

INTEGRATED ORAL DISEASE PREVENTION AND MANAGEMENT

MODULES FOR PRIMARY HEALTH CARE WORKERS

2nd edition

Good health begins with a healthy mouth



MODULE II
CHILDREN
6-12
YEARS OLD



Pan American
Health
Organization



World Health
Organization

REGIONAL OFFICE FOR THE Americas

INTEGRATED ORAL DISEASE PREVENTION AND MANAGEMENT

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PROMOTION AND PREVENTION

GUIDELINES



TREATMENT

GUIDELINES

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Foreword

The Pan American Health Organization (PAHO), under its Community Free of Caries Initiative, is proud to present the Integrated Oral Disease Prevention and Management (IODPM) modules as a practical solution to facilitate the integration of oral health within primary health care. Integrating oral health prevention and management into the delivery of primary health care services is now one of the cornerstones of PAHO's oral health program.

The IODPM modules are geared to assist primary health care workers in the prevention of oral diseases and non-communicable diseases (NCDs) through various promotional activities. The resulting benefits serve to increase awareness of protective factors, such as appropriate oral self-care practices, the effective use of fluorides, and healthy lifestyle choices related to diet, nutrition, personal hygiene, and smoking and alcohol consumption. This integrated approach is a “best practice” model and reorients oral health care toward prevention, tackles common risk factors for NCDs and oral health and, facilitates early intervention.

I wish to take this opportunity to recognize the work of the oral health team at PAHO, particularly the strong support of Dr. Nancy Valencia, and the technical contributions of Dr. Gustavo Cruz, Dr. Dan Altman, Dr. Maritza Sosa, Dr. Yilda Rivera, Dr. Heriberto Vera, Ms. Dariene Lazore, Ms. Joan Lazore, Ms. Mary Beedle, MAMA Project Inc., and the Cleft Palate Foundation.

PAHO particularly acknowledges the support of Colgate-Palmolive Inc., which is renowned for its long-standing commitment to improving the oral health of the peoples of the Americas.

Dr. Saskia Estupiñán-Day
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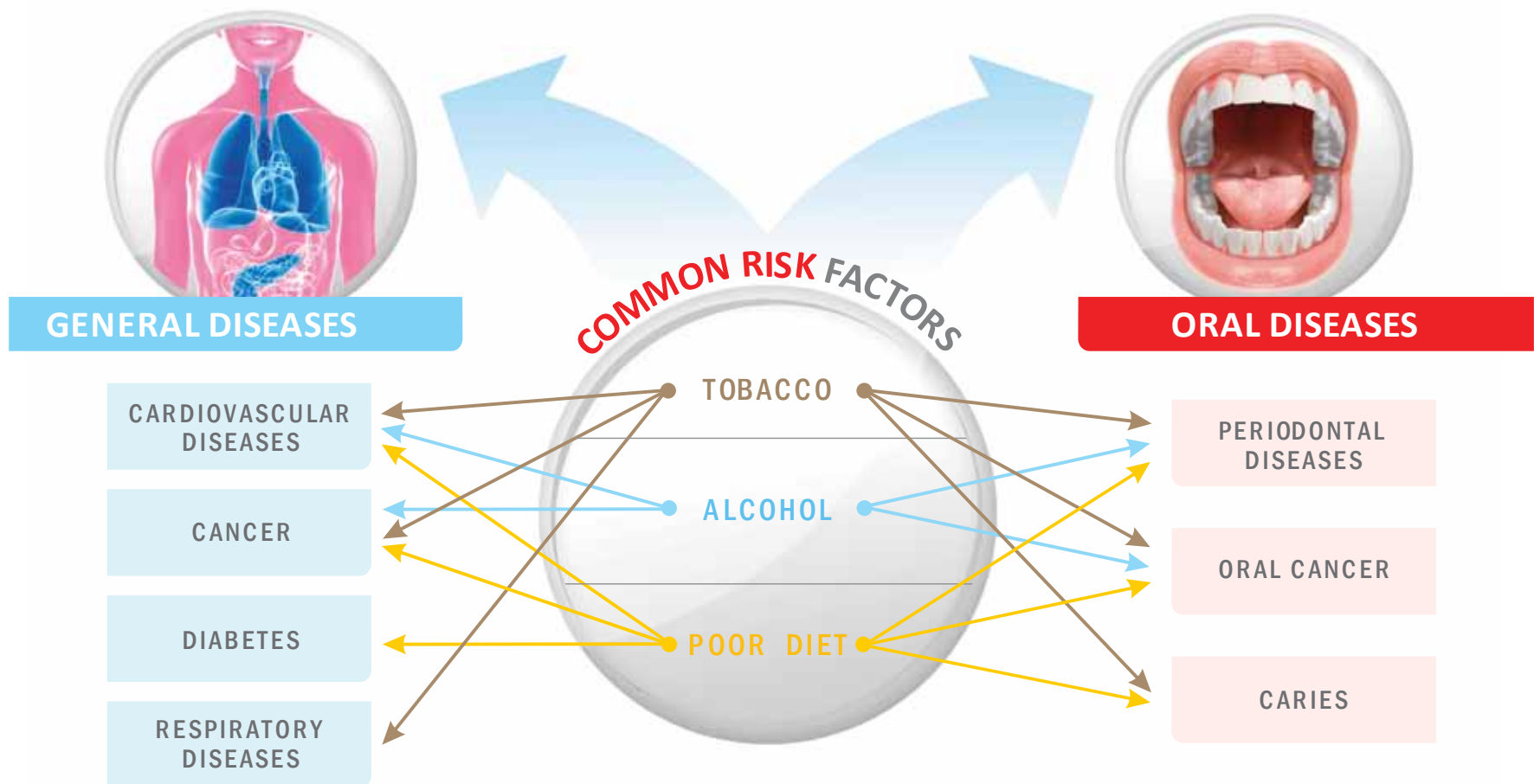
ORAL HEALTH: A GATEWAY TO GENERAL HEALTH

The mouth consists of teeth, gums, mucous membranes, salivary glands, and bone. The mouth is the entrance to the body for nutrients, bacteria, viruses, and fungi. It is a part of the body's immune system and plays an important role in primary health. Taking care of the mouth and maintaining good oral hygiene is a part of being healthy. Poor oral health affects your ability to eat, speak, and be happy.

There is a link between oral health and general health. When general health is impaired, oral health will also be affected. For example, signs of diabetes, HIV/AIDS, hepatitis, and arthritis can be seen in the mouth. And when oral health

suffers, there is an increased risk for poor general health, including cardiovascular disease.

The risk factors contributing to poor general and oral health are very similar, as illustrated in the diagram below. Tobacco use, excessive alcohol use, and poor diet/nutrition are common risk factors for different systemic and oral diseases. Tobacco use and poor diet/nutrition, especially, are both risk factors for diabetes, cardiovascular disease, respiratory disease, dental decay (caries), cancer including oral cancer, and periodontal disease (gum disease). Eliminating these common risk factors will improve general and oral health.



