

Pediatric Dentistry Patient Learning Center

Frequently Asked Questions (FAQs)

1. At what age should my child receive their first dental visit?
 - i. The first dental visit should be between six months of age and one year of age.
2. Should I give my child fluoride drops or tablets?
 - i. Not until your home water supply has been tested for fluoride.
3. We do not drink tap water. Should my child receive fluoride drops or tablets?
 - i. If you are cooking with tap water and making juices with it, probably not, otherwise, check with your pediatric dentist.
4. My child is one year old and has no teeth -- should I be concerned?
 - i. Even though most one year olds may have up to eight to ten teeth, some children may have a delayed eruption tooth pattern. There should be no concern about this matter.
5. My child's permanent lower front tooth/teeth is/are erupting behind his baby teeth; he has two rows of teeth and his mouth looks like a shark -- what do I do?
 - i. The treatment for this dental situation is patience; this is a normal process. The tongue will push the permanent lower front teeth forward and this will loosen the baby teeth and cause them to eventually fall out.
6. My child sucks their digit (thumb or finger). What side effects can happen to the mouth?
 - i. Most children stop digit sucking by the age of four to five when they become more socially cognizant. Sucking of a digit may cause a dental crossbite by constriction of the upper jaw, an openbite, flaring of the upper front teeth, and backward positioning of the lower front teeth. The degree of these dental discrepancies depend on the frequency, duration, and intensity of the digit habit. If your child continues this habit past the time of the eruption of the first permanent tooth (five to six years old), then a dental evaluation is appropriate to help them stop this habit.
7. At what age should I take my child off the bottle?
 - i. Your child should be taken off the bottle when they are old enough to hold a cup. This usually occurs near their first birthday. A child should not be placed to sleep with a bottle because this may cause dental decay, increase the incidence of ear infections, prolong bottle use, and may cause aspiration of the bottle's contents, which can be a medical emergency situation. If you put your child to sleep with a bottle, the best way to stop this habit is by the cold turkey method. This may cost the parents (and their neighbors) two nights of sleep, but it works!
8. What are the signs of teething and what can I do to make my child more comfortable?

- i. The signs of teething are irritability, restlessness, and loss of appetite; they do not include fever, illness, or diarrhea. If your child presents with the latter signs, they need to be evaluated by a health care provider. The best solutions to soothe teething are to have the child chew on a frozen rubber teething ring or frozen vegetables. Topical anesthetics such as Ora-gel or Numbs-it should not be used because these products contain varying amounts of anesthetic and if given frequently, the child may receive overdose / toxic levels of these drugs.
9. Why is it important to fix baby teeth -- they only fall out?
- i. Baby teeth serve the important function of eating, speech, and aesthetics (self image). These teeth not only help mold the developing jaws, but they reserve space for the permanent teeth so that a malocclusion (abnormal bite) does not occur. The last baby tooth to fall out occurs about twelve years of age. A decayed baby tooth can become so diseased that it can effect the health of the permanent tooth and more importantly, severely decayed baby teeth, can cause life threatening infections.
10. Why do not all children receive a cleaning when visiting the dentist?
- i. This is the most frequently asked question. The answer involves educating both the parent and the patient. Plaque, the sticky film on teeth, can be easily removed by a toothbrush and by flossing; tartar and tooth staining often must be removed by a dental care provider. Plaque builds up once every twenty four hours and does not require a professional cleaning since it can be removed by proper patient home oral health care. Most children only have plaque on their teeth. If a dental cleaning is provided once or twice a year without showing the child and parent how to remove it at home on a daily basis, then essentially, the cleaning serves no purpose.

I recommend that parents brush their children's teeth for the first five years of life, since young children lack the manual dexterity of proper toothbrushing. The toothbrush should be a child's size, with soft rounded bristles. Toothpaste should not be used until the child is able to spit (three to four years of age) to avoid its ingestion. Toothpaste should be treated as a medication, and a pea-sized drop should be administered by the parent for the young child. Flossing should be performed prior to brushing and waxed or non waxed floss may be used. Most children lack the proper manual dexterity to floss on their own until the age of ten and will need a parent's help and supervision.

Smokeless Tobacco, Is It Worth the Risk?

