

# Why air fresheners and scented candles can wreck your health: They could cause cancerous DNA mutations and asthma

**UK spends nearly £400 million a year on candles, incense and aerosols**  
**John Naish explores the hidden dangers of the hugely popular products**  
**Investigators warn they can cause tumors, lung damage and asthma**

By [John Naish for the Daily Mail](#)

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Spring meadows, pine forests, freshly laundered linen, and the mystic Orient; heavenly scents for boosting our morale and instantly making our homes feel fresh, clean, relaxing or invigorating.

In the UK, we spend nearly £400 million a year on 225 million aerosols, plug-ins, gels, candles and incense sticks, each promising an alluringly quick, convenient and harmless way to transform the atmosphere in our homes.

However, evidence is now emerging that all of these products contain industrial chemicals which can, among other things, transform the structure of our DNA.

Here, John Naish explores the hidden dangers...



The UK spends nearly £400 million a year on home perfuming, despite the potential dangers

## INCENSE SMOKE GETS IN YOUR EYES - AND DNA

Millions of us burn them every day to send spiritually inspiring wafts of spiciness around our homes. Research shows that ingredients such as frankincense can cause chemical changes in our brains, lifting our moods.

However, incense's mystic allure has been clouded by new findings warning that its fumes may be more dangerous than cigarette smoke, causing cancerous mutations in our DNA.

Burning incense releases tiny chemical particles which can become trapped in our lungs, causing potentially dangerous inflammatory reactions.

The research also found that incense particles from commonly used ingredients agarwood and sandalwood are more toxic to our cells' DNA than tobacco smoke.

## PUTTING A WHIFF OF DANGER IN THE AIR

Chemical sprays, plug-ins and gels for home perfuming are hugely popular but investigators warn that they can



include an array of hazardous substances which may cause lung damage and tumors, interfere with our hormones and cause such lifelong problems as asthma.

Last month, a study involving Public Health England's Centre for Radiation, Chemical and Environmental Hazards, warned that plug-in air fresheners produce 'considerable' levels of formaldehyde: described by the US government's National Toxicology Program as a known 'human carcinogen'. It is most closely linked with cancers of the nose and throat and at the very least, it can also cause sore throats, coughs, scratchy eyes and nosebleeds.

It is not the only chemical to fear in air fresheners. Other basic ingredients include petroleum products and such chemicals as p-dichlorobenzene, which hardly bring to mind summer meadows, vanilla pods and sultry spices.

A Glade air freshener. The company which makes their products published specific information on the ingredients it uses for the first time this June

These ingredients have been linked with a raised risk of asthma in adults and children.

In 2013, after a study of more than 2,000 pregnant women, the International Journal of Public Health reported that women who used air fresheners in their homes were significantly more likely to have babies that suffered from wheezing and lung infections.

One study that followed 14,000 children from before and after birth found they had higher levels of diarrhea and earache, while their mothers had raised risks of headaches and depression, all linked to the frequent use of air fresheners and aerosols during pregnancy and early childhood.

A 2007 study also found that using air fresheners as little as once a week can raise the risk of asthma in adults. The same report found that the risk of developing asthma was up to 50 per cent higher in people who had been exposed to air-freshener sprays.

Many air fresheners also contain substances called volatile organic compounds (VOCs), characterized by their low boiling points which mean they form vapor or gas at room temperature. Experts warn that these can increase the risk of asthma in children.

Another common ingredient is naphthalene, which has been shown to cause tissue damage and cancer in the lungs of rats and mice in laboratory studies.

Manufacturers of air fresheners, however, maintain that their products are safe.

In June, SC Johnson, which makes Glade air fresheners, published specific information on most of the ingredients in its products for the first time.

Company chairman Fisk Johnson says: 'We take great care in making ingredient choices to offer products that are both safe and effective.'

However, not all of the ingredients used in the actual perfumes are fully listed and critics claim that these can each be made up of several hundred different chemicals.

SC Johnson maintains, however, that all its fragrance ingredients, even those not listed, are safe: 'While they are not disclosed, the remaining ingredients also must meet our strict standards.'

The company is at loggerheads with environmental health campaigners, however, over its use of the synthetic musks galaxolide and tonalide.

*Most scented candles are made with paraffin. The oil by-product gives off ultra-fine soot particles containing acetone, benzene and toluene, usually seen in diesel emissions, and known carcinogens*

The American pressure group, Women's Voices for the Earth (WVE), produced a report in April claiming the musks can build up in our bodies and particularly in breast milk.

WVE believes that these musks are potentially dangerous, particularly to babies, because they may interfere with hormonal development. 'The potential health impacts of synthetic musk exposure so early in life are still unknown,' it warns.

SC Johnson disagrees, however, and its website argues: 'Despite what has been inaccurately reported, galaxolide and tonalide are not classified as hormone disruptors.

'Safety evaluations have deemed them safe for use in consumer products such as air fresheners.'

## NOT-SO-ROMANTIC SCENTED CANDLES

There is something very special about candles; their flickering glow creating a cosily romantic scene.

Scented candles bring another dimension, adding that subtle hint of aromatic bliss. Scientists remain unmoved however, voicing extreme concerns about the pollution that they are bringing to our lives.

In March, a team of experts tested six scented candles, with such aromas as clean cotton, strawberry and kiwi fruit.

Behind their delicious labels, however, lay a host of potentially dangerous industrial chemicals, including formaldehyde at levels which, with long-term exposure, are known to raise the risk of respiratory problems and cancer.

The candles also gave off significant levels of VOCs. Furthermore, the study warned that you don't even need to light such candles because simple evaporation will enable them to pollute your home.

Other studies show the chemicals are capable of being absorbed by the body simply through touching the candles.

Most scented candles are made with paraffin, which brings other problems. The oil by-product gives off ultra-fine soot particles containing acetone, benzene and toluene, usually seen in diesel emissions, and known carcinogens.

The report brought a riposte from the US National Candle Association, which argued that the experiments did not reflect normal use.

The journal stands by the study, saying: 'Scented candles can be significant sources of volatile chemicals in the indoor environment.'

Perhaps it's time to snuff out this particular habit.

Read more: <http://www.dailymail.co.uk/femail/article-3220306/Why-air-fresheners-scented-candles-wreck-health-cause-cancerous-DNA-mutations-asthma.html#ixzz4bJwJhb1p>

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