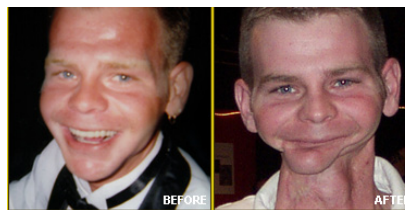
IN THE SCHOOLS

Mouthguards Help Prevent Dental Injuries

Everyone likes to think they are prepared for any emergency, especially in a school setting. A true dental emergency can come in many forms and usually will involve someone who has had an accident. Playing on the playground or falling in the hallway can cause a broken tooth, a knocked out tooth or a tongue or lip wound. Other dental emergencies include broken orthodontic wires, objects caught between teeth and bleeding from a lost baby tooth. Procedures for handling these emergencies can be found in [First Aid for Dental Emergencies](#), a poster from the Oral Health Section. Please print

It affects the cardiovascular system, increasing the heart rate, constricting blood vessels and even increasing blood pressure. Continued use leads to changes in the mouth, such as staining, gum recession, bad breath, bleeding gums, tooth decay and thickened white patches (leukoplakia) that can develop into oral cancer. The longer someone has used smokeless tobacco, the higher the risk of oral cancer.

The bottom line is that smokeless tobacco is both dangerous and addictive. It is *not* a safe alternative to smoking cigarettes; *there is no such thing as a safe tobacco product*.



Gruen Von Behren before oral cancer, and after reconstructive surgeries.

Gruen von Behren (shown above) was 13 when he tried spit tobacco for the first time. At 17, he was diagnosed with oral cancer. After 35 painful surgeries, [he now speaks to students, motivating them to avoid tobacco or quit](#).

If you or someone you know are using tobacco products, there are resources available to help you quit.

Start by visiting one of the following links, or making the phone call:

- [QuitlineNC](#)
1-800-QUIT-NOW (1-800-784-8669)
- [NCI's Smoking Cessation Quitline](#)
1-877-44U-Quit (1-877-448-7848)
- [The National Cancer Institute \(NCI\)](#)
1-800-4-Cancer (1-800-422-6237)
- [Smokefree.gov](#)
1-800-QuitNow (1-877-448-7848)
- [The National Network of Tobacco Cessation Quitlines](#)

This information was gathered from many different sources including:

1. [Top Facts: Spit / Smokeless Tobacco](#) - from Tobacco Free U
2. [Smokeless Tobacco and Cancer Factsheet](#) from the National Cancer Institute
3. [Fact Sheet: Are We Through with Chew Yet?](#) from the American Academy of Otolaryngology — Head and Neck Surgery
4. [Smokeless Tobacco](#) from the University of Iowa Hospitals and Clinics
5. [Smokeless Tobacco](#) from Teens Health - The Nemours Foundation

Healthful Living SCOS and Grade Level Competencies:

Grade 2, Obj. 5.01 & 5.02; Grade 3, Obj. 5.03; Grade 4, Obj. 5.01 & 5.02; Obj. Grade 6, Obj. 5.03; Grade 7, Obj. 5.02.



The risk of serious mouth injuries can be reduced by using mouthguards.

this poster and post it in your classroom before you need it.

With the spring and summer seasons approaching, our thoughts turn to the

outside sports and games we love. While preparing for all of these activities, be sure to include the important piece of sports gear designed to protect the smile – the mouthguard. Losing front teeth at any age can be a traumatic experience. When we think of contact sports like football, boxing and hockey, it seems natural to use a mouthguard. However, new findings show that individuals participating in many non-contact activities such as skateboarding, dirt biking and gymnastics can also benefit from the protection of a mouthguard. Several studies even show that the use of a mouthguard can reduce the incidence of concussion by lessening the impact of the blow. (continued on page 3)

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The three types of mouthguards available are the ready-made (or stock), the mouth formed “boil and bite”, and those custom made by a dentist. The ready-made and mouth-formed can be found in sports stores and department stores. When looking for a mouthguard, look for one that fits properly, is durable, easy to clean and does not restrict your speech or breathing. If in doubt about the right mouthguard, consult your dental professional.

Proper care of a mouthguard can help prolong its life. Examine it for tears, holes or poor fit. As children grow, you may need to purchase new mouthguards in

order to have the proper size. When not using the mouthguard, place it in a rigid container that has air holes to allow circulation. Before and after each use, rinse it with cold water or an antiseptic mouthrinse. Clean it with a toothbrush and toothpaste to prevent any bacterial growth. To prevent distortion, do not leave the mouthguard in extreme hot temperatures such as dash boards, direct sunlight, hot water, etc.

Accidents happen. We can't foresee or prevent every accident. We can, however, know what to do if a dental emergency happens. Follow these first aid procedures and check with your

public health dental hygienist or school nurse for any other locally adopted policies.

Please download and print these informative fact sheets from the NC Oral Health Section website: [Mouthguard Fact Sheet - English](#) [Mouthguard Fact Sheet - Spanish](#)

Healthful Living SCOS and Grade Level Competencies:

Grade K, Obj. 2.06; Grade 1 Obj. 2.06, 2.07, & 10.03; Grade 3, Obj. 2.04 & 7.01; Grade 4, Obj. 2.07; Grade 5, Obj. 2.07 and Grade 7, Obj. 2.05.

CURRICULUM CONNECTION

Healthy Habits Shouldn't Take a Vacation

All children love the summer break when they have more freedom to sleep late, play and relax without a schedule. These unstructured days, however, can also lead to many children becoming lax in their personal care habits. Bathing, shampooing and toothbrushing can often be forgotten or sporadic at best. Remind your students that their care routines should be maintained during the summer even if they stay home every day.

