



An Oral Health Curriculum for Future Mothers and Their Young Children

by Parisa Monirzad



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I've drawn from my experiences in various dental fields, and used *Smile Smarts* Oral Health Curriculum by the American Dental Association (ADA) and *Where There is No Dentist*, as a guide to build this curriculum. The goal of this curriculum is to assist teachers, volunteers, and mothers in providing routine and oral health practices that will be carried out in schools and homes.

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Unit 1: Why Oral Health Is Important for Everyone?

Dental disease is the most common disease. Proper early dental hygiene for infants, toddlers, and adults requires distinct attention that can improve the oral health of families. If a child develops an untreated cavity on any of their baby teeth, the cavity will get larger and deeper. If the tooth is close to falling out, it is optional to leave it alone. But if it has a while until it falls out, you need to visit a dental worker. Neglected cavities can lead to problems and can affect permanent teeth, causing discomfort and costly damage. The permanent teeth are growing directly underneath the baby teeth. If the decay is extensive, the bacteria in the cavity can cause dental abscess which can spread and affect the development of the permanent teeth underneath. The infection can cause the permanent teeth to be deformed. Regular and routine oral care can prevent dental decay.

Parents: You are the first teacher in your child's life and you play a significant role in maintaining their health. A clear understanding about oral hygiene can help you too.

Unit 2: Oral Care During Pregnancy

It is very important when you're pregnant to take care of your overall health, especially oral health. It's quite common to have dental problems, but keep in mind that some women may not experience dental problems during pregnancy. It can be common for some women to experience swelling, bleeding, or tenderness in the gums during the pregnancy. Maintaining a healthy mouth before, during and after pregnancy can benefit you and your child's health. By visiting a dentist regularly during pregnancy you can avoid having gum disease (periodontal disease). Women with periodontal disease are prone to have premature delivery or babies with low birth weight.

Future mothers: It is extremely important to take care of your mouth during pregnancy to ensure your health as well as your child's. Make a routine daily checkup schedule for brushing and flossing. If supplies are not available to you, see UNIT 7 (Page 13) for alternative ways to maintain a healthy mouth. Check your mouth and gum color daily and if you notice a problem, it is always better to start treating the problem early before it can get worse. Prevent the problem before it even starts by learning the proper and alternative ways to ensure your oral health. If you learn and follow the routine, you can be the best example in your community by educating your family and people that are close to you (Dickson, 2009).



What Are Some Signs of Gum Disease (Periodontal Disease)?

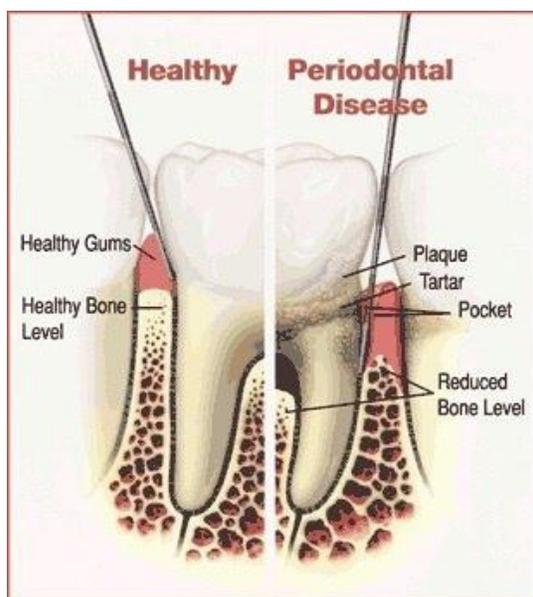
Gum disease is an infection of the tissues caused by bacterial overgrowth. Infection from gum disease can spread into the root and bone of teeth. Some pregnancies can cause imbalanced hormone levels which can make your gums more sensitive to harmful plaques. Therefore, it is important to have a daily brushing and flossing routine to prevent gum disease.

Some signs of the primary stage of gum disease are:

- Red instead of pink gums
- Tender gums
- A colorless, sticky film that constantly forms on teeth
- Bleeding when you brush or floss
- Bad breath at all times or bad taste in your mouth
- Significant amount of buildup of plaque above and below the gums
- Deep pockets between your teeth and gums
- In severe cases pus coming from the gums
- Obvious change of how teeth fit together

If you have gum disease:

- Visit your dentist to control the infection
- Keep up with a daily oral care routine at home
- Avoid smoking or chewing tobacco
- Avoid drinking alcohol



Alternative ways to reduce the impact of gum disease before you visit a dentist:

It is necessary to clean your teeth while having gum disease because it can affect the teeth around the infected area. If more food collects on the teeth, your gum infection will get worse. To avoid the pain, use a soft toothbrush to gently clean your mouth.

Tips: One way to ensure that your gums can fight the infection:

- Eat fresh fruits and green leafy vegetables, and avoid consuming sticky or hard food.
- **Rinse your mouth with warm salt water.** Continue doing this every day even when your gums feel better (Dickson, 2009).



Help yourself and keep the beautiful smile. When you think of your teeth, think of your gums. Gums are important for holding each tooth in place. Strong teeth are necessary to eat different kinds of foods. Check your teeth and gums regularly in the mirror. If you find a problem in your mouth, and are not sure how to treat it, talk to an experienced dental worker (Dickson, 2009).

