

# Dental Health Ambassador

## DHA TRAINING

# DENTAL HEALTH AMBASSADORS!



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# Our Mission Statement

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- “The Dental Health Ambassadors program is the educational outreach component of the UCSD Pre-Dental Society. Members are trained and certified as Dental Health Ambassadors with the help of the Share-the-Care Dental Initiative of San Diego County to raise awareness for the importance of oral health. DHA focuses on preventing oral decay and diseases by providing the surrounding community, particularly children, with simple techniques and information to maintain good oral health. Through this program, we hope to instill in our community that oral health is valuable and very much a significant aspect of one's overall well-being.”



# Events

- Elementary Schools
- Health Fairs
- Family/ Community Resource Events
- Teenage/ Homeless Shelters
- Clinic
  
- Know your Audience!



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# Signing up to Volunteer

- ❑ Emails will be sent out for each event
- ❑ Sign-up through Google form
- ❑ Selection Factors
  - ❑ DHA Certification
  - ❑ Sign-up time
  - ❑ Meeting Attendance
  - ❑ Experience
  - ❑ General Involvement



# VOLUNTEER EXPECTATIONS

- Basic oral health knowledge
  - Be able to answer questions
  - Research on topic if necessary
- Preparation
  - Organize your presentation
  - Props
  - Visual aids
- Attire
  - Scrubs + Name tag

- Be vocal and professional
  - Make an impact!
- Interaction
  - Induce questions and conversations for discussion
- Promptness
  - Be on time!
- No-Show Fee!
- Smile!



# Communication

- Email or phone?
- Talk to us at meetings!
  - We'll be nice 😊
- READ EMAILS ALL THE WAY THROUGH!!
  - Pretty Please!



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# Workshop Topics

- Brushing and Flossing
- Anatomy and Disease
- Nutrition
- Experiment
- Dentistry
- Rotating Stations



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# Teenage-Adult Audiences

## □ Storefront Teenage Shelter

### □ Additional Topics:

- Oral Cancer
- Tobacco
- Alcohol
- Drugs
- Oral Embellishments'
- College/Careers



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# “You can not be healthy without oral health.”

Surgeon General's Report on Oral Health May 2000

**And by practicing good oral hygiene habits it's possible to prevent tooth decay, gum disease and possibly some serious health issues....**



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# Poor dental health is related to our systemic health

