Best Practices in Oral Health for Older Adults - How to Keep My Bite in My Life!
Mr. has most of his natural teeth.
Mr. JB

• Age 78.

• In for rehab from stroke; will return home.
  – Non-dominant hand/arm paralyzed.
  – Seizure disorder.

• No dental pain but many root-surface cavities.

• Meds include dilantin, anti-hypertensives, etc.

• Mouthdryness.

• Uses regular diet.
These teeth will likely be lost.

Advanced Root Surface Caries
Ms. MT
Introduction

Ms. MT

• Age 92.
• With several natural teeth but also upper and lower dentures.
  – Feels that she is doing OK with hygiene but exams show accumulation of plaque and food.
• Avoids hard foods (beef, salads, breadcrust).
• Has mouthdryness.
Absence of Upper Teeth (Edentulous)
Upper Complete Denture
with Poor Oral Hygiene
Lower Partial Denture
with Periodontal (Gum) Inflammation
How to Keep My Bite in My Life.

• Has much to do with keeping one’s teeth.
• In general, older adults have fewer teeth than others.
• However, aging, itself, seems to have little effect on oral tissues (teeth, periodontal tissues, tongue, lips, etc.)
• Retaining teeth has most to do with care over a lifetime.
Introduction

OBJECTIVES 1

• To become acquainted with normal oral changes with age.
• To become acquainted with the forms of oral diseases common in older adults.
  – Cavities (Dental Caries)
  – Periodontal (Gum and Bone) Inflammation
Introduction

OBJECTIVES 2

• To gain increased awareness of relationships between oral and general health.
• To gain increased awareness of the importance to older adults of preventive dentistry and techniques for prevention.
• Examples of best practices in oral health for older adults. (2 patients)
Prevalence of Edentulousness

- The prevalence of edentulousness is highest in older adults.
Number of teeth (n=19) is lowest in older adults.
Think you're too old for cavities? Chew on this

Brush away those outdated ideas about dental care

Kim Painter
Special for USA TODAY

Alice Boghosian, a dentist in Niles, Ill., says she was working on an 87-year-old patient recently when she found a cavity and exclaimed, “You have got to be kidding me.”

Boghosian, a consumer adviser for the American Dental Association, was not surprised by the patient’s age. She was surprised because the patient was her own mother.

“Luckily, I was able to save the tooth,” she says — something she cannot always do for her older patients.

Adults of all ages need to know cavities are not just for kids, dentists say. The risk can even rise as we age. “It’s as much a problem in seniors as it is in kids,” says Judith Jones, a professor of general dentistry, health policy and health services research at Boston University.

It’s also a more persistent threat now that most older adults keep at least some of their teeth. Just 50 years ago, more than half of people over 65 in the USA had lost all their teeth and needed dentures, Jones says. More recent data find 15% of people ages 65 to 74 and 25% of those over 75 are toothless, according to the federal Centers for Disease Control and Prevention.

But those with teeth don’t always have healthy ones. More than 20% of those over 65 had untreated cavities in 2008, the CDC says. Poor people, men and non-whites were most at risk.

Cavities can lead to pain, infection and tooth loss. They can also come as a shock for older adults, says Christine Downey, a clinical assistant professor of dental ecology at the University of North Carolina at Chapel Hill.

“Many a person has come into my office saying: ‘I always had really nice teeth, and now I’m getting cavities. What’s going on?’” says Downey, who is also on the adjunct faculty of Duke University.

Here are some of the factors that might be at play:

**DIET, ESPECIALLY SUGAR.** Sugar is bad for your teeth, whether you’re 7 or 70. When you eat or drink sugar, bacteria in your mouth produce acid. That acid breaks down the protective enamel on teeth, which allows decay. Eating acidic foods such as citrus fruits can also damage tooth enamel.

**DRY MOUTH.** Cavities can be a side effect of more than 500 medications, including many commonly used by older adults, the dental association says. “Our saliva has a cleansing, anti-cavity effect,” Boghosian says.

**RECESSED GUMS.** When you are “literally long in the tooth,” decay is more likely to reach tooth roots, Jones says.

**DELAYED CARE.** Many people lose their dental insurance when they stop working and then stop going to the dentist, Jones says. Dental care is not covered by Medicaid, and Medicare coverage varies by state.