Unit 3: At What Age Should You Start Taking Care of Your Teeth?

Generally your child's primary teeth make their appearance between 6 and 7 months old. She or he will have 20 primary teeth, followed by 32 permanent teeth. Your child will have all her or his baby teeth by the age of 3 and will maintain them to the age of 5 or 6. Then, they will begin to loosen and fall out. Primary teeth will fall out because permanent teeth are pushing outward. By the age of 12 or 13, your child has 32 permanent teeth, 4 of which are wisdom teeth. These 4 wisdom teeth grow behind the permanent teeth in late puberty.



Instruction for parents:

Infant toothbrushes are made specifically for baby's teeth. Use a very small size of toothpaste or none at all. To properly use the toothbrush place the infant toothbrush in your index finger when the first tooth appears. Teeth should be brushed at minimum twice a day.

Alternatives ways:

If a baby toothbrush is not available, use gauze or wrap your finger around moist cloth and slowly run it through your infant's teeth. This could also ease the process of teething because your infant's gums start itching before she or he start teething. Using a cloth or baby toothbrush can relieve the pain and the itch. This process doesn't require toothpaste.

Unit 4: Teeth Give Us a Beautiful Smile!

Can you name something that we do with our teeth? How about eating, drinking, verbal and non-verbal communication. Good daily oral care results with a mouth that looks and smells healthy! That means your teeth are clean, gums are pink, and they do not hurt or bleed when you brush or floss. Poor oral hygiene is associated with pain and unpleasant gum disease. But dental problems are preventable. Maintaining a good oral care is one of the best things that you can do for your teeth and gums. Healthy teeth can help you to look good and eat and speak properly. Good oral health is important to your overall well-being.



Unit 5: What Do Baby Teeth Do?

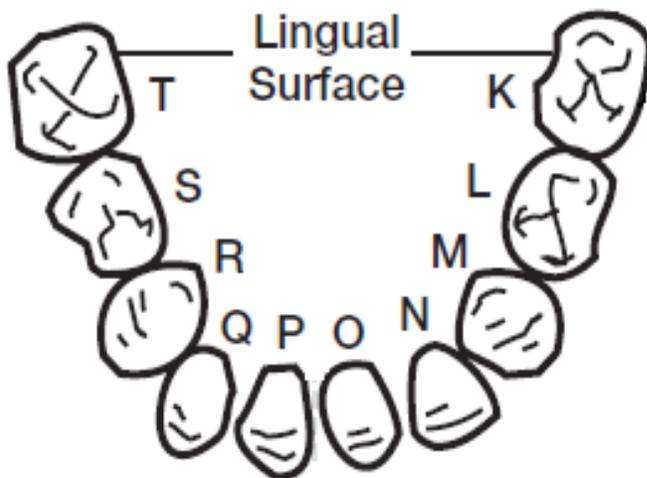
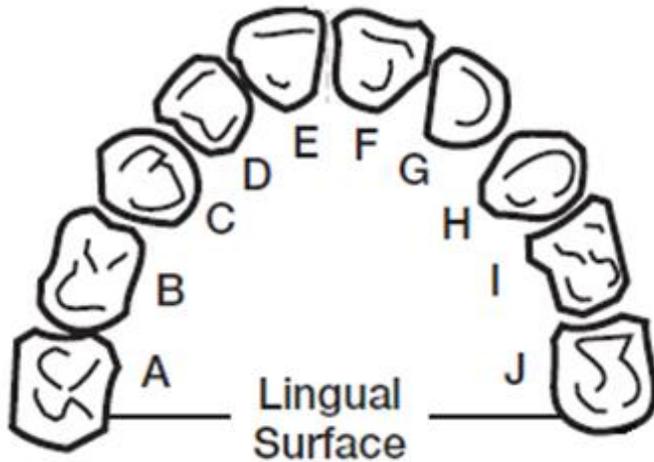
Baby teeth are important. They serve major functions for children such as chewing and clear speech. A baby's tooth remains in your child's mouth until a permanent tooth underneath is ready to emerge through the gums. Usually the root of the baby tooth dissolves and the tooth becomes loose and falls out. After approximately two weeks, the permanent tooth pokes through. The purpose of the permanent tooth is to take the place of the baby tooth.



Baby teeth are important for:

- Normal appearance
- Clear speech
- Reserve space for future permanent counterparts