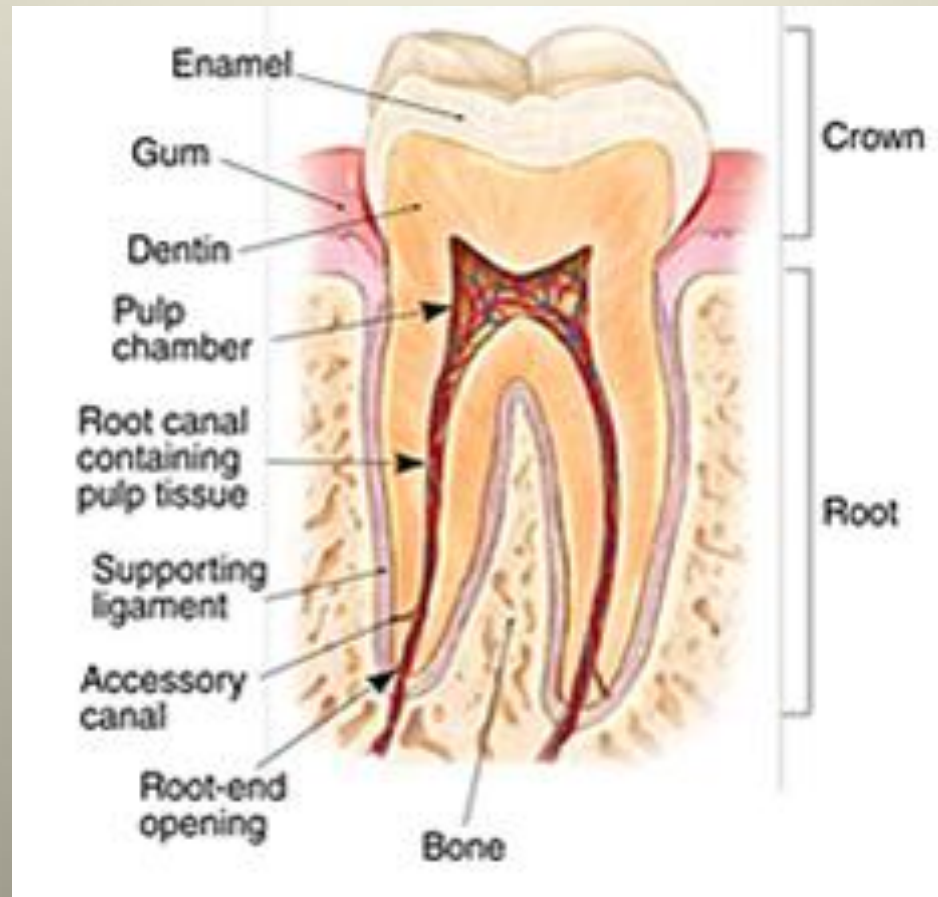


**Diabetes**  
**Cardiovascular Disease & Stroke**  
**Asthma**  
**Epilepsy**  
**Cancer**



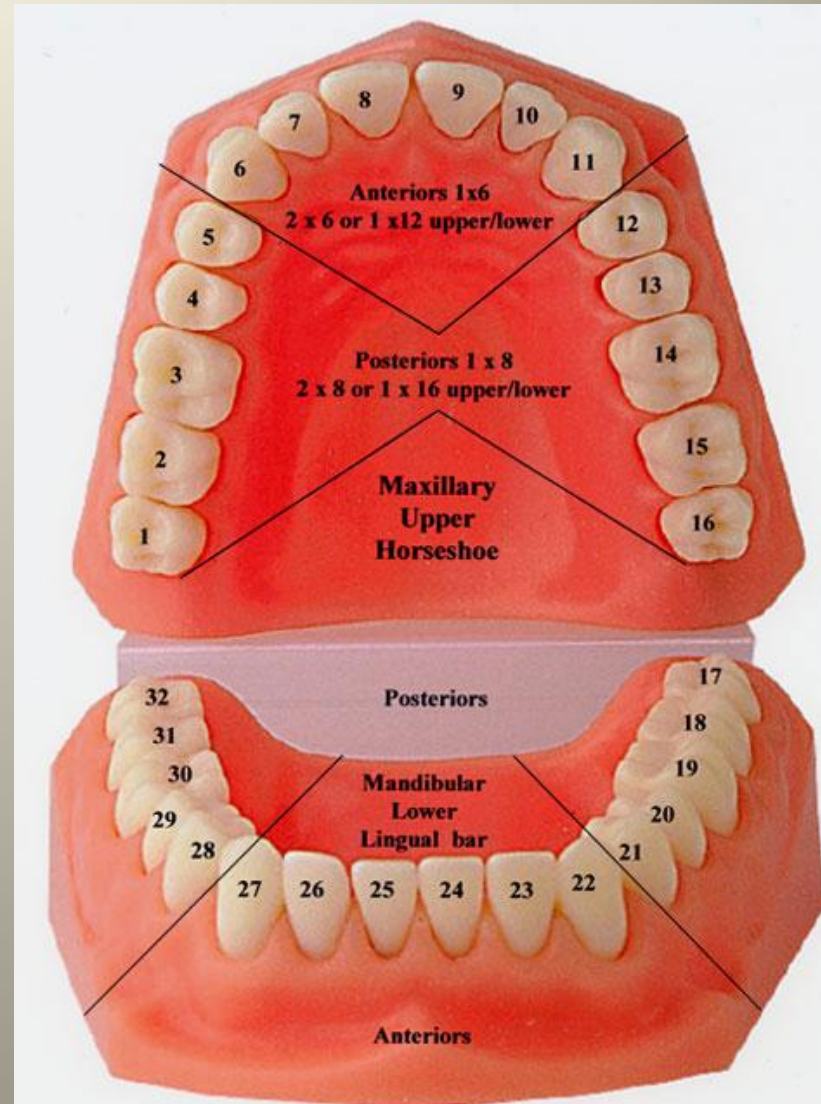


# Anatomy of a Tooth



# Tooth Numbering

- Adult Teeth:
  - 32 total
  - Maxillary & Mandibular
    - Right → left
  - Teeth to note:
    - 8, 9, 24, 25



# How to Correctly Brush Your Teeth



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# Toothbrush & Toothpaste

- Soft Bristled
- New toothbrush every 3 months
- Throw away toothbrush after an illness (ie. cold, flu, etc.)



