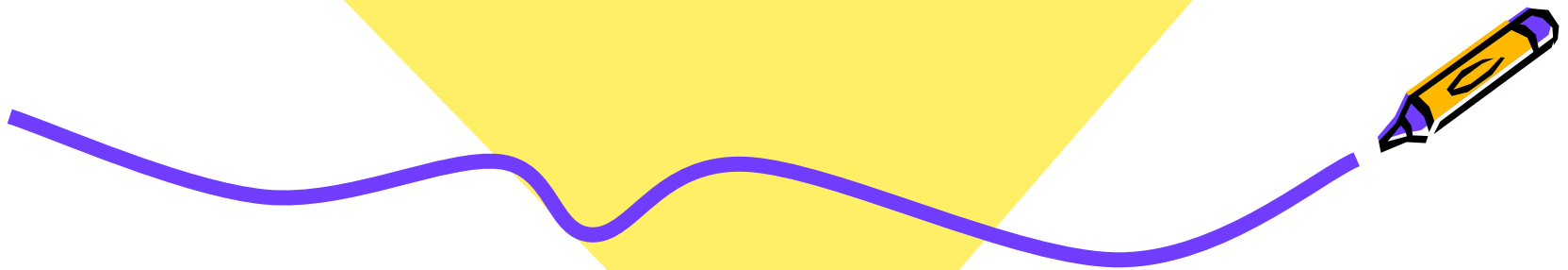




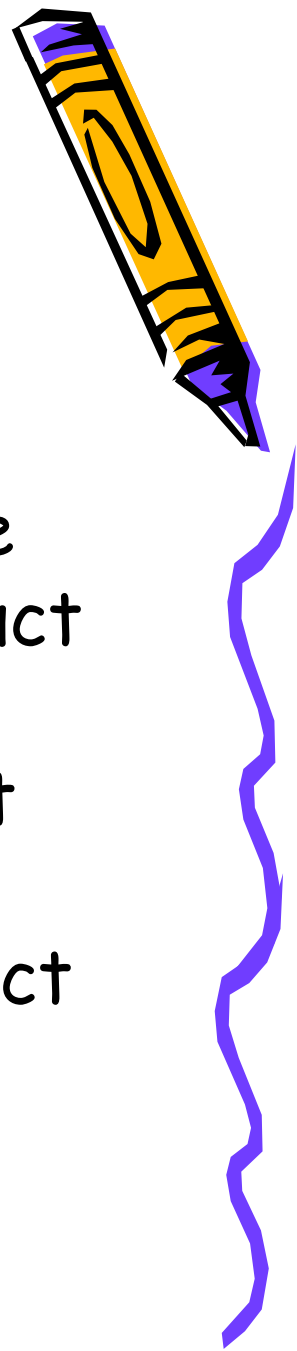
Pediatric Dental Group

Dr. Charles R. Keithline

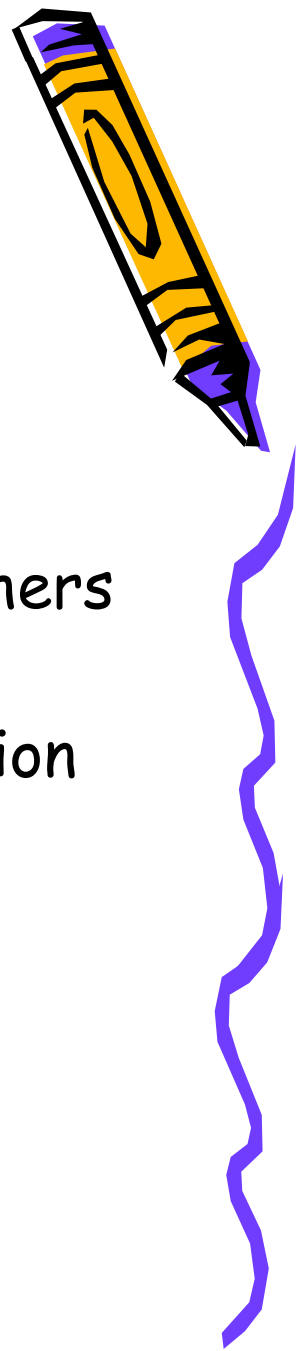


Disclosure Statement

- In the past 12 months, I have had no relevant financial relationships with the manufacturers of any commercial product or providers of commercial services discussed in this CME activity. I do not intend to discuss an unapproved or investigative use of a commercial product or device in my presentation.



