

Bad breath (halitosis) is a common problem which often comes from the activity of bacteria in the mouth. Although there is no way of knowing for sure, most adults probably suffer from bad breath occasionally, with perhaps a quarter suffering on a regular basis. This fact file looks at the causes and at what dentists can do to help.

Is bad breath always treatable?

In the past, bad breath was often considered to be an incurable affliction. However, in recent years it has become increasingly evident that bad breath is usually treatable once a proper diagnosis is made.

The main problem is knowing whether we have it or not, because we are poor judges of our own breath odour. Some people suffer from bad breath without knowing it, while others build up exaggerated fears about breath odour even though they do not have it. The best way to find out whether we have bad breath is to ask for someone else's opinion. If we don't ask, other people are unlikely to tell us. And since bad breath can sometimes - fortunately rarely - be a sign of a significant general health problem, we should not be reluctant to tell people dear to us that they have a bad breath problem.

What should I do if I have bad breath?

If you have reason to believe that there is a problem, then see your dentist first, since bad breath often comes from the mouth itself.

When you see the dentist, it is a good idea to explain in advance that you will be asking for advice about bad breath. Also, try to go with someone who is familiar with the problem,

(a family member or close friend, for example), to help give the dentist an objective picture of how bad the odour really is, how long it has been going on, and when it improves or gets worse. Since bad breath often varies, the person accompanying you can also help determine whether the odour at the time of the appointment resembles, both in character and intensity, the odour that is generally troublesome.

If the dentist knows that the consultation is about bad breath, you may be asked not to eat, drink, smoke, chew gum, suck confectionery, use mouthwashes, breath fresheners etc., so that the odour will be more typical. You should also avoid using perfumed cosmetic products, such as perfume, aftershave and scented lipstick prior to the appointment, since it can interfere with the odour assessment. If the dentist is not told about the reason for the consultation beforehand, do these things anyway and tell the dentist that you have prepared for the appointment in this way.

What will happen at my appointment?

Your dentist will ask questions to help determine the possible causes of the odour, and then compare the odour coming from your mouth and nose. In most cases (about 85-95%) the odour comes from the mouth rather than the nose. This is an indication that bacterial activity somewhere in the mouth is responsible. If the odour comes mostly from the nose, then the nasal passages may be involved.

Your dentist may also make measurements using a sulphide monitor to help in diagnosis and treatment, since volatile sulphur compounds are often associated with bad breath.

This table summarises different odour-related problems, and their possible causes.

Problem	Possible cause or source of malodour
Odour after fasting, dieting, sleeping, taking medications, prolonged speaking, exercise	dryness in the mouth, insufficient saliva flow
Gums bleed and/or smell	gum problems, poor cleaning between teeth
Odour upon talking	postnasal drip on back of tongue
Odour at onset of menstrual cycle	swelling of gums
Small whitish stones with foul odour appear on Tongue, for example following coughing	tonsoliths from crypts in tonsils
Odour appears suddenly from mouth of young children	onset of throat infection
Odour appears suddenly from nose of young children	foreign body placed in nose
Odour appears suddenly from entire body of young children	foreign body placed in nose
Taste or smell of rotten fish	trimethylaminuria (rare)
Odour in denture wearers	dentures kept in mouth at night or not cleaned properly
Odour from nose	sinusitis, polyps, dryness, foreign body, hindered air or mucus flow
Bad taste all day long	poor oral hygiene, gum disease, excessive bacterial activity on tongue

Where does the odour come from?

Most cases of bad breath appear to be due to the breakdown of proteins by a variety of micro-organisms. Several of the breakdown products are foul smelling gases.

In people with healthy teeth and gums, the odour usually comes from the far back region of the tongue, and grows stronger when the patient starts talking. The dentist can sample this area using a plastic spoon. The odour

coming from the spoon sample may then be compared to the overall odour.

Although we do not know why, the very back of the tongue is an important source of bad breath, possibly as a result of postnasal drip, which can get stuck on the tongue and is then broken down by bacteria on the tongue surface.

If the back of the tongue is the problem, then the dentist can recommend a method of cleaning the area with a specially designed tongue scraper (in some countries, tongue cleaning is a common and ancient practice). Several types of tongue cleaners are now

available in the UK. It takes time and patience to overcome the gagging reflex, but eventually, tongue cleaning becomes easy. Care should be taken to clean the back of the tongue thoroughly yet gently, without inflicting pain or sores.

