Occiliation Resource Supplemental Curriculum Resource Kindergarten



South Carolina Healthy Schools Office of Adult and Community Education Division of District and Community Services South Carolina Department of Education

Inez M. Tenenbaum

State Superintendent of Education

The South Carolina Department of Education's Oral Health Curriculum Guides

The Oral Health Supplemental Curriculum Resource Guides were developed and endorsed by South Carolina Healthy Schools in the Office of Adult and Community Education at The South Carolina Department of Education in 2002-2003. The lessons and activities for Kindergarten, 2nd and 7th grade students were designed to reinforce the health and safety learning standards at these grade levels. The Oral Health Supplemental Curriculum Resource Guides were funded through CDC DASH Cooperative Agreement U58/CCU417047-03-02 and South Carolina Healthy Schools at the State Department of Education.

The Oral Health Supplemental Curriculum Resource Guide for Preschool, developed in 2005, draws from and was designed to be part of the original oral health curriculum resource series. The Preschool Guide, part of the *More Smiling Faces in Beautiful Places* project, was funded by a grant from the Robert Wood Johnson Foundation.

Oral Health Supplemental Resource Guides Purpose:

These guides contain lessons that encourage students to take care of their teeth as well as teach them oral health concepts. Each of the student activities in the *Oral Health Supplemental Resource Guides* includes a list of needed materials, background information, step-by-step instructions and suggested extension and evaluation activities. These guides are primarily designed for classroom use.

Highlights:

Preschool Resource Guide

- 6 activities designed for children age 3-4
- parent tip sheets included with each activity

Kindergarten Resource Guide

- aligned with health and safety standards
- 8 hands-on activities
- additional ideas for the center-based classroom

2nd Grade Resource Guide

- introductory activities
- 12 standards-based lessons that actively engage students
- ideas for integrating oral health concepts in all subject areas
- resources for students and teachers

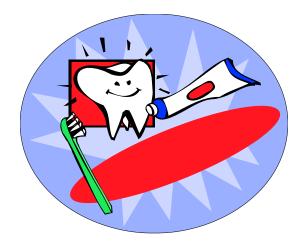
7th Grade Resource Guide

- 15 lessons aligned with health and safety standards
- age-appropriate lessons include preventing dental injuries, resisting tobacco use, determining healthy and unhealthy foods for teeth and bodies, and learning about orthodontics

The Oral Health Supplemental Curriculum Resource Guides are available on CD. For more information contact the Oral Health Division at 803-898-0194.

ORAL HEALTH SUPPLEMENTAL CURRICULUM RESOURCE

KINDERGARTEN



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The initial draft was made available to the Children's Oral Health Coalition Curriculum Committee for its review. The committee members were Dr. Linda Kaste, College of Dental Medicine, Medical University of South Carolina; Beverly Dunbar; Dee Dee Chewning, Healthy Learners; Cindy Poole, Health Reach; and Libby Brown, South Carolina Department of Health and Environmental Control. The materials were also reviewed by several district-level health coordinators: Beth Barry, Richland School District One; Lorraine Conrad, from Richland School District Two; Kitty Farnell, District Five of Lexington and Richland Counties; Sara Morgan, Lee County School District; and Joan Trezevant, Fairfield County School District. Dr. Raymond Lala, oral health coordinator at the South Carolina Department of Health and Environmental Control, was also given the opportunity to review the document and provide input.

As part of the development process, three classroom teachers from Richland District One reviewed the materials as well: Margaret Hill, Ashley Norton, and Kelli Montgomery. In addition, State Department of Education staff in the Office of Early Childhood Education, the Office of Curriculum and Standards, and the Office of Adult and Community Education were given the opportunity to review drafts of the curriculum and make suggestions.

How the *Oral Health Supplemental Curriculum Resource* Relates to South Carolina Health and Safety Curriculum Standards

The South Carolina health and safety education curriculum standards are based on seven learning standards that identify what students should know and be able to do.

Learning Standards

- A. Students will comprehend health promotion and disease-prevention concepts.
- B. Students will demonstrate the ability to access valid health information, products, and services.
- C. Students will demonstrate the ability to practice behaviors that enhance health and reduce risks.
- D. Students will analyze the influence of personal beliefs, culture, media, technology, and other factors on health.
- E. Students will demonstrate the ability to use interpersonal communication skills to enhance health.
- F. Students will demonstrate the ability to use goal-setting and decision-making skills to enhance health.
- G. Students will demonstrate the ability to advocate for personal, family, and community health.

Additionally there are six identified content areas in which students work to fulfill each standard.

Content Areas

- I. Personal Health and Wellness
- II. Nutritional Choices
- III. Mental Health
- **IV. Preventing Injuries**
- V. Family Living and Healthy Sexuality
- VI. Alcohol, Tobacco, and Other Drugs

The Oral Health Supplemental Curriculum Resource was designed in alignment with these standards and content areas. General topics and student performance indicators were developed and correlated with specific health and safety learning standards and content areas where applicable.

Assessing the Oral Health Activities

Each of the student activities in the *Oral Health Supplemental Resource Guide* includes a suggested evaluation activity. When selecting or designing an assessment tool, one must examine the purpose of the assessment. The selection, design, and use of assessment techniques should also be guided by considerations of validity, reliability, and objectivity (i.e., the extent to which strategies will yield information that is relevant, accurate, and verifiable). To help ensure that student assessments have these three characteristics, the following guidelines may prove valuable:

- Judgments should be based on the results of multiple assessment techniques. A variety of formats and methods of assessment should be used.
- Assessment procedures should be fair to all students.
- Assessments should adequately represent the range of objectives and standards that students are expected to achieve.
- The techniques used for assessment should be compatible with the approaches used for instruction.
- The criteria for making judgments about student responses should be clearly established.

It is essential for health and safety educators and their students to be active participants in the assessment process. In fact, assessment itself might best be viewed as a learning experience—one that encourages teachers and students to reflect on their classroom experiences and to share those reflections with family, school, and community. When we see it in that light, we can easily acknowledge that assessment is involved in much of what goes on in classrooms every day. Throughout a given class period, the teacher and students continually evaluate their own work and the work of others. The challenge for health and safety educators is to find innovative ways to provide systematic feedback about students and programs.