Being home with unlimited access to the kitchen also can lead to grazing all day long on snack foods and frequently sipping on sugary drinks. Remind students to eat a well balanced diet each day and to choose foods wisely using the [US Department of Agriculture \(USDA\) food pyramid](#) as a guide. Farmer's markets can be a source for fresh and low cost fruits and vegetables. Summer is a great time to eat lots of berries, melons and other fruits and vegetables that are in abundance in the summer. Many fruits can be frozen into “pops” for a cool treat that is much healthier and tastier than sugar loaded popsicles. Fruits and vegetables are a good source of vitamin C that helps to keep teeth and gums healthy.



Remind your students that an occasional sweet treat such as an ice cream cone on a hot day or a soft drink at a cookout is okay, but to be careful about having these types of foods too often. Foods and drinks high in sugar provide food for the bacteria on our teeth. Too much sugar can lead to tooth decay.

Encourage children to get outside and get moving. Riding bikes, swimming, and playing outdoors can be great ways to burn extra calories and will get a child away from the TV or video game where snacking can be too easy. Emphasize that students should try to limit their snacking and resist the urge to go to the kitchen cabinets simply out of boredom.

Quenching thirst and staying hydrated in summer are extremely important. Children should drink plenty of water. Stress to students that soft drinks and

sports drinks are not wise drink choices. They offer no nutritional value and can lead to dental decay. Soft drinks have replaced nutritional beverages for many children, so remind them to drink their milk each day. Dairy products are a good source for calcium that helps to build and maintain bone and teeth.

Summer is a great time for children. Life tends to be a little more relaxed and laid back as picnics, vacations and other family events take place. Remind your students to continue to brush their teeth twice a day. We want our children to have fun and enjoy their leisure time, but we don't want to let healthy habits take a vacation too.

Healthful Living SCOS and Grade Level Competencies: Grade K, Obj. 4.01, 4.02 & 4.03; Grade 1 Obj. 4.01, 4.02 & 4.03; Grade 2, Obj. 4.01, 4.02; Grade 3, Obj. 4.03; Grade 5, Obj. 4.01 & 4.02; Grade 6, Obj. 4.06; Grade 7, 4.01 & 4.03; Grade 8, 44.03

FUN FACTS

Pets' and Wild Animals' Teeth

Children are usually fascinated with animals. A fun way to introduce dental health is to compare the number of teeth humans have to animals, and how animals use their teeth. Here are a few fun facts:

- Humans have 32 teeth, dogs have 42 teeth, and cats have 30 teeth.
- Pigs have 44 teeth, and armadillos have as many as 104 teeth.
- Sharks have an unlimited supply of teeth. They continuously grow behind each other and each time a tooth breaks off, a new tooth moves in to replace it.
- The teeth of rabbits, mice, hamsters, squirrels and rodents never stop growing. They keep them worn down by gnawing on hard foods like bark. Some gophers' teeth can grow up to 15 inches a year. If you keep hamsters or mice as pets, they must have wood to gnaw on to shorten their teeth, or they can grow so long that it can prevent



them from eating properly, and could endanger their lives.

- Blue whales are the largest mammal on earth, but they don't have any teeth. They have rows of stiff hair-like combs, called baleen, that filter food from the ocean.
- The mammal that has the most teeth is the long snouted spinner dolphin with 252 teeth.
- The mouth of a snail is no larger than the head of a pin, but it can have as many as 25,000 tiny teeth lined up in rows on a ribbon-like tongue called a radula. The radula works like a file, ripping food into small pieces.

- Minnows have teeth in their throats.
- Turtles and tortoises are toothless.
- A mosquito has 47 teeth on its proboscis (snout) that puncture skin.
- An elephant's molar can be seven inches square and can weigh over six pounds.
- Fangs are not found in all snakes, but all snakes do have teeth, usually six rows of teeth that are curved backwards, just like the barbs on a fishing hook, which keep their prey from escaping.
- A crocodile replaces its teeth over 40 times during its life. The Crocodile Bird keeps crocodile teeth clean by flying into their open mouths and eating the food on their teeth.

From multiple sources, including:
[Dental Trivia](#) from Healthplex
[Dental Trivia](#) from Valley Dental Group

DENTAL HEALTH RESOURCES

Books:

Clarabella's Teeth
 by An Vrombaut

Clarabella, the crocodile, has so many teeth to clean, she hardly has time for anything else...until her friends come to the rescue! (Ages 3 to 6)

The Tooth Fairy Tells All
 by Cynthia Copeland

An easy reader for children beginning to lose their baby teeth in which the Tooth Fairy tells all about incisors, canines, and

molars, and how to take care of them. (Ages 6 to 9)

Web Links:

N.C. Nutrition Services Branch

The [N.C. Nutrition Services Branch](#) website has a wide range of resources for teachers that are ready to use. They make it easy to include good nutrition and physical activity educational messages in the classroom. They have lesson plans, presentations, bulletin board designs, curriculums, toolkits and much more.

American Dental Association (ADA)

The [ADA website](#) provides a nice Q&A on mouthguards. Topics they cover include advantages for using a mouthguard, types of mouthguards, and braces and mouthguards. Fact sheets and videos are available.

Pets Need Dental Care, Too.

A [website for pet owners](#) concerned about the oral health of their animal companions.

Remember:

- Don't let your healthy habits take a vacation this summer.
- Exercise and play with safety in mind.
- Eat nutritious foods, limit sweets and drink lots of water.

YOUR STATE PUBLIC HEALTH DENTAL HYGIENIST

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