- Fluoridated toothpaste
- Amount of toothpaste = toothbrush width
- Non-fluoridated for infants and small children that can't control swallowing





# How to Correctly Floss Your Teeth



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# Peanut Butter Flossing Experiment!



- Demonstrate to kids that flossing is essential along with brushing, to get food and plaque out from between their teeth
  - Gloved fingers=teeth
  - Peanut Butter=food/plaque
  - Tissue=brush/brushing
  - String=floss/flossing
- 
- Put peanut butter into gloved hand, wipe off as much as possible with tissue
  - Wiggle string between two fingers and demonstrate proper flossing techniques
  - Remove string and let kids examine it. Make sure they notice how much peanut butter “plaque” had been left behind with brushing and how flossing was needed to remove it

# Nutrition



[www.myplate.gov](http://www.myplate.gov)

# Nutrition Facts: Reading the Label

**RED BULL Energy Drink** • Improves performance, especially during times of increased stress or strain • Increases endurance • Increases concentration and improves reaction speed • Stimulates the metabolism

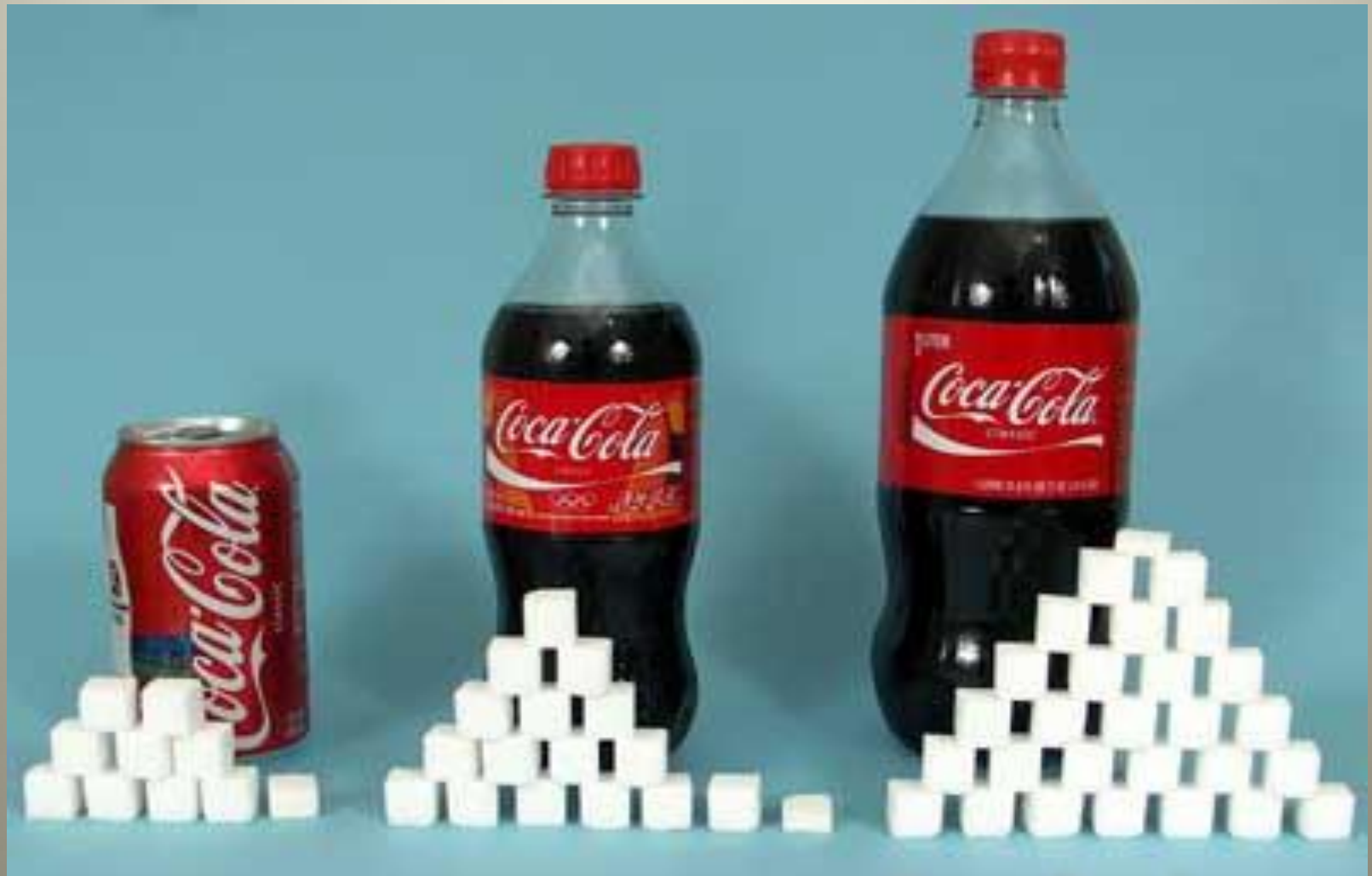
Nutrition Facts	
Serving Size 1 Can	
Amount Per Serving:	
Calories 110	
	% Daily Value*
Total Fat 0 g	0%
Sodium 200 mg	8%
Total Carb. 28 g	9%
Sugars 27 g	
Protein less than 1g	
Niacin 100%	Vitamin B6 250%
Vitamin B12 80%	Pantothenic Acid 50%
Not a significant source of sat. fat, cholest., fiber, vitamin A, vitamin C, calcium and iron.	
* Percent Daily Values are based on a 2,000 calorie diet.	