Here are three general recommendations for assessment in health and safety:

- The type of assessment used should fit the purpose of the assessment.
- Individual classroom assessments should measure both the students' knowledge of essential facts and concepts and their ability to apply the knowledge and skills.
- Both objective and performance assessments should be used in the classroom.

Using Performance Tasks as an Assessment Tool

Performance tasks are exercises, or curriculum-embedded projects, that students complete over an extended period of time (more than one class period). The exercise involves several parts and may require multiple activities and types of responses. Students may complete some work in groups, but the final product always includes one or more individually completed components.

Although performance tasks will require health facts and concepts specific to the context of the assessment, they are intended to assess thinking and behavioral skills such as accessing information, analyzing influences, decision making, and communication (i.e., refusal skills or advocacy).

Tasks at the kindergarten level could include brainstorming and other group work. Drawing pictures that represent concepts, role-playing, improvisations, and reenactments enable students to explore their understanding of various experiences. Performance tasks are intended to be grounded in authentic student experiences, investigations, and interactions that are genuine for students in their home, school, or community environments. Performance assessments are especially well suited to certain content areas since they allow teachers to directly observe the application of the desired skill.

(Source: *South Carolina Health and Safety Education Curriculum*, South Carolina Department of Education.)

General Health and Safety Topics and Student Performance Indicators

I. Oral Health and Overall Health

CONTENT AREA I: PERSONAL HEALTH AND WELLNESS

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicators:

- A. The student will be able to identify personal practices that promote a healthy lifestyle (e.g., washing hands, brushing teeth, using fluoride, getting proper nutrition).
- B. The student will be able to identify the structure and functions of the major body systems (e.g., describe a healthy mouth, the function of teeth, and the process of losing teeth).

Learning Standard 2: Access valid health information, products, and services. Student Performance Indicators:

- A. The student will be able to identify sources and services that promote oral/dental health and prevent disease.
- B. The student will be able to describe what happens during a visit to the dentist and will recognize the importance of regular dental checkups.

II. Oral Health and Nutrition

CONTENT AREA II: NUTRITIONAL CHOICES

Learning Standard 3: Demonstrate the ability to practice behaviors that enhance health and reduce risks.

Student Performance Indicator:

The student will be able to select foods that will have a positive impact on his or her oral health as well as general health.

Learning Standard 5: Use interpersonal communication skills to enhance health.

Student Performance Indicator:

The student will be able to use effective communication skills to explain what foods are beneficial to oral health.

III. Self-Esteem

CONTENT AREA III: MENTAL HEALTH

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicators:

- A. The student will be able to describe characteristics and behaviors that promote sound mental health.
- B. The student will be able to identify ways that poor oral health can affect a person's self-esteem.

IV. Injury Prevention

CONTENT AREA IV: PREVENTING INJURIES

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicators:

- A. The student will be able to explain the relationship between positive health behaviors and the prevention of oral/dental injuries.
- B. The student will be able to identify and develop safety strategies to prevent oral/dental injuries.

Learning Standard 3: Demonstrate the ability to practice behaviors that enhance health and reduce risks.

Student Performance Indicators:

- A. The student will be able to demonstrate strategies for avoiding or minimizing unsafe situations.
- B. The student will be able to respond appropriately to emergency dental situations, including the use of first-aid procedures for the mouth and teeth.

Learning Standard 6: Use goal-setting and decision-making skills to enhance health.

Student Performance Indicator:

The student will be able to use an age-appropriate decision-making process to reduce the risk of harm to self and others.

Content Target Area Matrix

Content Area I

Personal Health and Wellness

RATIONALE: Seven of ten leading causes of death are related to personal behavior and lifestyle choices. Physical wellness and personal responsibility for the practice of health-enhancing behaviors are basic components of health in today's world. Students learn personal health skills best within an environment that supports the development and maintenance of positive health behaviors, as well as understanding the causes, effects, treatment, and prevention of diseases.

LEARNING STANDARDS	ORAL HEALTH STUDENT PERFORMANCE INDICATORS FOR GRADES K-2
1. Students will comprehend health promotion and disease- prevention concepts.	 By the end of grade two, students should be able to identify personal practices that promote a healthy lifestyle (e.g., washing hands, brushing teeth, using fluoride, getting proper nutrition) and identify the structure and functions of the major body systems (e.g., describe a healthy mouth, the function of teeth, and the process of losing teeth).
2. Students will access valid health information, products, and services.	 By the end of grade two, students should be able to identify sources and services that promote oral/dental health and prevent disease and describe what happens during a visit to the dentist and will recognize the importance of regular dental checkups.
3. Students will demonstrate the ability to practice behaviors that enhance health and reduce risks.	 By the end of grade two, students should be able to determine and use strategies to improve or maintain personal health, including good dental care.
6. Students will use goal-setting and decision-making skills to enhance health.	 By the end of grade two, students should be able to develop and implement a personal health and wellness program, with specific goals related to oral health.

Content Area II

Nutritional Choices

RATIONALE: An effective nutrition-education program contributes to lifelong health. Diverse nutrition practices and changing nutritional needs throughout the life cycle require balancing daily food intake. Healthy eating habits reduce the risks of one's developing chronic diseases and other health problems.

LEARNING STANDARDS	ORAL HEALTH STUDENT PERFORMANCE INDICATORS FOR GRADES K-2
3. Students will demonstrate the ability to practice behaviors that enhance health and reduce risks.	 By the end of grade two, students should be able to select foods that will have a positive impact on their oral health as well as general health.
5. Students will use interpersonal communication skills to enhance health.	 By the end of grade two, students should be able to use effective communication skills to explain what foods are beneficial to oral health.
6. Students will use goal-setting and decision-making skills to enhance health.	 By the end of grade two, students should be able to make healthy nutritional choices and predict the effects of positive and negative nutritional choices on oral health.

Content Area III

Mental Health

RATIONALE: A positive self-image is an important component of mental health. Emotional health includes the ability to express needs, wants; and feelings; to handle emotions in positive ways; to manage anger and conflict; and to deal with frustration. Stress management provides the coping skills for maintaining positive mental health. Interpersonal communication skills promote the individual's network of social support by helping him or her build and maintain healthy relationships.

LEARNING	ORAL HEALTH STUDENT PERFORMANCE INDICATORS
STANDARD	FOR GRADES K-2
1. Students will comprehend health promotion and disease- prevention concepts.	 By the end of grade two, students should be able to describe characteristics and behaviors that promote sound mental health and identify ways that poor oral health can affect a person's self-esteem.

