

Toothbrushing in Early Education and Childcare (EECC) Programs

Brush in a Box Toolkit



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Toothbrushing should be a pleasurable experience for childcare providers, teachers, parents, and children. If a child is hesitant to brush their teeth, teachers or childcare providers will work with the family to assist the child in learning to participate in this activity.



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From the Dental Director's Desk



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Tooth decay is one of the most common childhood chronic diseases. Although preventable, disparities in the prevalence of tooth decay with respect to income, race and ethnicity, and parental education are profound. Daily toothbrushing with fluoridated toothpaste combined with a low-sugar diet will help reduce the risk of developing tooth decay.

Early education and childcare (EECC) programs are an important setting to implement a daily toothbrushing program for teaching children a lifelong healthy habit. Many professional and governmental organizations endorse supervised toothbrushing in early care programs. Promoting early professional care in primary care settings with the age-one dental visit should complement daily home care.

Through laws and regulations, Kansas, Massachusetts, and West Virginia support toothbrushing in EECC programs. The Office of Head Start has established a standard ensuring all children with teeth are assisted by appropriate staff or volunteers, if available, in brushing their teeth once daily with toothpaste containing fluoride. In addition, there are resources that include protocols, education materials, and staff training. Local oral health programs should consider this effective strategy to promote oral health.

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State Dental Director

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California Department of Public Health



California Department of Public Health
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INTRODUCTION

Encouraging toothbrushing in Early Education and Childcare (EECC) programs helps to promote oral health and teaches children a lifelong habit. Local Oral Health Programs (LOHPs) can use this toolkit as a resource to help fulfill Work Plan **Activity 2.1.b #6. Design of an early education and care prevention program (e.g., Toothbrushing Programs in Pre-K, Oral Health Education) and 2.1.b reporting measure E) Early Prevention Program**. LOHP staff can use this toolkit to train teachers and childcare providers how to implement a daily toothbrushing program and incorporate oral health education into their classrooms and/or childcare programs.

Toothbrushing at the table, or [Circle Brushing-IHS Head Start](#), provides children with a shared space to learn how to brush effectively. It also provides teachers and childcare providers with a more efficient and less messy approach to the daily routine. Sitting at tables or desks, children are given a toothbrush, a napkin, and a paper cup with a pea-sized dab of fluoride toothpaste. Using a no-water or dry-brushing method, the children brush their teeth. Toothbrushes are rinsed afterward to remove any residue and then stored upright to air dry. A detailed *Toothbrushing Procedure* for various age groups with *Safety and Sanitation Guidelines* can be found in this toolkit.

A brushing routine in a childcare home with children of varying ages may look different than those in the video examples. Help teachers and childcare providers to structure the brushing routine to work for their classroom or childcare program. The most important thing is that children are brushing every day and that their staff is following the safety and sanitation guidelines.

[Growing Healthy Smiles in Early Care and Education Programs | ECLKC \(hhs.gov\)](#)
[Snohomish County Teaching Toothbrushing in Child Care Video](#)
[No Water Toothbrushing | California Childcare Health Program \(ucsf.edu\)](#)



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Oral Health

Oral health is an essential component of overall health.

Dental disease is the most common chronic childhood disease. Dental disease is completely preventable with daily oral hygiene, regular dental visits, and the use of preventive methods like fluoride applications and sealants, along with limiting sugary foods and beverages.

Health equity means that every person has the opportunity to attain his or her full health potential regardless of race, ethnicity, gender, income, and location. Classroom toothbrushing encourages all children to have healthy behaviors and offers a component of peer-to-peer modeling. Learning healthy behaviors ranks high for influences in one's quality of life and life span, making it important to learn healthy habits early on.



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Establishing a Dental Home

1. Every child should have a first dental visit by age one. This establishes a dental home at a dental clinic or office.
2. Parents can make their child's appointment at any time. It may take a few months to get an appointment, but clinics prioritize seeing children, especially if the child is in pain.
3. If a child does not have a dental home, the child's pediatrician, or the Local Oral Health Program (LOHP) may be able to assist the family in establishing a dental home.



