

Halitosis

Buraira Bibi

1st Year BDS, Islamabad Medical and Dental College, Islamabad Pakistan

Key points

- What is Halitosis (Bad Breath)
- What are the causes of Halitosis?
- Diagnosis and Treatment
- Treatment of Halitosis

Halitosis

Halitosis, also referred to as bad breath, is the term for an unpleasant mouth odor that frequently causes social discomfort and humiliation. Oral hygiene, nutrition, lifestyle choices, and underlying medical issues are just a few of the causes. The presence of bacteria that produces Sulphur in the mouth is one of the primary causes of halitosis. As these bacteria break down proteins and amino acids in food, they release volatile Sulphur compounds (VSCs), which gives off the sour smell that is linked with halitosis.⁵

The gram-negative anaerobic bacterium *Porphyromonas gingivalis* is among the principal microorganisms linked to foul breath. *P. gingivalis* is frequently discovered in the oral biofilm, a complex structure made up of bacterial cells encased in a polymer matrix. Enzymes called cysteine proteases are produced by *P. gingivalis*, and they can break down proteins in saliva and gingival tissues, causing the growth of VSCs and causing foul smell.³

Fusobacterium nucleatum is a prominent bacterium that has a significant role in unpleasant breath. *F. nucleatum* is an anaerobic bacterium that can flourish in the mouth and aid in the development of dental plaque. It has been demonstrated that *F. nucleatum* uses its metabolic pathways to make VSCs and other offensive substances, which contribute to foul breath.²

In addition, other investigations have discovered additional bacterial species that have been linked to foul breath, including *Solobacterium moorei*, *Tannerella forsythia*, and *Treponema denticola*. These bacteria may break down proteins or create sulfur-containing compounds to form VSCs.

Causes

Poor oral hygiene is one of the primary causes of halitosis. As bacteria and food particles build up in the mouth, they may break down and emit Sulphur compounds that give off bad odor. Poor tongue cleaning, insufficient brushing and

flossing, and infrequent dental checkups can all contribute to the accumulation of these odor-causing chemicals.⁴

Halitosis can also be caused by dietary variables. Strong-smelling meals like garlic and onions can temporarily make your breath smell bad. Moreover, low-carb diets or fasting can force the body to burn down fat reserves, releasing ketones that can leave the breath smelling bad.¹ Halitosis may occasionally be a sign of an underlying medical issue. Gum disease, dental caries, oral infections, and dry mouth (xerostomia) are a few ailments that can result in poor breath. Halitosis can also be exacerbated by additional medical illnesses like sinusitis, diabetes, liver disease, gastrointestinal issues, respiratory infections, and sinusitis.¹

Diagnosis

A thorough oral examination is often used to make the diagnosis of halitosis brought on by Sulphur-producing bacteria. This examination includes an assessment of oral hygiene practices, saliva flow rate, and periodontal health. Improved oral hygiene habits, treating dry mouth if it exists, and controlling periodontal disease with professional dental cleaning, antimicrobial mouth rinses, and/or periodontal therapy are the conventional treatment approaches for halitosis caused by Sulphur-producing bacteria.⁶

Treatment

Maintaining proper oral hygiene habits is the cornerstone of halitosis therapy. This entails using fluoride toothpaste and brushing the teeth thoroughly at least twice daily, flossing every day to eliminate plaque and food particles from in between the teeth and along the gum line. Furthermore, routine dental checkups with a dentist to identify and address any dental problem that could be causing foul breath are crucial. Halitosis management might also benefit from dietary changes. Keeping away from foods like garlic and onions will help lessen momentary foul breath. Moreover, avoiding dry mouth - which can lead to halitosis -

by drinking lots of water throughout the day, can help prevent dehydration. Halitosis treatment can also be greatly aided by adopting healthy lifestyle practices, such as giving up smoking and alcohol consumption. Quitting smoking can not only improve general dental health but also get rid of the unpleasant smell brought on by tobacco usage.

If an underlying medical problem is the root of halitosis, treating that illness is essential for managing foul breath. Treatment of oral infections, gum disease, dental caries, and other oral health problems may be necessary. It may be required to use adequate medical therapy under a healthcare professional's supervision for systemic illnesses like diabetes or liver disease.⁴

References

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