It has been reported that about 22 million Americans use smokeless tobacco (snuff). Over three million users are under 21 years old and two thirds of these are male between 12 and 17 years of age. This habit is mainly seen in the South, Central, and Northwestern U.S. states. Younger initiators are usually from rural communities having parental/familial influence, while older users are from more urbanized regions primarily having peer influence.

Chewing or more frequently termed "dipping" smokeless tobacco, is the process of placing tobacco between the lip and teeth where it stimulates the flow of saliva and mixes with it. The saliva is either swallowed or spat out. Systemic absorption of the nicotine from one dose of smokeless tobacco is four times that of one cigarette. Smokeless tobacco use does have potential health hazards; it is not safe.

Potential adverse health consequences to the nicotine contained in snuff include heart disease, stroke, high blood pressure, delayed wound healing, reproductive disorders, peptic ulcer and esophageal disease, and nicotine dependency. A variety of oral problems can also result to include leathery, white patches inside the mouth that are the result of direct contact with and continued irritation by the tobacco juice. A low incidence of these oral smokeless tobacco sores develop into mouth cancer; that's approximately four times more than for those who do not use snuff. Gum recession, tooth abrasion and discoloration, dental decay, reduced taste and smell, and bad breath are other oral consequences of prolonged smokeless tobacco use. More than 87% of all oral cancer cases are directly linked to smokeless tobacco and cigarette use. Of the estimated 25,000 new cases of oral cancer discovered each year, more than 9,000 people die.

Smokeless tobacco use is very addictive and may develop into a similar nicotine habit that is caused by smoking. Snuff use appears attractive to children because it is more hidden than smoking, and due to professional athlete's use and advertising. Youths using snuff have the potential to develop a nicotine dependency that may lead to a future cigarette nicotine dependency as an adult.

Smokeless tobacco is not a safe alternative to smoking; it contains 10 times the amount of nitrosamines, the same cancer-causing substances found in cigarettes and 100% more than the FDA permits in U.S. foods and beverages.

The following are recommendations for smokeless tobacco users:

1. Discontinue its use. If help is needed, seek aid from Medical or Dental.
2. Those who are not willing to stop this habit are advised to move the snuff to multiple sites in the mouth to help prevent the development of oral sores to one site by its continual use; do not swallow the tobacco juices.
3. If an oral sore caused by smokeless tobacco does not resolve within 2 weeks of this habit's cessation, then a dental evaluation must be sought.

The following is a sad, but true story taken from an American Cancer Society publication concerning the devastating result of smokeless tobacco usage. Sean was a budding track athlete and a popular student who started to use smokeless tobacco when he was 13 years old because he thought it was safe. After five years of using a can or more a day, he got mouth cancer. As a result, he had part of his tongue removed. At the age of 19, he died.

Is using smokeless tobacco worth this ultimate risk? You decide.

The Dental Benefits of Chewing Gum

Recent dental studies have shown that chewing gum may actually help reduce the dental decay process. The reason for this is that gum chewing stimulates oral saliva production which has a buffering effect in the mouth by lowering the levels of harmful acids that are produced by oral bacteria when fermentable carbohydrates are ingested. Additionally, the stimulation of saliva allows the teeth to be bathed in a mineral-rich fluid that may help small areas of tooth decay remineralize (repair). Some chewing gum ingredients (xylitol) actually have an antidecay effect by reducing the harmful oral bacteria content.

To take advantage of the dental benefits of chewing gum, the following is recommended:

1. Chew gum that is sugar free; chewing gum may promote dental decay if a new piece is frequently used due to the liberation of a continual source of sugar.
2. Sugar containing gum may provide a benefit if it is chewed over a long period of time because the sugar content is reduced by the production of saliva.
3. The most beneficial time to chew gum is following meals or snacks, when brushing can not be done.

There are many factors that contribute to the development of dental decay including diet, the type of oral bacteria present, and oral hygiene. The early studies on chewing gum as playing a role to help reduce dental decay looks promising. However, do not rely on chewing gum to replace daily brushing and flossing.

First Aid for Dental Emergencies

Injuries to the mouth, face, and teeth occur frequently. Most dental injuries happen to young permanent teeth as a result of falls or sport's related trauma. Severe injuries to the head and neck require a physician's evaluation and are most often due to automobile accidents. All dental injuries should be treated as soon as possible to prevent future discomfort and possible loss of the teeth.