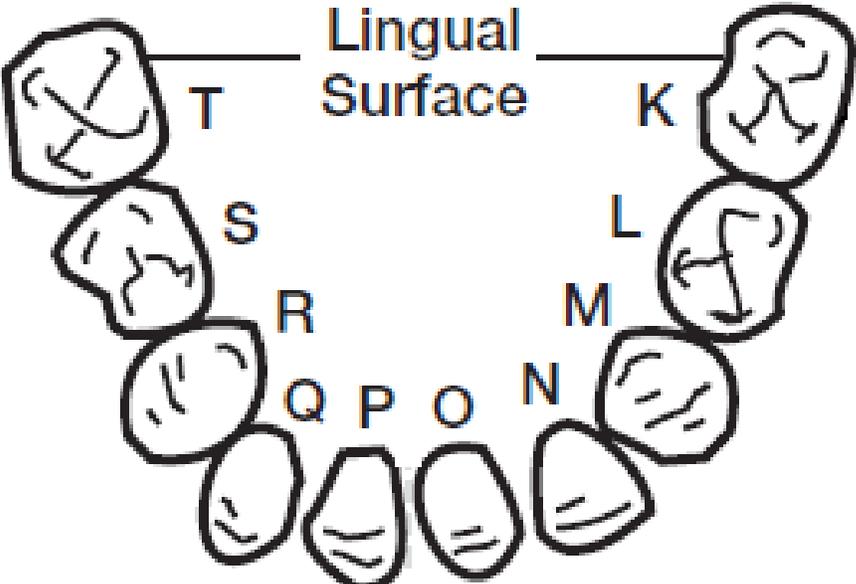
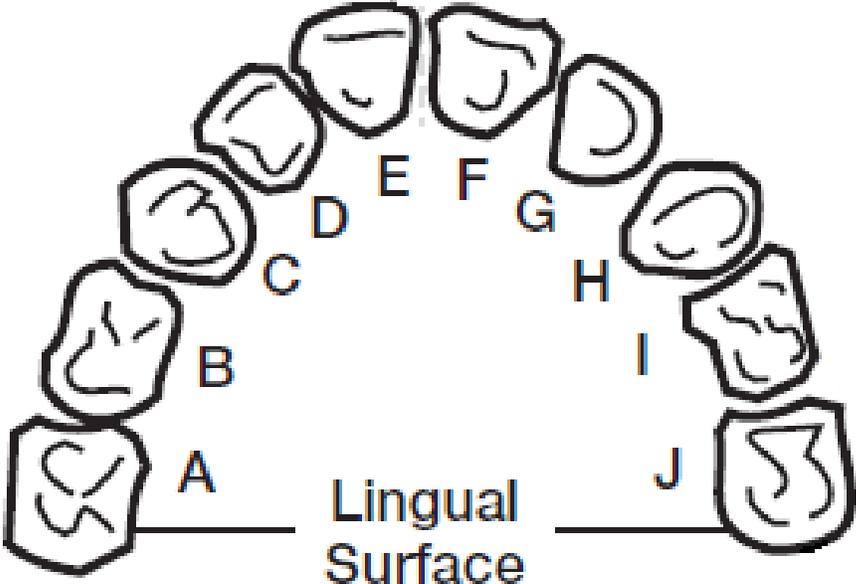
Unit 6: Primary Teeth Development



- Lower central incisors (P, O) teeth emerge first between 6 to 10 months.
- Upper central incisors (E, F) teeth come next, between 8 to 12 months.
- Upper Lateral incisors (G, D) teeth emerge around 9 to 13 months.
- Lower Lateral incisors (N, Q) teeth emerge around 10 to 16 months.
- Upper first molars (I, B) teeth which are your child's first molar emerge about 13 to 19 months.
- Lower first molars (L, S) teeth emerge around 14 to 18 months.
- Upper Canine also called cuspid (C, H) teeth emerge between 16 to 22 months.
- Lower canine also called cuspid (M, R) teeth emerges between 17 to 23 months.
- Lower second molar (T, K) teeth which are the back bottom molars emerge between 23 to 31 months.
- Lower second molar (A, J) the final upper back molars on the top that appears by the age of three.
(Baby center, 2013)

Reminder: A baby that is poorly nourished may not grow his or her first tooth as early as a baby who's well nourished. Parents need to provide soft and nutritional food for their babies to keep them and their teeth healthy.

