



## The Middle Kingdom

How and why things happen

# How to breathe easier over your breath

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**H**ERE'S something to ponder as you prepare to mingle at a holiday party: How's your breath? You can breathe a sigh of relief if your only problem is a lingering whiff of garlic or the tang of tobacco or alcohol on your breath. You can hide them, at least temporarily, with mints, gums or mouthwashes.

Because those odours come from particles in your mouth, they are short-lived and can usually be solved by brushing your teeth or rinsing out your mouth with water. Having something to eat can also push out the offending particles, but you'll put new ones in their place.

Cover-ups can also work for the aromas of some spices (including garlic) that return to your breath as their volatile oils get into the blood and are released into your lungs. Alcohol travels to the lungs in the blood as well, which is why police use Breathalyzers. However, alcohol doesn't have much fragrance of its own, so the smell of liquor comes from other ingredients in the drink.

But what if people back away from you even after you swish, gargle, spray or chew a mint? You might be among the one in four Canadians who have recurring breath problems that don't respond to brushing and mouthwash alone.

Locating the source of the bad odour begins with checking for medical conditions that create their own characteristic aromas. Diabetics who don't have the disease under control may have a sweet, fruity odour on their breath. Kidney problems will create a urine-like smell, while a liver problem may create a fishy aroma. And infected teeth create an unforgettable pungency. In most cases, tenacious bacteria in the mouth are the culprits in persistent halitosis, or bad breath, according to Anne Bosy, co-founder of the private Fresh Breath Clinic, which has offices in Toronto and Thunder Bay.

In people who are otherwise healthy, the odour invariably comes from sulphurous gases produced by the micro-organisms as they break down food particles on the tongue and teeth.

While there's no magic pill for pristine breath, there are some steps that can help you party with confidence, said Ms. Bosy, who holds a master's degree in oral malodour from the University of Toronto.

Bacteria can be very good at adhering to plaque on the teeth, so flossing and thorough brushing are a good first defence. Brushing your tongue definitely helps, and there are cleaners designed to take the coating off a tongue more effectively than toothpaste.

"But even in the cleanest mouth we sometimes find humungous readings of bacteria," Ms. Bosy said.

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Anything that dries the mouth can allow collections of cells favoured by microbes to build up on your tongue and cheeks. Smoking produces continual drying, as do such common medications as tranquilizers and anti-anxiety pills. And people who breathe through their mouths when they sleep create hours of drying, which is why morning breath can be vicious.

A persistent infection along the gum line can go undetected if the gums don't bleed, Ms. Bosy noted. As these infections heal, pockets of dead cells form that are breeding grounds for micro-organisms.

People with persistent breath problems often find their halitosis rises under stress and can improve when stress is relieved. This may be because stress depresses

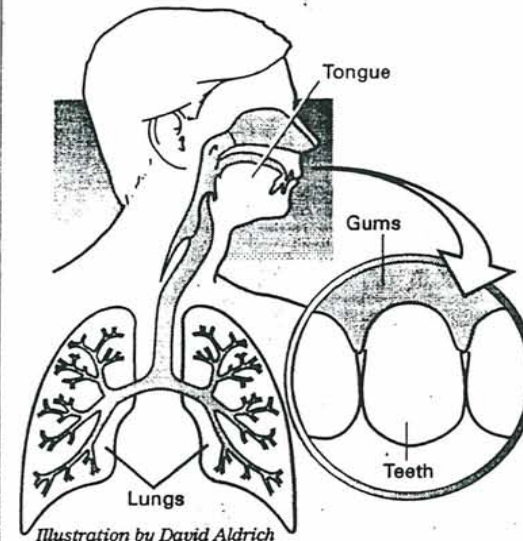


Illustration by David Aldrich

the activity of immunoglobulin A, the antibody that protects soft, mucosal surfaces from infection and allows bacteria to flourish. Yeast infections in the mouth, which can develop in people with a suppressed immune system, are also a possibility.

In some intransigent cases, the Fresh Breath Clinic may prescribe antimicrobial drugs. It will test bacterial levels and analyze items in the diet that might trigger breath attacks. The consultations, which include an assessment of the problem and measurement of the odours in the mouth and nose, cost \$475 and are covered by many dental plans, Ms. Bosy noted.

If you want to attack the problem on your own, a good first line is flossing diligently. Regular appointments with a dental hygienist will clean out tartar along the gum line that can hold bacteria.

A dietary approach might include eating lots of raw foods or fasting and drinking something acidic such as lemon juice to change the alkaline conditions that bacteria need. But the sugar in mints and chewing gums may actually feed the bacteria. Chlorophyll has been used as a natural breath defence for centuries, but if the taste of raw parsley leaves you cold, try alfalfa, wheat grass or barley juice.

Despite its pungency, garlic can help because it can act as a natural antibiotic. Vitamins A and C are also recommended to help heal mouth and gum diseases.

Many dentists remain skeptical of antibacterial mouthwashes because they may contain chlorine, which can stain teeth. Also, the long-term effects of chlorine on the body aren't well understood.

Wallace Immen contributes to Body Works every other Wednesday. If you have a comment or a query for Body Works Interactive, call 1-800-461-3298 (toll-free) or 416-585-5168, fax 1-416-585-5085, write c/o The Globe and Mail, 444 Front St. W., Toronto, Ont., M5V 2S9, or send E-mail to [MidKing@GlobeAndMail.ca](mailto:MidKing@GlobeAndMail.ca). For previous columns and a discussion forum go to <http://www.TheGlobeAndMail.com> and click on WebExtra.