□ CARBONATED WATER, SUCROSE, GLUCOSE, SODIUM CITRATE TAURINE, GLUCURONOLACTONE, CAFFEINE, INSTOL, NIACINAMIDE, CALCIUM-PANTOTHENATE, PYRIDOXINE HCL, VITAMIN B12, ARTIFICIAL FLAVORS, COLORS.

## Sugar Conversion:

4 grams = 1 teaspoon





# Exercise



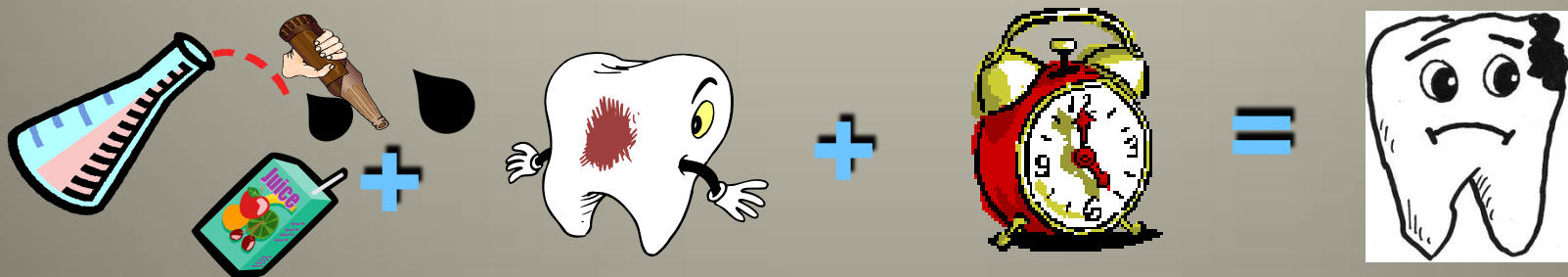
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# Cavity Equation

Bacteria + Sugar = Acid



Acid + Tooth + Time = Caries



What Can You Control?

