

# Improving Oral Health of Aging Adults:



## Assistive Devices & Modifications for Improved Oral Care

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# Oral Health in Older Adults:

## *ALL ABOUT ORAL HEALTH: HOW BAD IS IT?*

19% of older adults who are 65+ end up with several untreated dental caries (cavities) or often times no remaining teeth (Barney & Perkinson, 2016). However, most older adults aged 65+ have an average of 19 remaining teeth – you need at least 20 for good dentition (Barney & Perkinson, 2016).

Age-related changes in oral health is inevitable. You might notice receding gums, poor perception of flavor or a diminished chewing ability as you grow older (Barney & Perkinson, 2016). Some of the more prevalent oral health *problems* that present in older adults include orofacial pain which can result in a reduced quality of life, periodontal disease & dental cavities.

You might notice a change in the saliva production within your oral cavity as you get older as well – especially if you're taking various medications. Often times these medications can result in a very dry mouth; it's been mentioned that anywhere from 10-40% of older adults experience dry mouth. Unfortunately, this can lead to various consequences – a dry mouth can cause increased plaque accumulation, tooth loss & an increased chance of infection (Barney & Perkinson, 2016).

## *SO, WHAT'S THE BIG DEAL ABOUT ORAL CARE?*

We need good oral care for things like efficient chewing & good speech production. Additionally, good oral health has been associated with good nutrition, an improved quality of life & an increased social life (Barney & Perkinson, 2016).

Poor oral health, especially periodontal disease, has been associated with an increased risk for things like cardiovascular disease & aspiration pneumonia (& many more...) – so, it's very important to focus on oral care as part of a daily routine to lower your chances of developing these conditions.

Having poor oral health can also have several other implications for older adults. Someone with poor oral health is likely to experience a diminished pleasure of eating & engage in eating a poor diet as a result of substituting easier to chew foods that are often high in fat & cholesterol (Griffin et al., 2012). Another HUGE implication for poor oral care is a diminished social life – older adults who might have significant tooth loss become self-conscious of their appearance and turn to isolation, limiting their opportunities for interacting with others (Griffin et al., 2012). This loss of social connection can further result in loneliness & depression.

Oral self-care behaviors can be influenced by a number of factors. One of the biggest things contributing to oral self-care is simple access to resources that promote and assist others in achieving good oral care (Arcury et al., 2009).

Older adults might also find themselves struggling to engage in good oral care as a result of age-related changes & often times certain disease or disability (i.e., frailty, muscle weakness, heart attack, stroke, injury). 49% of people aged 65+ end up with some form of arthritis which significantly limits dexterity, making things like brushing your teeth very difficult (Scully & Ettinger, 2007). You might be someone recovering from one of the above conditions – if you are, we understand how challenging oral self-care might be.

It's evident that oral care is VERY important. For all of these reasons ... this resource has been created to help all older adults (those with and without disabilities) hopefully engage in better oral care through the help of assistive devices & another simple modification. Enjoy!

# Simple Modifications:

If you find yourself struggling to stick to a routine when it comes to oral care, it might be beneficial to personalize a routine list that caters to your daily schedule. You want to engage in oral care 2x daily (i.e., brush teeth, etc.). **A sample schedule will be attached at the end of this resource 😊**

A visual schedule can also be extremely helpful for older adults whom might have mild to moderate cognitive impairments or other related conditions that impact cognitive functioning. A visual schedule is a great way to provide step-by-step instructions supplemented by pictures to make task completion easier. *Linked below are sample visual schedules available for purchase.*

<https://www.teacherspayteachers.com/Product/Morning-Routine-Visuals-2590865>

<https://www.teacherspayteachers.com/Product/Brushing-Teeth-Visual-Schedule-1583536>



Additionally, if you know you're someone who just gets busy & forgets to brush your teeth during the day – a checklist can be helpful. Post the checklist in the bathroom and use it as a reminder. If you notice that a box hasn't been checked: participate in the designated oral care activity & then check it off! *Sample checklists that can be downloaded & printed off are linked below:*