SOFT TISSUE DISEASES OF THE MOUTH AND FACE



ASK

- Difficulty speaking, eating or drinking?
- Fever?
- Pain in throat or mouth?
- Blisters or ulcers in the mouth or lips?
- How long have the symptoms been present?



LOOK AND FEEL

- Swelling of the face
- Loss of gums, dead or dying tissue
- Pus, redness, warmth, pain in mouth (signs of dental infection)
- Red, swollen tonsils with pus
- Blisters on the lips
- White patches inside the mouth
- Ulcers in the mouth
- Red, swollen gums that bleed easily

* Ready To Use Therapeutic Foods are high energy, fortified ready to eat food suitable for treatment of severely malnourished children. Each country must follow national recommendations and guidelines for management of malnutrition in children.

Severe Moderate Soft

SIGNS/SYMPTOMS	CLASSIFY AS	TREATMENT
<ul style="list-style-type: none"> • Widespread or localized swelling of the face • If caused by dental infection or tooth abscess: severe tooth pain accompanied by red, swollen gums that may contain pus • If caused by trauma: presence of burns, bruises, cuts and scratches, or puncture wounds • Fever, swollen lymph nodes, difficulty speaking /eating/ drinking 	FACIAL CELLULITIS	<ul style="list-style-type: none"> ☺ Administer antibiotics (see chart) ☺ Administer pain medication only IF needed (see chart) ☺ Refer URGENTLY to emergency hospital
<ul style="list-style-type: none"> • Loss of gums, dead or dying gum tissue • Painful ulcerations on gums • Grey residue on gums or swollen gums that bleed easily • Bad taste in the mouth, bad breath, fever 	ACUTE NECROTIZING ULCERATIVE GINGIVITIS (ANUG)	<ul style="list-style-type: none"> ☺ Administer antibiotics (see chart) ☺ Administer RUTF* if child is malnourished ☺ Clean mouth by rinsing with warm salt-water solution ☺ Advise about oral hygiene and nutrition ☺ Refer URGENTLY to dental clinic
<ul style="list-style-type: none"> • Tonsils are red, swollen and have white spots or pus • Severe throat pain and swollen lymph nodes on neck • Small red spots on the soft or hard palate • Fever 	STREP THROAT OR TONSIL INFECTION	<ul style="list-style-type: none"> ☺ Administer antibiotics if pus present on tonsils (see chart) ☺ Administer pain medication IF needed (see chart) ☺ Advise patient: (Advise patient to gargle) gargle with salt-water rinse and eat bland foods ☺ Advise about oral hygiene and nutrition ☺ Refer to hospital if sore throat lasts longer than 48 hours and/or difficulty breathing/swallowing
<ul style="list-style-type: none"> • Painful blisters on lip or outer edges of mouth • Blister might be broken open or crusted over with a scab • Tingling, burning, or itching feeling before blister became visible 	FEVER BLISTERS OR COLD SORES (Herpes Simplex Virus)	<ul style="list-style-type: none"> ☺ Advise on how to prevent transmission of herpes (see picture chart) ☺ Administer antiviral medication IF extensive blisters are present, high fever, and inability to eat ☺ Administer pain medication IF needed (see chart) ☺ Place ice on area to help reduce swelling and pain ☺ Advise about oral hygiene and nutrition
<ul style="list-style-type: none"> • White patches on inside of cheeks or lips, or on the surface of tongue or palate 	ORAL CANDIDIASES (Thrush)	<p><u>If white patches can easily be wiped away to reveal a red area:</u></p> <ul style="list-style-type: none"> ☺ Administer antifungal (see chart) ☺ Advise about oral hygiene and nutrition <p>If white patches can NOT be wiped off: Refer to dental clinic for evaluation</p>
<ul style="list-style-type: none"> • Single to multiple painful ulcers inside the mouth with whitish centers and red borders • Burning, tingling, and slight swelling of the mucous membrane 	CANKER SORES OR STOMATITIS	<ul style="list-style-type: none"> ☺ Apply Debacterol only to ulcers, not surrounding tissues ☺ If Debacterol is unavailable, administer pain meds IF needed ☺ Advise mother to have child use salt-water rinses or baking soda rinses until ulcer heals, and to avoid irritating foods (salty, spicy, etc) ☺ Advise mother about oral hygiene and nutrition ☺ Apply fluoride varnish every 6 months (for prevention of dental caries)
<ul style="list-style-type: none"> • Small, ball-shaped, swelling that can form in salivary glands or mucosa, may contain clear fluid • Usually painless, can rupture, disappear, and reappear 	MUCOSAL CYST	<ul style="list-style-type: none"> ☺ Advise about oral hygiene and nutrition ☺ Apply fluoride varnish every 6 months (for prevention of dental caries) <p>If the cyst keeps growing, does not rupture, and/or is painful: Refer to dental clinic for examination</p>
<ul style="list-style-type: none"> • Swollen, soft, puffy, red gums that bleed easily accompanied by dental plaque build-up on the teeth 	GINGIVITIS	<ul style="list-style-type: none"> ☺ Advise about oral hygiene and nutrition ☺ Apply fluoride varnish every 6 months (for prevention of dental caries) ☺ Encourage a dental visit



HARD TISSUE DISEASES OF THE TEETH



ASK

- Toothache or sensitivity?
- Consume sugary food or drinks often?



LOOK AND FEEL

- Pus, redness, warmth, swelling in the mouth (signs of infection)
- Holes in teeth or white, brown, black spots on teeth
- Irregular enamel
- Plaque build-up

SIGNS/SYMPTOMS	CLASSIFY AS	TREATMENT
<ul style="list-style-type: none"> • Spontaneous tooth pain that is severe • Long lasting tooth pain that is intense • Sensitivity to hot, cold, sweets, and/or chewing • Red, swollen gums near the hurting tooth with a possible abscess that contains pus 	DENTAL INFECTION OR TOOTH ABSCESS	<ul style="list-style-type: none"> ☞ Administer antibiotics (see chart) ☞ If abscess is observed, a prick with a disinfected needle may allow pus to drain helping to relieve some of the pain ☞ Administer pain medication IF needed (see chart) ☞ Refer URGENTLY to dental clinic for treatment
<ul style="list-style-type: none"> • Visible holes in teeth, or partial loss of tooth structure • White, brown, or black spots on teeth • Tooth pain or sensitivity to hot, cold, or sweets 	DENTAL CARIES	<ul style="list-style-type: none"> ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (Do NOT apply on large cavities.) ☞ Refer to dental clinic for treatment
<ul style="list-style-type: none"> • Abnormal enamel that is soft, thin, pitted, or grooved and fractures easily • Teeth appear discolored • Tooth sensitivity to thermal or chemical stimuli 	AMELOGENESIS IMPERFECTA	<ul style="list-style-type: none"> ☞ Educate about disease (see picture chart) ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries) Refer to dental clinic IF tooth appearance and sensitivity are severe
<ul style="list-style-type: none"> • Plaque build-up but no dental decay • Frequent eating of starchy or sugary snacks, sweets, artificial juices, and soft drinks 	TEETH AT RISK FOR CAVITIES	<ul style="list-style-type: none"> ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries)

Severe Moderate Soft

MALFORMATIONS, ANOMALIES AND NEOPLASMS OF THE FACE AND MOUTH



ASK

- Was the abnormality present at birth?
- Does milk or food come out of the nasal passage?
- Has the child seen a surgeon?
- Has the child jaw pain when opening and closing the mouth?