Photo by Nadezhda Moryak

Steps LOHPs Can Take to Assist in the Implementation of EECC Toothbrushing

- ❖ Meet with Center Directors, Lead Childcare Providers, or school Administrators to promote *Brush in a Box* and gain buy in
- ❖ Provide a presentation for teachers/childcare providers
- ❖ Have the teachers/childcare providers sign up using the **Program Agreement** provided in this toolkit
- ❖ Go over the **Safety and Sanitation Guidelines** and **Toothbrushing Procedure** provided in the toolkit
- ❖ Offer to model the process
- ❖ Give an oral health education lesson in the classroom or childcare home, or provide oral health curriculum
- ❖ Offer support with implementation
- ❖ Provide *Brush in a Box* supplies (if possible) or go over the **Cost Analysis** and help budget for materials
- ❖ Go over the **Checklist** provided in this toolkit to make sure the teachers/childcare providers have everything they need
- ❖ Observe and review the brushing routine to make sure **Safety and Sanitation Guidelines** are being followed and that everyone is having fun!
- ❖ Discuss successes and challenges and make improvements as needed
- ❖ Use the **Survey and Supply Order** provided in the toolkit
- ❖ Discuss the sustainability of the *Brush in a Box* Program



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Reasons to Implement a Toothbrushing Program

By implementing a classroom or childcare toothbrushing routine, children learn the skills they need to take care of their own teeth and gums, and gain knowledge of why oral health is important.

Dental issues can cause:

- ❖ An inability to learn/ concentrate
- ❖ Social-emotional delays
- ❖ Behavior issues and high emotion
- ❖ Infection/illness
- ❖ Poor nutrition
- ❖ Absences from childcare/school
- ❖ A lot of time and money spent addressing dental issues

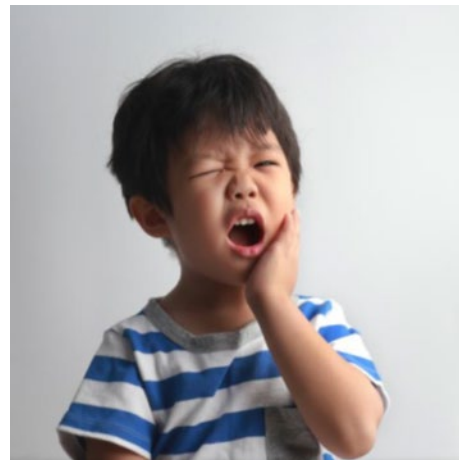
Children with severe oral health issues may be:

- ❖ Embarrassed to smile
- ❖ Afraid to speak because their speech is impaired or mouth hurts
- ❖ Unable to keep up with peers because of discomfort or increased absences

Note: Parents/guardians with oral health problems may have some of these same issues. They may also have trouble with employment or parenting due to discomfort/illness. It is important to remember that they may need oral health education and support too.



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By implementing a toothbrushing routine into a playgroup setting, parents acquire the oral health literacy and education to know how to take care of their children's teeth from the beginning.



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Toothbrushing Procedure for Children Ages Birth to One Year

- ❖ Make sure that each baby has their own infant-sized, soft-bristled toothbrush labeled with the baby's name. Use a finger brush, gauze, or clean cloth for babies without teeth
 - ❖ Wash hands with soap and water before and after brushing each baby's teeth
 - ❖ Caregiver should wear gloves and gloves should be replaced between each baby
 - ❖ Parents/Guardian or caregiver will hold the infant in their lap and wipe baby's gums and teeth with a clean cloth, gauze, or finger brush or brush baby's teeth
 - ❖ Brush babies' teeth with a small smear (rice-size amount) of fluoride toothpaste as soon as the first tooth comes into the mouth
 - ❖ Use new gauze/cloth each time to wipe baby's gums
 - ❖ Rinse and store toothbrushes according to the Safety and Sanitation Guidelines
-