<https://www.teacherspayteachers.com/Product/Free-Tooth-Brushing-Chart-2784406>

<https://www.multitestmommymommy.com/2015/04/oral-health.html>

<https://www.upliftingmayhem.com/wp-content/uploads/2017/04/teeth-chart.pdf>

## Educational Resources:

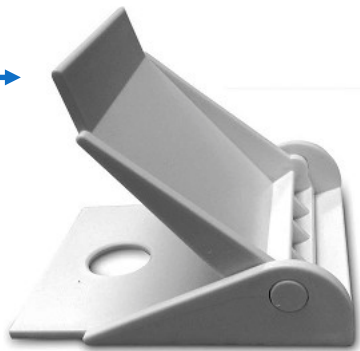
Sometimes being misinformed or undereducated on topics related to oral care can lead to a neglected oral care routine. My hope is that by providing access to educational resources, you can learn more about the benefits of good oral care, along with learning helpful tips for improving your oral care routine.

- <https://www.ada.org/en/member-center/oral-health-topics/aging-and-dental-health>
- <https://www.colgate.com/en-us/oral-health/life-stages/oral-care-age-55-up/oral-care-tips-for-older-adults-0213>
- [https://www.agd.org/docs/default-source/default-document-library/agd-factsheet\\_aging.pdf](https://www.agd.org/docs/default-source/default-document-library/agd-factsheet_aging.pdf)
- <https://dentistry.uic.edu/patients/oral-health-older-adults>
- <https://www.smilesforlifeoralhealth.org/buildcontent.aspx?pagekey=101567&lastpagekey=101566&userkey=15453477&sessionkey=5644395&tut=555&customerkey=84&custsitegroupkey=0> (lots of patient education handouts & posters)

# Assistive Devices for Oral Care:

Assistive devices can be extremely helpful aids when it comes time to participate in oral care activities. Although anyone can benefit from these devices, they might be particularly more helpful for those with functional difficulties secondary to disease or relate disability.

## Squeeze Toothpaste Dispensers:



We all know how important the use of toothpaste is. If you find it difficult to squeeze out toothpaste due to decreased grip strength this device can be of great use.

**Step 1:** Remove the cap & protective covering on the tube of toothpaste

**Step 2:** Place the cap back on tightly before inserting the tube of

toothpaste into the squeeze dispenser.

**Step 3:** Using the palm of your hand, press down on the top part of the device to create an opening to slide the tube of toothpaste in.

**Step 4:** At the same time as you complete step 3 slide the end of the tube of toothpaste into the small opening and then remove the pressure from the top of the device.

**Step 5:** When you're ready to apply toothpaste to your toothbrush just uncap the lid & then press down on the top of the device to release toothpaste from the tube



<https://www.wrightstuff.biz/easy-out-tube-squeezer.html>

<https://www.healthproductsforyou.com/search?searchterms=squeeze+toothpaste>



## Built-Up Handles & Utensil Holders



There are numerous versions of built up handles & utensil holders that can assist those who might have difficulties with grip and coordination of the hand. These devices are designed to create an easier grip on utensils – making it easier for the user to hold them as they complete a task.

**Step 1:** Depending on the style of the device you will have to slip your toothbrush or long-handled flosser into the opening of the device. (see pictures above for reference).

**Step 2:** If using either of the first two devices you can slip your hand into the opening or strap the device around your hand for use. If using a built-up handle (picture 3) the device is ready to use as soon as you place the utensil in the opening.



<https://www.wrightstuff.biz/eazyhold-grip-straps-adult-5-pack.html>

<https://www.allegromedical.com/daily-living-aids-c519/universal-cuff-best-adjustable-utensil-holder-adult-or-pediatric-p539415.html>

<https://www.aliexpress.com/item/4000239170174.html>

<https://www.healthproductsforyou.com/p-north-coast-colored-foam-tubing.html>

## Gripit Floss Holder & Floss:



If flossing is difficult for you to complete this device simplifies the task through elimination of having to use two hands & it can assist in reaching further back in the mouth to floss the teeth in the back.

