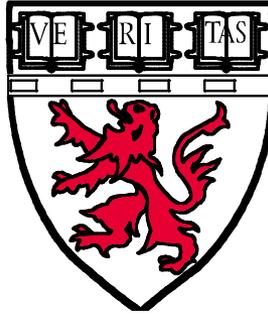


CHOMP





CHOMP

Congenital Heart Oral Health Maximization Project

Disty Pearson PA-C
Boston Adult Congenital Heart Service
ACHA - Orlando 2016

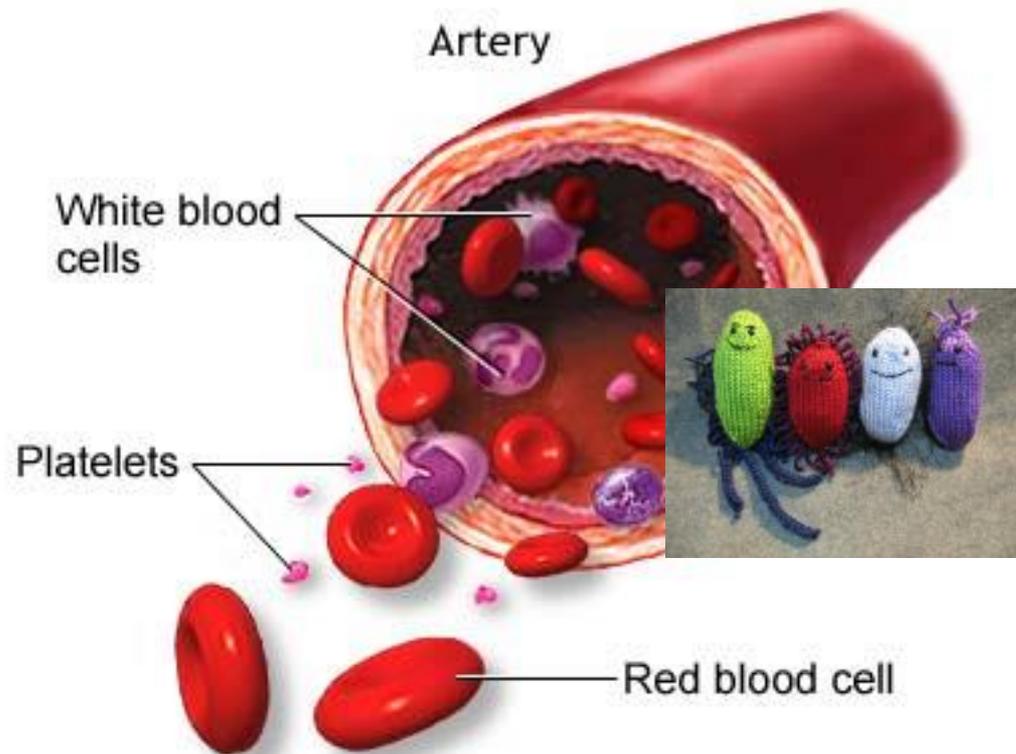