Common forms of dental injury include:

1. Toothache: This is by far the most common cause of dental discomfort. It is usually due to untreated tooth decay. Rinse the mouth with warm water and carefully remove food from between the teeth in the area of the discomfort with dental floss. If swelling is present, apply a cold compress to the cheek (iced towel); do not use heat or aspirin placed on the gum or tooth. Have a dentist evaluate the affected area as soon as possible.
2. Knocked out permanent (adult) tooth: Find the tooth and handle it by the top (crown), not by the root portion. The tooth should be immediately rinsed with water, but DO NOT clean, scrub, or handle the tooth unnecessarily. Try to properly insert the tooth in its socket and then have the individual hold the tooth in place by biting on a clean gauze or cloth. If you can not reinsert the tooth, transport it in a cup containing milk, saliva (spit), or water. See a dentist immediately; time is a critical factor in saving the tooth whether inserted or not.
3. Knocked out or shoved in baby tooth: Find the tooth if it is knocked out. DO NOT attempt to reinsert this baby tooth in the socket. Seek dental evaluation.
4. Cut or bitten tongue, lip, or cheek: Apply ice to the bruised areas. If there is bleeding, apply firm but gentle pressure with a clean gauze or cloth. If the bleeding does not stop after 15 minutes or it can not be controlled by simple pressure, the individual requires evaluation at the hospital.
5. Broken (fractured) teeth: Rinse the debris from the injured area with warm water. Place a cold compress over the face in the area of the injury. Locate and bring the broken tooth fragments immediately to the dental clinic.
6. Possible jaw fracture: Movement of the jaws should be prevented by wrapping a towel or cloth under the lower jaw and across the top of the head. A cold compress will keep swelling down while the person is taken to a hospital emergency room: The hospital department that provides emergency services to patients who need immediate medical attention..

7. Objects wedged between the teeth: Try removing the object with dental floss. Guide the floss carefully to avoid cutting the gum. Do not use tooth picks or other sharp instruments. If you fail to remove the object seek dental evaluation.

As in all matters of health, prevention of disease and injury are the best policy. Some dental injuries may be prevented by taking the following precautions:

1. Wear mouth guards while playing contact sports.
2. Children and infants should be always well secured in their car seats by seat belts.
3. Adults and older children must always wear their seat belts.
4. Child proof your home to prevent falls, choking on small objects, and electrical injuries.
5. Insure that regular dental visits are sought to prevent dental problems.

Caring for your Child's Teeth and Gums

Most people think that gum (periodontal) disease is an adult problem. The fact is that 97% of school-aged children experience gingivitis, the first level of gum disease. This is not just an adult problem, although it tends to become more advanced with age. Gum disease is a progressive condition that occurs over time, not overnight. As parents there are basic preventive steps you can take with your child to ensure a lifetime of good oral health. The best bet for healthy teeth and gums as an adult is to establish good oral health habits as a child.

Periodontal disease affects the gums and supporting structures of the teeth. It is caused by the bacteria found in dental plaque, a sticky colorless film that constantly forms on the teeth. If plaque is not removed, it hardens into a rough porous substance known as calculus or tartar. The toxins in plaque and tartar that irritate the gums are what cause gum disease. Gingivitis is the most common form of gum disease in children. It usually causes the gum tissues to swell, turn red, and easily bleed. Fortunately, this is both preventable and curable with regular routine brushing and flossing. If gingivitis is left untreated over the course of many years, more serious forms of gum disease may develop due to plaque's toxins invading the tooth's supporting bone and tissues forming pockets or spaces around teeth. There is evidence that gum disease may increase during adolescence due to hormonal changes related to puberty and the lack of initiative or motivation to practice oral hygiene during the teenage years.

Parents usually establish a good preventive health program for their children to include well-care checks, inoculations, and immunizations; why then not establish preventive steps against dental and gum disease? Gingivitis can be almost completely prevented if plaque is removed from the teeth and gums by oral health care at home. Plaque can be easily removed by a toothbrush and by flossing; tartar and tooth staining often must be removed by a dental care provider. Plaque builds up every 24 hours and does not require a professional cleaning since it can be removed by proper home oral care.