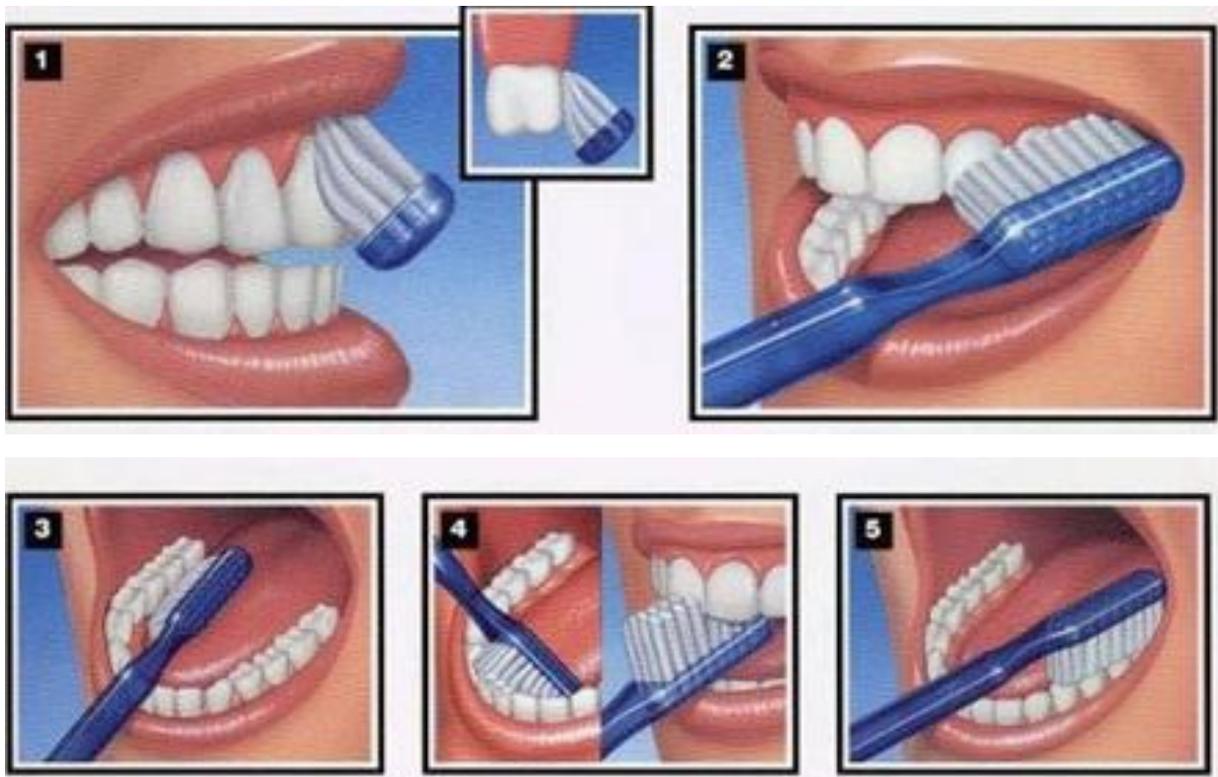
Activity 1: Let's count our primary teeth and notice the similarities between teeth on opposite sides of the mouth



Activity 2: Let's clean our teeth

When supplies are available, we should all have to brush and floss our teeth twice a day with a small amount of toothpaste.

Brushing techniques for parents to help and teach kids: Use a soft toothbrush that fits comfortably in your hand. Use only a pea-sized amount of toothpaste on your toothbrush. Hold the brush at a 45-degree angle and gently brush with a short or circular motion. If this motion is hard for you, ask a grown-up to help you to brush your teeth. Work your way around your mouth so that you can clean all your teeth. There are four parts: top right, top left, bottom right, and bottom left. If you spend 30 seconds on each part, you will get a full two minutes of brushing time. Position your toothbrush perpendicular to your lips to brush your top molars, and rotate the toothbrush 180 degrees to brush the bottom molars. Follow the same procedure to clean your teeth on the opposite side. It is significantly important to brush the inner surface of your teeth so that the head of the toothbrush is pointed towards your gum line. Take a sip of water and swish it around your mouth, and then spit it out. At the end, rinse your toothbrush for a few seconds.



Now that you've brushed your teeth, give me a big smile!

Activity 3: Let's review some general points to improve oral health

- Identify your name on your toothbrush or pick a different color when replacing it
- Take care of your teeth by using a toothbrush that is easy to hold
- You only need a pea-sized amount toothpaste
- Brush after the first and last meal every day for two minutes
- If brushing can't be conducted, then rinse and gargle after the first and last meal of the day with water
- Rinse your toothbrush after use and let it dry
- Don't share your toothbrush with anyone else
- Replace your toothbrush at least every three months
- Floss your teeth daily
- Follow this routine every day to have a beautiful smile



Activity 4: Identify used and new toothbrushes in this photo!



(Give the kids some time to express their answers, and then reveal the right answer).

The new toothbrush is on the right and the used toothbrush is on the left. Remember, use a soft toothbrush, and remember it is more effective to clean teeth once the right way than it is to clean poorly several times in a day.

Unit 7: Alternative Ways to Brush Your Teeth Without a Toothbrush

If you don't have a routine schedule to take care of your mouth, the food that is left in your mouth can cause pain and gum disease over time. If a toothbrush is not available to you, use a young small branch of bamboo, not too thin and not too thick. Cut a piece that is soft and green. Chew one end to make it stringy like a toothbrush and sharpen the other end so it can be used to clean between each tooth (Dickson, 2009).



