



OBESITY AND ORAL HEALTH

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ORAL HEALTH



Oral health is a state of being free from chronic mouth & facial pain, oral & throat cancer, oral sores, birth defects such as cleft lip & palate, periodontal (gum) disease, tooth decay & tooth loss, and other diseases and disorders that affect the oral cavity.




-World Health Organization

INFLUENTIAL FACTORS

- Diet
- Hygiene
- Behavior
 - Tobacco
 - Alcohol
 - Illegal Drug Use
- Medical Comorbidities
- Access to Care
 - Finances
 - Insurance
 - Systematic Barriers
- Fluoridated Water

MECHANISM OF ACTION

- **Tooth Decay (Caries)**
 - Bacteria in the mouth create an acidic environment causing breakdown of the tooth structure
 - Spread of infection may lead to localized abscesses or infection in other areas of the body



MECHANISM OF ACTION

• Gum Disease (Gingivitis)

- Inflammation of the gum tissue due to plaque and bacteria
- Bacteria can enter the bloodstream affecting other regions of the body

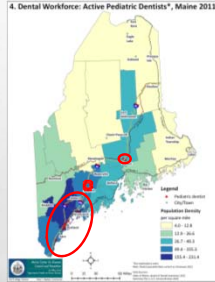


THE FACTS

- Dental caries is the most *common chronic disease* in children
 - 5 times more common than asthma
 - 7 times more common than hay fever
- 27.9% of children aged 3 to 5 have experienced at least one cavity
- >20% of children aged 2 to 5 have untreated tooth decay
- 80% of Americans have had at least one cavity by age 17
- The burden of disease is greatest among lower socioeconomic minority populations

MAINE

4. Dental Workforce: Active Pediatric Dentists*, Maine 2011



- 2011 Maine Integrated Youth Health Survey
 - 22% of K and 33% of 3rd graders with caries experience
 - 13% of K and 15% of 3rd graders with untreated caries
- Increased instance in those who receive free or reduced meals
 - 27% vs 18% (caries experience)
 - 17% vs 12% (untreated caries)

Oral Health in Maine (2013)

QUALITY OF LIFE

• School Success

- 51 million school hours lost annually due to dental related conditions
- Impacts ability to focus & pay attention

THE ORAL SYSTEMIC CONNECTION

"By the time Deamonte's own aching tooth got any attention, the bacteria from the abscess had spread to his brain, doctors said. After two operations and more than six weeks of hospital care, the Prince George's County boy died."

-The Washington Post (2007)



WHY IS THIS IMPORTANT?

The most common dental diseases are

PREVENTABLE!!!!

OBESITY AND CARIES

- American Academy of Pediatric Dentistry
 - Policy on Dietary Recommendations for Infants, Children, and Adolescents
 - Policy on Obstructive Sleep Apnea
- Several studies in numerous countries have explored the relationship between obesity and caries
 - Mixed results
- Obesity and dental caries in children aged 2-6 years in the United States: National Health and Nutrition Examination Survey 1999-2002 (Hong et al., 2008)
 - "No significant association between childhood obesity and caries experience after controlling for age, race, and poverty/income ratio"
- Dye et al., (2004) found significantly greater odds of experiencing caries in primary teeth in non-poor children who did not eat breakfast daily or who ate fewer than 5 servings of fruits and vegetables per day

GOALS

PREVENTION & EDUCATION

- Early visits to prevent development and progression of dental disease
- Consistent messaging across disciplines
- AAPD and AAP recommend first dental visit by age 1 to establish a DENTAL HOME



PRIMARY CARE AND ORAL HEALTH

- Risk Assessments
- Education and Anticipatory Guidance
- Application of Fluoride Varnish
- Referrals

RISK ASSESSMENTS

- *What, where, when, why, how often?*
- Diet
 - Sugar, soda, carbohydrates
- Hygiene practices
 - Brushing, flossing, mouth rinse, toothpaste
- Behavioral risk factors
 - Smoking, drinking, sports
- Medical factors
 - Medications (decay, xerostomia)


Patient Name: _____ Date of Birth: _____ Date: _____
 Visit: 6 month 9 month 12 month 15 month 18 month 24 month 30 month 3 year
 4 year 5 year 6 year Other _____