**Step 1:** Press the small button on the back to pop open the device in order to insert a roll of floss



**Step 2:** Make sure the roll of floss is pulled through the opening & then secured on both sides. The device will be ready to use one floss is secured.

<https://www.just4teeth.com/Gripit-Floss-Holder>

<https://www.wrightstuff.biz/grip-it-floss-holder.html>

### Plaque Identifying Toothpaste & Mouthwash:

Plaque buildup within the oral cavity can contribute to an increased risk of infection. It can be challenging trying to identify areas that are more prone to plaque accumulation. Using these two products can help to find these areas within the mouth.

**Step 1:** Apply plaqueHD toothpaste onto toothbrush & brush your teeth as normal. Once thoroughly brushed spit out extra toothpaste – DO NOT RINSE.

**Step 2:** Glance in the mirror to identify any green areas which indicates plaque buildup. Once identified, brush over these green areas without any additional toothpaste.

**Step 3:** Once the plaque has been removed rinse out mouth. You can now pour mouthwash into the cap to measure appropriately & then rinse mouth, followed by water.



<https://www.amazon.com/Plaque-HD-Toothpaste-1-tube/dp/B013X9CO7G>

<https://plaquehd.com>

<https://www.amazon.com/Plax-Advanced-Formula-Plaque-Loosening/dp/B001E7BA7A>

### Toothbrush Timer:

If you find yourself unsure about spending enough time on brushing your teeth you can set a timer to make sure you brush for at least 2 minutes 2x a day. You can use a regular timer, or one specifically programmed for brushing your teeth.



**Step 1:** Place batteries into the backside before use.

**Step 2:** Click the tooth button (circled in red) which is already preprogrammed with a 2-minute time period. Stop brushing when the timer sounds off.

<https://www.amazon.com/Intellitec-LPL822-Mini-Brush-Timer/dp/B000TWW1S4>



## Unique Toothbrushes:

Various toothbrush styles have been created to address specific user needs. If you find it difficult to fully brush each tooth, you might benefit from use of a *Surround* Toothbrush. If you have sensitive gums or find yourself brushing too hard you might benefit from a *Collis-Curve* or Electric Toothbrush.



<https://www.amazon.com/Surround-Toothbrush-Pack-purple-green/dp/B01KGI3YB2>

SURROUND STYLE TOOTHBRUSH



COLLIS CURVE TOOTHBRUSH

<https://colliscurve.com/store/>



ELECTRIC TOOTHBRUSHES

<https://www.getquip.com/store>

<https://www.amazon.com/Electric-Toothbrush-Rechargeable-Optional-Fairywill/dp/B06VWD8NY3>

## Oral Foam Swabs (Toothettes):

These small oral swabs are very soft and can be used to clean between teeth & remove food debris that gets stuck. If you have sensitive gums these would be great to use because they're very gentle on the mouth.

<https://www.healthproductsforyou.com/p-sage-toothette-plus-oral-care-swabs.html>

<https://homecare.stryker.com/Toothette-Oral-Swabs>



# Who else can help?

## Dentists & Dental Specialists (Oral Surgeons & Orthodontists)

A referral to a dentist or other dental specialist can be of huge help to older adults struggling with maintaining good oral care. Dentists can complete routine oral examinations to gain information regarding oral care. A dentist is able to diagnosis oral conditions & diseases along with provide specialized treatment. Additionally, the dentist can provide helpful tips regarding prevention of conditions associated with poor oral health. Dentists can take a step further by referring patients to more specialized oral doctors (i.e., surgeons) if a more specialized procedure is needed to help correct problems within the oral cavity.

## Home Health Aides or Caregiver:

Home health aides & caregivers can be of great assistance for older adults who are more dependent on others for completion of self-care tasks. These individuals can help with preparatory methods for participation in oral care tasks (i.e., getting the environment set up appropriately), along with helping older adults adhere to a specific oral care routine. Additionally, if an older adult is physically or cognitively unable to perform oral care independently, aides & caregivers can assist in completion of the task through various methods. Things like hand-over-hand guidance & utilization of physical, verbal or tactile cueing and prompting can be extremely helpful for these individuals in completing an oral care routine.