**HEALTH, COGNITIVE CHALLENGES.** People with dementia may forget to brush or “don’t care about it,” and caregivers may not take up the slack, Downey says. Lost dexterity and other physical problems can also interfere with dental hygiene.

Cavity prevention, at any age, means brushing with a fluoride toothpaste at least two times a day for two minutes at a time, flossing and regular dental visits, dentists say.

Some people need to take extra steps, like using stronger prescription fluoride toothpastes and oral moisturizers.

**HERE’S SOME SWEET ADVICE**

All Americans can benefit from watching what they eat and drink. Here are tips for a tooth-friendly diet from consumer adviser Alice Boghosian of the American Dental Association:

**RECOGNIZE SUGAR IN ALL ITS FORMS.** Scan labels for honey, corn syrup, dextrose, fructose and other sweeteners, she says: “It’s all sugar!”

**BEWARE OF STICKY FOODS.** Dried fruit, caramels and other sticky sweets can promote decay. Even bread or crackers that stick to teeth can convert to sugar and cause trouble.

**DON’T MURSE SWEET DRINKS OR CANDIES.** Sipping sweet tea or sucking hard candy for hours keeps your teeth bathed in sugar.

**LIMIT ACIDIC FOODS.** Citrus fruits and juices count. So do sodas, even if sugar-free.

**DRINK WATER, AND MAKE IT FLUORIDATED TAP WATER WHEN YOU CAN.** Swish water in your mouth after eating sweet, sticky or acidic foods.

**KEEP UP YOUR CALCIUM INTAKE.** Consuming more milk, yogurt, cheese and leafy greens will help rebuild enamel.
Cavities
(Dental Caries)

- Caused when foods (e.g. sugars) are metabolized by bacteria (dental plaque) producing acids which demineralize teeth.
- Classified by location on tooth:
  - Coronal (Crown)
  - Root
Significance of Oral Hygiene

Good oral hygiene is not “care”, it is a preventative medical treatment and a direct medical intervention to any seriously ill patient.

Evidence links poor oral health to serious systemic illness; including diabetes, stroke, hypertension, cardiovascular disease, myocardial infarction, congestive heart failure, coronary artery disease, rheumatoid arthritis, osteoporosis and aspiration pneumonia.

Figure 1. Prevalence of untreated dental caries and existing dental restorations in teeth, by age: United States, 2005–2008

Coronal Caries
Coronal Caries

- Only slightly lower in older adults.

1998

2002

u.s. nhanes
Root Surface Caries
Root Caries

- Prevalence highest
- in older adults.

U.S. NHANES 1998-2002
Toothbrushes for Older Adults
“Toothette”
-good for application of fluorides but not removal of plaque.
Use of Fluorides for Older Adults

- **Daily Home Care**
  - Use toothpaste &/or solution **every day**.

- **Professionally Applied**
  - Use every 3 months by dental hygienist or dentist.
Select daily topical fluoride(s) based on:
1. Risk level.
3. Ability to use.

Most important is some form of daily exposure.
How to Keep My Bite in My Life

Dental Caries (Cavities)

• Brush
• Clean between teeth
  – Floss, Soft-Pik, Stim-u-Dent
• Use toothpaste with Fluoride (ADA Seal).
• For people at high risk (e.g. many fillings, dry mouth)
  – High F paste
  – F rinse at night
How to Keep My Bite in My Life

Periodontal (Gum and Bone) Inflammation
### Periodontitis 2012

<table>
<thead>
<tr>
<th>Age Group (Yrs.)</th>
<th>%Severe</th>
<th>%Moderate</th>
<th>%Mild</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-34</td>
<td>1.9</td>
<td>13.0</td>
<td>9.4</td>
</tr>
<tr>
<td>35-49</td>
<td>6.7</td>
<td>19.4</td>
<td>10.4</td>
</tr>
<tr>
<td>50-64</td>
<td>11.7</td>
<td>37.7</td>
<td>7.9</td>
</tr>
<tr>
<td>65+</td>
<td>11.2</td>
<td>53.0</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Severe: >2 interprox sites ≥ 6mm AL  
Moderate: >2 interprox sites ≥ 4mm AL  
Mild: >2 interprox sites ≥ 3mm AL  
AL = Attachment Loss

Relationship of Poor Oral Hygiene to Pneumonia

Poor oral hygiene, profuse plaque development and a compromised immune host system provide favorable conditions for pneumonia development when orally incubated pathogens are aspirated.

