

HALITOSIS



Halitosis, known as “bad breath”, could be defined as an unpleasant or offensive odour emanating from the breath, arising from either extra-oral or intra-oral sources.¹ The prevalence of halitosis is about 31%.^{2,3} Halitosis may be perceived or actual but could lead to social distress and reduced quality of life.

Classification:^{4,5}

1. Genuine halitosis—usually physiological or pathological.
2. Pseudo-halitosis—no identifiable cause or obvious malodour.
3. Halitophobia—the patient worries that those around her/him might find her/his breath offensive.

Odours can be: Rotten cabbage, rotten eggs, sweet, musty, fruity, fishy, pungent

Genuine halitosis could be subdivided into physiological or pathological causes. Pathological causes could be either due to an extra-oral or intra-oral sources

Intra-oral source:⁶

1. Poor oral hygiene, deep carious lesions, retention of food debris, exposed necrotic pulp, and tongue biofilm
2. Periodontal disease—inflamed bleeding gingiva/ presence of calculi.
3. Infections—candidosis (fungal), necrotising gingivitis (bacterial), alveolitis, osteomyelitis.
4. Ingested substances—garlic, curry, tobacco, alcohol, methamphetamine
5. Hyposalivation including systemic syndromes and medications
6. Carcinoma and necrosis

Extra-oral source:⁷⁻⁹

1. Respiratory system—atrophy rhinitis, postnasal drip, pharyngitis, sinusitis, tonsillitis and tonsilloliths (Figure 1), pneumonia, chronic bronchitis, lung abscess, cystic fibrosis, and bronchiectasis.
2. Gastrointestinal system—gastroesophageal reflux, peptic ulcers, carcinoma of the stomach, hiatus hernia, duodenal obstruction, and steatorrhea.

Figure 1



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column

oral medicine

3. Other systemic diseases—liver and kidney failure, diabetes, fish odour syndrome, hypermethioninemia
4. Medications—duloxetine, imipramine, oxybutynin, etc.

Assessment:¹⁰

1. Good history with subjective and objective evaluation, and medical history
2. Examination—the presence of periodontal disease, caries, other diseases, staining, tongue coating, and organoleptic scale.
3. Halimeter and gas chromatography
4. Blood, microbial, and salivary flow testing (β -galactosidase, N-benzoyl-dL-arginine-2-naphthylamide test)

Treatment:^{11,12}

1. Explanation of halitosis and instructions for oral hygiene
2. Manage local and systemic causes
3. Improve oral health (by professional oral health care) and regular tongue cleaning
4. Oral Hygiene products such as toothpaste, hydrogen peroxide, chlorhexidine-Zinc mouthwash (Anti-microbial)
5. Regular review to maintain effective oral hygiene
6. Topical masking agents such as chewing gum (sugarless), and breath mints
7. Essential oils such as Menthol
8. Placebo (mouthwash/topical agents) for pseudo-halitosis, patient education, counselling
9. Patients with pseudo-halitosis or halitophobia may require referral for psychology investigation.



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