Unit 8: What Do You Do if There Is No Toothpaste Available

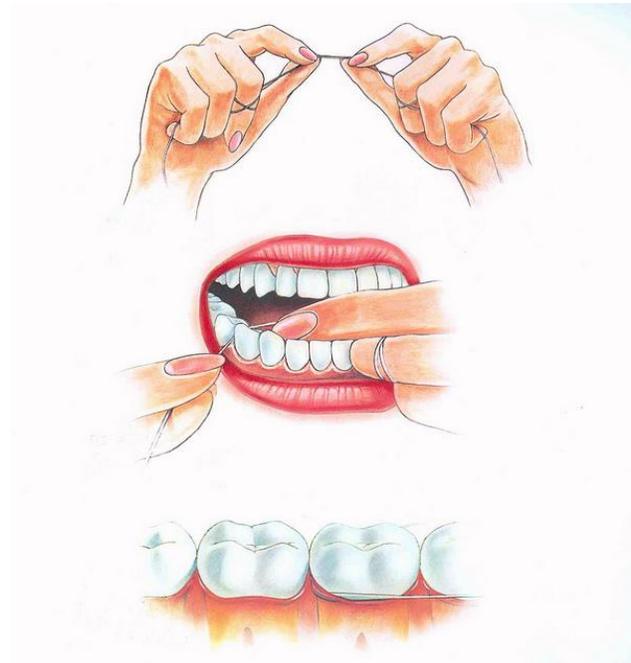
Toothpaste is used to encourage oral hygiene, but if it is not available use either salt or baking soda to clean your teeth. Both remove stains and discolorations from the surface of teeth that are caused by drinking tea, coffee, soda, and smoking tobacco. If using baking soda or salt as a powdered form, wet the toothbrush with water and put small drops on your toothbrush. These items are not intended to be swallowed. If a toothbrush or bamboo is not available, use a coconut husk to clean your teeth. Before using, shake away all the loose bits. Whichever form of toothbrush you choose, be sure to clean each tooth carefully. When you are done, rinse your mouth with water (Dickson, 2009).

Unit 9: Why Floss Teeth?

Small pieces of food often get stuck between teeth and around the gums. If not taken care of properly through flossing, bacteria will start collecting and will turn into bad breath and plaque and, in worst cases, mesial decay. Infrequent flossing can lead to gum disease. Therefore, it is very important to have an oral care routine.



Activity 5: Let's Practice Flossing



Flossing techniques for parents to help and teach kids:

Take a small piece of floss, and wrap it around your index finger of one hand. Wrap most of the floss around the index finger of the other hand. Slowly place the floss between two teeth and gently scrape the floss around each tooth. Do not force the floss in between your teeth. The motion is going up into the gum line until you meet resistance. Follow this motion until you go around all 32 teeth.

Alternate ways in the absence of dental floss:

- *Use the stem from a palm leaf. Use the thin side of the leaf and move it gently in and out between the teeth.*
- *Be cautious when using a cotton thread use a thin soft thread because, if it is not used correctly, it can hurt your gums.*



Remember you can reduce the risk of cavity or gum disease by brushing and flossing your mouth daily.

What is a cavity?

A cavity is a hole that appears in a tooth and is made by infection called tooth decay. Not following a routine after consuming sweet foods and beverages leads to cavities.

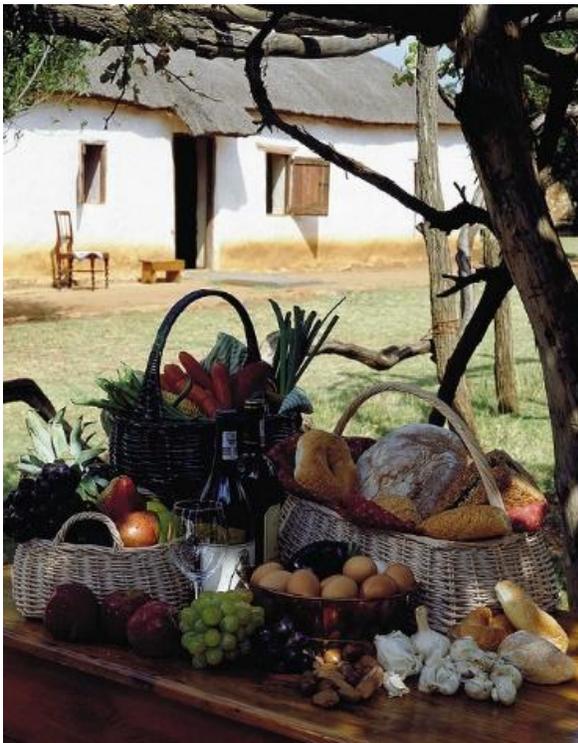
Do you have a cavity?

Look in the mirror or ask someone to check for a black spot on or around your teeth. If you are feeling pain or sensitivity to eating or drinking, you may have a cavity. If you do have a cavity, follow your daily oral routine schedule and visit a dentist to fill the cavity (Dickson, 2009).

Unit 10: Good Nutrition!

Other than brushing and flossing, adequate nutrition is important for healthy teeth. Does anyone know why? Because nutrition is directly linked to children's growth and development. For instance, children who eat less sweet food or snacks are likely to have fewer cavities. Likewise, children who consumes a significant amounts of sweet food, or snacks, are prone to more cavities and dental disease. Poor nutrition during childhood can affect children's cognitive development and productivity in adulthood. At the same time, inadequate nutrition will affect your child's teeth. Teeth can be affected by decay, and this condition occurs when enamel is lost due to exposure to acidic foods. Too much sugary food and starches can create tooth decay. Left untreated, decay and infection can lead to problems in eating, speaking, and learning. If a child is suffering pain from a toothache, it can affect the child's health, school attendance, and their mental and social well-being.

Another reason that nutrition is important for children is that they do not know enough to choose to eat foods that are healthy. Parents need to provide adequate healthy choices for their children and teach them the right nutrition so they can learn what's necessary for their body and not only just for the taste buds. These lessons can help children to live longer and healthier lives.