RISK FACTORS	PROTECTIVE FACTORS	CLINICAL FINDINGS
<ul style="list-style-type: none"> ▲ Mother or primary caregiver had active decay in the past 12 months <input type="checkbox"/> Yes <input type="checkbox"/> No ● Mother or primary caregiver does not have a dentist <input type="checkbox"/> Yes <input type="checkbox"/> No ● Continual bottle/sippy cup use with fluid other than water <input type="checkbox"/> Yes <input type="checkbox"/> No ● Frequent snacking <input type="checkbox"/> Yes <input type="checkbox"/> No ● Special health care needs <input type="checkbox"/> Yes <input type="checkbox"/> No ● Medicaid eligible <input type="checkbox"/> Yes <input type="checkbox"/> No 	<ul style="list-style-type: none"> ● Existing dental home <input type="checkbox"/> Yes <input type="checkbox"/> No ● Drinks fluoridated water or takes fluoride supplements <input type="checkbox"/> Yes <input type="checkbox"/> No ● Fluoride varnish in the last 6 months <input type="checkbox"/> Yes <input type="checkbox"/> No ● Has teeth brushed twice daily <input type="checkbox"/> Yes <input type="checkbox"/> No 	<ul style="list-style-type: none"> ▲ White spots or visible decalcifications in the past 12 months <input type="checkbox"/> Yes <input type="checkbox"/> No ▲ Obvious decay <input type="checkbox"/> Yes <input type="checkbox"/> No ▲ Restorations (fillings) present <input type="checkbox"/> Yes <input type="checkbox"/> No ● Visible plaque accumulation <input type="checkbox"/> Yes <input type="checkbox"/> No ● Gingivitis (swollen/bleeding gums) <input type="checkbox"/> Yes <input type="checkbox"/> No ● Teeth present <input type="checkbox"/> Yes <input type="checkbox"/> No ● Healthy teeth <input type="checkbox"/> Yes <input type="checkbox"/> No

ASSESSMENT/PLAN			
Caries Risk: <input type="checkbox"/> Low <input type="checkbox"/> High	Self Management Goals: <input type="checkbox"/> Regular dental visits <input type="checkbox"/> Dental treatment for parents <input type="checkbox"/> Brush twice daily <input type="checkbox"/> Use fluoride toothpaste <input type="checkbox"/> Dental Referral	<input type="checkbox"/> Wean off bottle <input type="checkbox"/> Less/No juice <input type="checkbox"/> Only water in sippy cup <input type="checkbox"/> Drink tap water	<input type="checkbox"/> Healthy snacks <input type="checkbox"/> Less/No junk food or candy <input type="checkbox"/> No soda <input type="checkbox"/> Xylitol
Completed: <input type="checkbox"/> Anticipatory Guidance <input type="checkbox"/> Fluoride Varnish <input type="checkbox"/> Dental Referral			

PREVENTION

- **Dental Home**
 - The ongoing relationship between the dentist and the patient, inclusive of all aspects of oral healthcare delivered in a comprehensive, continuously accessible, coordinated, and person-centered way



ORAL EXAMINATION



INFANTS AND TODDLERS

Brush Early and Often



- Soft cloth to wipe gums after feeding
- Soft bristled brush when teeth appear
- Use "smear" or rice grain size of toothpaste *with* FLUORIDE

INFANTS AND TODDLERS



- Vertical Transmission
 - DO NOT lick pacifiers or share utensils
 - Wet kisses
- Wipe gums/brush teeth before bed
- No bottle with sweetened liquid at bedtime/naptime
- Regular breastfeeding
 - If breastfeeding on-demand, wipe baby's gums/brush teeth more often
- Only water in the sippy cup
- FIRST dental visit by FIRST birthday

CHILDREN (3+ YEARS)

- Brush 2x daily with pea-sized amount of fluoride toothpaste
 - Parents should brush until age 6 or 7
- Floss between teeth that touch
- Limit juice & milk to meal times only
 - Fluoridated water between meals & in travel cups
- Avoid sticky fruit snacks
- Prevent trauma & promote safety
 - Electrical burns, trips/falls, sports
- Regular dental visits (every 6 months)



FLUORIDE VARNISH APPLICATION

Fluoride varnish is easily applied in a primary care setting & can reduce caries (tooth decay) in those at high risk

- In office application
 - 0.25ml unidose 5% NaF (2.26% F)
- Moderate to High Risk
- Multiple applications per year
- Start when teeth erupt



FLUORIDE VARNISH APPLICATION

- Remove biofilm/debris
- Dry teeth with gauze
- Apply Fluoride Varnish, coating all surfaces
- Inform patient/parent to avoid hard food & hot drinks
 - Follow manufacturer's recommendations



REFERRALS TO DENTAL PROVIDERS

- Dental Safety Net
- Integrated Practices
- Networks
- Case Management
 - Language
 - Transportation
 - Insurance
 - Medical consults