LOOK AND FEEL

- Hole or slit in the lip and/or palate
- Teeth misaligned

SIGNS/SYMPTOMS	CLASSIFY AS	TREATMENT
<ul style="list-style-type: none"> • Hole or slit in the lip and/or palate, immediately noticeable at birth • Difficulty eating or speaking due to abnormal oral anatomy • Poor growth and development • Recurrent ear infections and/or ear pain 	CLEFT LIP/CLEFT PALATE	<ul style="list-style-type: none"> ☺ Administer RUFT* if child is malnourished ☺ Administer antibiotics IF ear infection present (see chart) ☺ Advise about oral hygiene and nutrition ☺ Apply fluoride varnish every 6 months (Do NOT apply on large cavities.) ☺ Refer hospital for evaluation by surgeon
<ul style="list-style-type: none"> • Lower anterior teeth are positioned significantly behind, edge-to-edge, or just in front of the upper anterior teeth when biting down • Uncomfortable bite that causes headache, neck pain, painful jaw that clicks or pops • Worn down teeth that are chipped or have fillings that continue to fail 	MALOCCLUSION	<ul style="list-style-type: none"> ☺ Advise about oral hygiene and nutrition: ☺ Apply fluoride varnish every 6 months ☺ Apply fluoride varnish every 6 months (Do NOT apply on large cavities.) Refer to dental clinic IF malocclusion causes functional or aesthetic concern

* Ready to Use Therapeutic Foods are high energy, fortified ready to eat food suitable for treatment of severely malnourished children. Each country must follow national recommendations and guidelines for management of malnutrition in children

Severe Moderate Soft

ASK

- How was the child injured?
- When did it happen?
- Where did it happen?
- Date of last tetanus shot?

LOOK AND FEEL

- Injury to face or mouth
- Redness, warmth, or swelling around the injury
- Tooth pushed into or out of gum
- Broken, loose, or displaced teeth (Have patient bite down and assess each tooth if needed)

REMEMBER:

- Do not confuse exfoliating teeth with injured teeth. Refer to eruption chart
- Have patient bite down to assess teeth for injury.
- The main causes of dental trauma are:
 - Sports and related injuries
 - Falls and collisions
 - Automobile accidents
 - Child physical abuse (50% of injuries are to face and mouth)

Children repeatedly presenting with facial injuries may be victims of child abuse

Report suspicions to the authorities if you suspect the child was intentionally harmed

Severe Moderate Soft

TRAUMA OF THE MOUTH AND TEETH

SIGNS/SYMPTOMS	CLASSIFY AS	TREATMENT
<ul style="list-style-type: none"> • Severe mouth or face trauma • Broken or displaced bones • Multiple broken teeth • Difficulty moving the mouth 	<p>SEVERE TRAUMA</p> <p>(JAW FRACTURE, OPEN FACIAL WOUNDS)</p>	<ul style="list-style-type: none"> ☞ Remove any debris from the soft tissue ☞ Clean the wounds and cover them ☞ Administer pain medication IF needed (see chart) ☞ Administer antibiotics (see chart) ☞ Determine if tetanus shot is needed and administer if possible ☞ Refer URGENTLY to emergency hospital
<ul style="list-style-type: none"> • Broken tooth: Injured tooth is broken off completely • Luxation: Injured tooth is displaced sideways or very mobile • Intrusion: Injured tooth is pushed into the gums • Avulsion: Injured tooth is knocked out of gums 	<p>MODERATE TRAUMA</p> <p>(BROKEN TOOTH, LUXATION, INTRUSION, AVULSION)</p>	<ul style="list-style-type: none"> ☞ Rinse with clean water ☞ Use ice packs to reduce any swelling ☞ Determine if tetanus shot is needed and administer if possible ☞ Administer pain medications only IF needed (see chart) ☞ First Aid: Broken tooth: Cover tooth with gauze Luxation: Gently push tooth back into place Intrusion: Do NOT try to pull the tooth out. Inform patient that the tooth is generally allowed to re-erupt on its own Avulsion: Baby tooth: -Do NOT reinsert a baby tooth. Inform patient this can damage the underlying adult tooth Adult tooth: -Handle the tooth only by the crown. Rinse with clean water. Do not scrub, dry, or wrap the tooth in tissue. Irrigate the tooth socket with saline. Gently reinsert the tooth into the socket. If tooth cannot be re-inserted than place the tooth in a transport liquid (milk, saline, saliva, cold water). Reach the dental clinic during the next 6 hours ☞ Refer all patients URGENTLY to dental clinic for treatment
<ul style="list-style-type: none"> • Enamel fracture: Injured tooth has small chip or shallow crack • Subluxation: Injured tooth is slightly mobile and be sensitive to touch, percussion, or chewing. May be blood around gumline of tooth 	<p>MODERATE TRAUMA</p> <p>(ENAMEL FRACTURE, SUBLUXATION)</p>	<ul style="list-style-type: none"> ☞ Rinse with clean water ☞ Use ice packs to reduce any swelling ☞ Administer pain medication only IF needed (see chart) ☞ Refer to dental clinic immediately for treatment
<ul style="list-style-type: none"> • Dental concussion: Injured tooth is not mobile, but tender to percussion and often biting 	<p>MILD TRAUMA OF TOOTH</p> <p>(DENTAL CONCUSSION)</p>	<ul style="list-style-type: none"> ☞ Rinse mouth with clean water ☞ Use ice packs to reduce any swelling ☞ Administer pain medication IF needed (see chart) ☞ Inform that tooth may become discolored ☞ Recommend that patient have soft diet for 1 week and avoid chewing on tooth
<ul style="list-style-type: none"> • Scratches, cuts, burns, or bruises to the soft tissues of the mouth or face <p>(Soft tissue includes the hard and soft palate, mouth floor, cheeks, lip, and tongue)</p>	<p>MILD TRAUMA OF SOFT TISSUES</p>	<ul style="list-style-type: none"> ☞ Clean external wounds with hydrogen peroxide ☞ Clean mouth wounds by having patient gargle salt water then rinse with clean water ☞ Advise that patient use ice packs to reduce swelling ☞ Administer pain medication IF needed (see chart) ☞ Determine if tetanus shot is needed and administer if possible

HABITS AND BEHAVIORS RELATING TO THE MOUTH AND TEETH



ASK

- Does child grind teeth?
- Does child suck on thumb, finger, or lip?
- Does child chew or eat non-food items such as dirt or paint chips?
- Does child snore a lot when sleeping?



