

Should You Use a Tongue Scraper?

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✓ Fact Checked

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STORY AT-A-GLANCE

- › Some dentists suggest that a tongue scraper can remove dead cells, food debris and bacteria that contribute to bad breath. Because there is a lack of good evidence that they are better than toothbrushes for mechanically cleaning your tongue, the American Dental Association doesn't endorse tongue scrapers
- › If you do use a tongue scraper, always use light pressure to reduce the risk of micro cuts to the small bumps (papillae) on your tongue that function to help you sense and taste your food
- › Clean a reusable scraper after each use with soap and water or soak it in water and hydrogen peroxide to disinfect the device. Watch your tongue for signs of illness or vitamin deficiencies such as vitamin B12 deficiency or candida albicans (yeast) overgrowth
- › More ways to keep your tongue clean and your breath fresh include eating a diet high in fiber, oil pulling with coconut oil and brushing your tongue, which reduces the risk of injury to the mucus membrane and papillae and was just as effective as tongue scraping in one study

While your tongue may look like a simple muscle, it is vital to eating, speaking, tasting and breathing. Roughly 85% of the reason for bad breath (halitosis) resides in the mouth, including a thin film of dead cells, food debris and bacteria that can coat your tongue.¹ Some dentists suggest that you can improve bad breath, and get the taste of your previous meal out of your mouth, by using a tongue scraper.²

From modern idioms like “biting your tongue” to biblical references like “the power of death and life is in the tongue,” the tongue plays a powerful role in your health. It is a powerful muscle, a sensory organ, a part of the body's defense system and a major player in body language.

Unique to the tongue are three-dimensional muscle fibers³ that allow you to move your tongue in all directions. The muscle can make grooves and change position, and can be extended and contracted, rounded or hollowed.

These movements are used in eating, drinking, sucking, swallowing, chewing and speaking. Your tongue also has sensory cells that allow you to taste your food and beverages. It's highly vascularized and innervated with many nerve fibers that transmit information about taste and sensation to your brain. It also defends against germs that come in through the mouth.

Your tongue is covered with a layer of mucous membrane with a rough surface composed of papillae. These many small bumps are formed by cells bulging through the mucous membrane and have two distinct functions. The papillae allow us to sense the form and texture of food, as well as increase the surface area of sensory cells to allow for tasting.

The tongue is divided into three sections. The tip and the sides can perform complex movements. The upper surface is called the back of the tongue; the root is connected to the floor of your mouth by a strip of tissue called the lingual frenulum. As your mouth closes, the tongue nearly fills the entire cavity.

Why and How to Use a Tongue Scraper

A reporter from CNN⁴ interviewed Dr. Michael Kosdon, a cosmetic dentist from Manhattan, about using tongue scrapers to help clean the surface of your tongue. The theory is that by helping to clean the bacterial pathogens that form colonies on your tongue, you can help reduce problems with bad breath.

Microbial deterioration and breakdown in the oral cavity form volatile sulfur compounds (VSCs),⁵ which are responsible in part for bad breath. Most are produced by gram-negative anaerobic oral bacteria, which are some of the same bacteria involved in periodontitis or gum disease.

While tongue scrapers may be innocuous, this is true only if they are used correctly. These little devices are made of metal or plastic that function like a comb to strip the buildup of bacteria, dead cells and food particles that can get trapped between the papillae.

CNN notes that few studies support tongue scraping and most of those are small. Kosdon said that “By scraping it off, you can actually taste things better because germs are covering where the taste buds are situated.”⁶ One Cochrane Database of System Reviews⁷ published in 2006 analyzed randomized controlled trials that compared different methods of tongue cleaning.

They found two methodologically sound trials involving 40 participants. Analysis of the data revealed “weak and unreliable evidence to show that there is a small but statistically significant difference in reducing VSC levels when tongue scrapers or cleaners rather than toothbrushes are used to reduce halitosis in adults. We found no high-level evidence comparing mechanical with other forms of tongue cleaning.”⁸

A 2015 review of the literature⁹ also found “very limited evidence,” the strength of which was “weak.” Despite weak evidence, a 2017 study¹⁰ sought to determine if users perceived tongue scraping as an effective method of cleaning the tongue and mouth. They evaluated participant preference and perceived effectiveness in nine commercially available scrapers and found the scrapers that were most comfortable were perceived to be effective.

