

WCCO news story:

Patient information about bad breath

*University of Minnesota
School of Dentistry
Oral Health Clinical Research Center*

Causes of Bad Breath (Halitosis)

Most offensive breath odors are related to sulfur-containing gases produced by bacteria in the mouth.

Periodontal or gum disease, tooth decay, foods and beverages, dry mouth and some medical conditions can also cause bad breath.

Treatment of Bad Breath

In the absence of dental or periodontal disease, most bad breath is caused by bacteria located on the back of the tongue. These bacteria produce sulfur-containing gases that have an objectionable odor.

See your dentist for an examination to rule out obvious causes of bad breath such as periodontal (gum) disease and tooth decay. If there is evidence of dental or periodontal disease, it should be treated. Conscientious tooth brushing and flossing will help prevent decay and periodontal disease that can cause bad breath.

Over-the-counter mouth rinses, sprays and lozenges containing oils and flavoring agents only mask odors for a short period of time.

Your dentist may recommend mechanical methods to clean your tongue and/or may prescribe antibacterial mouth-rinses to help control growth of bacteria on the tongue.

Mechanical methods that physically remove bacterial buildup (plaque) and debris from the tongue include:

Tongue brushes or tongue scrapers

Oral irrigation devices with pulsating sprays

Care should be taken to clean the back of the tongue thoroughly yet gently, without causing pain or sores.

Chemical methods that are used to treat bad breath:

Prescription antibacterial mouth rinses that kill bacteria and prevent their growth

Zinc containing compounds that interfere with the bacteria's ability to produce sulfur compounds

Chlorine dioxide compounds that have no effect on the bacteria but can break down the bad smelling sulfur gases

University of Minnesota Research

University of Minnesota research on bad breath has focused on two areas:

Measuring Bad Breath Laboratory researchers have analyzed breath gases to develop objective methods to measure halitosis. If an objective method for analyzing breath gases can be identified that is similar to the ability of human smell to detect objectionable odors, it will improve the diagnosis and treatment of bad breath. Findings to-date are encouraging because they indicate that the analysis of breath gases is much more reproducible and sensitive than human smell in detecting changes in objectionable breath odors.

Treatment of Bad Breath Studies have been conducted to determine if using a prescription antibacterial mouth rinse containing chlorhexidine provides any additional benefit in reducing bad breath than the use of daily tongue cleaning alone. The results indicate that use of the prescription mouth rinse plus tongue cleaning was more effective than tongue cleaning alone in reducing bad breath for up to two weeks after stopping the mouth rinse.