*Li et al (2000); Scannapieco et al (2010); Shay, (2002)*
The most common oral pathologies, caries and periodontal inflammation, are infectious diseases.

Pressure Ulcer
Stage 4

Advanced Periodontitis

These may have similar bacterial “counts.”
Interdental hygiene is essential.
NEW!

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Access

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iVillage

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(712-5796) ..................36 per Box  27.49
Jailers worry about dental floss as a weapon

Experts say dental floss, or the plastic holder it sometimes comes in, has been used to strangle enemies, to saw through bars, to make a hand grip on a shank, and to hoist contraband from one level of cells to another.
How to Keep My Bite in My Life

Dentures
Dental Plaque Scraped Off Denture
Doggie Dentures!
Because brushing is just too hard.

But it’s worth the effort!
How to Keep My Bite in My Life

Mouthdryness

She presented with the complaint that chewing crunchy cereal was beginning to hurt her tongue and cheeks.
Management of Mouthdryness

• Rinse mouth and drink cool water.
• Use gustatory stimulus (e.g. citrus).
• Use masticatory stimulus (e.g. chewing gum).
• Reduce use of hyposalivatory meds.
• Use Biotene products (gel, rinse, spray).
• If wearing dentures, use adhesive.
Biotene

Solution/Rinse

Toothpaste

Gel

Spray also available.
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Arrange for Help if Needed
Sometimes I feel that I have the worst job in the world!

YA... RIGHT!
How to Keep My Bite in My Life

Oral Lesions
(Sore Spots)
Blue
(Amalgam Tattoo)
Red (Denture Stomatitis)
White
(Leukoplakia)
How to Keep My Bite in My Life

Oral Lesions (Sore Spots)

Arrange Dental Exam in Case of
-Color Change
-Ulcer or Swelling
-Bleeding
How to Keep My Bite in My Life

Have a Plan
How to Keep My Bite in My Life
Ms. MT

• For teeth -
  – Brush 2x daily.
    • Use power brush.
    • Toothpaste with ADA seal.
  – Clean between teeth with Stim-U-Dents.

• For periodontal tissues (gums and bone).
  – Rinse mouth at night with Pro-Health (Crest).

• For dentures.
  – Brush with denture brush and store in water.
How to Keep My Bite in My Life
Ms. MT

• For dentures
  – Brush with denture brush and store in water.

• Supervision?
  – Consider asking caregiver to help monitor daily care.

• Office visits
  – Every 3 months for dental hygienist.
  – Every 6 months for dentist.
Advanced Root Surface Caries
How to Keep My Bite in My Life
Mr. DJ

• For teeth
  – Brush 2x daily
    • Use power brush.
    • Use high-fluoride paste (Prevident 5000+ by Rx)
  – Clean between teeth with Stim-U-Dents or flosser.
  – Rinse at bedtime with low fluoride solution (e.g. ACT, Fluorigard).
  – Immediately schedule a dental appointment to plan for professional hygiene, fillings, etc.
How to Keep My Bite in My Life!

Summary

• Common oral health problems for older adults include dental caries, periodontal inflammation, and mouthdryness.

• Adequate management of these problems contributes to retaining teeth.

• Long-term retention of healthy teeth (“My Bite”) requires effective daily personal and professional oral health protocols.
Results of Poor or Absent Oral Care:

- Plaque build-up between brushing
- Risk of Periodontal Disease and Gingivitis, and even sepsis
- Increased bacterial growth on tongue, palate, cheeks, lips
- Oral Thrush
- Decreased oral sensitivity
- Decreased amounts of saliva (xerostomia)
- Oral pain
- Impaired eating/swallowing resulting in dehydration, malnutrition or weight loss
Periodontium

- Thickness of cementum increased, due to tooth wear and ongoing tooth eruption.
- Increased fibrosis of periodontal ligament.
- Attachment loss with recession and decreased alveolar bone levels, due to chronic exposure to plaque and other irritants.