# Why Oral Health Matters

Putting the Mouth Back in the Body
#Why Oral Health Matters: Today’s process

- Oral Health 101 and a little history
- Oral Health and Overall Health
- What can you do?
Why #Oral Health Matters?

- It’s not just teeth!
- Mouth, tissue, bone, teeth
Oral health is key to a healthy life

Good oral health gives you the ability to be healthy and functional

• Eat
• Speak
• Smile
• Learn, play and work!

“Live, laugh, love across the lifespan”
“Good oral health makes a difference in how people see you and how you see yourself.”
What do you think when you see this woman?

Happy?
Healthy?
Employed?
What job?
• Doctor?
• Supervisor?
• Receptionist?
• Waitress?
• Other?
What do you think now?

Demi Moore – actress and celebrity
Brian Maixner is a waiter at the Doo-Dah Diner in Wichita, Kansas
History: How did my mouth get out of my head?

- In America, we treat the mouth as separate from the rest of the body
- Medical and dental have separate education, service networks, health records, payment systems, etc.
- Dental is not considered a medical specialty; it is treated as a separate profession
- Yet dental disease is systemically associated with overall health and left untreated it can advance to life-threatening
- Early dentists were barber surgeons using surgical and mechanical techniques to address dental issues
- In 1840, the first dental college was established in Baltimore by 2 self-trained dentists
- They approached physicians at the U of Maryland to add dental instruction to the medical training based on dentistry being more than a mechanical challenge that needed a field of study, licensure, and peer review – NO

• “Historic Rebuff”
• The medical system is a network of providers, hospitals, specialists, ambulances and components while dentistry remains a cottage industry of unconnected private offices. Slowly changing.
• Impact: patient care is fragmented, and dental care is often considered “optional”, poor oral health is often stigmatized while we hold a social value of “straight, white” teeth.
2 Most Common Types of Dental Disease

Decay
• Cavities
• Caries
• “Rotten Teeth”
• “Soft Teeth”

Periodontal Disease
• Gingivitis
• Periodontitis
• Bleeding Gums
• Puffy Gums
• Gum Disease
• Inflammation
• Gum Infection
What causes cavities?

- Caused by bacteria – *streptococcus mutans*
- Bacteria feeds on sugar, then produces acid
- Destroys the structure of the tooth
- Yes, you can transfer it to others
Acid Decay Cycle: A Snack Attack

Acidic Drink, Sugary Foods, Carbohydrate → Feed Bacteria in the Mouth → Creates Acid → Acid Attacks the Teeth for 20-30 Minutes = Demineralization or Decay with Increased Exposures
The Acid Level of Common Drink Choices (pH)

<table>
<thead>
<tr>
<th>Drink</th>
<th>pH Level</th>
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</thead>
<tbody>
<tr>
<td>Arizona Iced Tea</td>
<td>2.85</td>
</tr>
<tr>
<td>Barq's Root Beer</td>
<td>4.11</td>
</tr>
<tr>
<td>Coca-Cola Classic</td>
<td>2.37</td>
</tr>
<tr>
<td>Coca-Cola Diet</td>
<td>3.1</td>
</tr>
<tr>
<td>Country Time Lemonade</td>
<td>2.72</td>
</tr>
<tr>
<td>Gatorade Lemon-Lime</td>
<td>2.97</td>
</tr>
<tr>
<td>Monster Energy</td>
<td>3.48</td>
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<tr>
<td>Pepsi</td>
<td>2.39</td>
</tr>
<tr>
<td>Pepsi Diet</td>
<td>3.02</td>
</tr>
<tr>
<td>Redbull Regular</td>
<td>3.43</td>
</tr>
<tr>
<td>Snapple Kiwi Strawberry</td>
<td>2.77</td>
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<tr>
<td>Sprite</td>
<td>3.24</td>
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<tr>
<td>Sunkist Orange</td>
<td>2.98</td>
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<tr>
<td>Tropicana 100% Orange Juice</td>
<td>3.8</td>
</tr>
<tr>
<td>Vitamin Water Power C Dragonfruit</td>
<td>3.05</td>
</tr>
<tr>
<td>Vitamin Water Zero Go-Go Mixed Berry</td>
<td>3.08</td>
</tr>
<tr>
<td>Welch's Apple Juice</td>
<td>3.57</td>
</tr>
<tr>
<td>Aquafina</td>
<td>6.11</td>
</tr>
<tr>
<td>Dasani</td>
<td>5.03</td>
</tr>
</tbody>
</table>

Any Number **Below 5.5 pH Attacks** the Enamel for 20-30 minutes from Each Sip

*Cow’s milk pH is about 6.7 to 6.9.*

How do I know if I have periodontal disease?