Toothbrushing Procedure for Children Ages One to Three Years

- ❖ Toothbrushing will be scheduled at least once daily after mealtime
- ❖ Make sure that each toddler has their own child-sized, soft-bristled toothbrush, labeled with their name
- ❖ Wash hands with soap and water before and after brushing each toddler's teeth. If the childcare provider directly assists with brushing, gloves should be replaced after each child
- ❖ When dispensing toothpaste from a tube, put the toothpaste for each toddler on the rim of a cup, and scoop the toothpaste from their cup onto the toddler's toothbrush
- ❖ Help toddlers brush their teeth with a small smear of fluoride toothpaste the size of a grain of rice.
- ❖ One way of brushing is by holding the child in your lap. Gently lay the child's head back, and place the toothbrush on the teeth with the bristles touching the edge of the gums, gently making
- ❖ circular motions with the toothbrush on the outside, inside and chewing surfaces of all teeth and tongue
- ❖ After brushing, have toddlers dribble the remaining toothpaste into a cup, but do not have them rinse. Then have toddlers wipe their mouth with a napkin and place the napkin inside the cup. The cups and napkins are thrown away
- ❖ Childcare provider or parent/guardian rinse each toothbrush and store the toothbrushes in a holder that allows them to air dry (no toothbrush covers) in an upright position without touching each other
- ❖ Disinfect the sink after all the toothbrushes are rinsed and put away



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Toothbrushing Procedure for Children Ages Three to Five Years



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- ❖ Toothbrushing will be scheduled at least once daily after mealtime
- ❖ Make sure that each child has their own child-sized, soft-bristled toothbrush labeled with the child's name
- ❖ Teacher/childcare *provider* and child should wash their hands with soap and water before and after brushing. If soap and water are not available, hand sanitizer that contains at least 60% alcohol can be used
- ❖ Gloves should be worn if directly assisting a child with brushing and should be changed between each child
- ❖ Toothbrushing should occur at the classroom table or desks with children sitting as far apart as feasible with supervision
- ❖ When dispensing toothpaste from a tube, put a pea-sized amount of toothpaste for each child on the rim of a cup and have the children scoop the toothpaste from their cup onto their toothbrush. Note: It is helpful to have a tray of these materials prepped beforehand to save time
- ❖ Place a paper towel or napkin in front of each child. Provide each child with a disposable cup with a pea-sized amount of fluoride toothpaste on the rim. The child will scoop the toothpaste onto the brush
- ❖ While the children are brushing their teeth, the teacher/childcare provider will demonstrate on a tooth model or dental puppet, giving guidance on proper toothbrushing techniques. These demonstrations can occur at other times of the day as well, such as at circle time or small group

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- ❖ Angle the toothbrush toward the gum line, with the bristles touching the edge of the gums, and gently make little circles with the toothbrush on the outside, inside, and chewing surfaces of the teeth and the tongue
 - ❖ After brushing, have children dribble or spit the remaining toothpaste into a cup, but do not have them rinse. Then have children wipe their mouth with a napkin and place the napkin inside the cup and throw the cups and napkins away
 - ❖ The children or teacher/childcare provider will rinse each toothbrush, taking care to prevent them from touching one another, and store the toothbrushes in a holder that allows them to air dry (no toothbrush covers) in an upright position without touching each other
 - ❖ Disinfect the sink after all the toothbrushes are rinsed and put away
 - ❖ Longer duration of brushing leads to more plaque removal (2 minutes is ideal.) Timers may be used as a visual aide. Children are encouraged but never forced to brush until the timer is finished



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SAFETY AND SANITATION GUIDELINES