Endocarditis

- Infection of the inner lining of the heart

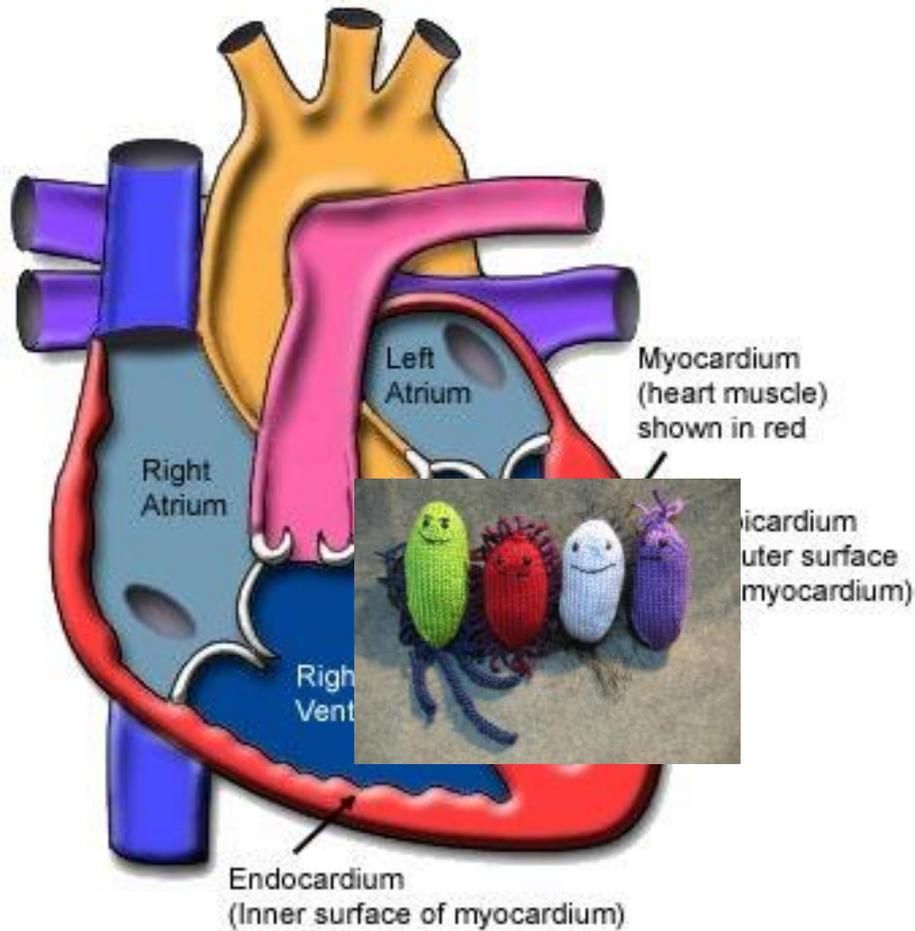
1st: Bacteria Gets Into Blood Stream



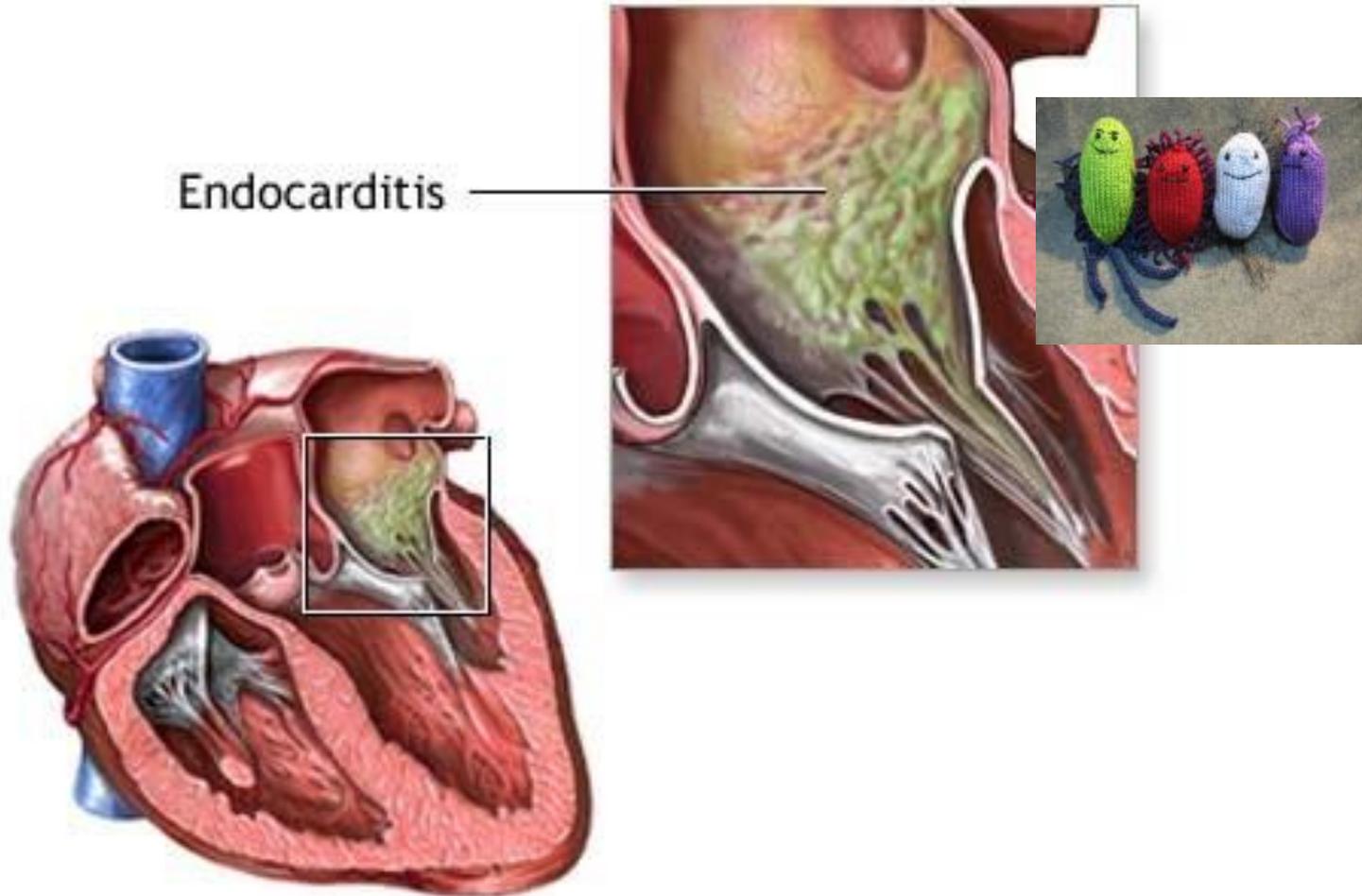
2nd: Bacteria travels in the blood through the body