Periodontal (gum, tissue and bone)

- 30%-50% of American adults have at least mild to moderate gum disease
- Inflammation
- Develop pockets
- Deep infection
- Bone destruction
Impact of Dental Disease

Medical - Dental Condition
• Infection, decayed teeth, bone loss
• Gum disease with inflammation and bleeding
• Bacterial, fungal and viral infections in the mouth and head
• Pain and pain management needs
• Impact on full body health and systems

Impaired Function
• Broken, decayed teeth that result in difficulty biting, chewing and digesting
• Difficulty speaking and communicating clearly
• Difficulty concentrating and focusing due to pain or pain medication. Risk of addiction and recover

NH Oral Health Coalition - NH Oral Health Baseline Survey
Oral Health and Overall Health Associations

- Diabetes*
- Heart disease/cardiovascular*
- Osteoporosis
- Rheumatoid Arthritis*
- Inflammatory disease
- Sepsis - infection
- Chronic pain leading to substance use disorders and recovery relapse
- Depression
- Aspiration pneumonia/respiratory illness*
- Oral cancers/cancer*
- Dry mouth
- Nutritional issues
- Speech difficulties
- Poor self-image
Diabetes

➢ Poor oral health is a double-edged sword for diabetics because (1) diabetes makes an individual more susceptible to serious gum disease and infection, while (2) periodontitis can negatively affect blood glucose control
➢ Diabetics have a decreased ability to fight infections that invade their gums
➢ Standard surgical and nonsurgical procedures for gum disease can reduce long-term blood glucose levels
➢ Even modest reductions in blood glucose levels can have substantial benefits in reducing other complications including microvascular effects on the eyes, kidneys and nerves

Source: Oral Health is Key to Overall Health – Chalmers, Novy, and Boynes. DentaQuest Institute
Cardiovascular and Heart Disease

- Individuals who brush frequently are at less risk of cardiovascular disease than those who brush less.
- Less frequent tooth brushing is associated with a higher concentration of the C-reactive protein that is a marker for inflammation and that rises with infection.
- Individuals with poor oral hygiene habits were more likely to have hypertension (HBP).
- Frequent tooth brushing accompanies a decreased prevalence of HBP – concluded that good oral health habits including daily brushing and flossing could help control or prevent high blood pressure.

Source: Oral Health is Key to Overall Health – Chalmers, Novy, and Boynes. DentaQuest Institute
Rheumatoid Arthritis (RA)

- Tooth loss, a sign of periodontal disease, may predict the likelihood of developing rheumatoid arthritis resulting in pain, swelling and stiffness of joints
- There is a correlation between the number of teeth lost and the risk of RA
- Individuals with RA are 8 times more likely to have periodontal disease
- Research suggests that poor oral health in RA patients may be due (1) to systemic inflammation and (2) to the difficulty doing good mouth care with painful, stiff joints

Source: Oral Health is Key to Overall Health – Chalmers, Novy, and Boynes. DentaQuest Institute
Respiratory Disease, Pneumonia, and Chronic Obstructive Pulmonary Disease (COPD)

- Bacteria in the mouth can travel to the lungs and cause respiratory diseases such as pneumonia and COPD
- This is especially true in individuals with gum disease
- Individuals with pneumonia and COPD have worse gum disease that their healthy peers
- Individuals with bacteria associated with gum disease increase the risk of developing or worsening respiratory infections
- Respiratory infections are among the leading causes of death in the US
- 10% of deaths of pneumonia in elderly nursing home patients could be prevented by improving oral hygiene.

Source: Oral Health is Key to Overall Health – Chalmers, Novy, and Boynes. DentaQuest Institute
Cancer and Oral Cancer

• Every year 50,000 Americans are diagnosed with oral or throat cancer and more than 8,600 die

• Individuals with swollen gums and missing teeth are more likely to be infected with the HPV virus that causes both oral and throat cancer

• Chronic gum disease may increase the risk of developing head and neck cancers

• Each millimeter of tooth loss due to gum disease was associated with more than 4 times the risk of head and neck cancers after accounting for other risk factors such as smoking

• Strongest links between gum disease and cancer are in oral cancer followed by cancer at the back of the mouth and the throat

Source: Oral Health is Key to Overall Health – Chalmers, Novy, and Boynes. DentaQuest Institute
Dry Mouth - Xerostomia

• Does not sound serious
• A reduction in the production and flow of saliva
• Role of saliva is to rinse and cleanse the oral cavity/teeth, initiate the digestion of food, and aid mechanically in swallowing
• Many causes including medications, radiation, and some diseases/conditions, mouth breathing
• Has some antimicrobial factors
• Plaque and decay thrive in that dry, unhealthy, unprotected environ
“If you’re not managing dental disease, you aren’t managing your health care...or its cost.”
How can I manage MY oral health?

• Eat healthy, fresh and nutritious foods
• Avoid sugary drinks, snacks and carbohydrates that stick to your teeth such as crackers, cookies, gummy snacks and fruit leathers
• When you snack, rinse with water or brush your teeth
• Brush and floss daily
• Include fluoride in your toothpaste, water, and mouth rinses
• Use a dry mouth rinse or spray if you need
And…

• See a dental professional for regular preventive care, cleanings and repairs

• Talk with your medical provider about your oral health

• Advocate for fluoride in your community

• Be an oral health ambassador – tell others about the link between oral health and overall health!

• Use your insurance dental benefit!
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