Parents: Your child depends on you when it comes to nutrition. Make the right food choices with different variety of meals and vegetables from the local market or your own garden. Learn to use several kinds of ingredients in each meal. Share your understanding of nutrition by inviting friends to set an example to others in the community (Dickson, 2009).

Some alternative ways to eat healthy and make learning fun:

Make a garden at school or vacant land in your area. Divide the ground so that each person or class can have its own space to plant. Keep the kids engaged by helping them to take care of their own space. Use some of the garden's foods to prepare a meal for students as frequently as possible. Usually the best foods are the traditional recipes (Dickson, 2009).



Activity 6: Can you name some acidic drinks/sugary foods

- Orange Juice
- Sweet breads
- Candies
- Milk
- Chewing gum
- Chips
- Sodas

Soft and sweet drinks have lots of sugar that attract bacteria, and excessive use can be bad for both gums and teeth.

Activity 7: Can someone tell me why sodas, candies, and sweets are not healthy choices?

(Get opinions from children.) Like other parts of our body, our mouth is packed with harmless bacteria. This otherwise harmless bacteria loves sugar, so when you eat sugar, the bacteria that eats sugar release an acid after consuming the sugar. When your teeth are exposed to this acid, it can contribute to decay. To prevent this, try to avoid constant sweet snacks.

How can you protect your teeth instantly?

- Rinse your mouth with water after a meal
- Try to brush and floss your teeth

What are healthy food choices?

- Fruits
- Vegetable
- Cheese
- Grain
- Meat
- Beans
- Nuts



Parents: *It is significantly important to the overall oral health of your children to get them in the habit of eating as few sweets as possible!*

Activity 8: Daily check ups

Establish a routine because tiny teeth do big jobs!