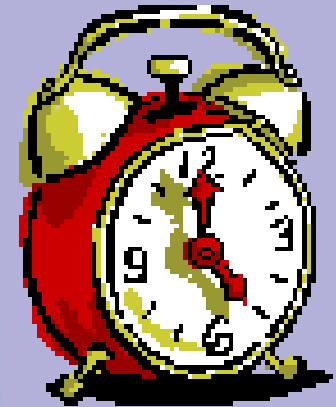
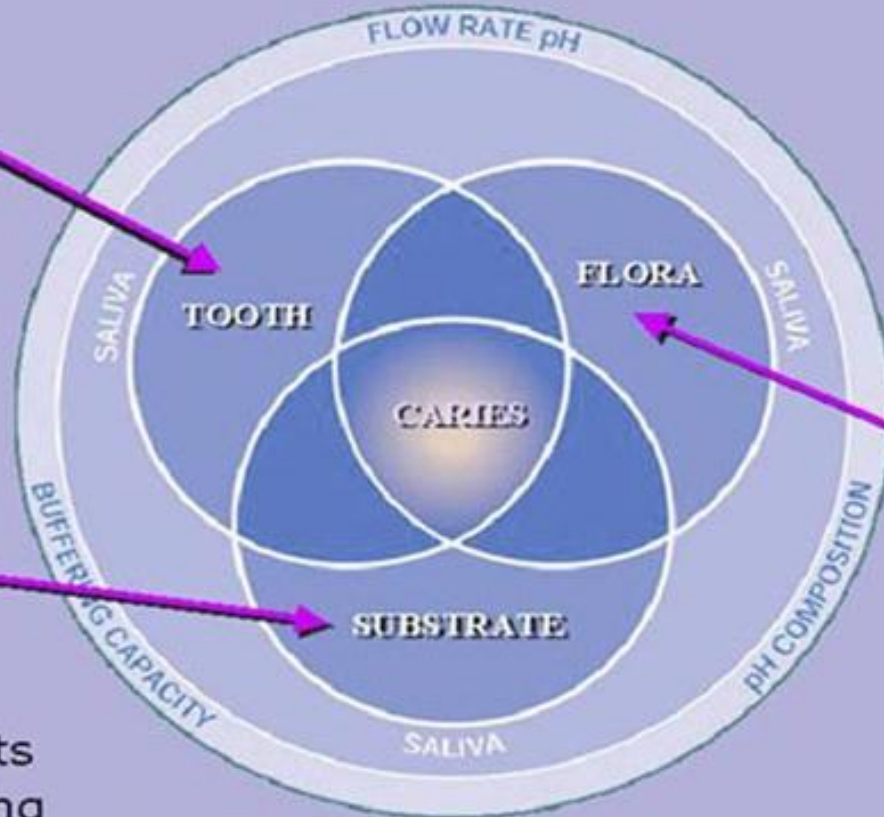
# Factors Necessary for Caries

## TOOTH

Age  
Fluorides  
Morphology  
Nutrition  
Trace Elements  
Carbonate Level

## SUBSTRATE

Oral Clearance  
Oral Hygiene  
Salivary Stimulants  
Frequency of Eating  
Carbohydrate (type, concentration)



## FLORA

*Strep, Mutans*  
(Substrate)  
Oral Hygiene  
Flouride in Plaque





# COOKIE EXPERIMENT!

Crunchy, healthy snacks can help clean teeth

- 1.) Eat cookie
- 2.) Drink water

- 1.) Eat cookie
- 2.) Eat apple, carrot, etc.

Teaches kids that eating a crunchy healthy snack after all their food will help clean their teeth the best, when they don't have a toothbrush!