OBSERVE:

- Is enamel worn?
- Are teeth chipped or cracked?
- Is child mouth breathing?
- Are fingernails irritated or bloody?

SIGNS/SYMPTOMS	CLASSIFY AS	TREATMENT
<ul style="list-style-type: none"> • Worn down enamel, dentin may be visible and teeth may be sensitive • Cracked, chipped teeth 	TEETH GRINDING (BRUXISM)	<ul style="list-style-type: none"> ☞ Inform parents that grinding is common in children and most outgrow the habit ☞ Teach recommendations on how to deal with oral habits ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries) <p>In rare cases of excessive pain: Refer to dental clinic</p>
<ul style="list-style-type: none"> • Upper and lower front teeth do not come together when patient bites • Lipping or tongue thrusts out when talking 	THUMB/FINGER SUCKING	<ul style="list-style-type: none"> ☞ Inform caregiver that thumb/finger sucking is normal for infants but is inappropriate as the child gets older as it can cause speech and dental problems ☞ Teach recommendations on how to deal with oral habits ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries) <p>If child has trouble eating or speaking because of malocclusion: Refer to dental clinic</p>
<ul style="list-style-type: none"> • Abnormal consumption of non-food items such as hair, paper, feces, dirt, etc • Behavior lasts longer than a month and is NOT part of cultural or religious practice 	*PICA	<ul style="list-style-type: none"> ☞ Administer RUTF** if child is malnourished ☞ Inform caregiver that it is normal for children to explore things with their mouth but that behavior becomes inappropriate as the child gets older ☞ Teach recommendations on how to deal with oral habits ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries) <p>If child is suspect for developmental disorder: Refer to medical clinic for evaluation</p>
<ul style="list-style-type: none"> • Dry, cracked lips • Red, irritated skin around the lips 	LIP SUCKING OR BITING	<ul style="list-style-type: none"> ☞ Advise caregiver that this is common habit in children but should decrease with age because the habit can affect the way the teeth grow ☞ Teach recommendations on how to deal with oral habits ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries)
<ul style="list-style-type: none"> • Open mouth and dry lips, teeth may not be touching in the front • Difficulty breathing through nose, may be congested • Dark circles under eyes, may be sneezing and sniffing • Snores when sleeping 	MOUTH BREATHING	<ul style="list-style-type: none"> ☞ Explain to parent that the cause of mouth breathing could be related to malocclusion, enlarged adenoids, allergies, or sleep disorder ☞ Instruct patient on breathing through the nose instead of the mouth ☞ If allergies are suspected: Have patient use nasal spray and recommend avoiding dust, animals, pollen, etc. ☞ Advise on oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries) <p>If malocclusion suspected: Refer to dental clinic for evaluation. If enlarged adenoids, or sleep disorder is suspected: Refer to medical clinic for evaluation</p>
<ul style="list-style-type: none"> • Nails or cuticles are irritated and bitten 	NAIL BITING	<ul style="list-style-type: none"> ☞ Teach recommendations on dealing with oral habits ☞ Advise about oral hygiene and nutrition ☞ Apply fluoride varnish every 6 months (for prevention of dental caries)

Severe Moderate Soft

*Eating disorder characterized by persistent and compulsive cravings for non-food items i.e. metal, coins, clay, coal, soil, feces, chalk, paper, soap, mucus, ash, gum, etc.

Practices must not be culturally or religiously sanctioned activities. Extreme behaviors are more common in children with autism and developmental disabilities.

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ORAL HYGIENE KEY MESSAGES

Dental Plaque



- ☞ Plaque is a layer of bacteria that forms on the teeth. It can develop on any surface of the teeth, especially along the gum line
- ☞ The bacteria produces acid which dissolves the enamel of a tooth and leads to dental decay
- ☞ If dental plaque accumulates and is not removed, it can harden and turn into calculus or tartar which is a risk factor for gum disease
- ☞ Poor oral hygiene make easy large amounts of plaque build-up
- ☞ if kids have braces, the bands/bonded brackets can create areas where food and plaque can stick more easily. This can also cause permanent white spots from demineralization

Fluoride Toothpaste



- ☞ Always use fluoride toothpaste
- ☞ Toothbrushing with fluoridated tooth paste helps make teeth stronger and protect against dental decay

Dental Floss



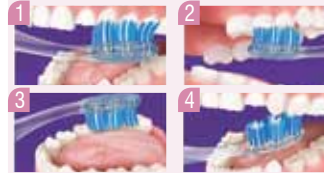
- ☞ Use dental floss at least once a day to scrape off dental plaque in between teeth
- ☞ Always keep the pressure of the dental floss against the sides of your teeth, never pull into the gum tissue or you might cause injury
- ☞ Floss teeth gently

Healthy diet and Teeth



- ☞ Avoid sugary, starchy snacks or sugary drinks especially between meals. Prepare only health snacks and encourage water consumption
- ☞ Eat a balanced diet rich in vegetables, fruits, dairy products, meats and beans

Toothbrushing



1. Place a toothbrush beside your teeth at a 45-degree angle and gently brush teeth in an elliptical motion. Clean the outsider surfaces of the upper and lower teeth
 2. Clean the inner surfaces of the lower teeth
 3. Clean the chewing surfaces of the upper and lower teeth. Do not forget to brush the tongue
 4. Tooth brushing with fluoridated toothpaste help to make stronger teeth, protects teeth against dental decay
- ☞ Brush teeth with fluoride toothpaste for at least two minutes, twice a day

How to brush teeth with braces



1. Hold toothbrush at a straight angle and brush in a circular motion. Clean the outside of the upper and lower teeth. Don't forget to brush the brackets
 2. Clean the inner surfaces of the upper and lower teeth
 3. Clean the chewing surfaces of the upper and lower teeth. Do not forget to brush the tongue
 4. Brush teeth with fluoride toothpaste three times a day
- ☞ Brush after each meal and snack
 - ☞ Brush teeth slowly, do not rush

Toothbrush



- ☞ Use a soft or regular toothbrush
- ☞ Use a regular or orthodontic brush for braces
- ☞ Change the toothbrush every three months or when bristles begin to wear

Fluoride Mouth Rinse



- ☞ Use a fluoride mouth rinse to strengthen enamel, to protect against decay, and to repair white spots or small cavities by re-mineralizing the enamel