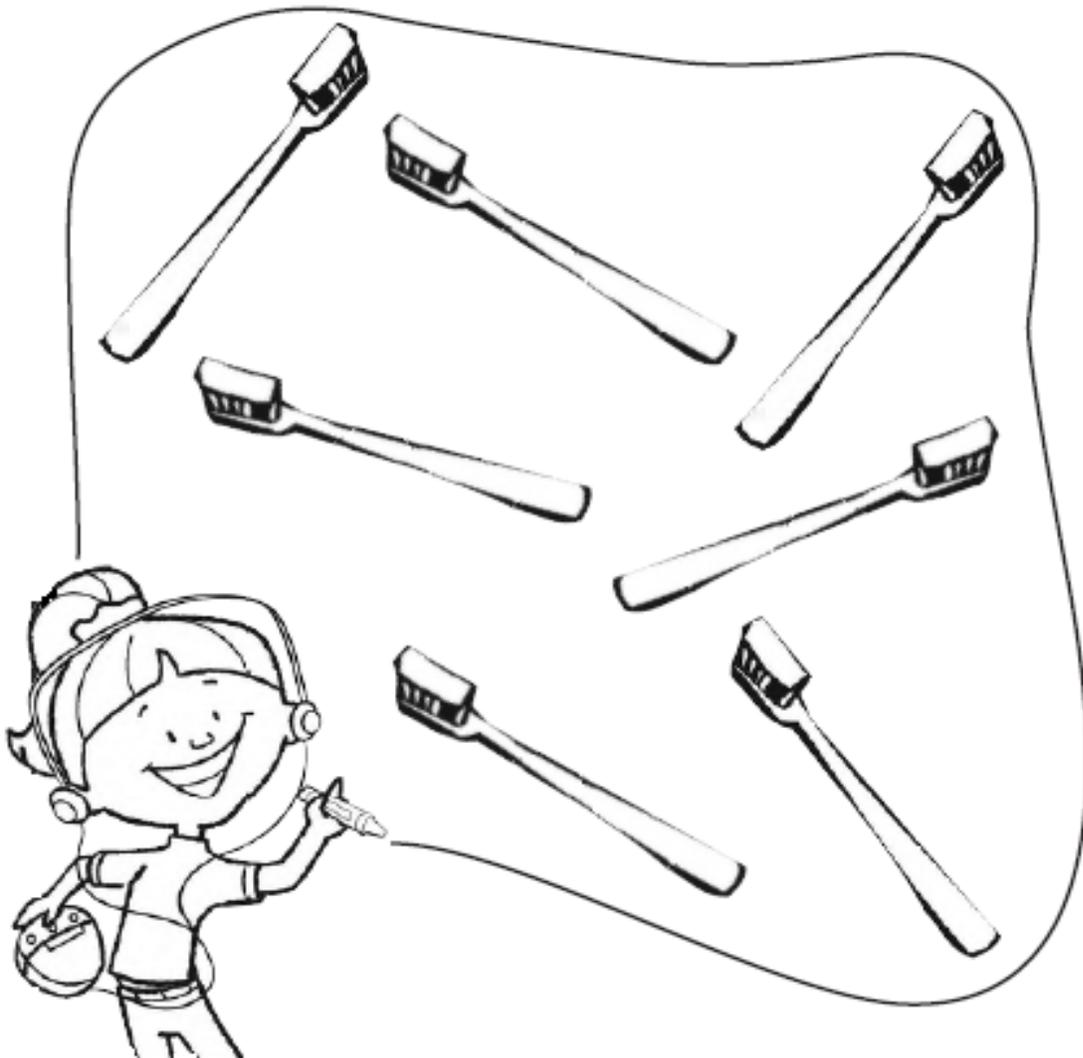
Oral Care Calendar



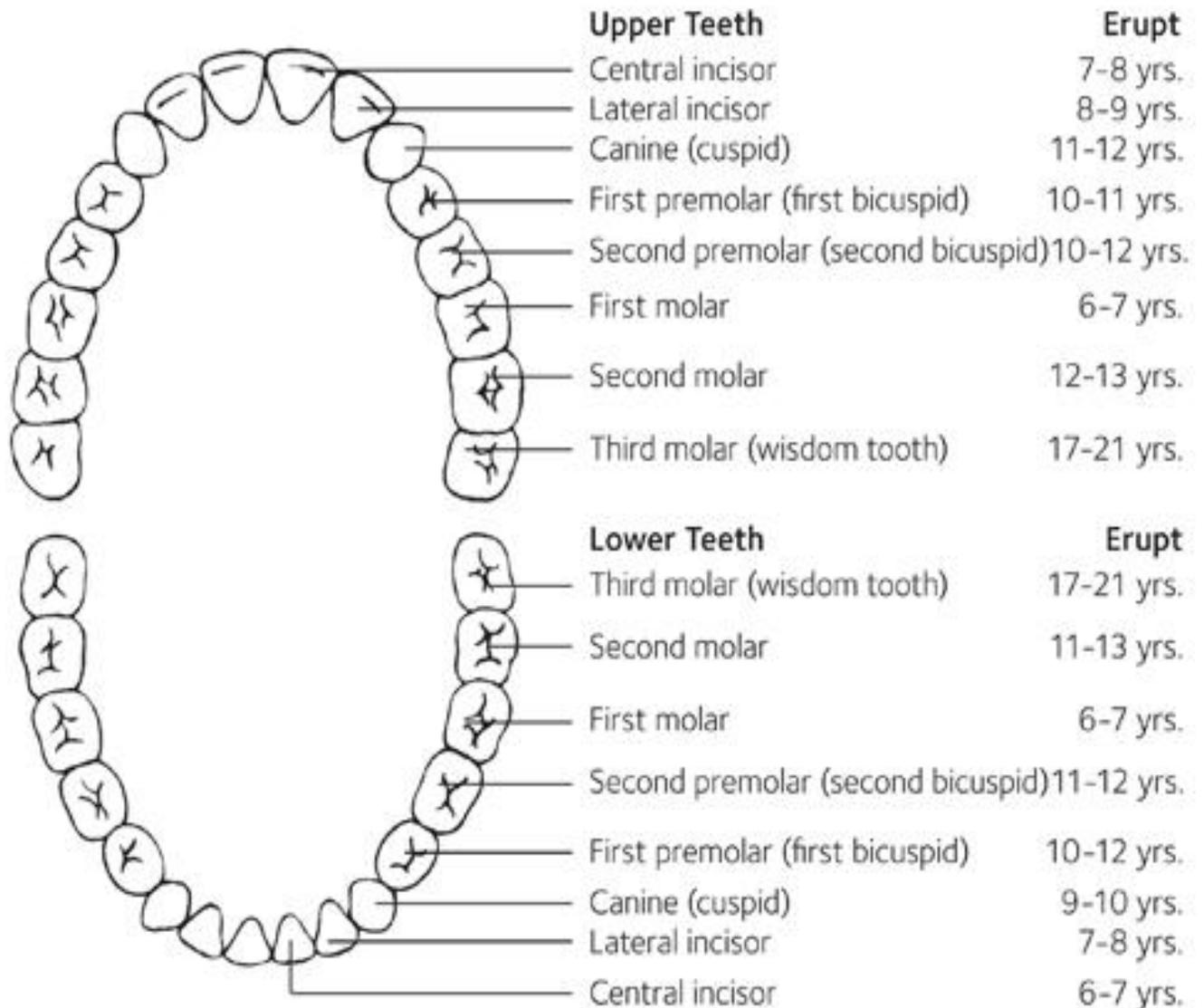
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Activity 9: Let's count and color each toothbrush and put some toothpaste on it.

Count and Color



Unit 11: Permanent Teeth Chart

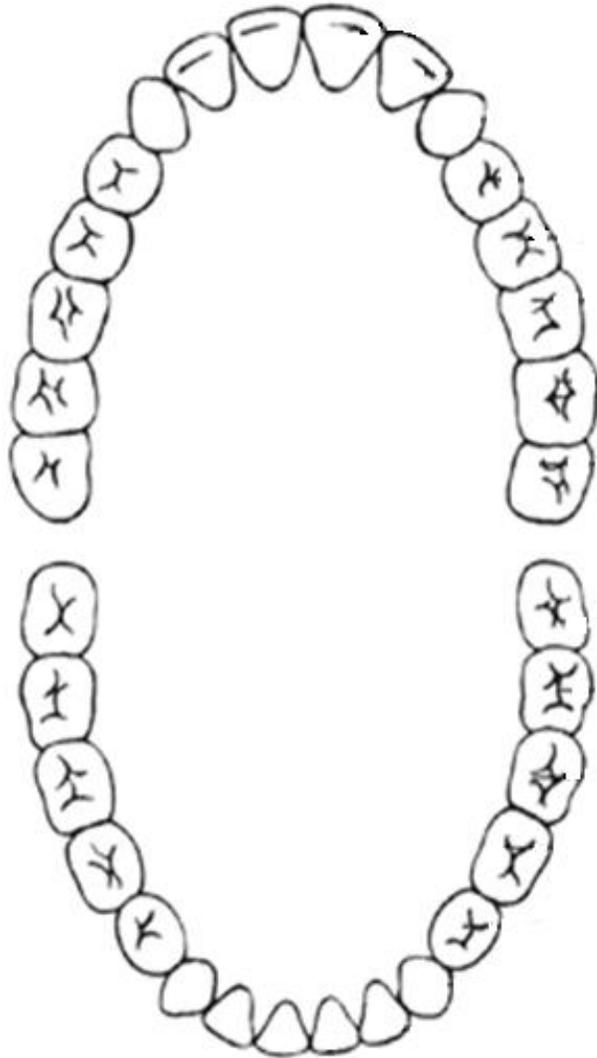


Why don't we get permanent teeth instead of primary teeth at an early age?

(Give the kids some time to express their answers.) The reason we don't get permanent teeth instead of primary teeth at an early age is that the 32 big permanent teeth wouldn't fit in your mouth. As we've learned, primary teeth are important and needed for eating, chewing, talking, and our facial structure. Most permanent teeth have emerged by the age of 6 to 12. Permanent teeth last for a life time; make sure you will take care of them to keep a healthy beautiful smile! Remember 4 out of 32 teeth are wisdom teeth.

Activity 10: Let's practice

To expand students' knowledge, have them count their sister's, brother's, or friend's teeth, and record them. In each position in the picture below, mark if the teeth exist in each position. Next to the teeth, record if you see any problem with the gums.



It is necessary to visit a dentist for a regular checkup but really, you don't need a dentist to have a beautiful smile, if you follow your daily routine of brushing, flossing, and rinsing. Take care of your gums and teeth to maintain a healthy mouth. Now, share your knowledge of oral health with your family, friends, and community.

References:

- Atte, [Tooth cavity]. Flickr. Retrieved from <http://www.flickr.com/photos/neatmummy/2825172225/>
- American dental association. (2013). Retrieved from <http://www.mouthhealthy.org/az-topics/e/eruption-charts.aspx>
- Baudelino. (2011). [Dental floss]. Flickr. Retrieved from <http://www.flickr.com/photos/60360976@N02/5547350795/>
- Dental 2000 NJ, [illustration of peridonetal disease]. Flickr. Retrieved from <http://www.flickr.com/photos/90716443@N05/8554644932/>
- Dickson, M. (2009, April). Where There Is No Dentist. Retrieved from <http://www.arvindguptatoys.com/arvindgupta/hesperian-no-dentist.pdf>
- International Mazie and wheat improvement center. (2009). [illustration of garden]. Flickr. Retrieved from <http://www.flickr.com/photos/cimmyt/5352940723/>
- Kashani, K. (2011). [Bamboo toothbrush]. Flickr. Retrieved from <http://www.flickr.com/photos/kombizz/6242904423/>
- Marostica, J. (2012). [What is proper way to brush your teeth]. Flickr. Retrieved from <http://www.flickr.com/photos/tendercaidental/7985853822/>
- No author. (2005). Smile Smarts. Retrieved from http://www.ada.org/sections/publicResources/pdfs/smilesmlarts_curriculum.pdf
- No author. (2013). Baby teeth: Order of appearance. Retrieved from http://www.babycenter.com/101_baby-teeth-order-of-appearance_10355502.bc
- No author. (2013). Sweet Mama Africa. [Illustration of a pregnant woman]. Retrieved from <http://www.sweetmothermag.com/>
- Lafforgue, E. (2008). [Body woman with her gima stick]. Flickr. Retrieved from <http://www.flickr.com/photos/mytripsmypics/3049162461/>
- Schyberg, J. (2011). [Old and new toothbrush]. Flickr. Retrieved from <http://www.flickr.com/photos/mrjorgen/6156197637/>
- Sirowclinic. (2010). [Dental hygiene floss]. Flickr. Retrieved from <http://www.flickr.com/photos/sirowaclinic/5883565223/>
- Seth. M. (2008). [Healthy foods]. Flickr. Retrieved from <http://www.flickr.com/photos/33416551@N06/3111674990/>
- South African Tourism. (2008). [African food]. Flickr. Retrieved from <http://www.flickr.com/photos/south-african-tourism/2417717277/>

Trocaire. (2008). [healthy food]. Flickr. Retrieved from <http://www.flickr.com/photos/trocaire/2943891109/>

Wainwright, M. (2012). Children! Manchester needs your teeth. [brushing teeth]. Guardian. Retrieved from <http://www.guardiannews.com/>

zhejaing, (2013). [Baby toothbrush]. Ebay. Retrieved from <http://www.ebay.co.uk/bhp/baby-toothbrush>
