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# How Can Older Adults Best Maintain Their Oral Health?

A guide to preventive care, oral diseases, and oral health promotion measures

# Oral health has a major impact on overall health and well-being<sup>1</sup>

Poor oral health can adversely affect the quality of life and various daily functions<sup>2</sup>



Pain and discomfort in the mouth<sup>3</sup>



Impaired chewing and swallowing, an altered sense of taste<sup>4</sup>



Constrained food choices and nutritional deficiencies<sup>4</sup>



Dissatisfaction with appearance<sup>3</sup>



Lowered self-esteem and social isolation<sup>3</sup>



Difficulty in social interactions and communication<sup>3</sup>



Increased economic burden<sup>4</sup>



Increased longevity has contributed to an increase in the population of older adults with poor oral health<sup>5</sup>
Good oral health is, however, crucial for healthy ageing<sup>5,6</sup>

#### Older adults are particularly vulnerable to oral diseases due to:



Age-related



Dependence on care<sup>5</sup>



Multiple co-morbidities<sup>2</sup>



Limited mobility and access to oral care services<sup>5</sup>



Lack of incentives and policies supporting oral care<sup>4</sup>



Poor oral hygiene<sup>2</sup>

# Conditions associated with an increased risk of dental problems in older adults<sup>4</sup>

- Cognitive disorders
- Neurodegenerative diseases
- Uncooperative behaviours due to psychological disorders



Sedation or general anaesthesia may be required to conduct dental treatment in certain cases

#### Types of oral health issues in older adults



- Dental caries<sup>5</sup>
- Oral traumatic injuries
- Conditions affecting the soft tissues of the mouth<sup>5</sup>
- Periodontal disease
- Oral cancer⁵
- Chewing and swallowing problems<sup>5</sup>
- Dry mouth
- ¶ Tooth loss⁵
- Denture-related conditions<sup>5</sup>

### Steps to ensure better control of oral health problems



Assistance by caregivers for maintaining daily oral hygiene<sup>5</sup>



Scheduling regular visits to dental professionals or arranging domiciliary dental visits every six months for those unable to visit a dental office themselves<sup>5</sup>

### **Screening of older adults**

- Older adults should be screened for their ability to independently manage their oral care and hygiene maintenance, and for difficulties with eating, mainly difficulty in chewing and swallowing<sup>5</sup>
- Regular oral health screening by caregivers and non-dental healthcare providers in case of lack of access to dental care services<sup>5</sup>
- Regular screening for oral cancer: Check all areas of soft tissue in the mouth for signs of cancer<sup>5</sup>

#### Oral care measures<sup>4</sup>



Older adults should brush or have their teeth and/or dentures brushed twice a day<sup>5</sup>

#### **Dentures**



Dentures restore functional abilities and improve the appearance and self-esteem of older adults with partial or total loss of teeth

However, appropriate use and care of dentures is necessary to experience benefits and avoid denture-related health problems

#### **Denture care measures**

- Rinsing dentures after every meal<sup>5</sup>
- ✓ Using specific denture-cleaning brushes and pastes or soaps, and avoiding regular toothbrushes and toothpaste to clean dentures<sup>5</sup>
- ✓ Cleaning surfaces lacking teeth and other areas of the mouth with a soft brush<sup>5</sup>
- ✓ Cleaning and storing dentures in a dry and clean container while sleeping<sup>5</sup>
- Cleaning denture adhesives (if used) from mucosal and denture surfaces after removing dentures for the night, every day
- Visiting the dental professional once a year to assess dentures and the mouth

# Dietary and lifestyle modification measures that help maintain good oral health



Avoid carbonated drinks<sup>7</sup>



Consume a balanced diet with sufficient proteins<sup>7</sup>



Ensure sufficient intake of calcium and vitamin D, since their deficiencies can contribute to tooth loss<sup>8</sup>



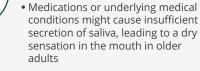
Avoid smoking and alcohol consumption<sup>7</sup>