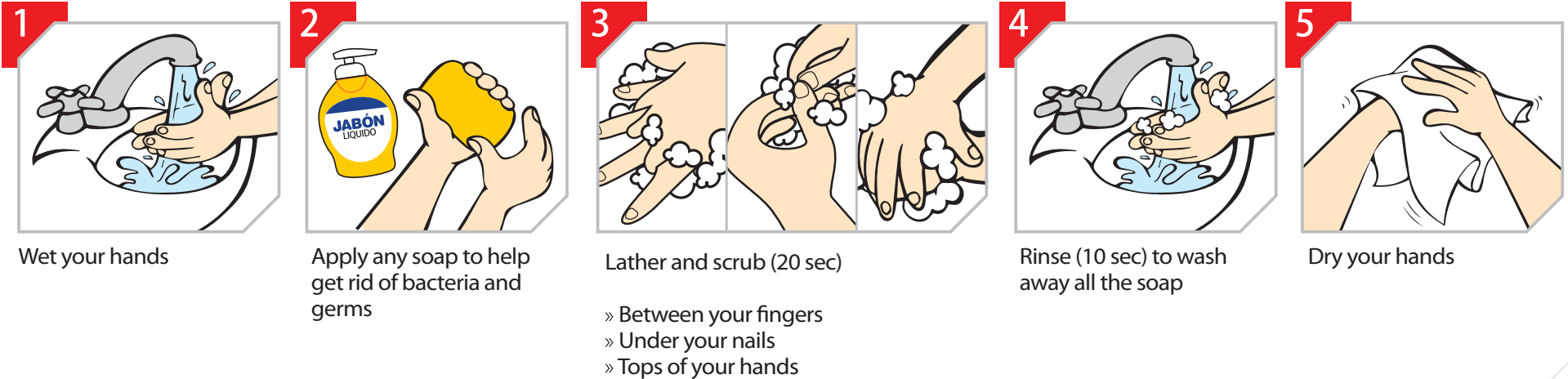
Dentist Visits



- ☞ Visit a dentist regularly for check-ups

WASHING YOUR HANDS WITH SOAP IS THE BEST WAY TO STAY HEALTHY

HAND WASHING



Washing hands with any type of soap and clean water is the best way to stop the spread of germs and disease

WHEN SHOULD YOU WASH YOUR HANDS?

BEFORE

- » Before, during, and after preparing food
- » Before eating food
- » Before and after caring for someone who is sick
- » Before and after treating a cut or wound

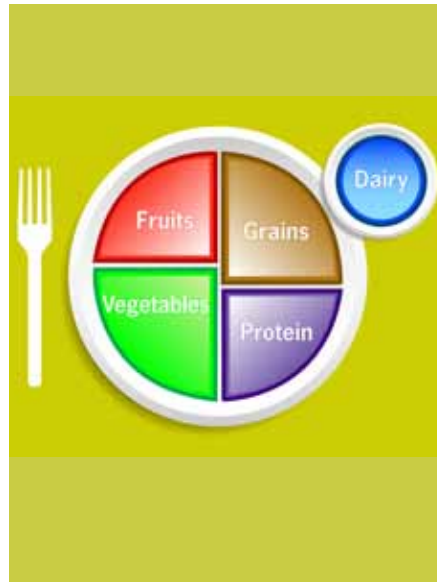
AFTER

- » After using the toilet
- » After changing diapers
- » After cleaning a child who has used the toilet
- » After blowing your nose, or sneezing
- » After touching an animal
- » After touching animal feed or animal waste
- » After touching garbage

HEALTHY EATING RECOMMENDATIONS

Healthy diet and lifestyle

A healthy diet and lifestyle includes eating right and exercising. Children and teenagers should eat a balanced diet that includes cereals and grains, vegetables, fruits, dairy, and meats and beans. They should also get plenty of daily physical activity



BENEFITS FOR ORAL HEALTH

The establishment of a healthy diet and lifestyle from an early age is the foundation of lifelong general health and can prevent oral diseases and systemic diseases

Tips

- Avoid foods high in sugar and starch (candy, potato chips, etc)
- Avoid sticky foods (raisins, taffy)
- Avoid soft drinks, juice, energy drinks or any other type of sugary drink
- Prepare healthy snacks that are protective against dental caries (cheese, milk, vegetables)
- Avoid oversized portions of food and overeating
- Use safe practices when playing sports (mouthguard, helmet)



HOW?

- Healthy diet and lifestyle leads to an enhanced immune system. An enhanced immune system means less sickness and disease
- Good health means less absence from school and improved intellectual capacity
- Healthy habits lead to increased physical growth and developmental benefits
- Good health means reduced risk of chronic diseases such as diabetes, obesity, and cardiovascular disease
- Good health leads to increased athletic performance and physical appearance

ORAL HEALTH

RECOMMENDATIONS



REGULAR DENTAL VISITS FOR CHILD AND FAMILY MEMBERS



HEALTHY DIET



BRUSH WITH FLUORIDE TOOTHPASTE AT LEAST 2 TIMES DAILY



USE FLUORIDE MOUTH RINSE EVERY DAY



USE DENTAL FLOSS EVERY DAY



AVOID SOFT DRINKS, ARTIFICIAL JUICES, ENERGY DRINKS



AVOID SWEETS OR CANDIES



AVOID JUNK FOODS



AVOID TOBACCO PRODUCTS



NO ALCOHOL

IMPORTANT:

THE LAST THING THAT TOUCHES YOUR CHILD'S TEETH BEFORE BEDTIME IS THE TOOTHBRUSH WITH FLUORIDE TOOTHPASTE.

FLUORIDE VARNISH (FV) APPLICATION

Fluoride varnish is a highly concentrated form of topical fluoride used to prevent tooth decay.



READ

- FV must be applied every six months to be effective
- Do **NOT** use if child has an allergy to **pine nuts** or **colonophony/colonphonium**



APPLY

- Dry the teeth by wiping them with clean, dry cotton. The teeth must stay dry throughout the FV application
- Apply a thin layer of varnish on all surfaces of the teeth according to the manufacturer's directions. Do NOT apply on large cavities
- Don't worry about saliva getting on the teeth after the FV is applied. The varnish dries very quickly



ADVISE

- FV must stay on teeth overnight to be effective. The teeth may appear to have a yellow, sticky surface
- Have the child avoid hard, sticky, or crunchy foods for the rest of the day
- Do not let the child brush, floss, or use mouth rinse until the next morning. The sticky feeling and yellow color will disappear at this time

PAIN MEDICATIONS

MEDICATION	INDICATIONS	DOSAGE	FREQUENCY	COMMENT
IBUPROFEN	Pain, fever, swelling	4 - 10 mg/kg/dose OR 1.8 - 4.5 mg/lb/dose	Every 6 - 8 hours (Maximum: 4 doses/day)	Take with food
ACETAMINOFEN AND PARACETAMOL	Pain, fever	10 - 15 mg/kg/dose OR 4.5 - 6.8 mg/lb/dose	Every 4 - 6 hours (Maximum: 2.6 grams/day)	

Notes:

- 1 kg = 2.2 lbs
- Dosages are based on United States standards. Contact your country's Ministry of Health to find out local regulations
- Pain medications are not for long term use

ORAL ANTIBIOTICS

Antibiotic dosages are per day. The dosage must be divided up into equal parts and administered. Maximum dosage cannot exceed adult dose.