I recommend that parents brush their children's teeth for the first five years of life, since young children lack the manual dexterity of proper toothbrushing. The toothbrush should be a child's size, with soft rounded bristles. Toothpaste should not be used until the child is able to spit (3-4 yrs of age) to avoid its ingestion. The constant ingestion of toothpaste can cause fluorosis (white spots on the permanent teeth) or a serious medical emergency if swallowed in large quantities. Toothpaste should be treated as a medication, and a pea-sized drop should be administered by the parent for the young child. When brushing children's teeth,

establish a set sequence so the process becomes a routine for both of you. The proper way to brush is to place the toothbrush at the gumline and begin brushing in small, gentle circles. Brush one or two teeth at a time, moving in your established sequence. The older child should have the toothbrushing supervised by the parent. Flossing should be performed when the spaces between teeth are closed because gum disease most often begins between teeth where a toothbrush can not reach. Flossing should be performed prior to brushing and waxed or non waxed floss may be used. Most children lack the proper manual dexterity to floss on their own until the age of ten and will need a parent's help.

A child's self-esteem is a very important part of their development. Self-esteem encompasses a healthy lifestyle to include teaching a young person the importance and benefits of taking care of the entire body. Since children often model their behavior after a parent's, it follows that a child will have more success in achieving good oral health with a positive role model. A healthy smile, good breath, and strong teeth all contribute to a young person's sense of personal appearance and confidence. These are easily achieved through good, lifelong habits of brushing, flossing, and regular professional dental care.

A Fluoride Update

During the last ten years there has been significant reduction in the prevalence of dental decay in children due to the increased availability of fluoride. Fluoride benefits teeth by increasing resistance to acid demineralization (break down), by enhancing tooth remineralization (repair), and by reducing dental plaque's destructive ability. Fluoride is available by systemic (swallowed) or by topical application (direct tooth contact).

Water fluoridation is the most efficient and cost effective means of systemic fluoride delivery. Clinical studies have shown that this source of fluoride availability is responsible for a 65% reduction in tooth decay in children.

The most common way to receive topical fluoride is by toothpaste and oral rinses. Toothpaste is a medication, and should be dispensed for young children by an adult. The amount of toothpaste placed on the child's toothbrush should be no more than a pea-sized drop. Toothpaste should not be used until the child is able to spit (3-4 years old) to prevent its unnecessary ingestion. Repeated fluoride containing toothpaste ingestion during permanent tooth development (birth to six years of age), may result in chronic fluoride toxicity. This may become evident as irreversible dental fluorosis (white spots, tooth pitting) of the permanent teeth. Large amounts of swallowed toothpaste may lead to an acute fluoride toxicity resulting in nausea, vomiting, and/or a medical emergency. If this should occur, the child should be given syrup of Ipecac to induce vomiting. If vomiting does not occur in 20 minutes following the syrup of Ipecac, the child should be given milk to drink to help delay the fluoride stomach absorption, and be transferred to a medical facility for evaluation. Oral fluoride rinses are not recommended for children less than 6 years old to prevent its unnecessary ingestion.

Fluoride delivery by a systemic water source and by topical toothpaste application plays a significant role to help prevent dental decay. Bottled water has been shown to contain varying amounts of fluoride. Recent studies report that home water filtration, reverse osmosis systems, and distillation units significantly cause a reduction in fluoride levels. Prenatal fluoride supplementation is not recommended since there is insufficient evidence of its effectiveness.

Fluoride exposure is not the only solution to healthy teeth; proper oral hygiene and parental supervised brushing and toothpaste administration for children are also important factors to establish and promote oral

well being.

Mouthrinses

Mouthrinses are generally considered safe products. However, those that contain ethanol may be fatal if ingested by a small child. In a case reported in Clinical Pediatrics, a four year old boy died after drinking 20 oz of a mouthwash containing 10% ethanol. 2.6 oz of a mouthrinse containing 12 % ethanol can cause hypoglycemia, coma, and tonic seizures in an averaged sized two year old. Children are capable of drinking large amounts of mouthrinses in relation to their body weight and then achieve a high blood alcohol level rapidly.