# How the above resources can help:

The modifications, educational resources & assistive devices that I've provided information on can help address several areas of occupational engagement. The areas of activity & participation that are addressed as part of my resource include: *self-care* relating to *caring for teeth*. Through utilization of these resources I would also anticipate a positive impact on areas of *communication* and *community, social, and civic life* pertaining to *socialization* as a result of improved oral care routines & good oral health.

Using the proposed resource can contribute to greater overall occupational engagement & participation in oral self-care. By providing educational resources to learn more about the benefits of oral care older adults can find the motivation to more frequently & properly engage in oral self-care activities. Engaging in an oral care routine can help older adults ensure that they're performing the appropriate amount of oral care as part of their daily routine. Additionally, providing information regarding helpful assistive devices can increase independence in participation of these activities, leading to increased satisfaction. Older adults can learn how to use various toothbrushes that will help clean their teeth more efficiently, as well as finding ways to simplify oral care activities to make them easier to complete (especially when faced with disability).

Although my resource does not directly address communication & socialization, the proposed benefits from use of my resources can indirectly impact these areas of activity & participation. Good oral health is important for communication. If older adults are able to take care of their oral cavity, articulation of speech will be much easier leading to effective communication with others. Good oral health contributes

significantly to socialization with others. If older adults are able to maintain proper oral care, we see increased self-esteem regarding physical appearance. As a result of this perceived increase in appearance these individuals might become more inclined to venture out into the community to engage in social events with others, enhancing their social life experience.

# References

Barney, K., & Perkinson, M. (Eds.) (2016). *Occupational therapy with aging adults: Promoting quality of life through collaborative practice*. Elsevier

Arcury, T.A., Bell, R.A., Anderson, A.M., Chen, H., Savoca, M.R., Kohnman, T., & Quandt, S.A. (2009). Oral health self-care behaviors of rural older adults. *Journal of public health dentistry*, 69(3), 182-189. <https://doi-org.proxy.lib.wayne.edu/10.1111/j.1752-7325.2009.00121.x>

Griffin, S.O., Jones, J.A., Brunson, D., Griffin, P.M., & Bailey, W.D. (2012). Burden of oral diseases among older adults and implications for public health priorities. *American journal of public health*, 10(23), 411-418. doi: 10.2105/AJHP.2011.300362

Mehrl, J. (2013). Oral Hygiene Resistance. [PowerPoint PDF]. <https://coc.unm.edu/common/training/aspiration2013mehrl.pdf>

Scully, C., & Ettinger, R.L. (2007). The influence of systemic diseases on oral health care in older adults. *The journal of the American dental association*, 138, S7-S14. <https://www.clinicalkey.com.proxy.lib.wayne.edu/#!/content/playContent/1-s2.0-S0002817714627379?returnurl=null&referrer=null>



# ORAL CARE SCHEDULE

## MORNING ROUTINE

7:30 AM: GOOD MORNING – WAKE UP!

8:00 AM: Prepare yourself breakfast & make a cup of coffee

8:30 AM: Enjoy breakfast & coffee (or whatever you may prefer)

9:00 AM: **BRUSH YOUR TEETH**. Check off once complete.

<https://www.123dentist.com/what-your-oral-hygiene-routine-should-consist-of/>

(use this resource if you need some guidance with how long & details of how to best perform these activities)

9:10 AM: Get dressed and ready for the day.

9:30 AM: FREE TIME – DO WHATEVER YOU NEED / WANT!

## NIGHTTIME ROUTINE

6:00 PM: Prepare Dinner

6:30 – 7:00 PM: Eat dinner & Clean up

7:30 PM: Watch TV, read a book, call a friend, etc.

8:00 PM: Get pajamas on

8:30 PM: **BRUSH YOUR TEETH, FLOSS & WRINSE WITH MOUTHWASH**

(Always use mouthwash after flossing your teeth; this will help get rid of any leftover food residue & particles from eating throughout the day)

8:40 PM: Enjoy the rest of your evening!

\* This is a generic sample of a basic oral care schedule. You can tailor it to suit your own personal schedule & specific oral care needs \*