3rd: Bacteria finds a place to settle



4th: Bacteria creates an infection - endocarditis



Sub Acute Bacterial Endocarditis

Symptoms

- Fevers and chills
- Poor appetite or unexplained weight loss
- Fatigue
- Aching joints and muscles
- Night sweats
- Shortness of breath

What to do?

- Get Care:
 - Call your caregivers or go to emergency room
 - Explain you have a heart defect/have had surgery....
 - Get blood cultures **BEFORE** they treat you
 - Treatment:
 - Antibiotics
 - First “broad spectrum”
 - Then antibiotics specific for the bacteria
 - Possibly surgery

Prevention

Have the healthiest mouth you can!





Healthy Mouth

- Thin surface of mucosal epithelium prevents potentially pathogenic bacteria from entering the bloodstream and lymphatic system.
- Teeth and gums are bathed in saliva
 - Antimicrobial, cleansing activity controlling plaque & pH remineralization of tooth enamel using calcium and phosphates.

Transient Bacteremia



- 10-100% tooth extraction
- 36-88% periodontal surgery
- Up to 40% teeth cleaning
- 20-68% tooth brushing and flossing
- 20-40% wooden tooth pick use
- Chewing food 7-51%

American Heart Association **New** Guidelines

- Who: the AHA +
 - ADA Dental Association
 - Infectious Diseases Society of America
 - American Academy of Pediatrics
 - Additionally members of Rheumatic Fever, Endocarditis and Kawasaki Disease Committee of the AHA Council on cardiovascular Disease in the Young and national / international experts on infective endocarditis reviewed data on prevention of infective endocarditis.
- Approved 3/7/2007

Why Change?