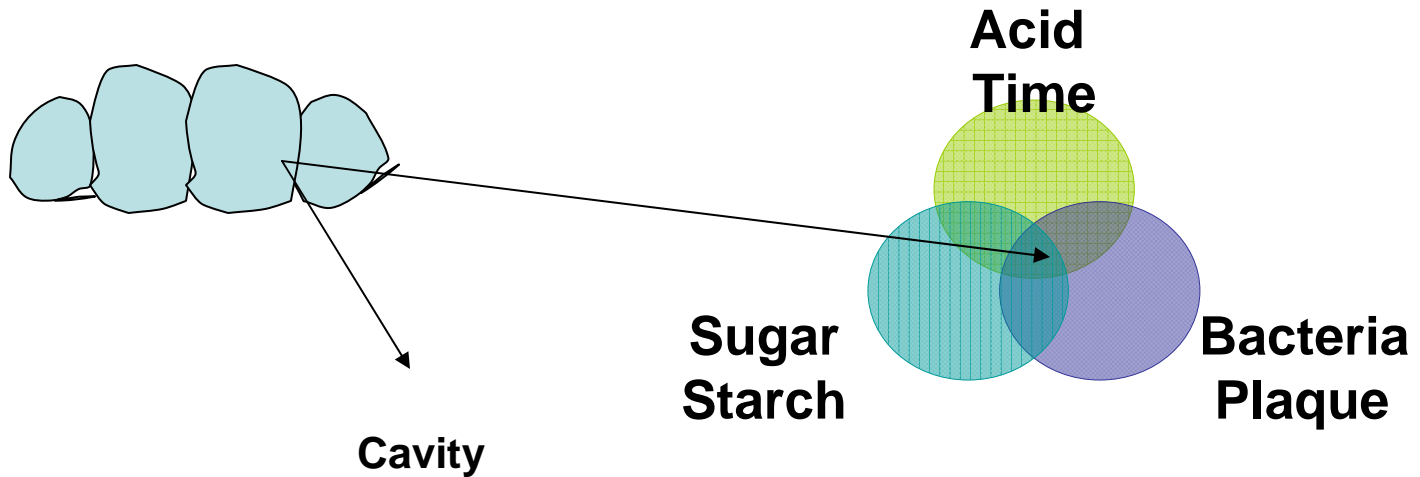
Learning Objectives



- Tooth Decay is an infectious, transmissible, destructive disease caused by acid-forming bacteria acquired by toddlers from their mothers shortly after their first teeth erupt.
- Caries is preventable through early intervention and education and must begin in the first or second year of life.
- Particular attention should be paid to the oral health of expectant and new mothers.



Dental School Concept of Caries 1972-1978



Brush & Floss

Don't Eat Sweets; No candy, cookies, pop or Kool-Aid

White Spot Lesions = future cavity

Sealants - answer to pit & fissure cavities

Fluoride will eliminate decay



In Practice First 15 Years

- Limited time to consult w/ parent before & after treatment
- Diet Instructions -No candy, pop off bottle by age 1
- Parents assist with brushing
- Sealants on first molars



In the Early 1990's

- Dr. Art Nowak raised early infant health issues
- Parent at Chair side Always
 - Allows more time for consultation
 - Diet & hygiene instruction at new pt visit
- Tooth brushing Instruction
 - Parent brushes until child is 8 – 9 years old
 - Separate, Dry brush
 - Child reclined, head supported
 - Child at sink with own brush after parent brushes
- Diet Instruction
 - 20 minute meals, 10 minute snacks
 - Make healthy choices, but almost anything goes
 - When time is up, meal is over.
 - Water only until next time
 - Fasting is necessary to develop a healthy appetite



