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

- 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 experienced)
    - 17% vs 12% (untreated caries)

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."


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
- “No significant association between childhood obesity and caries experience after controlling for age, race, and poverty/income ratio”
- Rye 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)

RISK FACTORS

- Not having dental care in the past 2 years
- Age
- Smoking
- Drinking
- Medical factors
- Medications
- Other

PROTECTIVE FACTORS

- Inflamed gingiva
- Brushing and flossing
- Tobacco use
- Coffee use
- Medications

CLINICAL FINDINGS

- White spots or visible lesions in the past 12 months
- Bleeding
- Inflamed gingiva
- Tobacco use
- Coffee use
- Medications

ASSESSMENT PLAN

- Caries Risk
  - Low
  - Medium
  - High
- Infection Management Goals
  - Oral Hygiene
  - Medical Treatment
  - Weight Management
  - Tobacco Use
  - Alcohol Use
  - Unhealthy Snacks
  - Appetite Control

Patient Name

Date of Birth

Date

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)
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

INFANTS AND TODDLERS

• 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
REFERENCES


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