1. Endocarditis more likely from **frequent exposure** to bacteria associated with **daily activities** than by procedures
2. Antibiotic prophylaxis may prevent very very small # cases
3. Risk of antibiotic-associated adverse events is worse than the benefit
4. **MAINTENANCE OF OPTIMAL ORAL HEALTH AND HYGIENE** may reduce the incidence of bacteremia from daily activities and is **MORE IMPORTANT** than antibiotics before a dental procedure to reduce the risk of endocarditis

Recommendations for Dental Prophylaxis

- In general: Cardiac conditions associated with the highest risk of adverse outcome from endocarditis
 - Prosthetic cardiac valve or prosthetic material used for cardiac valve repair
 - Previous endocarditis
 - Cardiac transplantation recipients who develop cardiac valvulopathy
 - Unrepaired cyanotic CHD, including palliative shunts and conduits

Recommendations for Dental Prophylaxis

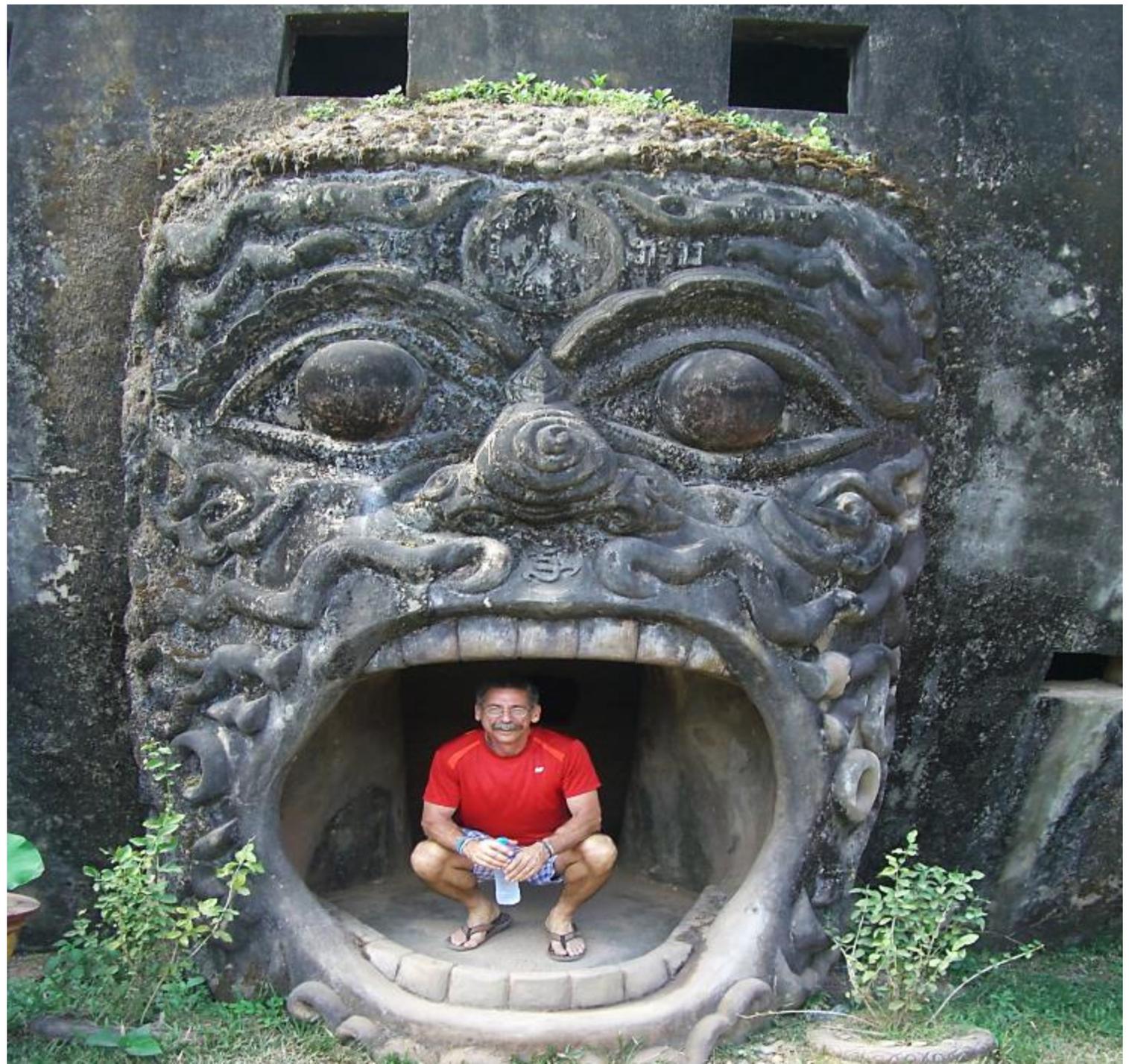
- Repaired CHD with residual defects inhibiting endothelialization
 - At site of prosthetic patch/device
 - Adjacent prosthetic patch/device
- Completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention during the first 6 months after the procedure
 - Endothelialization of prosthetic material occurs within 6 months after the procedure