- ❖ Follow current COVID guidelines (CDC, CDPH, local Public Health)
- ❖ Children, parents/guardians, teacher, or childcare staff should wash their hands with soap and water for at least 20 seconds before and after toothbrushing. If soap and water are not available, hand sanitizer that contains at least 60% alcohol can be used
- ❖ If the teacher/provider directly assists with children's brushing, gloves should be worn and replaced after assisting each child
- ❖ Tables should be disinfected before and after toothbrushing
- ❖ Sinks should be disinfected after toothbrushes are rinsed
- ❖ Each child is provided with his or her own soft-bristled, child-sized toothbrush labeled by name so that toothbrushes are never shared
- ❖ To avoid cross contamination, toothpaste should never be applied directly from the tube to the toothbrush. When dispensing toothpaste from a tube, put toothpaste for each child on the rim of a disposable cup. If the child is able, they will scoop the toothpaste from the cup onto the toothbrush
- ❖ Toothbrushes are never disinfected with bleach or run through the dishwasher. If available, a [UV toothbrush sanitizer](#) may be used
- ❖ Toothbrushes are replaced when the bristles become bent or frayed, when there has been an illness going through the classroom, and at least every three months
- ❖ Contaminated toothbrushes are always discarded and replaced to control the spread of infection or illness
- ❖ Encourage children to avoid placing toothbrushes directly on the classroom table or other surfaces or from playing with the toothbrush.
- ❖ Toothbrushes are stored upright in toothbrush holders so that they stay clean and open to circulating air and so that bristles do not touch any surface, including another toothbrush
- ❖ Toothbrush holders are washed and disinfected by hand at the end of every week using bleach, HDQ Neutral, PURE disinfectants, etc.



Brush in a Box Program Agreement

Today I am signing up for the *Brush in a Box* Program. I received or purchased _____ month(s) worth of toothbrushing supplies for my classroom or childcare home.

My *Brush in a Box* includes:

- A toothbrush holder and toothbrush holder cover
- Child-sized Toothbrushes (if program includes children with special needs, provide different styles of toothbrushes as well, such as fat handled or triangle brushes)
- Toothpaste (If possible provide/purchase multiple flavors of toothpaste)
- Paper cups
- Napkins
- Disinfectant wipes
- Gloves
- A copy of the *Toothbrushing Procedure*, including *Safety and Sanitation Guidelines*
- A Classroom/Childcare *Brush in a Box Checklist* and *Program Agreement*
- An oral health-related book such as [Potter the Otter Visits the Dentist](#)
- A dental puppet with toothbrush or other educational materials if funding allows

I will follow the *Safety and Sanitation Guidelines* and use the *Toothbrushing Procedure* for the age group that I work with.

The Local Oral Health Program (LOHP) will check in after one month to see if I have implemented a toothbrushing routine into my classroom or childcare home. If I have not implemented a daily brushing routine, I may ask for additional support or training.

I will continue to receive (or purchase) brushing supplies throughout the school/program year. **Name of School or Childcare home:** _____

Print name: _____ **Sign:** _____ **Date:** _____

Best Contact Phone or Email: _____

Of students in my care _____ **Grade/Ages of children** _____

If I have any questions I can contact: _____



Brush in a Box Checklist

- I have read the *Toothbrushing Procedure* and the *Safety and Sanitation Guidelines*
- I have watched the video: [Growing Healthy Smiles in Early Care and Education Programs | ECLKC \(hhs.gov\)](https://www.hhs.gov/eclkc/edl/pubs/pdf/13-0012.pdf)
- I have set a regular time in our daily routine for brushing
- I have a designated spot to store the toothbrush holder (out of children's reach)
- I have a place to store all other materials needed for brushing:
 - Fluoridated toothpaste
 - Cups
 - Napkins
 - Cleaning/sanitation wipes/gloves
- All toothbrushes are labeled with children's names
- I have a prep plan for putting toothpaste on individual cups (or another surface other than directly on to the brush) and for distributing materials to children for brushing.
- I am prepared to model toothbrushing for my students and feel comfortable with the procedure. I may use a puppet if I prefer and do this demonstration at any time in the day.
- I have a clear plan for children to dispose of their cups/napkins and for toothbrushes to be rinsed and put back into the holder
- I have an approved cleaning solution or wipes to sanitize tables



Brush in a Box Survey and Supply Order

Date: _____

Name of School or Childcare home: _____

Print name: _____ Sign: _____

Best Contact Phone or Email: _____

Of students in my care _____ Grade/Ages of children _____

I have implemented a brushing routine around the table

- Yes
- No
- I need more help/support with classroom brushing

Please share successes and challenges that you have had with daily toothbrushing.