While the American Dental Association does not endorse tongue scrapers specifically because “there is no evidence that brushing or scraping your tongue will prevent bad breath or improve halitosis,”¹¹ they have recently approved a combination toothbrush-tongue cleaner “based on its finding that the product is safe and has shown efficacy in removing plaque and helping to prevent and reduce gingivitis, when used as directed.”¹²

Instead of tongue scraping the ADA recommends people prioritize brushing, flossing and dental visits, Dr. Alice Boghosian, a consumer advocate for the ADA, says. However, she did tell CNN that she scrapes her tongue every night before going to sleep because “it makes me feel like I have a cleaner mouth.”¹³

To Scrape, Swish or Brush: That Is the Question

If you do choose to use a tongue scraper, Kosdon recommends¹⁴ using light pressure, starting in the middle of the tongue rather than back further where you can initiate a gag reflex, and move forward. With greater pressure, you can cause microscopic abrasions to the papillae, which in turn causes inflammation and irritation.

You can purchase a disposable or nondisposable device for at-home use. If you're not using a disposable device, you want to wash it with soap and water after each use or soak it in a cup of hydrogen peroxide and water for several minutes to disinfect it. Never share your tongue scraper since this practice also shares your oral bacteria.

Although there are no official guidelines, Kosdon recommends including tongue scraping twice a day in your daily routine since “It can't hurt if done properly.”¹⁵ The goal of tongue scraping is the mechanical removal of bacteria, dead cells and bits of food that can coat your tongue.

A 2022 study¹⁶ published in the International Journal of Environmental Research and Public Health found that the tool you use may not be important. The researchers tested three groups of individuals, one that used a toothbrush, one that used a tongue scraper, and the third group that used a tongue scraper and toothbrush.

The researchers measured the participant's VSCs, tongue coating value and machined-measured gas value from the oral cavity. The results confirmed that mechanical tongue cleaning was effective, but in this cohort, there was no statistical difference in which tool was used to clean the tongue.

You have likely also been advised by well-meaning dentists to use mouthwash to kill oral bacteria and freshen your breath. Yet, just as in your gut, there are beneficial and

harmful bacteria in your mouth and if you kill off all the bacteria, it can put your health at risk.

For example, data¹⁷ show that incorporating over-the-counter mouthwash twice daily as part of your oral care may increase the risk of prediabetes and diabetes. Another study¹⁸ demonstrated using mouthwash twice daily or more also increased the risk of high blood pressure.

What Can Your Tongue Tell You?

Whether you choose to incorporate tongue scraping in your daily routine or not, it's important to pay close attention to your tongue for signs of your overall health. For example, symptoms of a vitamin B12 deficiency can show up in your mouth. One 2016 paper¹⁹ reported on the oral manifestations of vitamin B12 deficiency in 22 patients with the chief complaint of glossodynia or mouth burning.

The researchers found that even in those whose oral mucosa appeared normal and who did not have a history of gastrectomy, vitamin B12 deficiency should be considered when patients present with the sensation of a burning tongue.

Another clue about your health that may be found on your tongue is an over-abundant growth of *Candida albicans*, which is a pervasive yeast that grows on and in the body. When your immune system becomes disrupted, candida can begin to grow out of control.

One of the clear clinical symptoms is a white coating on your tongue, also known as thrush. You may inadvertently mistake *Candida* for bacterial overgrowth and attack it with a tongue scraper.

When the microbial balance on your tongue is normal, the mucosa appears clean and pink. Other signs²⁰ of an overgrowth of candida in the body include unusual aches and pains, persistent fatigue, sudden development of food sensitivities, and gut problems, such as bloating, constipation or diarrhea.

More Ways to Keep Your Tongue Clean and Breath Fresh

There are several steps you can take to naturally clean your tongue and reduce the potential for bad breath from food debris and bacterial growth on your tongue. One option is the natural action of chewing fibrous foods that can clean your mouth.

One study²¹ sought to compare the effect of eating a high-fiber diet on bad breath. They compared two groups of people, one that ate a high-fiber meal and the other that ate a low-fiber meal. The researchers then measured halitosis parameters over 2.5 hours, looking for VSCs.

The researchers also measured tongue coating and mouth sensation. They found a statistically significant reduction in those parameters for both groups but found a higher reduction in halitosis in the group that ate the high-fiber meal. The researchers concluded that in this group of individuals eating a high-fiber, chewing-intensive meal could result in a reduction in halitosis for at least 2.5 hours.

A natural alternative to mouthwash is [oil pulling with coconut oil](#). This has a lipophilic effect and helps to eliminate unhealthy biofilm from your teeth and tongue. Coconut oil also contains several valuable nutrients that promote oral health. Oil pulling has been used as a traditional Ayurvedic remedy in India since ancient times.

You can try it by using a small amount of oil and swishing it in your mouth, pulling it between your teeth, for approximately 20 minutes. Once finished, be sure to spit it out into the garbage as the oil can cause your pipes to clog. Use oil pulling daily alongside a healthy, high-fiber diet, regular brushing and flossing to promote good oral health.

Sources and References

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