If I Need Prophylaxis, When ?

- All dental procedures that involve manipulation of gingival tissue or the peri-apical (top) region of teeth or perforation of the oral mucosa.
- When I don't need it: dental X-rays, loosening of "baby teeth", bleeding from trauma to the lips or oral mucosa.

If Prophylaxis, What?

- Discuss with your cardiology team!!!!
- General recommendations:
 - Pills: Amoxicillin: 2 gms 1 hour before procedure
 - Allergy to Penicillin: Cephalexin, clindamycin, azithromycin/clarithromycin
 - IM or IV: Ampicillin, Cefazolin or ceftriaxone.
 - Allergy to Penicillin: Cefazolin, ceftriaxone or clindamycin



Healthy Body and Mouth



“the mouth reflects general health and well-being”

David Satcher MD, PhD

Why is Oral Health Important?

Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions.



Oral Health Problems

- Cavities
- Gum diseases
 - Gingivitis (red, swollen gums, bleed easily) periodontal disease
- Dry mouth (Xerostomia: not enough saliva/spit)
 - Medications (diuretics, blood pressure medicines)
 - Hormones, nutritional deficiencies, anxiety, depression, diabetes, blocked salivary gland
- Oral cancer
- Canker sores, cold sores

Importance of Oral Health

- Employed adults lose > 164 million hours of work/year with oral health problems or dental visits.
- Customer service industry employees lose 2 to 4 times more work hours than executives or professional workers
- 1 out of 20 middle-aged adults missing all teeth
- Tooth pain: interferes with
 - eating, swallowing and talking.
- Almost 1 out of 4 adults reported some form of facial pain the past 6 months



Easy Steps for Healthy Teeth

- Brush your teeth twice a day
 - Best after meals
 - Gently brush all sides of your teeth with a soft-bristled brush
 - Brush along the gum line
 - Round and short back-and-forth strokes
 - Lightly brush your tongue



Easy Steps for Healthy Teeth

- Floss your teeth at least once a day (have your dental hygienist show you the best way to floss)
- “Change your tooth brush every 3 months”



Easy Steps for Healthy Teeth

- Regular dental check ups twice a year (or per your dentist's advice)
- See your dentist immediately if:
 - Your gums bleed often
 - Red or white patches on your gums, tongue, floor of mouth
 - Mouth/jaw pain
 - Sores that do not heal
 - Problems swallowing or chewing



Easy Steps for Healthy Teeth

- Healthy lifestyle affects your oral health
 - Healthy meals, limit soda
 - even diet soda can erode tooth enamel
 - Avoid snacking on sugary or starchy foods between meals
 - Fiber-rich fruits and vegetable stimulate saliva – remineralization of tooth surface
- Don't use tobacco
 - Any kind: smoke or smokeless – chewing tobacco
 - Gum disease, oral and throat cancer, oral fungal infections, stains teeth, bad breath
- Limit alcohol
 - Oral and throat cancer

Oral Health and Heart Health

- Poor oral health (severe gum disease) is associated with the development of heart disease. (Inflammation)
- Dedicate 5 minutes a day to your heart health.



