



A new light bulb goes on – and those household odors disappear

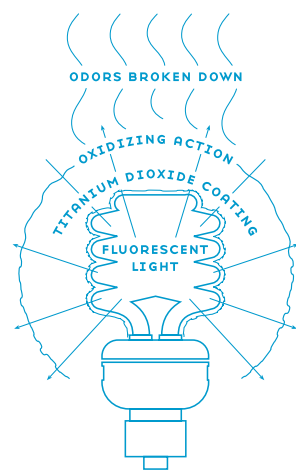
By Joyce Cohen, Special for USA TODAY

Denise Hauser thought something smelled fishy when she heard about a new light bulb that purports to rid the air of foul odors.

She tested it out on a problem in her home – in the basement utility room, where two litter boxes serve the family's two cats. "You can always tell there is a litter box, even though you clean it," says Hauser, a nurse in Cleveland.

But she sensed a change in the air when she turned on the odor-expunging bulb – a brand-new kind of fluorescent bulb with a coating of titanium dioxide. The "lingering odor" vanished, she says. "I'm impressed."

Impressed she may be, but scientists are not surprised.



The new light bulb attacks odor with a titanium dioxide coating.

Both bulbs – Ozonelite (ozonelite.com) and fresh² (www.fresh2.com) – are compact fluorescents coated with titanium dioxide, a powder form of the mineral titanium. The cost: \$40 for Ozonelite's 23-watt bulb (equivalent to 100-watt incandescent); \$20 for two 23-watt fresh² bulbs.

Demand for ways to freshen the air is enormous. In the USA, spending on air-freshening sprays, solids, plug-ins



and candles jumped from \$2.5 billion in 1998 to \$3.4 billion in 2003, reports Mintel, a research firm in Chicago. Mintel predicts that spending will grow about 25% over the next five years.

"There's a huge market of people wanting to control odors, especially when they can't control the source," such as smoking or cooking smells, says Tom Yacobellis of the Indoor Air Quality Association. "Even a vinyl shower curtain has obnoxious odors associated with it."

The odor-neutralizing bulbs work by converting odors, which are organic compounds, into harmless carbon dioxide and water. The smelly substance is destroyed "as though you'd burned it," says Daniel Blake, a scientist at the National Renewable Energy Laboratory in Golden, Colo.

How well the bulb works depends on several factors, including room size and the concentration of the smell.

It won't work inside a closed fixture – the fetid air must touch the bulb's surface. Nor will it be very effective on a source that continually generates odors, such as a leaky pipe that feeds mold.