Successes:

Challenges:

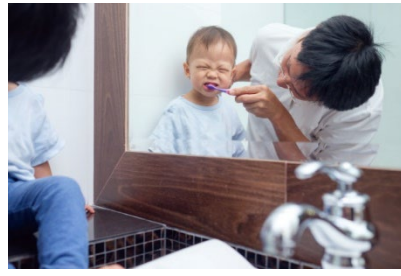
I am ready to receive/purchase more supplies

- toothbrushes
- toothpaste
- paper cups
- napkins
- sanitary wipes
- gloves
- Other Supplies:

Supporting Families with Toothbrushing at Home



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- ❖ Children under the age of 8 do not have the manual dexterity to effectively clean their own teeth
- ❖ It is recommended that additional brushings take place at home, and that the adult do the brushing for the child at least one time a day
- ❖ The Local Oral Health Program (LOHP) may be able to provide families with information on dental hygiene and dental supplies as needed.
- ❖ Use [Brush, Book, Bed, Cepillo, Libro, Cama](#) to help families implement a brushing routine at home
- ❖ [Best Toothbrushing Songs for Kids - American Dental Association \(mouthhealthy.org\)](#)
- ❖ [Fun Ways to Encourage Kids to Brush](#)



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Supporting Oral Health Education in EECC Programs

- ❖ Promote good oral health by including oral health topics in the curriculum such as: eating healthy foods, brushing teeth with fluoride toothpaste, causes of tooth decay, visiting a dental office, and preventing oral injuries. Dental materials and curriculum/lessons should be integrated into classrooms and childcare homes and noted on lesson plans or homebased program contact sheets as (DH) Dental Health. Curriculum examples include:
[Activities for Early Learning: Circle Time | Cavity Free Kids](#)
[Mouth Healthy Lesson Plans for Tiny Teeth](#)
[Smile Smarts ADA Curriculum](#)
[Head Start Oral Health Curricula](#)
- ❖ Dental kits may be available for Classroom Teachers, Childcare Providers and Home Visitors. Check with your Local Oral Health Program (LOHP). Dental kits may include puppets, dramatic play dental props, books, toothbrushing charts, etc. to support children and families with good oral health practices and to ease anxiety about going to the dentist

Other resources the LOHP may be able to provide include:

- ❖ Educational brochures or handouts
- ❖ [Classroom tooth brushing charts](#)
- ❖ Dental puppets
- ❖ More dental curriculum ideas
- ❖ Dramatic play boxes and/or oral health books
- ❖ Training opportunities for teachers and staff
- ❖ Parent presentations/meetings
- ❖ Education lessons for EECC programs



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LOHP *Brush in a Box* Participants Successes and Challenges

- ❖ Not every student is able to brush their teeth at home, so doing at school has been very successful. -Special day class teacher
- ❖ Everyone is compliant and enjoys brushing their teeth -Teacher
- ❖ Students enjoy it and it is quick and easy. -4th grade teacher
- ❖ We put on a toothbrush song to brush our teeth for two minutes. -1st grade teacher
- ❖ Not everyone likes the toothpaste. -Teacher
- ❖ Students look forward to brushing their teeth. They are brushing for the full two minutes and brushing better. -Pre-K teacher
- ❖ Students still have trouble brushing even with modeling. -Teacher
- ❖ Children love this activity! -Home daycare provider
- ❖ I wrote a two-minute toothbrushing song and every day I play my guitar and sing while the children brush their teeth. They love it! - Kindergarten Teacher



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LOHP Highlight

Humboldt County Local Oral Health Program coined the term *Brush in a Box* and took it a step further by bringing the program into elementary school classrooms, modifying the procedure to work for children in grades K-8th. All the instructions and supplies needed to start or improve a highly effective toothbrushing routine was provided in a box. Cost wise the LOHP determined that implementing such a program for one school year (180 days) for a classroom of 20 children would be approximately \$600. This is a good investment to help prevent the consequences of a child not receiving proper oral health care. Now that children have returned to in-person learning, brushing should become a part of the daily routine, and toothbrushing at the table is a best practice recommended by the Office of Head Start and the California Department of Public Health, Office of Oral Health.

Cost Analysis

Classroom Brushing Supplies for 20 students for One School Year (180 days)						
<i>Vendor: School Health</i>						
Product	Total	Item	# Per	\$ Per	Quantity	Price
	Needed	#	Case	Case	to order	
Toothpaste (4.2 oz tubes)	15	1007324	12	\$28.59	2	\$57.18
Toothbrush holder	1	1002759	Holds 20 Toothbrushes	\$20.09	1	\$20.09
Toothbrush holder cover	1	47087		\$9.39	1	\$9.39
Child Toothbrushes	100	1005925	144	\$65.69	1	\$65.69
3 oz. Paper Cups	3,600	21209	100	\$6.49	36	\$233.64
Sani Wipes	1,800	49239	160/Canister, 12 Canisters/Case	\$147.39	1	\$147.39
Multifold paper towels	3,600	21423	4000	\$67.29	1	\$67.29
					(w/out ship)	\$600.67

One Student will need approximately 5 toothbrushes; 1 new toothbrush every 3 months, plus 2 extras in case one gets contaminated or brushes need to be replaced more often due to illness in the classroom. Each student will need 180 cups and 180 paper towels; one for each day. Approximately 1,800 sani wipes (estimating 1 wipe used per 2 desks) will be needed or about 12 canisters. Each classroom will need one toothbrush holder and holder cover.



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References

Explore health rankings: County health rankings model. County Health Rankings & Roadmaps. (n.d.). Retrieved November 30, 2022, from <https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model>

Kranz, A. M., & Rozier, R. G. (2010). Oral Health Content of early education and Child Care Regulations and Standards. *Journal of Public Health Dentistry*, 71(2), 81–90. <https://doi.org/10.1111/j.1752-7325.2010.00204.x>

Office of Head Start. (2021, November 15). *Oral Health*. Early Childhood Learning & Knowledge Center. Retrieved October 11, 2022, from <https://eclkc.ohs.acf.hhs.gov/oral-health>

Oral Health in Child Care and early education. Oral Health in Child Care and Early Education | National Resource Center. (n.d.). Retrieved October 11, 2022, from https://nrckids.org/CFOC/Oral_Health



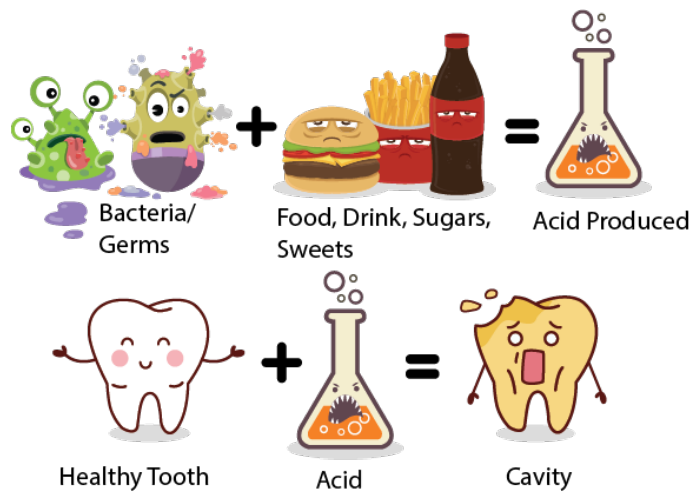
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Dental Decay Process



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