Mindfully Brushing Your Teeth

- If you brush your teeth mindfully you can also be “brushing your brain” it gives your brain a chance to rest and “sets a peaceful tone for the day ahead or the night ahead.”
 - *Apply the toothpaste to your toothbrush.*
 - *Begin to brush. Breathe through your nose, slowly and deliberately.*
 - *Relax your neck and jaw.*
 - *Loosen your grip on the toothbrush. Feel the bristles moving over your teeth and the gums.*
 - *Taste the toothpaste.*
 - *As you rinse, breathe deeply through your nose. Notice your clean teeth.*
 - *Feel gratitude for your teeth and all that they allow you to do — chewing, smiling, speaking.*

Dr. Fern White. Dentist in Australia

CHOMP

Congenital Heart Oral Health Maximization Project



Funded by the National Interprofessional Initiative on Oral Health
(NIIOH)

The content is solely the responsibility of the authors and does not necessarily
represent the official view of the NIIOH



Significant Findings

The First Cohort

- Lack of dental insurance was associated with recognition of pertinent findings on oral health exam ($p=0.02$)
- Lower levels of education and less than daily flossing were associated with receiving a referral for specialty dental care ($p=0.10$, $p=0.04$ respectively)
- **COME SEE US IN THE RESEARCH ROOM**

Why Brush and Floss?

Brushing and flossing every day helps keep your teeth and gums healthy. Having clean teeth also makes you look and feel better. Your breath is fresher. Your smile is brighter. And your teeth feel smooth.

Fighting Plaque

Many kinds of bacteria live in the mouth. They collect on the teeth, gums and tongue. Bacteria quickly form a sticky film called plaque. Plaque is the major cause of tooth decay and gum disease. Plaque is always forming and needs to be removed every day. Brushing removes plaque from the tooth surfaces and around the gumline. Flossing breaks up the plaque between the teeth and under gums.



Plaque collects under the gums and in the spaces between teeth.



Brushing removes plaque from tooth surfaces and around gums.

Flossing breaks up plaque between teeth and under gums.

How to Brush

Proper brushing should take about 2 to 3 minutes. Use a soft brush and a fluoride toothpaste. Start at one place and work around your mouth. Brush each tooth as shown below.

1

Hold the brush at a 45° angle at the gumline. Gently brush using a circular motion. Don't scrub or use a lot of pressure.



2

Brush the inner surfaces of the back teeth using the same circular motion.



3

Turn the brush and use the tip to clean the inner surfaces of the upper and lower front teeth.



4

Clean the chewing surfaces using a scrubbing motion. Brush your tongue then rinse well.



How to Floss

Floss at least once a day to remove plaque between the teeth and below the gums. Start at one place and work all the way around your mouth. Floss between each tooth as shown below.

1

Wrap 18 inches of floss around your middle fingers. Secure it with your index fingers and thumbs.



2

Slide the floss between your teeth. Wrap it around one side of the tooth, forming a C-shape.



3

Gently work the floss up and down, going below the gumline. Then go back to step 2 and do the other side of the tooth.



NOTE: If you have a bridge or wear braces, use a floss threader to get the floss under the bridge or the wires.



© 2002-2012 Evonco Specialty, 780 Township Line Road, Liberty, PA 15001. All rights reserved.

Name: _____

Date of Visit: _____

The pictures checked are the areas you should focus on between today and your next visit.



Schedule a visit with your dentist



Limit soda, Gatorade, energy drinks
 Diet soda is a better option



Limit candy & junk food



Limit sugar added to food and drinks



No tobacco products



Healthy snacks such as fruit, carrot sticks, yogurt, low fat cheese, pretzels, whole grain crackers



Drink fluoridated water



Chew xylitol/sugar free gum



Brush morning and before bed with at least a pea-size amount of fluoride toothpaste



Daily flossing with floss string or pick



Educational Materials Provided Brushes/Paste/Floss



Visual condition of teeth

- Unable to visualize teeth
- No teeth present
- No obvious caries/decay present
- Early signs of caries/decay (e.g. white/brown spots)
- Frank decay present
- Gum disease (Gingivitis, Periodontal disease)

Clinician's Comments:

