

**ISSN: 2250-0359****Volume 3 Issue 2 2013****MOUTH FRESHNERS - Useful or harmful?**

Dr. Ulaganathan Venkatesan

Meenakshi Medical College

Kancheepuram

From periods best known to man, aroma or pleasant smell is always welcomed while bad odor with resent. Many methods have been adopted to avoid or mask malodour. Bad odor is considered as disgusting especially during the periods of intimacy or closer association with others.

Of all body odors, bad breath or halitosis is most troublesome and may lead to depression and even social neglect.

FACTORS

It can be due to many factors: some of them are

1. It may be normal phenomenon; each individual has his or her own characteristic odor. It can be due to shredding and collection of desquamated epithelial cell and secondary infection or due to commensal organisms.
2. Dietary causes: Certain food can leave behind malodor or unpleasant breath smell which will be disturbing others, especially food containing garlic, onion, meat, coffee etc.
3. Habits also form major role in halitosis. Smoking, alcohol and tobacco induce halitosis.
4. Dental factors are attributed as major factor for halitosis. It can be poor oral hygiene, infection, and various dental problems.
5. Habit forming and other therapeutic drugs can produce halitosis. Some examples being
6. Dehydration, debilitating diseases and mental disorders may cause halitosis.

7. Systemic diseases like hepato-biliary, renal, gastrointestinal systemic disorders will produce bad breath. Indeed some conditions have characteristic fetor.
8. Bad breath smell may also emulate from the lungs and oesophagus (Pharyngeal pouch, Achalasia cardia) and stomach (GERD, Hiatus leaks).
9. Over eating as well as starvation also may cause halitosis.
10. There are established conditions such as pregnancy halitosis as well as senile halitosis.

HALITOSIS MASKER OR MOUTH FRESHENER

As most of us know, that we cannot eradicate halitosis completely however much we try, and finally land up in masking than avoiding halitosis. Hence, universally one form or the other form of mouth fresheners is used and many have become millionaire by selling the products with attractive additives.

They can be classified as

1. Traditional condiments such as cloves, fennel seeds, Anise seed, Cardamom, neem, Rose petals etc
2. Leafy materials and leafy preparations such as Mint leaves, Parsley leaves etc.
3. Supari, betel nut, betel leaves quid etc
4. Gutchas, pan-masala, beeda etc
5. Chewing gum preparations
6. Peppermint, mint preparations
7. Menthol and menthol based preparations such as Polo, Mentos, Tic Tac etc
8. Commercially available preparations, which contain other ingredients that may give sense of euphoria.
9. Toffees containing menthol, mint flavor etc.
10. Mouth sprays which may or may be alcohol based.

These preparations give a feeling of freshness, coolness, tinge and thereby satisfaction of having fragrant breathe, while it is not going to clear basic etiological factors or emulating halitosis.

Some of these materials are also used for stimulating or increasing the secretion of saliva and other digestive secretions.

While increasing the saliva and repeated chewing may facilitate cleaning the mouth indirectly.

Also these actions are useful for Eustachian tubal function.

Some believe these fresheners are useful for mental and sexual stimulation.

Though much usefulness is attributed, some doubts have to be answered.

1. How long their effects will last?
2. Repeated usage is beneficial or harmful?
3. The belief that these mouth fresheners will eradicate halitosis is true?
4. Will it lead to Habituation?
5. Is there adverse effects due to the fresheners and also the preservative or additives?