Reduce dietary intake of sugar and sweeteners<sup>7</sup>



Ensure sufficient water intake



• Water will not only help clear the mouth of debris after meals, but can also replace sugary drinks



Decrease the consumption of processed foods<sup>9</sup>



Decrease the consumption of tea and caffeinated drinks with sugar multiple times a day<sup>7</sup>

# Oral hygiene aids and products that help maintain oral health

**Toothbrushes** 



# Powered (electric) toothbrushes

#### Manual toothbrushes

- ✓ Easier for caregivers to use on older adults<sup>5</sup>
- Better for people with reduced motor skill<sup>10</sup>
- More effective in plaque removal and controlling gum inflammation<sup>10</sup>
- Expensive compared to manual toothbrushes<sup>5</sup>
- More affordable<sup>4</sup>
- ✓ Familiar<sup>5</sup>
- Customising the toothbrush handle can make it easier to grab and hold<sup>11</sup>
- Require proper muscle co-ordination and control<sup>10</sup>



# Are all types of powered toothbrushes equally effective?



Ultrasonic toothbrushes



lonic toothbrushes



Powered toothbrushes with side-to-side motion



Powered toothbrushes with circular motion

Oscillating-rotating toothbrushes



Among powered toothbrushes, oscillating-rotating toothbrushes have consistently outperformed manual brushes

# **Toothpastes and the role of fluoride**



- A toothpaste with high fluoride content (i.e., 5000 ppm) may be prescribed when increased caries protection is necessary
- A non-foaming toothpaste can be used in persons with swallowing problems or when providing assisted oral hygiene
- Using a fluoridated toothpaste decreases the risk of caries and aids in the replacement of minerals lost from the enamel<sup>12</sup>
- Stannous fluoride toothpastes have antibacterial properties and are effective in the prevention of gum problems and oral malodour<sup>12</sup>
- Stannous and sodium fluoride toothpastes have anticavity properties<sup>12</sup>

#### **Mouthwashes or mouth rinses:**



Do not replace toothbrushing



Show better distribution in tough-to-reach areas



Exhibit positive impact on oral health by reducing bacteraemia from oral micro-organisms

Mouth rinses can contain anti-bacterial ingredients that aid in plaque control, like:

- Chlorhexidine
- Cetylpyridinium chloride
- Essential oils





Mouth rinses with a 0.12% chlorhexidine solution are more effective and have been shown to be an adjunctive strategy in the management of acute oral conditions<sup>13</sup>



- Decreases the oral microbial load<sup>13</sup>
- Minimises plaque formation<sup>13</sup>
- Provides a refreshing sensation

However, the use of chlorhexidine mouthwash has also been associated with multiple side effects such as:

- Tooth discolouration<sup>5</sup>
- Allergies<sup>5</sup>
  - Irritation of the inner lining of the mouth (cheeks, tongue, etc.)<sup>5</sup>
- Altered taste sensation<sup>5</sup>
- Hazardous in older adults with cognitive decline and swallowing difficulties<sup>5</sup>

#### Chlorhexidine mouthwashes<sup>13</sup>

- Should be used only after recommendation/prescription by a dental professional
- Should have clear instructions regarding preparation and mode of application
- Should not be used for long periods unless otherwise recommended by a dental professional



#### Considerations and recommendations for oral care in older adults<sup>1,2,5</sup>



Educate older adults and their carers on proper oral care techniques



Implement policies that improve access to oral care service



Promote a healthy lifestyle, including a healthy diet



Ensure regular dental check-ups in the community and in long-term care facilities



Implement dental examination at the time of admission in long-term care facilities

# **Key takeaway**

Oral health promotion measures, including a healthy lifestyle, daily oral hygiene maintenance, regular dental screenings, and access to high-quality and affordable dental care, can decrease the oral disease burden of older adults and improve their quality of life<sup>3,5</sup>

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