Emerging Issues

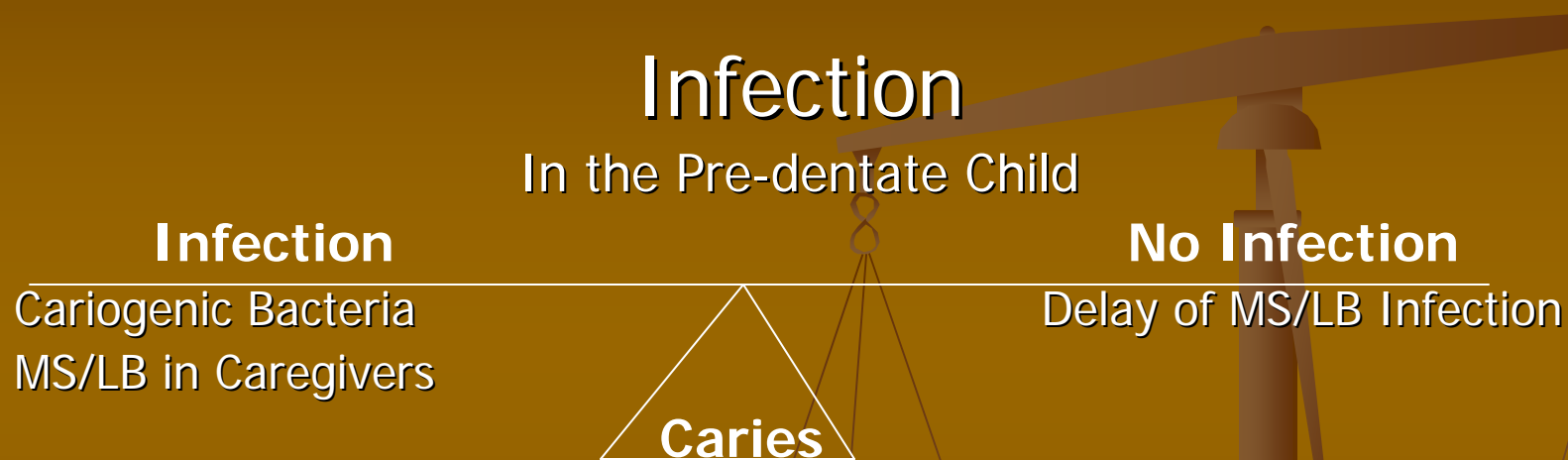
- Recurrent decay in existing patients
 - About 1/3 return with new decay
 - Good compliance to Diet & Hygiene instruction
- Decay in new patients
 - Already too late by age 2 or 3 years old



Aren't they just baby teeth?

- Children with decay are not just “Unlucky”
 - They have an Infection with mutans strep or lactobacillus or both
- They are **not** just baby teeth
 - These children will have the infection usually for life or as long as they have teeth!
- Consensus Statement
 - 13 pediatric dental experts offer an opinion
 - Caries is a progressive, multifactorial, complex, and chronic disease.

Caries: A Multifactorial Disease



**The higher the level of MS in the Mother,
the greater the risk of infection in the infant**

**Not only do fewer kids get cavities if they are MS free at an
early age, but if they do get cavities, they have fewer of them.**

