

PHARMCON freeCE Monograph

Overview of Denture Care

0.25 HOUR CE



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Thanks to the dental care provided to my generation by our parents, and the beginning of the use of fluoride, very few people in my generation wear dentures. Due to lack of competent dental care, many family members in my parent's generation wore dentures. I remember a lot of my relatives who had dentures only wore them to eat or if they were going out. Dentures today are much better fitted; however, pharmacists may still see plenty of patients who do not wear their dentures to the drug store.

Dental implants might be a good option for patients who have the financial means. According to the National Institute of Health, dental implants have been on the rise since 1999.¹ The number of dental implant procedures performed in the U.S. increased from 0.7% in 1999 to 5.7% in 2016. Of those who underwent the procedure, nearly 13% were between the ages of 65 and 74. A success rate of 98% has been reported for this procedure.¹

Dr. Rod frequently refers to root canals, crowns, and bridges as a "pretreatment for implants!" He's right, as the total number of dental implants is expected to increase by 23% from 2020 to 2026.¹

Caring for Dentures

When things don't go as planned, denture-wearing patients may come to the pharmacy for advice. Nearly 69% of adults between 35-44 years old have lost more than 1 permanent tooth, and 26% of adults that are 75 and older are missing all of them. In 2020, 41 million people were denture wearers.¹

Daily Care Tips for Denture Wearers

- Don't let dentures dry out
 - o Place them in a denture cleanser soaking solution or in plain water when they're not being worn
 - o Never clean them with hot water, which can cause dentures to warp

- Most dentures today, including the teeth and pink denture base, are made with plastic (acrylic)
 - o Denture teeth are typically made from various types of resin. Very few are still made with porcelain teeth today.
- Be careful with your beloved pet. Dogs love to get a hold of dentures!
- Many dentures are broken by dropping them in the sink
 - o Dropping a porcelain denture may result in breakage
- Brushing dentures daily will remove food and dental plaque and help prevent them from becoming stained
 - o Always brush dentures over a folded washcloth
 - If the dentures slip out of the wearer's hand, a washcloth might prevent breakage
 - o Patients can use special creams for dentures or any toothpaste
 - Some sources recommend dishwashing liquid (Dawn works great) or hand soap to clean dentures

What NOT to Do

- Do not use any household abrasives
- A regular or denture brush for cleaning works fine, but patients should not rely solely on denture cleansers
- Some dentures have a permanent soft liner, and this material requires special care
 - o A patient should not use conventional brushing methods for these types of dentures
 - o Patients with these dentures are given a special solution to clean them with at the time they are given their dentures
- Take the rest of the mouth, too – brush gums, tongue, and palate every morning with a soft-bristled brush before inserting dentures
 - o This stimulates circulation in the tissues and helps remove plaque
- Patients should NEVER super glue their dentures!

- o Most of the time dentists are professionally unable to repair them after they have been glued

Fungal Infection

Up to half of those wearing dentures will develop a fungal infection called oral stomatitis (candidiasis).

Tips for Preventing Fungal Infection

- Keep smiling, eating, and speaking with confidence
- Give the dentures a rest:
 - o Remove dentures out for 6-8 hours a day to allow mouth tissues to heal from any soreness or irritation that may have occurred throughout the day
 - o Removing dentures while sleeping is also a good way to give the mouth a rest

Dentist Consultations

- Patients should consult a dentist if dentures break, chip, crack, or become loose
- Resist the temptation to adjust dentures at home — this can damage them beyond repair
- Pharmacists should never recommend a "denture repair kit"
- Damaged denture care is best left to the professionals

Adjusting Eating Habits

- Cut foods into smaller pieces to allow better chewing
 - o Note: Adding gravy or a pat of butter can help to soften up some foods
- Use both sides of the mouth to chew food to avoid dislodging dentures while eating
- Avoid chewy types of food, like caramel and hard foods like nuts, which can loosen dentures

Soaking Dentures

- Alkaline peroxide cleaners are the most common
 - When dissolved in water, they become alkaline solutions of peroxides, releasing oxygen for mechanical cleaning
- Soak for 4-8 hours
 - Best for new stains and plaque
 - Soaks are useful for inhibiting growth of *Candida albicans*, which can cause stomatitis

Examples:

- Hypochlorite (bleach; Polident and Efferdent): removes stains, bacteria, fungi
 - Hypochlorite dissolves plaque, but not calculus/tartar in the mouth, when formed
- Sodium hypochlorite (0.5% NaOCl solution; Dentural): effective in decreasing microorganisms without changing the color of the denture resin
- Acid-containing solutions:
 - Shorter soaking times recommended.
 - May be used with ultrasonic cleaners.
 - Usually contain citric acid
 - Examples:
 - Polident, Stain Away
- Avoid persulfate, it may cause allergic reactions

Denture Adhesives

Denture adhesives are pastes, powders or adhesive pads that may be placed in/on dentures to help them stay in place. In most cases, properly fitted and maintained dentures should not require the use of denture adhesives.