MEDICATION	INDICATIONS	DOSAGE		FREQUENCY	COMMENT
amoxicillin	Orofacial (mouth/face) infection	Mild-to-moderate infection	20 mg/kg/day OR 9 mg/lb/day	Divided doses every 8 hours X 7 days	May be taken with food
			25 mg/kg/day OR 11.4 mg/lb/day	Divided doses every 12 hours X 7 days	
		Severe infection	40 mg/kg/day OR 18.2 mg/lb/day	Divided doses every 8 hours X 7 days	
			45 mg/kg/day OR 20.5 mg/lb/day	Divided doses every 12 hours X 7 days	
clindamycin	Take if allergic to amoxicillin	10-20 mg/kg/day in divided doses OR 4.5-9 mg/lb/day in divided doses	Divided doses every 6-8 hours X 7 days	May be taken with food	
metronidazole	Anaerobic orofacial infection/abscess	15-35 mg/kg/day in divided doses OR 6.8-15.9 mg/lb/day in divided doses	Divided doses every 8 hours X 10 days	Take without food (If upset stomach occurs than take with food.)	
co-trimoxazole	Ear infection	8-12 mg/kg/day in divided doses OR 3.6-5.5 mg/lb/day in divided doses (Dosage based on Trimethoprim content.)	Divided doses every 12 hours X 10 days	Take with 8oz of water	

Notes:

- Dosages are for children over 3 months of age that are under 40 kg, or 88 lbs. (1 kg = 2.2 lbs)
- Dosages are based on United States standards. Contact your country's Ministry of Health to find out local regulations

ANTIFUNGAL MEDICATIONS

For Candidiasis or Oral Thrush



NYSTATIN DOSAGE

- Topical: Apply 2-3 times per day
- Oral, Suspension: 4-6 ml x 4 times a day
- The preparation should be retained in the mouth as long as possible before swallowing

GENTIAN VIOLET

- Using a cotton swab, apply only the effected area every 1-2 times daily for 7 days
- Make sure the area is dry before using this medication
- Avoid swallowing any of the medicine

ANTIVIRAL MEDICATIONS

To improve healing time and reduce symptoms of cold sores. Begin treatment when lesions first appear or as early as possible



TOPICAL APPLICATION

ACYCLOVIR 5% CREAM

Every 3 hours (6 times per day) x 7 days

PENCICLOVIR 1% CREAM

Every 2 hours x 4 days

VALACYCLOVIR CREAM

Every 3 hours (6 times per day) x 7 days

Contact your country's Ministry of Health to find out local regulations for antifungal and antiviral medications.

RECOMMENDATIONS FOR PARENTS ON DEALING WITH ORAL HABITS

A bad habit is a behavior that is repeated and causes harm. Your child might not know he/she is performing the behavior. Don't use harmful punishment on the child. Instead, try to help the child stop performing the bad habit with kindness, education, distraction, and praise

Be kind

Don't get mad and punish the child. The punishment can be more harmful than the habit

Talk to child

Explain to child that bad oral habits can introduce germs inside the mouth and cause problems with their teeth

Tell the child that "big" kids don't perform these behaviors

A child might be performing a behavior because of stress. Talk to the child and find out what might be bothering him/her. Comfort the child and encourage him/her to talk to you when feeling sad, stressed, anxious, or nervous

Distract the child

Encourage the child to perform other behaviors like sing a song, read a book, breathe deeply, or relaxing exercises

Praise the child

When the child is NOT performing the unwanted habit say positive things like "Your fingernails look so nice since you stopped biting them. I'm so proud of you!"

Don't assume

Don't think the behavior is caused by a curse or evil spirit and pursue harmful or painful treatments

Ignore the habit

Sometimes giving the child attention, even if it is negative attention, will cause the child to continue the behavior

Be patient

Often times a habit will stop as the child gets older

Seek medical attention

Sometimes habits are a sign of an illness such as allergies, malnutrition, hyperactivity, anemia, intestinal parasites, epilepsy, pain, anxiety, and neurological conditions. The child might need to be evaluated by a medical professional

THE IMPORTANCE OF BABY TEETH

Baby teeth are essential for proper nutrition and chewing, speech, appearance and self-esteem, development of the oral cavity, and eruption of adult teeth.



Speaking

Teeth assist in the formation of words and proper speech

In many cases, the importance of baby teeth (also called primary or milk teeth) is overlooked by parents and caregivers. Baby teeth start to erupt around 6 months of age and last until around 12 years of age. They serve many functions for a healthy child and should be cared for properly.



Smiling and building self esteem

The appearance of healthy teeth and smile contributes to high self-esteem and positive relationships with others



Eating

Teeth are needed for chewing and eating all the foods in a healthy diet



Developing the oral cavity

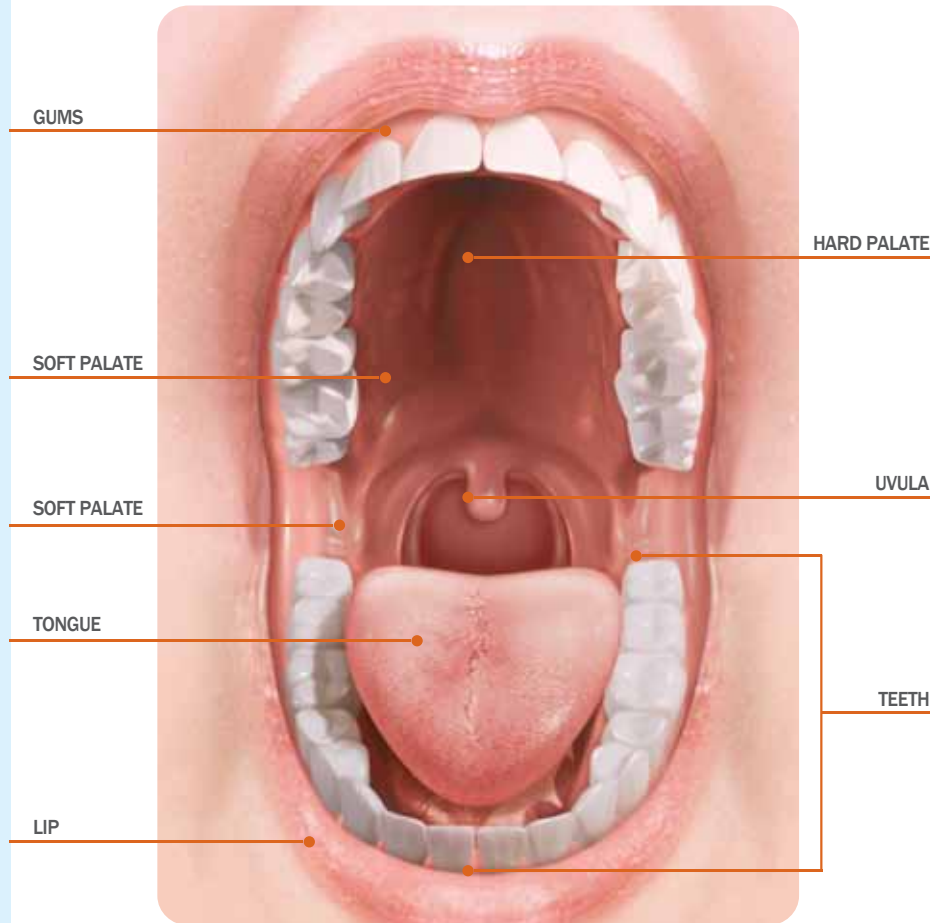
Chewing and speaking provides exercise to the muscles and bones of the oral cavity



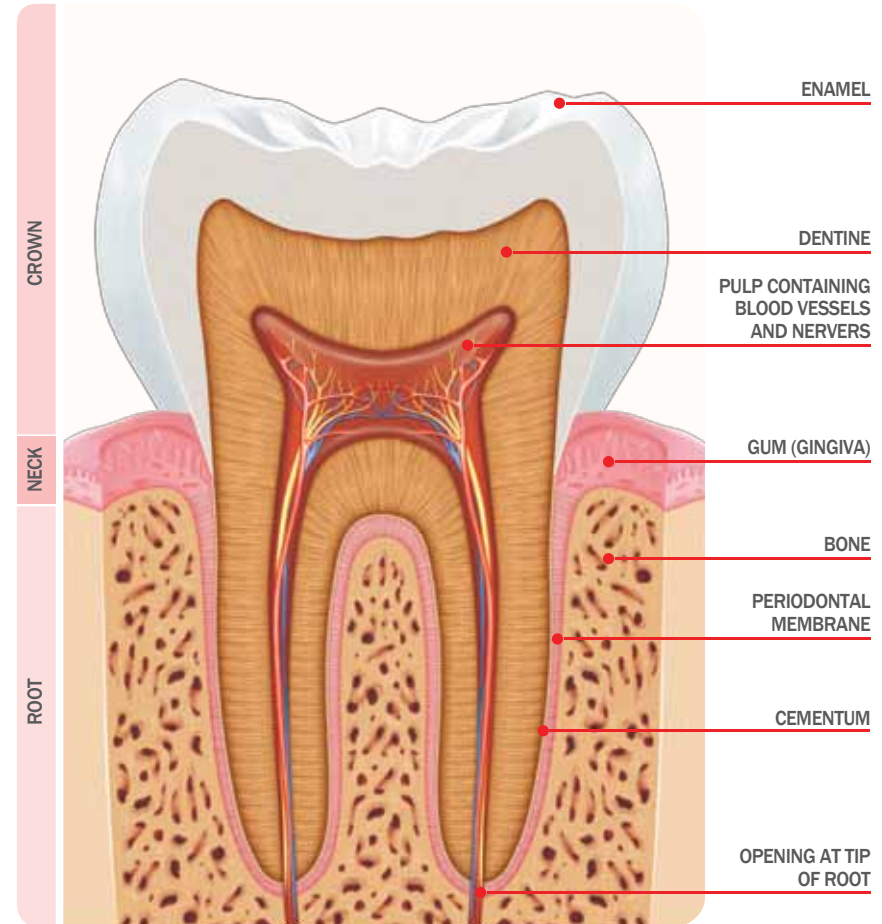
Guiding the eruption of adult teeth

Baby teeth provide a path for erupting adult teeth to follow

ANATOMY OF THE MOUTH



ANATOMY OF A TOOTH

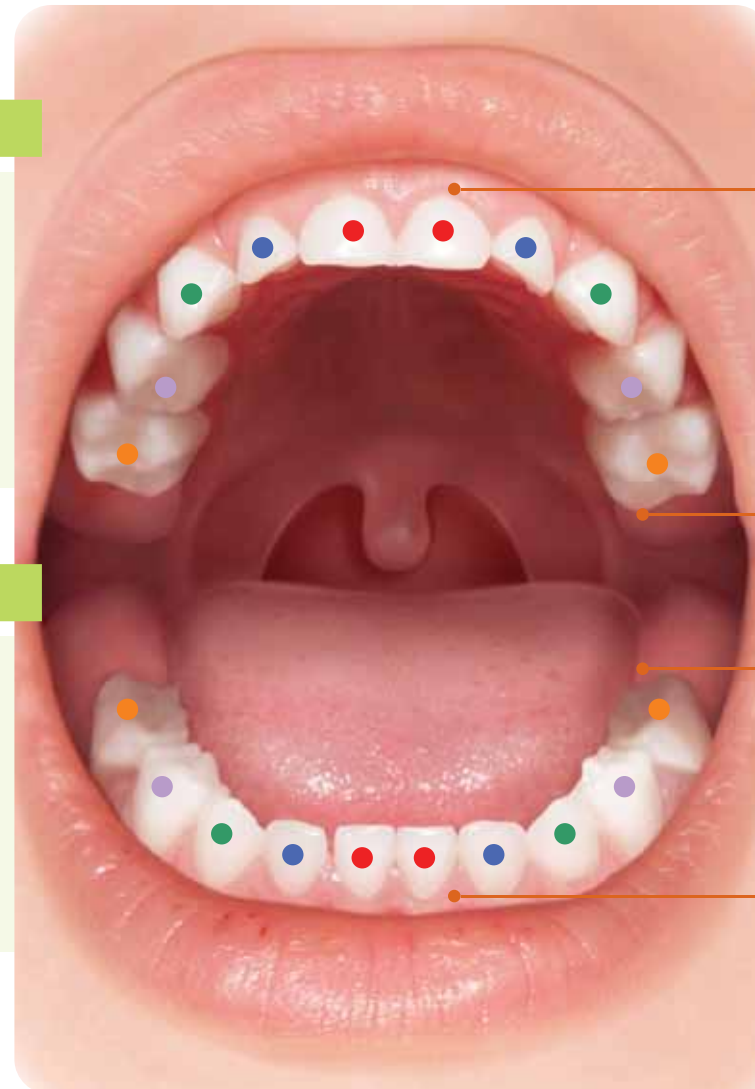


ERUPTION SCHEDULE OF BABY TEETH

Baby teeth have a schedule of eruption and shedding. Permanent teeth will take the place of baby teeth after they have been shed. Do not confuse a shedding, or loose, baby tooth for injured tooth. However, if a baby tooth become loose immediately after an injury then it should be treated as an injured tooth. Refer to the Trauma Chart for treatment.

Upper Teeth	Erupt/Grow	Shed/Lose
● Central incisor	8-12 months	6-7 years
● Lateral incisor	9-13 months	7-8 years
● Canine (cuspid)	16-22 months	10-12 years
● First molar	13-19 months	9-11 years
● Second molar	25-33 months	10-12 years

Lower Teeth	Erupt/Grow	Shed/Lose
● Central incisor	6-10 months	6-7 years
● Lateral incisor	10-16 months	7-8 years
● Canine (cuspid)	17-23 months	9-12 years
● First molar	14-18 months	9-11 years
● Second molar	23-31 months	10-12 years



Upper

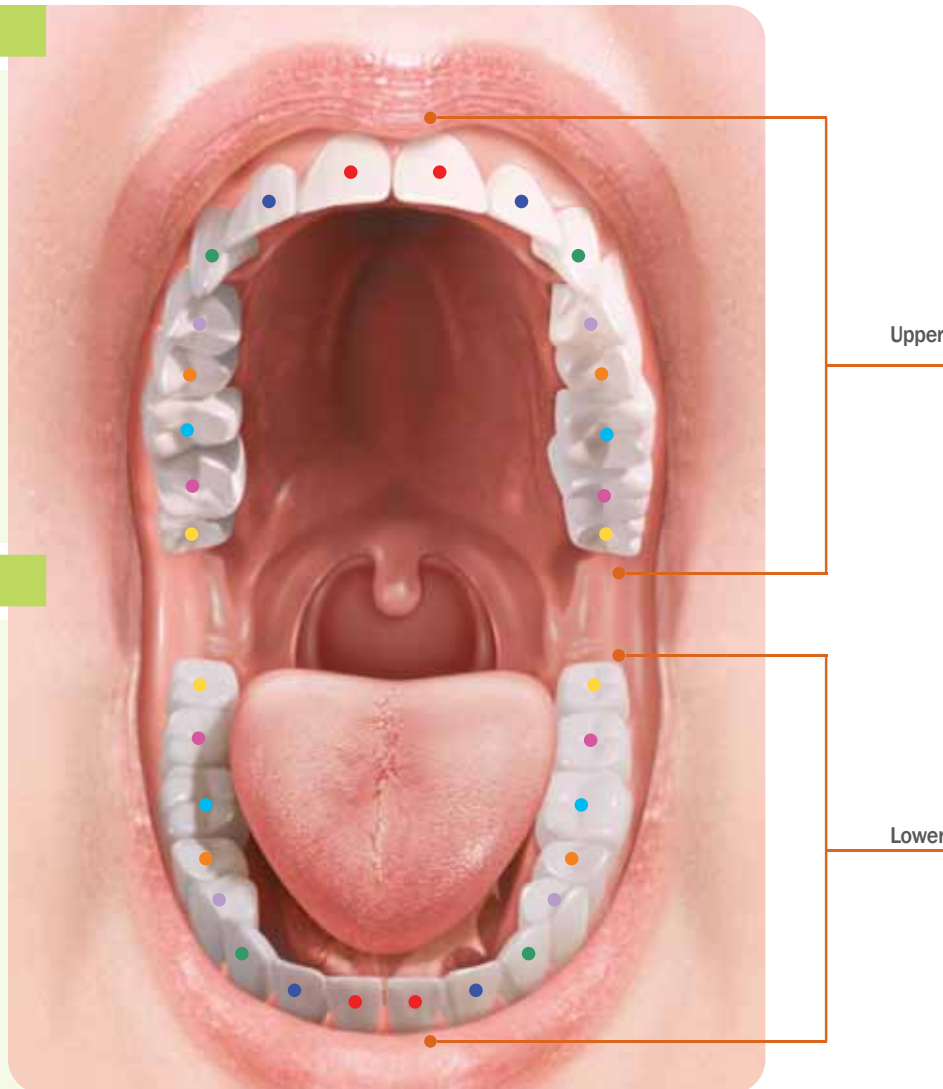
Lower

ERUPTION SCHEDULE OF ADULT TEETH

The first adult (permanent) tooth erupts around age 6, and the last erupts around age 12. These teeth will not be lost, thus caring for them is very important. Healthy permanent teeth aid in proper chewing and nutrition, speech, appearance and self esteem.

Upper Teeth	Erupt/Grow
• Central incisor	7-8 Years
• Lateral incisor	8-9 Years
• Canine (cuspid)	11-12 Years
• First premolar	10-11 Years
• Second premolar	10-12 Years
• First molar	6-7 Years
• Second molar	12-13 Years
• Third molar	17-21 Years

Lower Teeth	Erupt/Grow
• Central incisor	6-7 Years
• Lateral incisor	7-8 Years
• Canine (cuspid)	9-10 Years
• First premolar	10-12 Years
• Second premolar	11-12 Years
• First molar	6-7 Years
• Second molar	11-13 Years
• Third molar	17-21 Years



PICTURE CHART TO DISTINGUISH BETWEEN SIMILAR ORAL CONDITIONS



Herpes Simplex Virus

Herpes Simplex Virus infection (also called cold sores or fever blisters) causes painful blisters on the lips and outer edges of mouth. Blisters can be spread easily from person to person. They can also be spread to the genitalia. Do not share food, eating utensils, cups, or lipsticks. Do not kiss or perform oral sex



Canker Sore

A canker sore is a painful ulcer inside the mouth, usually located on the cheek. The cause of canker sores is unknown but they usually heal within 7-10 days



Amelogenesis Imperfecta

Amelogenesis Imperfecta is a disorder of tooth enamel. It can lead to discolored teeth, abnormal anatomy, weakened enamel, and easy breakage



Bruxism

Bruxism refers to the grinding of teeth, which is usually caused by stress. This usually occurs at night when patient is sleeping. It can lead to jaw pain, morning headaches, and worn down enamel



Strep Throat

Strep throat is a bacterial infection of the tonsils that causes red, swollen tonsils with white patches



Oral Candidiasis

Oral Candidiasis (also called thrush) is a yeast infection inside the mouth. The white patches can easily be wiped off to reveal a red area



Gingivitis

Gingivitis is a swelling of the gum tissue. The gums might appear red and puffy, and bleed easily when brushed. This condition can lead to periodontitis



Periodontitis

Periodontitis is a gum disease caused by bacteria. It causes loss of gum tissue, destruction of bone surrounding teeth, loose teeth and eventually tooth loss. The risk factors for periodontal disease include tobacco, alcohol, and drug use



Dental Caries

Dental caries (also called a cavity or tooth decay) is caused by bacteria. The bacteria release acid that demineralizes the enamel of a tooth and leads to decay. Good oral hygiene is important for removing these bacteria



Dental Abscess

A dental abscess (also called tooth infection) is caused by a bacterial infection at the root of a tooth. Bacteria and pus build up below the tooth causing an abscess to form on the gum



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