Mineralization of Enamel

White Spot Lesion

Demineralization

Remineralization

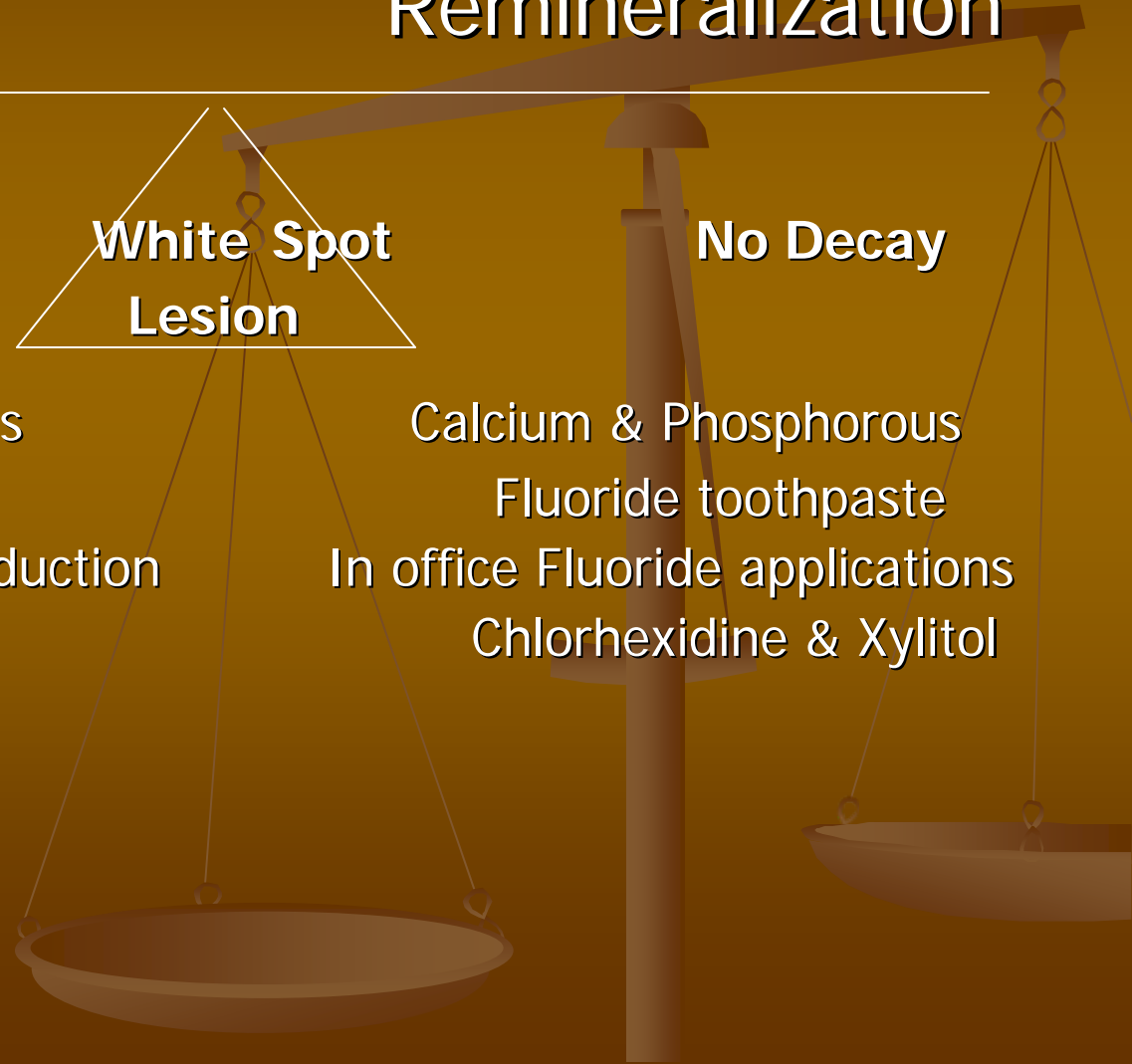
Decay

**White Spot
Lesion**

No Decay

Long term exposure of carbs
Starch & sugar promote
Bacterial growth & acid production

Calcium & Phosphorous
Fluoride toothpaste
In office Fluoride applications
Chlorhexidine & Xylitol



Saliva Flow and Function

Reduced Flow

Normal Flow



Caries

Promotes Caries

Less than 0.7 ml/min

Aggravated by Rx drugs:

Antihistamines, antidepressants

Asthma, Hyperactivity

Radiation Therapy

Protects Against Caries

More than 0.7 ml/min

Rinses Mouth of Food Debris

Buffers acid and contains

Proteins, Calcium Phosphate

and Immunoglobulins



Who is most at risk?

1. Children who are medically compromised or have developmental disabilities.
2. Children who have mothers or close caregivers at high risk for caries (active decay).
3. Children with demonstrable plaque and caries and or white spot lesions.
4. Children who sleep with a nursing bottle or at the breast.
5. Children with older siblings with history of early childhood caries.
6. Children from families of low socioeconomic status.



Reference

- California Dental Association
 - Journal articles on caries Feb. and March issues 2003
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