



Oxygene®: Oxyfresh's Exclusive Odor Eliminator

**Alcohol-free signature solution works in paste, rinse and gel
to neutralize obnoxious odor compounds that cause bad breath**

The bad breath from that cheeseburger with extra onions you had for lunch will linger for hours — if you let it. Nobody wants bad breath, that's why big-brand dental product companies spend millions of dollars each year trying to sell you their breath-freshening products. Problem is, most of these heavily advertised products simply hide mouth odors — or worse yet, compound the problem — with moisture-robbing alcohol and short-lived flavor additives. Oxyfresh uses its very own pharmaceutical formula to fight bad breath by attacking and *neutralizing* volatile sulfur compounds (VSCs), the rotten-smelling bacterial by-products mainly responsible for bad breath. Most commercial mouthwashes use alcohol — nearly 30 percent by volume in some cases — to actually kill the bacteria, but is that the answer?

“The use of alcohol in mouthwashes is an ironically poor choice,” says Dr. Anthony Stefanou, D.M.D., a New York City dentist. “VSCs result from dead bacteria and epithelial cells. When alcohol is used to ‘kill the germs that cause bad breath’ as touted by nationally advertised mouthwashes, those products may be fueling the carrier of bad breath by producing more dead bacteria!

“Oxygene®, Oxyfresh's long-lasting oxidizing compound, neutralizes these odor-causing germs and bacteria through an oxidation process,” explains Dr. Stefanou. Oxyfresh uses this signature solution in its concentrated, low-abrasion (gentle on tooth enamel) toothpastes and alcohol-free mouthrinses, as well as in body deodorizers and cleansers, skin gels and shampoos and oral additives for pets.

Oxygene is a *non-toxic* oxidizing agent that breaks down VSCs that cause odors. These stubborn, foul-smelling compounds get trapped in deep tongue crevices and cause bad breath. “Toothbrushes aren't designed to reach these deep pockets,” Dr. Stefanou says, “but Oxygene® mouthrinse can.”

Powerful solution works gently

The concentration of Oxygene® in Oxyfresh products ranges from 500 parts per million to 1,000 parts per million, but don't let the trace amount mislead you. Oxygene® is extremely effective in lower concentrations. In fact, Dr. Stefanou says, the formula works better in modest amounts. Specifically, Oxyfresh uses **zinc** — an excellent deodorizer proven to eliminate VSCs — combined with **fluoride**, the ultimate cavity fighter, to offer a remarkably effective breath-freshening mouthrinse.

Using Oxygene® in smaller amounts provides a more “neutral” taste in Oxyfresh oral products. “With Oxyfresh products, we can use low amounts of zinc and Oxygene® and provide excellent deodorizing benefits,” Dr. Stefanou says. “Oxyfresh is the only major dental company that offers the patented combination of stabilized chlorine dioxide with zinc and fluoride,” he says. “Products with Oxygene® combine safe, effective ingredients to offer a cleaner, fresher, healthier mouth.”

Protecting vulnerable gums

Besides the proven breath-freshening attributes of Oxygene® Oxyfresh mouthrinses may help prevent periodontal disease, according to recent dental studies. VSCs may increase the permeability of the periodontal membrane, weakening the gums and making them more vulnerable to disease. By reducing or eliminating the VSCs by rinsing with an Oxygene® product, there is a higher level of protection for the gums, according to a 1998 study done at the Medical College of Georgia, School of Dentistry, in Augusta, Georgia. The study, performed by



Kevin B. Frazier, D.M.D., and John C. Wataha, Ph.D., also concluded zinc acetate properties in Oxyfresh's patented mouthrinse "...have been shown to reduce plaque and calculus accumulation...and provide essential nutrients for enzyme activity."

According to another 1998 study performed by Dr. Steven Spindler, D.D.S., of Metairie, Louisiana, patients using an Oxygene® mouthrinse to control bad breath showed a 35 percent reduction in plaque scores when using Oxygene® products, and a 72 percent reduction in bleeding gums when compared with a phenol-related rinse regimen like Listerine — which includes more than 21 percent alcohol.

The same non-toxic, non-carcinogenic purification qualities of Oxygene® that eliminate microorganisms and odors in the mouth also make Oxyfresh's proprietary formula effective in body cleansers and deodorizers and oral additives for pets. Dr. John F. Prange, D.V.M., Oxyfresh Pet Division Leader, said as a water additive, Pet Oral Hygiene Solution with Oxygene®, helps control bacteria around the teeth and gum line, thus improving the animal's breath and slowing the progression of periodontal disease. Veterinarian clinics across the country use and recommend Oxyfresh pet products with Oxygene®, Dr. Prange said.

Industrially, these same chlorite and chlorate solutions have been used since the 1950s for a wide range of purposes, ranging from purifying public drinking water systems (as an attractive alternative to chlorine), to bleaching wood pulp to make paper — and even sterilizing anthrax crime scenes.