EVIL EFFECTS OF MOUTH FRESHENERS

The evil effects of Mouth fresheners can be summarized as follows:

1. The effect of Mouth fresheners may last for limited period only can be for few hours only. Hence people may tend to use Mouth fresheners repeatedly.
2. Repeated usage may lead to habituation as well as increase the adverse effects.
3. Fragrance of Mouth fresheners will in fact mix with Halitosis and give undesirable odour, which may be unpleasant to many.
4. Chewing gums may weaken the temporo-mandibular joint and can produce loose joint and ankylosis.
5. Most of the additives and preservatives are found to be carcinogenic
6. Sugars used are not suitable for diabetic individuals or artificial sweeteners.
7. Prolonged chewing in fact stimulates the brain continuously unnecessarily and may lead to mental confusion, irritation and lethargy rather than short term gain of mental stimulation.
8. Mental irritability may lead to lack of concentration, reduced working capacity, unnecessary arguments and tremors also.
9. Keeping the quid, pan, betel-nut with or without calcium and tobacco will lead to mucositis, multiple ulceration, burning mouth syndrome and sub-mucous fibrosis of oral cavity and oropharynx finally leading to oral malignancy.
10. Pan (3), quid, betel nut, betel leaves may produce molecular changes (5), chewing gutcha is well know for excessive salivation which people tend to spit and cause public health hazard.

11. Chewing gums may contain vinyl acetate (acetic acid ethenyl ester) potential carcinogen (1)
12. Betel nut chewing during pregnancy affects birth weight of the baby. (2)

RECOMMENDATIONS

Hence the following recommendations are suggested in order to protect the innocents and the public in general.

Measures adopted to overcome halitosis can be classified:

2. Agents to prevent mouth odors
3. Measures to clear or suppress mouth odors
4. Measures to mask or counter the malodor
5. Other measures with or without beneficial effects.

Some of the recommended measures may be

1. Improving oral hygiene and health education
2. Dental care in the form of proper and regular brushing, periodical dental checkups and dental treatment.
3. Hydration
4. Avoidance or occasional intake of odorous food stuffs
5. Moistening the oral cavity especially during summer days, hot humid atmosphere and also conditions such as 'sicca' syndromes
6. Most difficult but essential measure may be stoppage or avoidance of smoking alcohol and usage of tobacco in any form.

7. Diagnosing and treating primary etiological systemic or local condition form mainstay.
8. Calcium and tobacco with betel leaves should be avoided.
9. Habit of keeping the quid or chewing gum should be discouraged.
10. Spitting in public places should be banned as done in certain countries.
11. During the days of starvation proper nutrition and re-hydration measures must be insisted.
12. Mouth fresheners in the form of sprays should be condemned as it may cause respiratory irritation, infection; it also contains alcohol, which can cause, euphoria or knock down effect. Hence dangerous during driving.
13. Chemical gargling can be used in limited situations such as infective lesions, debilitating illness, chronic illness, acute toxic conditions and terminally ill patients. These gargling can be used when there is definite indication and for that particular prescribed periods only.
14. Usage of Aloe Vera celery, mint leaves, Myrr (Commiphora molmol), neem (Azadirachta indica) and other organic materials have been used without much side effects.

Finally while giving caution regarding widespread and casual usage of Mouth fresheners (though beneficial under certain therapeutic conditions), is to be restricted and avoid their random usage.

Normal breath odors cannot be completely removed or avoided; must be accepted.

Gargling with simple saline solution or tap water is more ideal rather than most of the commercially available mouth gargles.

Bibliography

1. "Substance found in chewing gum could be labelled toxic". Canada.com. 2008-05-30. Retrieved 2012-01-25.
2. Senn et al (2009). "Betel nut chewing during pregnancy, Madang province, Papua New Guinea". *Drug Alcohol Depend.* 105 (1–2): 126–31. doi:10.1016/j.drugalcdep.2009.06.021. PMID 19665325.
3. The World Health Organization IARC Expert Group. "IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 37, Tobacco Habits Other than Smoking; Betel-Quid and Areca-nut Chewing; and Some Related Nitrosamines, Lyon". IARC Press.
4. Sadasivan, G.; Rani, Gulab; Kumari, C.Kusuma (1978). "Chromosome-damaging effect of betel leaf". *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis* 57 (2): 183–5. doi:10.1016/0027-5107(78)90266-X. PMID 661839.