



Oral Care

Note

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Oral Microbiome

It's estimated that the human body contains 1 bacterial cell for each human cell in the body, which adds up to 30 trillion bacterium.¹ All of these bacterial cells play an integral role in the health and function of the human body. The oral microbiome is composed primarily of two types of beneficial bacteria that form a biofilm on the surface of the mouth.² Without proper oral care, this biofilm acts like a glue that allows other types of less beneficial bacteria to attach and proliferate. The physical contact of a toothbrush and floss on the teeth breaks up this biofilm and prevents harmful bacteria from establishing.

Acidity

The mouth should maintain a pH around 6.7, which is near neutral. Acidic foods, such as soda, lemons and sugar are damaging to tooth enamel and can

¹ Irfan M, Delgado RZR, Frias-Lopez J. The Oral Microbiome and Cancer. *Front Immunol*. 2020;11:591088. Published 2020 Oct 23. doi:10.3389/fimmu.2020.591088

² Sabharwal A, Scannapieco FA. Baking soda dentifrice and periodontal health: A review of the literature. *J Am Dent Assoc*. 2017 Nov;148(11S):S15-S19. doi: 10.1016/j.adaj.2017.09.010. PMID: 29056185.

make teeth more susceptible to cavities. A quick rinse with plain water or a neutral rinse after eating can help restore the pH to normal. You can make a simple neutral rinse by combining ¼ tsp of salt and 1/2 tsp. aluminum-free baking soda (i.e. Bob’s Red Mill baking soda) with 8 oz of warm water. If your enamel is damaged from an acidic environment, then your dentist may be able to help strengthen it with fluoride treatments. Discuss any fluoride treatments with us as well, so that we can find ways to help support your thyroid, which may be affected by fluoride.

Cancer Treatment and Oral Health

Cancer treatment can weaken the immune system and make it difficult for your cells to perform routine duties that prevent disease. It is very important to complete any needed dental work before starting treatment and remain diligent with an oral care routine throughout treatment. Food particles still present after eating can be especially burdensome for the mouth. It is common for chemotherapy patients and those receiving radiation therapy for head and neck cancer to develop oral mucositis (mouth sores). This painful condition can make it difficult to eat and speak. Following the protocol below may help prevent oral mucositis. However, if mouth sores do develop, talk to your dentist about getting a medicated rinse.

The Protocol

1. Brush – The mechanical action of toothbrush bristles against your teeth and gums is what breaks up the biofilm and removes food particles. Select a soft bristled toothbrush and if you are going through cancer treatment you may want to look for an extra soft toothbrush (sometimes labeled as post-surgical toothbrush). Toothpaste is not necessary, so if you struggle with nausea or become sensitive to toothpaste, just use water. You’ll need to brush after every time you eat. To learn how to properly brush your teeth, visit the American Dental Association website:
<https://www.ada.org/sitecore/content/home-mouthhealthy/az-topics/b/brushing-your-teeth>

2. Floss – Flossing helps reach places that your toothbrush bristles cannot reach. You'll need to floss each time after eating. To learn how to properly floss your teeth, visit the American Dental Association website: <https://www.mouthhealthy.org/en/az-topics/f/flossing-steps>
3. Rinse – A neutral mouthwash can be highly effective in preserving oral health during cancer treatment. Aim to rinse the mouth 4-5 times a day, but if that's not possible, try to rinse after each time you eat. Combine ¼ tsp of sea salt and ½ tsp of aluminum-free baking soda with 8 oz of warm water in a glass jar. Store this next to your bathroom sink and use it to swish and rinse your mouth throughout the day. Start over with a fresh solution and clean jar daily. If you need something extra healing, replace the water component with a calendula infusion. To learn how to make the infusion, visit our YouTube page: https://youtu.be/CzPIB_zGWeI
4. Moisturize – It's common for cancer patients to struggle with dry mouth after treatment. This condition can lead to root cavities, so it's important to keep the mouth moist. If you struggle with dry mouth, consult your dentist to discuss sprays, lozenges or rinses that might help alleviate the problem. Alternatively, you can make a marshmallow root cold infusion and use as needed. Combine 1 Tbs. of marshmallow root with 1 cup of cold filtered water into a glass jar. Allow this to soak overnight and then strain. Sip a mouthful, swish around your mouth, and slowly drink. This infusion can be stored in the refrigerator for up to 3 days.

Toothpaste & Mouthwash

There are several natural toothpaste and powder options available on the market or you can just use water. If you have sensitive teeth or are prone to developing tartar, then baking soda-based toothpastes are a good option. Avoid alcohol-based mouthwash as it can be drying to the oral cavity. Try using the neutral rinse described above in place of a mouthwash. Also, there are probiotic toothpastes, rinses, and mints available to help maintain the oral microbiome.

Oil Pulling

Oil pulling is the practice of swishing and forcing unrefined coconut oil between the teeth for 10-20 minutes. It's similar to swishing a mouthwash, but you'll want to focus on forcing the oil between the teeth instead of around your mouth. If you are interested in trying oil pulling, it should be done first and then followed with your usual oral care routine. Do not swallow the oil, it should be spit outside or into a trashcan to avoid clogging the sink drain. Coconut oil is naturally anti-microbial and can help with dry mouth and chapped lips.³

³ Shanbhag VK. Oil pulling for maintaining oral hygiene - A review. *J Tradit Complement Med.* 2016;7(1):106-109. Published 2016 Jun 6. doi:10.1016/j.jtcme.2016.05.004