Can gum disease cause bad breath?

In some people, bad breath is associated with gum disease, especially if rubbing the areas between the teeth and gums yields a foul odour. Your dentist can help prevent and treat gum diseases in various ways, depending on the type and extent of the problem, but your own daily home care makes all the difference in the world in maintaining gum health between appointments. Cleaning of the spaces between the teeth is of great importance. One home tip to healthy gums (and less bad breath) is to smell the odour coming from the dental floss following each passage, and to work to clean those areas more carefully. People with gum disease often have higher levels of odour coming from their tongue, as well. In certain instances your dentist may recommend special toothpicks to clean between your teeth. You can also smell the odour on the toothpicks to find out where the odour is coming from.

What type of treatment is there?

Your dentist may recommend dental treatment, if there are other areas in which bacteria and food can become trapped and cause odour. The dentist may also suggest daily rinsing with one of several available mouthwashes which have been scientifically shown to reduce breath odours^{1,2}. Recent mouthwash developments include a two-phase mouthwash now available in the UK, that visibly traps and removes bacteria and debris, and several mouthwashes with a variety of antibacterial anti-odour properties.

In coming years, other types of oral products specifically geared to treat bad breath (for example, special tablets) will probably be introduced as well.

Your dentist may also refer you to clinics that specialise in identifying breath odours, or to other medical experts. Since, in some instances, patients get overly concerned about

this problem (especially since it is so difficult to assess one's own breath), the dentist may also recommend that you discuss this problem over with a psychological professional, to help you bring it into the proper perspective.

What can I do?

In all probability, professional diagnosis and treatment can help eliminate bad breath. However, it is sometimes difficult for us to sense the improvement ourselves. In this case, a family member or close friend can also provide important feedback and reinforcement.

Listed below are some of the Do's and Don'ts regarding bad breath. Remember, bad breath is a problem that needs professional attention. Don't mask it - deal with it.

Do's

- Visit your dentist regularly.
- Have your teeth cleaned periodically by a dental professional.
- Floss or otherwise clean between your teeth, as recommended by your dentist. Choose unscented floss so that you can detect those areas between your teeth that give off odours, and clean them more carefully.
- Brush your teeth and gums properly.
- Ask your dentist to recommend a tongue cleaner. Clean your tongue all the way back gently, but thoroughly.
- Drink plenty of liquids, but not too much coffee.

- Chew sugar-free gum, especially if your mouth feels dry. Chewing parsley, mint, cloves or fennel seeds may also help.
- Clean your mouth after eating or drinking milk products, fish and meat.
- Unless your dentist advises otherwise, soak dentures overnight in antiseptic solution to prevent odour build-up.
- Get control over the problem. Ask a family member to tell you whenever you have bad breath.
- If someone in your family or a close friend has bad breath, find a kind way to let them

know. If you can't tell them directly, leave this fact file lying around. They may get the message.

- Ask your dentist to recommend a mouthwash which has been shown to be clinically effective in fighting bad breath. Use it most effectively right before sleeping.
- Eat fresh, fibrous vegetables such as carrots.

- Don't be depressed. Get help. Don't ignore your gums - you can lose your teeth as well as smell bad.
- Don't drink too much coffee - it may make the situation worse.
- Don't forget to clean behind the back teeth in each row.
- Don't brush your tongue with a regular toothpaste - it's better to dip your toothbrush in mouthwash for tongue cleaning.
- Don't run to the gastroenterologist for concerns of having bad breath - it usually comes from the mouth and almost never from the stomach.
- Don't give mouthwash to very young children, as they can swallow it.
- Don't clean your tongue so hard that it hurts.
- Don't rely on mouthwash alone - practise complete oral hygiene.

Don'ts

- Don't let your concern about having bad breath run your life. Don't be passive.

References:

1. Rosenberg M, Kulkarni GV, Bosy A and McCulloch CAG, Reproducibility and sensitivity of oral malodour measurements with a portable sulphide monitor, *Journal of Dental Research* 1991; 70: 1436-1440.
2. Kozlovsky A, Goldberg S, Natour I, Rogatky-Gat A, Gelerner I and Rosenberg M, Efficacy of a two-phase mouthwash in controlling mouth odour, gingivitis and plaque, *Journal of Periodontology* 1996; 67: 577-582.

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