# Frequency Counts more than Quantity



pH 10

pH  
Safe  
zone

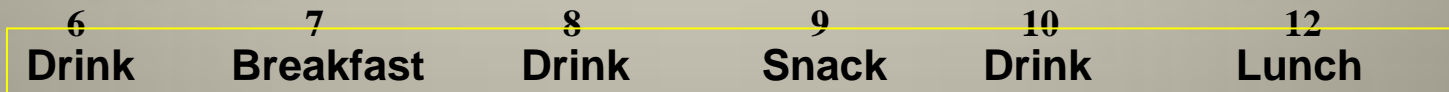
PURE WATER pH 7 (NEUTRAL)

NORMAL SALIVA

pH 6.0 and 7.4

Danger  
zone

pH 5.5



pH 1

**Acid stays in the mouth  
for 20 to 40 minutes**

Drain cleaner

Bleaches

Chalk

Ammonia

Milk of Magnesia

Baking soda

Sea water

Pure water

Milk

Coffee

Wine and Beer

Vinegar  
Orange juice

Carbonated  
beverages

Battery  
Acid

pH 14

pH 13

pH 12

pH 11

pH 10

pH 9

pH 8

**NEUTRAL**

pH 7

pH 6

pH 5

pH 4

pH 3

pH 2

pH 1

pH 5.5 enamel starts  
demineralization

**pH scale**

# Acid in Foods



Adipic  
Lactic

Citric  
Malic

Fumaric  
Tartaric

# Eggperiment!



- Teaches kids that brushing is essential to remove acidic coating from food/drinks off of teeth
- Egg was kept in acidic vinegar over-night and the result is...weak shell!
- This is what happens to your enamel if you consistently do not remove the acid from everyday usage

# Oral Health:



## Through the Ages

# When should we **FIRST** begin to take care of the **MOUTH?**



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Ideally before  
conception.  
Definitely during  
pregnancy...

**...and as  
soon as an  
infant is  
born...**



**before  
that first  
tooth  
erupts**



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# Pregnancy



- **Gingivitis**
- **Periodontal disease**
- **Dental caries**
- **Premature birth/low birth weight**





# Dental visits are safe:

- Any time
- For the comfort of the mother-to-be and the fetus:
  - Second trimester
  - Third trimester-first half
  - First trimester

**By NOT going to the dentist, a pregnant woman could suffer dental infections and may cause harm to the fetus.**

# Primary Causes

## Feeding Habits

- Nursing
- Bottle feeding
- Sippy cups



# Infants and Toddlers



Caries is a bacterial, transmissible, and contagious disease



Is influenced by dietary preferences & poor hygiene habits



Preventable



Reversible at an early stage

**Bacteria can be transferred from mother/primary caregiver to child**

- *hand-to-mouth*
- *sharing food and utensils*
- *“cleaning” pacifiers*
- *pre-chewing food*
- *everyday life*



# Childhood Caries

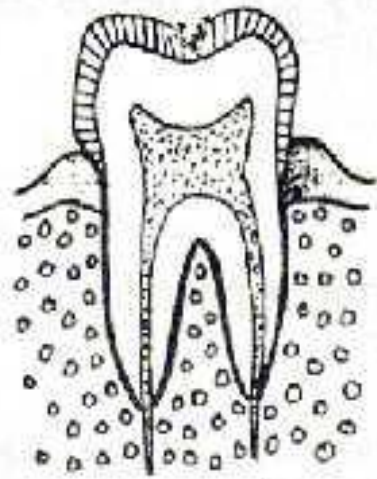
- The most common chronic disease
- Can develop as soon as teeth erupt.
- 5 times more common than asthma
- 7 times more common than hay fever
- When should a child first see a dentist?
  - **No later than the first birthday.**