Mouthrinses have a great potential to cause ethanol toxicity in children because of their prevalence, appeal: The action you take if you don't agree with a decision made about your benefit., and ease of use. Approximately 63% of US adults use mouthrinses. They are colorful and available in large containers that usually lack child resistant caps. Ethanol containing mouthrinses comprise most of the ones currently sold. The product with the highest ethanol content is Listerine (26.9%) by volume (54 proof). This is five times more ethanol found in a beer and two times that found in table wine. Mouthrinses containing more than three grams of ethanol must have a ADA warning printed on their label's container. However, this applies only to therapeutic mouthrinses; since the majority of mouthrinses are cosmetic, few must comply with this ADA warning requirement.

With children, irritability is often an early symptom of acute ethanol toxicity. Other reported signs include hypotonia, unconsciousness, unresponsiveness, and possible convulsions. As the blood alcohol levels increase, symptoms become more severe to include deep coma, hypotention, bradycardia, and death from respiratory arrest. The lethal dose of ethanol for children is 3 gm/kg. Toxic reactions have been reported from doses as small as 0.6 gm/kg. Besides the risk of acute ethanol toxicity, ethanol-containing mouthrinses have a potential for abuse by older children. Denaturants added to discourage ingestion of these products are not likely to deter abuse because they are only mildly toxic and a few consumers are aware of their presence. A 15kg (33lb) child who ingests 7.2 oz of Listerine swallows 1.9 oz of ethanol which is potentially lethal; approximately one tenth of this amount can produce toxic reactions.

Dentists and other health care providers should inform parents of the dangers associated with accidental ingestion of mouthrinses and encourage parents to keep it out of reach of children. Mouthrinses should be dispensed to children by an adult and only in small amounts to prevent possible ingestion. Since, children younger than six years of age comprised 52.5% of the reported exposures attributed to ethanol containing mouthrinses, it is not advisable to have children younger than six use these products.

The Digit Habit

The sucking of a digit (finger or thumb) or pacifier is a completely normal process for infants and young children. For many it satisfies the infant sucking need, it may provide security or stress relief, and some children use it to pacify and soothe themselves. In fact, some children begin to suck digits even before they are born. Most children stop sucking on their own by 4 years of age because this is when they become socially cognizant.

In most cases, no harm to the teeth is caused by digit sucking if this habit is stopped prior to the eruption of the first permanent tooth (5-6 years old). However if the sucking continues past this age, a dental malocclusion may result (crossbite, openbite, flaring of the upper front teeth, and/or tipping back of the lower front teeth). Studies have shown that the severity of the dental problem is directly proportional to the intensity and the duration of the sucking; prolonged sucking for more than 6-8 hours per day often leads to

a dental malocclusion.

The sucking of a pacifier may cause ill affects to the teeth essentially the same way as the digit. Even though the ortho pacifier assumes a more physiological nipple shape than the bulb pacifier, it may still cause dental problems. I recommend that a pacifier be introduced to the infant early on if they suck their digit. The pacifier has one nice advantage over the digit, it is easier to get rid of the pacifier as the child gets older than is the digit! If the child expresses no interest in the pacifier and prefers his digit instead, then do not force this alternative. Pacifiers should meet the following specifications:

- be of solid, one piece construction
- have large plastic shields to prevent choking
- have two holes in the shield, made of a non-toxic material
- contain a warning not to tie it around the neck

Honey or sugar should not be put on the pacifier to encourage its use.

Like any habit, some need help in stopping unwanted behaviors. If a child is 5-6 years old and has not stopped their digit habit, they should be evaluated by a dentist. When the child truly desires to stop their digit sucking and/or if a dental malocclusion develops as a result of the sucking, then intervention is recommended. The simplest form of treatment is to encourage the child to stop the habit by using positive reinforcement behavior management techniques in conjunction with parental support. If this approach does not work, then a mouth appliance that blocks the sucking habit can be used as an aid.

Infant Nursing

An Important Message for Parents

Prolonged infant nursing or its delayed weaning can contribute to the deterioration of a child's teeth (dentition). This tooth destruction is caused by the dental disease called decay (caries). Dental caries is an active process in the presence of sugars found in milk (human and cow), fruit juices, sweetened drinks, and most foods. This type of caries initially effects the upper front teeth but can also progress to the rest of the baby (primary) teeth. Because the early stages of this form of decay, primarily occurs to the back of the upper front teeth, it may easily go undetected. The cause of nursing caries is improper feeding habits during infancy and early childhood. The most common feeding practices responsible for this dental disease process include:

- Permitting the infant to nurse at the breast or bottle beyond the required feeding time or to allow the child to sleep habitually at the breast or with the bottle. If the bottle or the breast remains in the child's mouth during sleep, the liquids pool around the teeth, because the sleeping child rarely swallows. The prolonged tooth contact with the sugar containing liquids (occurring naturally or added) cause this severe form of tooth decay. The tooth deterioration will not occur over night, but will progress with continued bottle usage at bedtime.
- Allowing the child to use the bottle as a pacifier. This practice may not only cause decay but can also encourage the bottle habit to continue to late childhood.
- Chronic use of oral medications at bedtime prior to brushing. Oral hygiene practices should be performed after the meds are given at night.

- Children who are placed to sleep with a bottle containing a fermentable carbohydrate (milk, formula, juices) are more prone to get ear infections due to the backing up of this fluid in the ear tube potentially causing an area of bacterial growth. There is also an increased risk that a child placed to sleep with a bottle, can aspirate its contents which could cause medical complications.

The primary dentition needs to remain healthy and sound because it is very important for the normal growth and development of the jaws and the adult (permanent) teeth. Nursing caries can be so destructive and occur so rapidly that the baby teeth must be frequently removed to eliminate pain and infection to the permanent teeth. To prevent nursing caries from occurring to your child's teeth, the following is recommended:

1. Avoid bedtime or naptime bottle usage. During feeding, the bottle should be held by the parent while the child is being held. Do not have the child hold the bottle because this can lead to difficulty in weaning.
2. Avoid using the bottle as a pacifier. The bottle's contents should be used for its nutritional value, not to quiet, occupy, or pacify the child.
3. Discontinue the use of the bottle by 12 months of age. Most children will then be able to hold a cup (sippy), and can learn to drink from this.
4. Avoid prolonged breast-feeding; do not allow the child to nurse all night. This statement is not to be construed as opposing natural breast-feeding; it is meant only to call attention to the dental damage that may result from prolonged feeding with the bottle or breast.

Teeth affected by prolonged nursing remain highly susceptible to decay long after nursing is discontinued. In addition to developing good feeding habits very early on, good oral hygiene practices must be established early as well. The infant's gums should be wiped with a clean, damp, washcloth following meals. This practice should be begun at birth. Continue this cleaning until the front primary teeth erupt (6-12 months of age). Your child should have their first dental visit by one year of age. Toothpaste should not be used until the child is able to spit (3-4 years of age) since younger children may swallow it. The ingestion of toothpaste is not safe, and may lead to white spots on the child's permanent teeth called fluorosis. Toothpaste is a medication and a pea-sized drop should be dispensed by an adult to prevent its unnecessary ingestion. Parents should continue to monitor and supervise their children's brushing until they are 7-8 years of age to ensure that it is being done properly. Dental disease is an infectious process having a maternal genetic component; the window of human infectivity is the first 24 months of life. Sharing of feeding utensils should be discouraged to prevent the parent's oral bacteria transfer to the child's mouth. By establishing these good oral hygiene habits early, your children will have the opportunity to experience a decay free primary and permanent dentition. Prevention is our goal!

If you have any questions, please contact the Pediatric Dentistry Department, Naval Postgraduate Dental School, (301) 295-1364.

Oral Health for Parent and Child

Parents have the opportunity to keep their children's teeth free of decay by beginning proper preventive measures in infancy. Childhood dental health is important for eating, speech, adult tooth and jaw alignment, and a great smile. Good oral health practices should begin at birth and continue throughout adult life. In the

child's early years, the parents should provide this care, and later they should instruct, monitor, and, motivate the child to help maintain good oral health habits. Parents are the most influential role model for learning health practices and habits established at an early age are critical in maintaining good, life long oral health.

Dental caries (decay) is an infection that results in tooth destruction. This disease of the tooth structure is caused by the production of acids from oral bacteria and dietary fermentable carbohydrates. Diet modification and proper oral hygiene will reduce this acid production that may cause dental decay. Eating a well-balanced diet is the most important step that mothers can take to help the proper development of their baby's teeth. Pregnancy is a special time requiring good oral health; expectant mothers should be mindful of oral hygiene, eating habits, and professional dental care.

During pregnancy there is a need for good oral hygiene because dental problems may exaggerate. To avoid unnecessary dental emergencies, daily brushing and flossing is highly advised. Gingivitis (mild gum disease) is a condition that results from not removing plaque from the teeth near the gumline. The gums can get irritated which may lead to red, tender and inflamed oral tissues. Gingivitis may occur more frequently during pregnancy due to a rise in hormone levels, therefore proper oral hygiene during this period is important.

An expectant mother's diet can affect the development of her unborn baby's teeth. Eating a well-balanced diet is necessary to provide proper amounts of nutrients for both the child and mother. The baby's teeth begin to form during the sixth week in utero, and sufficient levels of Vitamin A,C,D, protein, calcium, and phosphorus are necessary for tooth development. Calcium is not lost from the mother's teeth during pregnancy, rather, from the mother's diet. If the mother's dietary calcium is inadequate, the mother's body will provide this mineral from stores in her bones. Many women have the desire to snack during pregnancy. While this is normal, snack foods rich in fermentable carbohydrates, can result in tooth decay if the teeth are not brushed and flossed after this consumption. Healthy snack foods include nuts, cheese, vegetables, yogurt, popcorn, and sugarless gum.

It is important that the patient inform their dentist that she is pregnant. This will help the dentist determine the best time for dental treatment to suit the needs of the pregnant patient. Regular, non emergent dental visits can generally be performed safely during pregnancy. The second trimester is usually the best time for elective dental care. Elective dental treatment during the first and third trimester should be postponed. Emergent dental care should be sought at all times during pregnancy because a dental infection could not only jeopardize the health of the mother, but also that of the unborn baby.

It has been proven that nursing for prolonged periods or delayed weaning can contribute to the destruction of a child's dentition. This destruction is caused by the disease called dental caries (decay), which is active in the presence of fermentable carbohydrates found in milk (human and cow), fruit juices, and sweetened drinks. This decay initially effects the upper front teeth but can also progress to the rest of the primary dentition (baby teeth). Because this form of decay in the early stages occurs on the back of the upper front teeth, it may easily go undetected. The cause of nursing caries is improper feeding habits during infancy and early childhood. The most common feeding practices responsible for this dental disease process include:

1. Permitting the infant to nurse at the breast or bottle beyond the required feeding time or to sleep habitually at the breast or with the bottle. If the bottle or the breast remains in the child's mouth during sleep, the liquids pool around the teeth, because the sleeping child rarely

swallows. This prolonged contact of the teeth with the sugar containing liquids (occurring naturally or added) can cause this severe form of tooth decay.

2. Allowing the child to use the bottle as a pacifier. This practice may not only cause decay but can also encourage the bottle habit to continue to late childhood.

Recent studies have demonstrated that children who are placed to sleep with a bottle containing a fermentable carbohydrate (milk, formula, juices) are more prone to get ear infections due to the backing up of this fluid in the ear tube developing an area for bacterial growth. There is also an increased risk that a child placed to sleep with a bottle can aspirate its contents which could cause medical complications. Nursing caries can be so destructive and occur so rapidly that the baby teeth must frequently be removed to eliminate pain and infection to the adult teeth. To prevent nursing caries from occurring to your child's teeth, the following is recommended:

1. Avoid bedtime or nap-time bottle usage. The bottle should be held by the parent while the infant is being held. Do not routinely allow the child to hold the bottle because this can lead to difficulty in weaning.
2. Avoid using the bottle as a pacifier. The bottle's contents should be used solely for its nutritional value, not to quiet, occupy, or pacify the child.
3. Discontinue the use of the bottle by 12 months of age since most children can hold a sippy cup, and can learn to drink from this.
4. Avoid prolonged breast-feeding; do not allow the child to nurse all night long. This statement is not to be construed as opposing natural breast-feeding; it is meant only to call attention to the dental damage that may result from prolonged feeding-bottle or breast.