



Take your breath away

There are several steps you can take to beat halitosis.

"Your breath stinks." With the possible exception of "frontal lobe trauma", this has to be the one of the scariest phrases in the English language. And yet it is music to the ears of Geoffrey Speiser, also known as "Dr Bad Breath", Sydney's halitosis guru.

"It's like *The Biggest Loser*," he says. "Sometimes when you see a bad case and you make it better, you can change someone's life."

A dentist since 1980, Speiser began treating people for bad breath in 1997 and set up the Dr Speiser's Australian Breath Clinic in the eastern suburbs in 2005. These days he sees about 15 patients a week and deals with a further 40 a day online. Speiser says about 30 per cent of Australians suffer from bad breath in one form or another, from the mildly offensive to the wake-the-Pharaohs variety. "The main cause of bad breath is an increase of bacteria on the tongue," he explains.



"The bacteria is there to break down food but it can release waste products known as volatile sulfur compounds. That's what causes the smell." Speiser uses a diagnostic tool called a Halimeter, which gauges volatile sulfur compounds in someone's breath. Anything under 150 parts-per-billion is normal: 150 to 200 denotes slightly bad breath; 200 to 500 is moderately bad breath and anything over 500 means you're stinking out the house. "It's the kind of smell that lingers well after the person leaves a room."

Out of curiosity, I take the Halimeter test, blowing an unexpectedly fragrant 78pbs. Speiser says he has seen it all, including a 60-year-old woman who had not removed her dentures since she was 20. "It was chock-a-block with 40 years of food matter. I remember the room clearing out." It's long been known that certain foods affect your breath: garlic and onions are notorious.

"But extreme diets, such as those low in carbo-hydrates and high in protein, are also bad," dietitian Genevieve Michael says. "It can produce ketosis, which is when you start breaking down body fats and [this] can produce bad breath." One of the other contributors is having a dry mouth. "Saliva acts like a buffer for your teeth, not allowing the bacteria to build up," says Professor Laurie Walsh from the University of Queensland's school of dentistry. "So you should avoid things that make your mouth dry, such as coffee, smoking and alcohol." Walsh also cites non-dental causes of bad breath, such as post-nasal drip, chronic tonsillitis, gastric reflux and a rare condition called Zenker's diverticulum, a pouch at the top of the oesophagus in which food can get caught.

Periodontal disease is also a factor. "This is where you lose bone and gum tissue around the teeth, leaving crevices where food and bacteria can reside," Walsh says. Acid is the other problem. In an acidic environment, only hardy bacteria can survive. Unfortunately, these bacteria are the same ones that cause bad breath. Because it is tied up with issues of self-esteem and paranoia, bad breath can feed into halitophobia or imaginary bad breath, Speiser says. "One of my patients told me she was convinced she had bad breath because she'd breathed into an air vent and someone two doors down had coughed." A

successful treatment is especially rewarding, however. "I've had people tell me their marriage has been saved or their sex life has improved or that their social life has come back. I find that very satisfying."

Mighty mouth

* **Good dental hygiene:** brush regularly with an anti-bacterial toothpaste (something with triclosan in it); also, floss to remove food from between the teeth. An anti-plaque mouthwash containing peroxide can be helpful.

* **Bacterial replacement therapy:** works by reintroducing beneficial oral bacteria called *Streptococcus salivarius* K12, which prevents growth of odour-causing bacteria.

* **Address saliva levels:** avoid things that dry the mouth, such as coffee, alcohol, smoking and some prescription medications.

* **Avoid "acid mouth":** high acid saliva can lead to bacterial imbalance (healthy saliva is at a neutral pH level of 7). Avoid low pH drinks such as Gatorade, Diet Coke, Sprite and sparkling mineral water.

* **Eat less protein:** milk, cheese and yoghurt thickens nasal mucus, providing a base for halitosis bacteria. Try substituting your dairy intake with rice milk and regularly clear nasal mucus with a saline nasal spray.