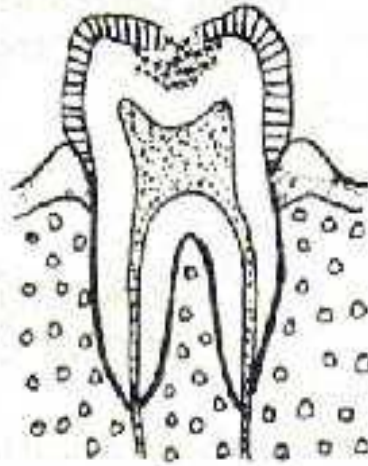
Photos by  
Bryan Williams, DDS



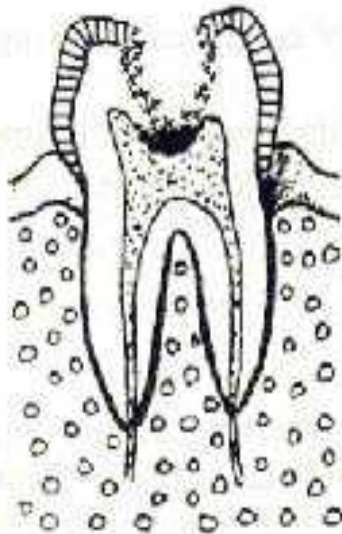




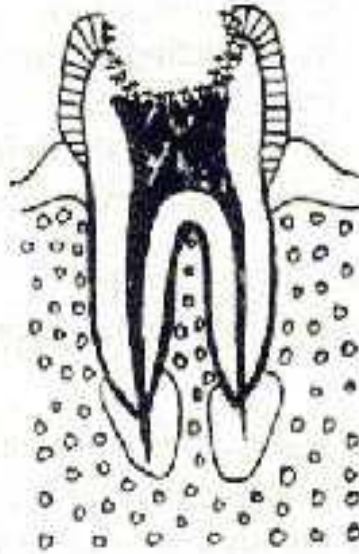
a. Enamel caries



b. Dentine caries



c. Pulp involved



d. Abscess

# Progression Of Dental Caries



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# Progression of Dental Caries



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# How to Spot Caries



## Reversible:

- **White spots**
- **Brown spots**

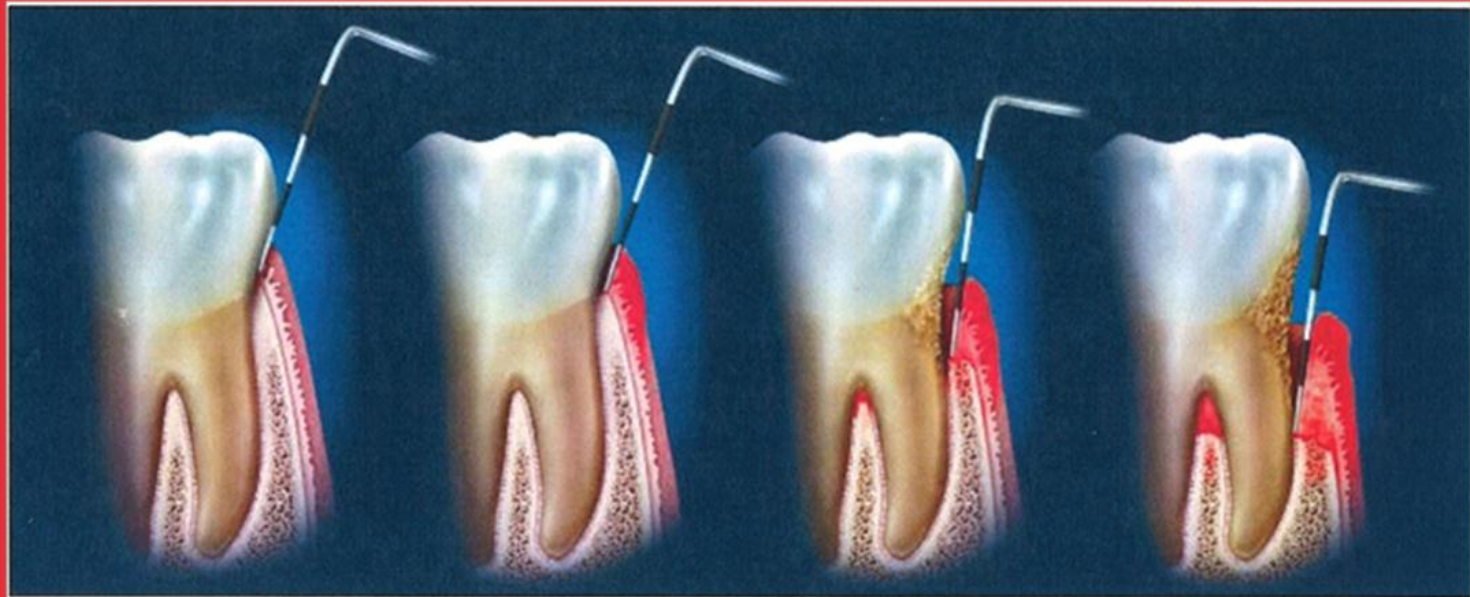
## Not Reversible:

- **Black spots**





# Periodontal Disease: Clinical Signs



**A.**  
Healthy Periodontium

**B.**  
Gingivitis

**C.**  
Slight to Moderate  
Chronic Periodontitis

**D.**  
Advanced  
Chronic Periodontitis



*Photographs courtesy of Charles Cobb, DDS, PhD*



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# Why Baby Teeth Matter

- Self Esteem - Appearance
- Speech
- Nutrition
- Space holder

Untreated Caries leads to

- Infection
- Pain
- Failure to thrive/low birthweight
- Systemic disease/chronic disease
- Death



*Oral health is part of total health*



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# Children: What's Different

- Mixed dentition
- Flossing
- Use fluoridated toothpaste
- Sealants
- Nutrition
- Wear a mouth guard when playing sports




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# Oral Disease Impact

 52 million school hours lost annually

 78% of children age 17 have fillings

 Increased ER visits, hospitalizations, surgeries

 By the time a child is 3, they have at least 11 contact visits with a medical office... a child's first dental visit is often in an emergency room



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# Teens: What's Different

- Independence
- Hormone changes
- Home care and Orthodontics
- Nutrition
  - Eating disorders
- Oral piercing
- Tobacco and other drug use



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# Adults: What's Different

- Periodontal disease
- Bridges and implants
- Nutrition
- Medications
- Access to Care



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# Elderly: What's Different

- Oral hygiene with Limited Dexterity
- Nutrition
- Xerostomia
- Tooth loss and Denture care
- Access to Care



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# Other factors effecting Oral Health



**Eating Disorders**

**Obesity**

**Oral Piercings & Tattoos**

**Alcohol, Tobacco and**

**Recreational Drugs**



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# Oral Cancer

- Symptoms:
  - Irritation persisting for longer than two weeks
  - Pain or numbness
  - Lump in or about the mouth, face or neck
  - Leathery, wrinkled or bumpy patch inside the mouth
  - Color changes in oral soft tissue (red, white or gray)
  - Ear pains
  - Difficulty chewing, swallowing, speaking or moving the jaw or the tongue



# TOBACCO

- Smoked

- Heat & Toxins
- Second-hand Smoke

- Smokeless

- Sugar & Flavorings
- Sand & Grit

- Stained teeth and tongue
- Tissue trauma & lacerations
- Decreased blood flow
- Tooth sensitivity
- Halitosis (bad breath)
- Gum recession
- Dental Caries
- Periodontal Disease
- Oral Cancer



# ALCOHOL

- Oral Cancer
- Xerostomia
  - Decreased Salivary Flow
- Tobacco use
- Behavioral Changes
  - Nutrition
  - Oral Hygiene





# DRUGS

- Cause:
  - Xerostomia (Dry Mouth)
  - Halitosis (Bad Breath)
  - Bruxism (Teeth Grinding/ Clenching)
  - Gingival tissue laceration
  - Infection from drugs directly applied to tissue
  - Higher chance of bacterial plaque and tooth staining



# Oral Embellishments

- Can include piercings, tattoos and various dental jewelry:
  - Allergic reactions to metals
  - Transmission of disease
  - Altered speech (lisp or slurring)
  - Permanent numbness and drooling
  - Fractured or broken teeth
  - Gum tissue irritation/recession



# Diabetes

- Higher chances of periodontal disease (gum disease)
- Gum Disease → Progression of Diabetes



# Prevention



 **Brushing**

 **Flossing**

 **Toothpaste**

 **Fluoride**

 **Sealants**

 **Xylitol Products**

 **Regular dental visits**

 **Food choices**



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# Xylitol





# Preventive Dental Therapies

**Varnish**



**Sealants**



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# Dentistry

- Goal: inform the audience and shape their perception of the dentist
  - Be flexible to your audience
  - Converse
- Basic Procedures
- Instruments
- Specialties
- Fear/ anxiety



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