Content Area IV

Preventing Injuries

RATIONALE: Whether measured in the number of deaths, the dollar costs for treatment, or the potential years of life lost, injury ranks the highest among health problems affecting children and youth. Violent and self-destructive behaviors significantly contribute to this leading cause of death among the school-aged population. Effective safety education promotes beliefs and practices that enable students to avoid or reduce the risk of injuries that occur on streets and highways; in the community, the workplace, the home; and at school.

LEARNING STANDARDS	ORAL HEALTH STUDENT PERFORMANCE INDICATORS FOR GRADES K-2
1. Students will comprehend health promotion and disease- prevention concepts.	 By the end of grade two, students should be able to explain the relationship between positive health behaviors and the prevention of oral/dental injuries and identify and develop safety strategies to prevent oral/dental injuries.
 Students will demonstrate the ability to practice behaviors that enhance health and reduce risks. 	 By the end of grade two, students should be able to demonstrate strategies for avoiding or minimizing unsafe situations and respond appropriately to emergency dental situations, including the use of first-aid procedures for the mouth and teeth.
6. Students will use goal-setting and decision-making skills to enhance health.	 By the end of grade two, students should be able to use an age-appropriate decision-making process to reduce the risk of harm to self and others.

Content Area VI

Alcohol, Tobacco, and Other Drugs

RATIONALE: Substance abuse pervades our society, and students must understand its lifelong physical, emotional, and economic consequences. They must develop skills for resisting peer, social, and media influences on their personal choices.

LEARNING STANDARDS	ORAL HEALTH STUDENT PERFORMANCE INDICATORS FOR GRADES K-2
1. Students will comprehend health promotion and disease-prevention concepts.	 By the end of grade two, students should be able to identify the short- and long-term effects of the use of smokeless tobacco on one's general health and oral health.
3. Students will demonstrate the ability to practice behaviors that enhance health and reduce risks.	 By the end of grade two, students should be able to use their knowledge of the health risks to refrain from using smokeless tobacco.
4. Students will analyze influence of personal beliefs, culture, media, technology, and other factors on health.	 By the end of grade two, students should be able to recognize the influences of peers and family on behaviors related to smokeless tobacco use.
5. Students will use interpersonal communication skills to enhance health.	 By the end of grade two, students should be able to use effective verbal and nonverbal communication skills to express the healthy choice concerning the use of smokeless tobacco.

Introductory Activities

Here are some activity ideas to capture and keep your students interested and involved in learning about oral health.

Brushing Experiment



This activity, which emphasizes the importance of good brushing habits, is a great way to begin a unit on oral health.

Materials needed:

- several hardboiled eggs
- several cans of dark soda
- several cups
- several toothbrushes
- toothpaste
- 1. Ask students why they think brushing their teeth is important.
- 2. Explain to students that the hardboiled eggs represent their teeth right now—nice and white. Tell them that the dark soda represents things that are unhealthy for their teeth.
- 3. Have students work in pairs or small groups. Give each group a small cup of dark soda. Tell them to drop the egg into the cup. Ask them to predict what will happen to the egg if it is left in the cup of soda.
- 4. The next morning observe what has happened to the eggs. Then give each group of students a toothbrush and ask them to gently brush their egg (tooth). What happens to the egg (tooth) when it is brushed?

What We Know and Would Like to Learn about Teeth



- 1. Have students tell you what they already know about their teeth.
- 2. Ask students what they would now like to learn about their teeth.

Here are some questions for the class to consider:

- What are teeth used for?
- What are teeth made of?
- How many teeth do you have?
- Are all your teeth the same?
- What are some things you can do to take care of your teeth?
- 3. List these questions and the answers on chart paper. Post the chart in the classroom and refer to it throughout the unit.

Oral Health Activities



Activity 1

CONTENT AREA I: PERSONAL HEALTH AND WELLNESS

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicators:

- A. The student will be able to identify personal practices that promote a healthy lifestyle (e.g., washing hands, brushing teeth, using fluoride, getting proper nutrition).
- B. The student will be able to identify (e.g., describe a healthy mouth, the function of teeth, and the process of losing teeth).

Factual Information	Materials	Lesson
Individuals are responsible for maintaining their health through good health habits. Plaque is an invisible film of germs that grows on teeth if they are not kept clean. The purpose of brushing teeth is to remove plaque from their inner, outer, and chewing surfaces.	 For classroom activity: toothbrushes for every child to use in the demonstration exercise musical instruments (if available) to use when singing the dental health songs 	Brainstorm with students good health habits such as hand-washing, proper nutrition, and brushing teeth. Discuss what would happen if you did not do these things every day. Have a school nurse or visiting dental hygienist demonstrate the proper way to brush and floss teeth. (Or use the information on the "Proper Way to Brush and Floss Teeth" sheet below.)

Factual Information	Materials	Lesson
Supplemental literature: • The Bird Who Was Afraid to Clean the Crocodile's Teeth, by Paris Sandow and Taylor Brandon	 For extension: gray construction paper with drawings of teeth white paint several old toothbrushes 	Share with students some of the dental health songs provided below, encouraging finger play. Songs are also an effective way to review concepts before and after the unit is
 Brushing Well, by Helen Frost 	For evaluation:paper	completed.
Brush Your Teeth Please, by Leslie McGuire	 crayons 	
 I Know Why I Brush My Teeth, by Kate Rowan 		

Extension

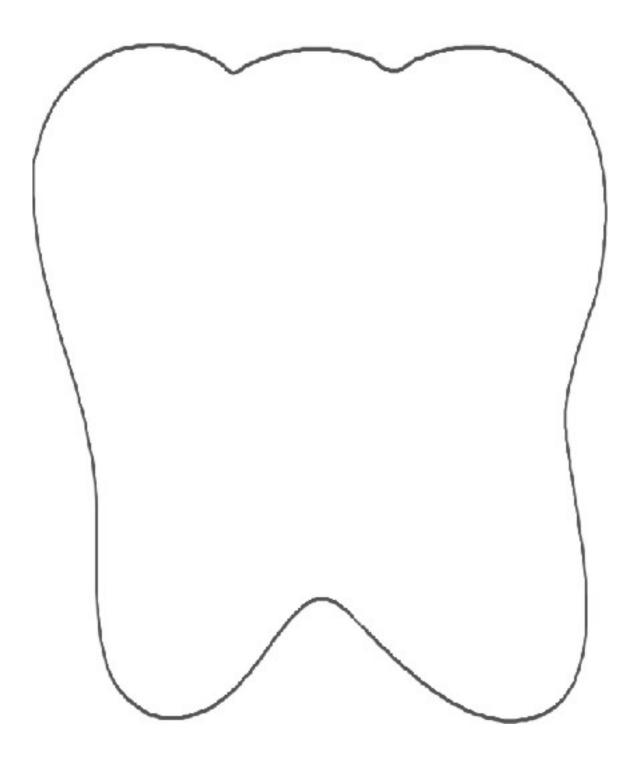
• Draw pictures of teeth on gray paper. Have students dip toothbrushes in white paint and "brush" the teeth, turning them white and bright.

Evaluation

- Have students draw pictures of a tooth before and after it is brushed.
- Have students make a picture book of good health habits.







The Proper Way to Brush and Floss Teeth

Brushing

- 1. Place a pea-sized dab of toothpaste on the toothbrush.
- 2. Place the brush at the gum line and begin brushing in small, gentle circles.
- 3. Brush one or two teeth at a time, moving in an established routine (left to right or right to left; top first, then bottom, or vice versa).
- 4. Brush the outside of all teeth, then the inside.
- 5. Brush the chewing surfaces last, using a firm back-and-forth motion to remove cavity-causing germs that collect in deep grooves of the tooth's surface.

Dentists recommend changing your toothbrush at least every three to four months or whenever it appears worn. And remember to replace a toothbrush that was used during an illness such as a cold.



Flossing

After brushing, use floss to clean in the tight spaces between your teeth and under the gums. Parents should assist children under the age of ten with flossing.

- 1. Using about twelve inches of floss, wound around the middle fingers on both hands. Hold the floss tight between the thumbs and forefingers with about one inch of floss between them.
- 2. Gently guide the floss between teeth. Do not push it into the gums. Instead, curve the floss into a C-shape against the side of the tooth at the gum line. Hold the floss against the tooth and scrape the side, of the tooth moving the floss away from the gum using an up and down motion.

It may be easier for children to use a loop of floss: tie the ends together into a circle, holding the floss between the thumbs and forefingers and proceed as detailed above.

Dental Health Songs

Are Your Teeth Clean and White?

Sung to "Do Your Ears Hang Low?"

Are your teeth clean and white? Do you brush them side-to-side? Are your teeth clean and white? Do you floss them good To remove the bits of food? Do you floss them every day? Like you know you should? Do you take good care of The teeth that are there? Do you floss them good?



—Author Unknown

I've Been Brushing

Sung to "I've Been Working on the Railroad"

I've been brushing with my toothbrush [*brushing motion*], Brushing every day. I've been brushing with my toothbrush [*brushing motion*], It's how I fight decay. All my teeth are gonna sparkle [*big smile*], How proud I'll be. Every time I want to smile, My teeth will shine for me! [*big smile*], Always brush your teeth, Every single day. Keep those cavities away! Use your brush and paste, Just the way you should, Keep your smile a looking good!

—Author Unknown

Sparkle

Sung to "Twinkle, Twinkle, Little Star"

Sparkle, sparkle, little teeth, Some above and some beneath. Brush them all at every meal, Clean and fresh they will always feel. Sparkle, sparkle, little teeth, Some above and some beneath.

Snacking, snacking, it's OK. Try it in the proper way. Eat raw veggies, fruit, and cheese. They will make your mouth say, "Please!" Snacking, snacking, it's OK. Try it in the proper way.

Floss them, floss them, in between. Cavities will not be seen! See your dentist twice a year. You will grin from ear to ear. Floss them, floss them, in between. Cavities will not be seen!

-Author Unknown



Sung to "Twinkle, Twinkle, Little Star"

Got my toothpaste, got my brush. I won't hurry, I won't rush. Making sure my teeth are clean, Front and back and in between. When I brush for quite a while, I will have a happy smile!

-Author Unknown





Brush Your Teeth Sung to "Row, Row, Row Your Boat"

Brush, brush, brush your teeth, At least two times a day. Cleaning, cleaning, cleaning, cleaning, Fighting tooth decay. Floss, floss, floss your teeth, Every single day. Gently, gently, gently, gently, Whisking plaque away. Rinse, rinse, rinse your teeth, Every single day. Swishing, swishing, swishing, swishing, Fighting tooth decay.

—Author Unknown

Activity 2

CONTENT AREA I: PERSONAL HEALTH AND WELLNESS

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicator:

The student will be able to identify personal practices that promote a healthy lifestyle (e.g., washing hands, brushing teeth, using fluoride, getting proper nutrition).

Factual Information	Materials	Lesson
Fluoride is a substance that helps to strengthen our teeth. It can be obtained through fluoridated drinking water, fluoride tablets and drops, toothpaste and mouth rinse with fluoride, and dental office treatments.	 For classroom activity: pictures of fluoride sources (Use the "Sources of Fluoride" sheet, below.) several pieces of poster board cut in the shape of a tooth (Make enough shapes for each group of students.) glue scissors 	 Have students stand an arm's length apart and lead them in the following exercises and questions. Running in place—what does this strengthen? (answer: our legs and heart) Rotating arms in circles—what does this strengthen? (answer: our arms) Jumping jacks—what does this strengthen? (answer: our legs and heart) Jumping jacks—what does this strengthen? (answer: our legs and heart) Define "fluoride" and discuss where fluoride can be found. Have students, working in small groups, color and cut out the pictures of fluoride sources on the "Sources of Fluoride" sheet (below). Provide small groups with poster board cut out in the shape of a tooth and have student groups paste the pictures to make a fluoride collage.

Evaluation

• Have students share their collages and share why fluoride is important and where it can be found.

Sources of Fluoride



dental office treatment

mouth rinse

Activity 3

CONTENT AREA I: PERSONAL HEALTH AND WELLNESS

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicator:

The student will be able to identify the structure and functions of the major body systems (e.g., describe a healthy mouth, the function of teeth, and the process of losing teeth).

Factual Information	Materials	Lesson
A healthy mouth has many characteristics. A healthy mouth has a pleasant odor, pink gums, cavity-free teeth, no prematurely missing teeth, and correct spacing between the teeth. An unhealthy mouth may have a foul odor, red swollen gums, bleeding sores, missing teeth, and cavities. Teeth affect how a person looks, speaks, and eats. Supplemental literature: • <i>The Tooth Book, Vol. 0,</i> by Theo. LeSieg • <i>How Many Teeth</i> , by Paul Showers • <i>Rotten Teeth</i> , by Laura Simms	 For classroom activity: a copy of the book <i>How Many Teeth</i>, by Paul Showers several small mirrors paper and crayons crackers 	 Read <i>How Many Teeth</i> to the class and discuss the facts that are examined in the book. Have students inspect the inside of their mouths with a mirror. Have students draw the following pictures: a person with all straight teeth, a person with missing teeth, a person with several cavities, and a person with no teeth. Have students say the alphabet and raise their hands each time their tongue touches their teeth. Continue by having them say some key words (e.g., "lollipop," "tinker toys," "dirty dishes"). Discuss the importance of teeth in speaking.

Factual Information	Materials	Lesson
		Have students eat a cracker and describe what role their teeth play in the eating.
		Distinguish the difference between front and back teeth by having students chew the cracker first with their front teeth and then their back teeth. Have students describe the difference.
		Have students tell what some of their favorite foods are. List these on the board, and then erase the foods that require teeth to eat.

Evaluation

• Have students compare and contrast the difference between what a healthy mouth looks like and what an unhealthy mouth looks like.

Activity 4

CONTENT AREA I: PERSONAL HEALTH AND WELLNESS

Learning Standard 2: Access valid health information, products, and services. Student Performance Indicators:

- A. The student will be able to identify sources and services that promote oral/dental health and prevent disease.
- B. The student will be able to describe what happens during a visit to the dentist and will recognize the importance of regular dental checkups.

Factual Information	Materials	Lesson
Going to the dentist regularly is important. Dentists and their assistants help you take care of your teeth. Dental Office Staff Dentist: a licensed professional who helps prevent, diagnose, and treat diseases of the oral cavity. Dental hygienist: a licensed professional who provides preventative services such as cleanings fluoride treatments, and patient education. Dental assistant: a person who performs tasks to help the dentist. Receptionist: a person who schedules appointments, answers the phone, and assists with financial record keeping and insurance paperwork. Supplemental literature: <i>I'm Going to the Dentist:</i> <i>Pop-Up Book,</i> by Maxie Chambliss <i>My Dentist, My Friend,</i> by Patrick K. Hallinan <i>Just Going to the Dentist:</i> <i>Golden Look-Look Book,</i> by Mercer Mayer <i>Fang the Dentist,</i> by Mark Thaler	 For classroom activity: one of the suggested books about a trip to the dentist popsicle sticks crayons scissors 	 Begin by sharing one of the suggested books about a trip to the dentist. Have students describe what happens when they visit the dentist. Discuss with the students the role of the dentist and his or her office staff: the dental hygienist, the dental assistant, and the receptionist. Divide the students into small groups. Have each group make a stick puppet of one member of the dental office staff. (Give students copies of the "Dental Office Staff" sheet, below, to use as a reference.) Then have the students role-play a trip to the dentist, using the puppets. These can be left in a learning center for imaginative play.

Dental Office Staff



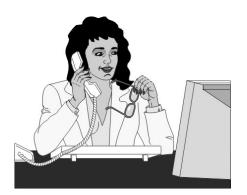


dentist

dental hygienist



dental assistant



receptionist

Factual Information	Materials	Lesson
 Dental Instruments Explorer: helps the dentist and dental hygienist check our teeth Scaler: used to remove tartar from teeth Mouth mirror: used to see all around inside the mouth Drill: used to remove decayed matter from teeth X-ray machine: used to produce a picture of the teeth and bones inside the mouth Suction: used to take water out of the mouth Water/air syringe: used to rinse and dry teeth 	For classroom activity: • dentist's instruments (optional) • lab coat or white shirts (optional)	If possible, arrange a field trip to a dental clinic or office. Or, if it is easier, have a dentist or dental hygienist visit your classroom. Ask him or her to bring some of the dental instruments. If this is not possible, use the pictures on the "Dental Instruments" sheet (below). Leave the pictures of the instruments and a lab coat, if available, in your dress-up area to encourage imaginative play. Tip: You may want to enlarge the "Dental Instruments" sheet and cut out the instruments and mount them on construction paper or poster board.

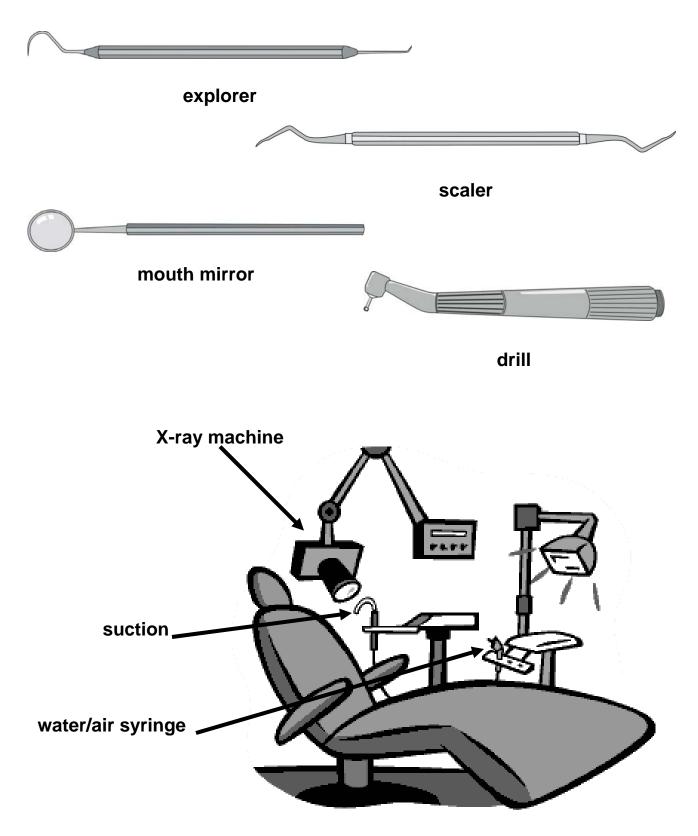
Extension

• After reading to the class some of the books about going to the dentist, play the following games with students. Involve the class in a memory game by having the children recall some of the dental instruments referred to in the books. Then have them list the items they have seen at their dentist's office. After this review, play "I'm going to the dentist": have the children sit in a circle and say, "I'm going to the dentist. and I will see _____ [name an item]." Let the students take turns saying what they will see at the dentist's office as well as repeating the items named by the other students. Continue until everyone has had a turn.

Evaluation

• Participation in the game and in role-playing activities will be the primary assessment tool.

Dental Instruments



Activity 5

CONTENT AREA II: NUTRITIONAL CHOICES

Learning Standard 3: Demonstrate the ability to practice behaviors that enhance health and reduce risks.

Student Performance Indicator:

The student will be able to select foods that will have a positive impact on his or her oral health as well as general health.

Learning Standard 5: Use interpersonal communication skills to enhance health. **Student Performance Indicator**:

The student will be able to use effective communication skills to explain what foods are beneficial to oral health.

Factual Information	Materials	Lesson
All foods are not the same. Certain foods help our bodies grow and be healthy. Some examples of nutritious foods are meats, eggs, vegetables, fruits, breads, non-sugary cereals, and whole grain products. Some examples of food that are not as nutritious are soda pop, chips, candy, and most cakes, cookies, and pies. Supplemental literature: • Ooey Gooey, by Erica Farber • Those Icky Sticky Smelly Cavity Causing but Invisible Germs, by Judith Anne Rice	 For classroom activity: examples of nutritious foods old magazines scissors knife apple marshmallows (See the "Healthy Recipes" sheet for the snack ingredients.) For evaluation: red and green construction paper cut into squares pictures of different foods 	Make real food available for students to examine. Explain to students that certain foods are better for our bodies and teeth than others. Have students cut out pictures of different foods from magazines. Then have the class classify the foods according to whether or not they are healthy for the teeth and the body. Using a knife, cut an apple in half and then cut a marshmallow in half. Have students examine the knife after each cutting and note the difference in the way it looks. Extend by having students consider the fact that marshmallows stick to our teeth the same way they stick to the knife. Ask students to list other foods that are sticky.

	Have students plan a nutritious snack party and invite school personnel to attend. (Use the "Healthy Recipes" sheet.)
	Encourage students to explain to the guests what the class has learned about good nutritional choices for oral health.

Evaluation

• Give each student two 3" x 5" piece of construction paper, one red and one green. Show the students pictures of different foods. Have them hold up the red piece of construction paper if the food item is *not* healthy for teeth and does *not* help your body grow. Have them hold up the green piece of paper if the food item is healthy for their teeth and helps their bodies grow.

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Apple Delights

Slice apple wedges and baste with melted margarine. Top with cinnamon. Bake for 30 minutes at 350 degrees. Serve warm or chilled. Can also be prepared in a toaster oven.

Healthy Recipes

Celery Boats

Stuff celery with pureed cottage cheese or sugarless peanut butter and top with sunflower seeds, roasted sesame seeds, paprika, or caraway. A sliced cucumber wedge on a toothpick makes a great sail!

Veggie or Fruit Kabobs

Arrange a variety of fruits or vegetables on toothpicks. Try radishes, mushrooms, cucumbers, carrots, cherry tomatoes, or broccoli. Suggested fruits are apple wedges, melon balls, orange sections, banana slices, grapes, berries, cantaloupe squares, and pineapple.

Frozen Crunch Pops

1 8-ounce container vanilla yogurt
 ½ cup applesauce
 ½ cup chopped nuts
 4 dashes of cinnamon
 2 paper cups
 2 ice cream sticks

Pour the yogurt into small mixing bowl. Add the applesauce and chopped nuts. Shake in the cinnamon. Mix well. Spoon half of the mixture into each paper cup. Put ice an cream stick into each cup. Freeze at least two hours. Remove paper cups from frozen pop and serve. Makes two servings.

OGUE

Orange-Banana Shake or Frosty

4 ripe bananas
½ cup unsweetened orange juice
¼ tsp. vanilla
4 cups of milk
1 cup crushed ice

Using a blender, combine the first four ingredients. Add crushed ice to thicken. Serves six.

Nutty Treats

Shape softened low-fat cream cheese, cheddar cheese, or sugarless peanut butter into balls and roll in chopped nuts, roasted sesame seeds, or parsley. Chill before serving.







Activity 6

CONTENT AREA IV: PREVENTING INJURIES

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicator:

The student will be able to explain the relationship between positive health behaviors and the prevention of oral/dental injuries.

Learning Standard 3: Demonstrate the ability to practice behaviors that enhance health and reduce risks.

Student Performance Indicators:

The student will be able to demonstrate strategies for avoiding or minimizing unsafe situations.

Learning Standard 6: Use goal-setting and decision-making skills to enhance health.

Student Performance Indicator:

The student will be able to use an age-appropriate decision-making process to reduce the risk of harm to self and others.

Factual Information	Materials	Lesson
There are certain rules that you can follow to help protect your mouth and teeth. (Refer to the "Safety Rules to Help Prevent Oral Injuries" sheet below.)	 For classroom activity: paper, crayons, or markers materials to make a bound book (fasteners, yarn, and so on) 	Ask students if they have ever broken or bumped a tooth. Allow students to share how it happened and how it felt. Make a student- generated list of some ways accidents happen. Have the class develop a list of safety rules for the classroom, playground, and home. Have students work in groups to illustrate the rules. Then compile the illustrations and the rules into a class book on safety.

Evaluation

• Have the students take home the class book of safety rules and share it with their parents and siblings. Ask parents to write a comment about the sharing experience.

Safety Rules to Help Prevent Oral Injuries

- A. When participating in vigorous activities and contact sports, always wear a properly fitted helmet and mouth guard.
- B. Wear a catcher's mask when receiving pitched balls.
- C. Keep your skateboard under control, and do not push or shove other skateboarders.
- D. Use a ladder to climb out of the pool.
- E. Do not run alongside a pool or engage in horseplay around a pool area.
- F. Do not push, hit, or throw things at people while they are drinking from a water fountain.
- G. Always wear a seat belt when riding in a car.
- H. Be extra cautious when riding a bike in rainy weather. Watch out for trees, stumps, and other objects in your path.
- I. Remain seated in a swing, and do not jump from or walk under a moving swing.



Activity 7

CONTENT AREA I: PERSONAL HEALTH AND WELLNESS

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicator:

The student will be able to identify the structure and functions of the major body systems (e.g., describe a healthy mouth, the function of teeth, and the process of losing teeth).

CONTENT AREA IV: PREVENTING INJURIES

Learning Standard 3: Demonstrate the ability to practice behaviors that enhance health and reduce risks.

Student Performance Indicator:

The student will be able to respond appropriately to emergency dental situations, including the use of first-aid procedures for the mouth and teeth.

Factual Information	Materials	Lesson
If a child's tooth is knocked out, it can be saved if you act quickly and appropriately. When a permanent tooth is knocked out, find the tooth, but do not handle it by the roots. Rinse it gently with water. Have the child place the tooth back in the socket and hold it with a finger or tissue. If the child is unable to do this, place the tooth in a glass of milk or place it in saliva. As a last resort, place the tooth in a glass of water. The tooth must not dry out! Take the child to the dentist immediately.	For classroom activity: • dental first aid supplies	Explain to students that there are special things you do when someone has experienced a dental injury. Discuss and demonstrate first aid procedures for a knocked-out permanent tooth. Work with students to assemble dental first aid supplies for the classroom. You can assign them to bring these items to class: • cotton swabs, • tea bags, • dental floss, • interdental cleaner or toothpicks, • dental wax (or paraffin), • ice pack, • handkerchief, and • milk.

Factual Information	Materials	Lesson
 Supplemental literature: Little Rabbit's Loose Tooth, by Lucy Bate Franklin and the Tooth Fairy, by Paulette Bourgeois Arthur Tricks the Tooth Fairy, by Marc Brown My Tooth Is Loose!, by Martin Silverman 		Explain to students that they are just beginning to lose their "baby" or primary teeth. This is a natural process that will continue until they have lost all of their primary teeth and all of their permanent teeth have grown in. Start a monthly chart where you can graph the number of teeth that students lose each month. This graph can stay up all year and be an ongoing project. Read one of the suggested literature selections to the class.

Evaluation

• Have each of the students draw a picture of someone saving a tooth that has been knocked out. Use their pictures to create a class bulletin board.

Activity 8

CONTENT AREA III: MENTAL HEALTH

Learning Standard 1: Comprehend health promotion and disease-prevention concepts.

Student Performance Indicators:

- A. The student will be able to describe characteristics and behaviors that promote sound mental health.
- B. The student will be able to identify ways that poor oral health can affect a person's self-esteem.

Factual Information	Materials	Lesson
How a person looks can affect the way that person feels about him- or herself.	For classroom activity: • pictures of people with different types of facial expressions, cut from magazines and catalogs	Show the student the pictures of people's faces. Discuss how each person might be feeling. Using the magazine pictures, tell students to blacken in some of the people's teeth. Ask them how the people might feel about themselves and how others might feel about them now. In learning centers, have students draw faces with different expressions.

Evaluation

• In small groups, have students describe orally how an unhealthy mouth with missing teeth and bleeding gums could affect how a person feels about him- or herself.



ADDITIONAL RESOURCES



Oral Health Activities for Learning Centers



In an effort to expose students to a multifaceted oral health unit, you may want to include these additional activities and supplies in the learning centers you have set up in your classroom.

Imaginative Play

- Encourage students to set up a "dentist office" in the play area. Appropriate props are pictures of dental instruments, lab coats or white shirts, a telephone for the receptionist, an appointment book, and so forth.
- Encourage students to use the stick puppets they made in activity 4 to act out a trip to the dentist.
- Provide students with items they can use as "puppets." Such items could include a toothbrush, a tube of toothpaste, an apple, and a tooth. The children can create stories or plays related to the puppets.

Math

- Have different toothbrushes in the learning center for students to count and sort according to size and color.
- Have students graph the colors of their toothbrushes, their favorite brands of toothpaste, and the number of toothbrushes in their house.

Art

- In the learning center, provide materials for students to make tooth models. (Use the drawing on the "Tooth Pattern" page, above.)
- Provide materials for students to use to make placemats reminding them to eat "tooth healthy" snacks like fruits and vegetables.
- Use cut fruit to make stamp prints.
- Paint pictures with toothbrushes.

- Have students draw a pictures of themselves with big smiles!
- Have students use paper bags to make "healthy mouth" and "unhealthy mouth" puppets. The bottom of the paper bags make great open mouths!

Language Arts

- Provide story starters to encourage creative writing and thinking:
 - "This morning when I was brushing my teeth, something strange started to happen. My teeth began to turn green"
 - "The tooth fairy called me last night and asked me if I could take her place for a few days. The first thing I did was. . . ."
 - "An alien from outer space has appeared in your room and wants to know what teeth are and why they are important. . . ."
- Include as many books as you can in your reading area for students to read and explore.
- Have students create a new flavor and brand of toothpaste. Encourage creativity by having students design the package.

Science

- Set up the "Brushing Experiment" (in the "Introductory Activities" section, above) for students to observe.
- Puncture a small hole in an apple and leave it in the science area for students to observe. Great example of decay!
- Leave handheld mirrors in the learning center for students to use to observe and explore their mouths.
- Use a disposable camera to take pictures of student smiles. These would make a wonderful bulletin board.
- Using pink clay and white navy beans the students can create a model of their teeth. There should be ten teeth in each gum.
- Set up a display of different kinds of teeth and skulls if they are available. Encourage students to examine the different types of teeth they see.

Blocks and Puzzles

- Challenge students to build a mouth. Use the blocks to represent teeth, or have them arrange the blocks in the shape of a single tooth.
- Use the included tooth pattern to make a tooth puzzle for students to complete. You may want to laminate the tooth before you cut it so that it will last longer. Students could create their own puzzles to take home.

Children's Literature



Barabas, Kathy. Let's Find Out about Toothpaste. New York: Scholastic, 1997.

- Bate, Lucy. Little Rabbit's Loose Tooth. New York: Crown Publishers, 1983.
- Beeler, Selby B. *Throw Your Tooth on the Roof: Tooth Traditions from around the World.* Boston: Houghton Mifflin, 1998.
- Birdseye, Tom. Airmail to the Moon. New York: Holiday House, 1988.
- Bourgeois, Paulette. Franklin and the Tooth Fairy. New York: Scholastic, 1996.
- ------. Franklin and the Tooth Fairy. New York: PolyGram Video, 1997. Videotape.