- Shrinkage in the bone structure in the mouth causes dentures to gradually become loose over time
 - When this occurs, the dentures should be professionally relined

- or new dentures should be made that fit the aging mouth properly
 - Denture adhesives fill gaps caused by shrinking bone and give temporary relief from loosening dentures
 - They are effective, but NOT a permanent solution!
 - If dentures are ill-fitting, the patient should be referred to a dentist
- How they work:
 - The denture adherent holds dentures in place while chewing or speaking
 - Also forms a seal that keeps food particles from sticking between the dentures and gums, which can be a problem with whole grains or fiber laxatives like psyllium (Metamucil)

Types of Denture Adhesives

- Paste application: Use a “pea-sized” amount in 4-5 locations on denture
 - Examples: Fixodent, Poligrip
- Powders: Easier to clean and better initial retention
 - Falls sharply within the first 6 hours
- Thin adhesive liners (wafers or pads): Sea-Bond

Tips for Adhesive Use

- Remind patients to scrub off the adherent each time the dentures are cleaned
- Inform patients that a 2.4-ounce tube of denture adhesive should last them 7-8 weeks if they wear both lower and upper dentures
- Recommend daily removal of denture adhesives from the prosthesis and the oral cavity
- Pharmacist’s Role: Remember, a film of saliva helps hold dentures in place. Inadequate saliva flow may cause dentures to be loose.

- Inadequate saliva flow may be due to prescription and OTC medications
 - Examples: anticholinergics (dicyclomine or Bentyl, hyoscyamine or Levsin), tricyclic antidepressants (amitriptyline or Elavil is the worst), or first-generation antihistamines (diphenhydramine or Benadryl)
- Treatment options:
 - Change to nortriptyline (Pamelor)
 - Less anticholinergic
 - Second- or third-generation antihistamines
 - Example: loratadine (Claritin) or fexofenadine (Allegra)
 - Zinc
 - Active ingredients: polymethyl vinyl ether-maleic anhydride (PVM-MA) zinc and calcium salts with carboxymethylcellulose
 - Problem: Chronic, excessive ingestion of zinc can result in copper deficiency
 - Copper deficiency is an established and increasingly recognized cause of neurologic disease and extremity weakness and numbness
 - Some marketed denture adhesive creams contain zinc at levels of about 17-34 mg/g.

What Does the ADA (American Dental Association) Have to Say?

Earning the ADA Seal

- Must have clinical data demonstrating the effectiveness of the denture adherent in providing increased biting force, increased retention, and that the integrity of the dentures is not affected by the adherent²
- Effergrip, is the only adherent that has the ADA seal
 - It has coloring agents, dispersal agents, wetting agents and adhesives: polymethylvinylether maleic acid calcium, polyethylene oxide, and sodium carboxymethylcellulose
 - Zinc-free
- Dr. Rod Messner says: “I tell my patients that the selection of a denture adhesive is based on what works best for them. It’s a vanilla or chocolate thing. I advise patients to use them, they do help! If they are doing some public speaking or going to a special even: USE THEM! They provide an extra level of confidence.”

See the Dentist

- Just because a patient may not have all their natural teeth, does NOT mean that they do not need to visit the dentist
- Patients still have gums and an oral cavity that need to be routinely checked
- A dentist will also check the fit of the denture and will be able to assist with changes to the structure that holds the denture
 - Extremely important as a patient ages
- Once-a-year check-up is recommended by Dr. Rod Messner

The Pharmacist’s Role in Medication Management

Many medications, such as anticholinergics, cause varying degrees of xerostomia, which can adversely affect denture retention. The pharmacist can assist patients in addressing this issue and ensuring that their medication list works with these counseling points to keep them confident in a strong, clean smile!

Have a great day on the bench!!

References

1. *Dental Implants Facts and Statistics 2018, 2019-2020*. Trend Statistics. Published July 24, 2019. <https://www.trendstatistics.com/health/dental-implants-facts-statistics/>
2. *Dentures*. www.ada.org. <https://www.ada.org/en/resources/research/science-and-research-institute/oral-health-topics/dentures>

Test Questions Pharmacist, Pharmacy Technician

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1. **What type of fungal infection will up to half of denture wearers develop?**
 - a. Candidiasis
 - b. Aspergillosis
 - c. Histoplasmosis
 - d. Blastomycosis

2. **How long should a 2.4-ounce tube of denture adhesive last a patient with top and bottom dentures?**
 - a. 1-2 weeks
 - b. 3 years
 - c. 7-8 weeks
 - d. 15 weeks

PHARMACIST LEARNING OBJECTIVES

1. Recognize the importance of dentures and how to take care of them

PHARMACY TECHNICIAN LEARNING OBJECTIVES

1. Recognize the importance of dentures and how to take care of them
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OVERVIEW

Micro-learning opportunities were created in response to evidence that learning is maximized when delivered in short and focused 'bursts.' In this session, denture care and treatment options are discussed.

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ACPE UNIVERSAL ACTIVITY NUMBER

PHARMACIST: 0798-0000-23-289-H01-P

PHARMACY TECHNICIAN: 0798-0000-23-289-H01-T

CE BROKER ID NUMBER: 20-1118764

EDUCATIONAL SUPPORT PROVIDED BY: PharmCon

ACTIVITY TYPE: Knowledge-based

RELEASE DATE: 11/17/2023

EXPIRATION DATE: 05/17/2026



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