Brown, Marc. Arthur Tricks the Tooth Fairy. New York: Random House, 1998.

——. Arthur's Tooth. Boston: Atlantic Monthly Press, 1985.

Bunting, Eve. Trouble on the T-Ball Team. Boston: Houghton Mifflin, 1997.

Chambliss, Maxie. I'm Going to the Dentist: Pop-Up Book. New York: Ladybird Books, 1997.

Clement, Rod. Grandpa's Teeth. New York: HarperCollins, 1997.

- Cole, Joanna. The Missing Tooth. New York: Random House, 1988.
- Ehlert, Lois. *Eating the Alphabet.* San Diego, CA: Harcourt Brace, 1996.
- Falwell, Cathryn. Dragon Tooth. New York: Clarion Books, 1996.
- Farber, Erica, and J. R. Sansevere. *Ooey Gooey.* New York: Random House, 1998.
- Fowler, Allan. A Look at Teeth. New York: Children's Press, 1999.

Frost, Helen. Brushing Well. Mankato, MN: Capstone Press, 1998.

——. Food for Healthy Teeth. Mankato, MN: Capstone Press, 1998.

——. Your Teeth. Mankato, MN: Capstone Press, 1998.

- Grohmann, Almute. Dragon Teeth and Parrot Beaks: Even Creatures Brush Their Teeth. Chicago: Quintessence Publishing, 1997.
- Hallinan, Patrick K. *My Dentist, My Friend.* Nashville, TN: Ideals Children's Books, 1996.
- Hodgkins, Fran. Dental Hygienists. Mankato, MN: Capstone Press, 2001.
- Houghton Mifflin Company Staff. *Molly and Slow Teeth.* Boston: Houghton Mifflin School, 1992.
- Jensen, Patsy. Loose-Tooth Luke. Brookfield, CN: Millbrook Press, 1998.
- Karlin, Nurit. The Tooth Witch. New York: Lippincott, 1985.
- Keller, Laurie. Open Wide: Tooth School Inside. New York: Henry Holt, 2000.
- Krementz, Jill. Taryn Goes to the Dentist. New York: Crown Publishers, 1986.
- Kroll, Steven. Loose Tooth. New York: Scholastic, 1992.
- Kuklin, Susan. When I See My Dentist. New York: Bradbury Press, 1988.
- Langreuter, Jutta, and Vera Sobat. *Little Bear Brushes His Teeth.* Brookfield, CN: Millbrook Press, 1997.
- LeSieg, Theo. The Tooth Book, Vol. 0. New York: Beginner Books, 1981.
- MacDonald, Amy. Cousin Ruth's Tooth. Boston: Houghton Mifflin, 1996.
- Mayer, Mercer. Just Going to the Dentist. Racine, WI: Western Publishing, 1990.
- McGuire, Leslie. Brush Your Teeth Please: A Pop-Up Book. Pleasantville, NY: Reader's Digest Children's Publishing, 1993.
- McPhail, David M. *The Bear's Toothache*. Boston: Little, Brown, 1972.
- Munsch, Robert N. Andrew's Loose Tooth. New York: Scholastic, 1998.
- Rey, Margret, and Alan J. Shalleck, eds. *Curious George Goes to the Dentist.* Boston: Houghton Mifflin, 1989.

- Rice, Judith Anne. *Those Icky Sticky Smelly Cavity-Causing but Invisible Germs.* Saint Paul, MN: Redleaf Press, 1997.
- Rockwell, Lizzy. *Good Enough to Eat: A Kid's Guide to Food and Nutrition.* New York: HarperCollins, 1999.
- Rogers, Fred. Going to the Dentist. New York: Putnam, 1989.
- Rowan, Kate I Know Why I Brush My Teeth. Cambridge, MA: Candlewick Press, 1999.
- Sandow, Paris, and Taylor Brandon. *The Bird Who Was Afraid to Clean the Crocodile's Teeth!* Manassas Park, VA: Imperius Publishing, 1999.
- Schissel, Marvin J., and John E. Dodes. *Healthy Teeth: A Users Manual: Everything* You Need to Know to Find a Good Dentist and Take Proper Care of Your Teeth. New York: St. Martin's Griffin, 1999.
- Schoberle, Cecile. Open Wide!: A Visit to the Dentist. New York: Simon Spotlight/Nickelodeon, 2000.
- Selby, Jennifer. The Seed Bunny. San Diego, CA: Harcourt Brace, 1996.
- Showers, Paul. *How Many Teeth?* New York: HarperCollins, 1991.
- Silverman, Martin. My Tooth Is Loose! New York: Viking, 1991.
- Simms, Laura. Rotten Teeth. Boston: Houghton Mifflin, 1998.
- Steig, William. *Doctor de Soto.* New York: Farrar, Straus, and Giroux, 1982.
- Swanson, Diane. *Up Close: Teeth That Stab and Grind.* Vancouver, Canada: Greystone Books, 2000.
- Thaler, Mark. Fang the Dentist. Mahwah, NJ: Troll Associates, 1994.
- Williams, Barbara. *Albert's Toothache*. New York: Dutton, 1977.
- Wood, Audrey. *Tooth Fairy*. Swindon, England: Child's Play International, 1989.

Ziefert, Harriet. A Trip to the Dentist. New York: Harper and Row, 1988.

Books for Teachers

- Craig, Leslie. *My Dentist Makes Me Smile*. Bloomington, IN: 1stBooks Library, 1998. Activity and coloring book.
- Gagliardi, Lori. *Dental Health Education: Lesson Planning and Implementation.* Norwalk, CT: Appleton & Lange, 1998.
- Schwartz, Linda. *Meet Your Teeth.* Edited by Barbara Dever and Kimberly Clark. Huntington Beach, CA: Creative Teaching Press, 1996. Dental care unit for grades 1–4.
- Silverstein, Alvin, Virginia Silverstein, and Laura Silverstein Nunn. *Tooth Decay and Cavities.* New York : Franklin Watts, 1999.

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South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS)

101 Business Park Blvd. Columbia, SC 29203-9498 Phone: 803-896-5555 Toll-free: 1-888-SC-PREVENTS

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Promoting and protecting the health of the public and the environment.