

Keep a Clean House With Nontoxic Cleaners

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✓ Fact Checked

STORY AT-A-GLANCE

- › Commercial cleaners emit toxic chemicals that may cause headaches and respiratory difficulties, organ damage and cancer
- › You can clean your home effectively and safely using natural ingredients like baking soda, vinegar, coconut oil, lemons and castile soap
- › Essential oils can be added to all of your homemade cleaning supplies and laundry detergents for an extra antimicrobial boost
- › Ditch synthetic air fresheners and scented candles for an aromatherapy diffuser, which smells wonderful and has therapeutic benefits

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A clean, decluttered home provides a much-needed sanctuary from the daily grind. It's hard to fully decompress if your home is dirty or untidy, and the average American worker spends nearly one hour on housework daily in an attempt to keep a clean house.¹ But there's a misconception that in order to truly clean your home, you've got to don rubber gloves and spray harsh chemicals to do it.

In fact, one of the primary reasons for cleaning your home regularly is to clear out the many toxic chemicals that have accumulated in your household dust. Flame-retardant

chemicals and phthalates are among them (along with thousands of species of bacteria and fungi).²

However, if you clean your home with commercial sprays, wipes, scrubs and polishes, you're putting toxins into your home environment instead of removing them. The same goes for most laundry detergents, dryer sheets and air fresheners. Even those strong-smelling lemon and pine scents – the ones many people believe are the epitome of a clean home – are created by toxic volatile organic compounds (VOCs).

You needn't expose yourself or your family to these toxins any longer, as it's simple to clean your home with nontoxic cleaners. You can even recreate the same "clean" scents you love using essential oils, and your home will smell much better for it while offering you therapeutic benefits at the same time. As an added bonus, by creating your own nontoxic cleaners, you'll probably save money too, compared to buying commercial cleaning products.

Scented Products Emit an Average of 17 VOCs

Have you ever felt nauseous, dizzy or gotten a headache after cleaning your home with typical cleaning supplies or using an air freshener? It's probably because of the VOCs. Eye, nose and throat irritation is also common at the time of use and over the longer term these chemicals can damage your liver, kidneys and central nervous system and even cause cancer.³

Research by Anne Steinemann, formerly with the University of Washington and currently a professor of civil engineering at the University of Melbourne, Australia, and colleagues tested 25 household products, including air fresheners and all-purpose cleaners, many of them "top sellers" in their category. The team found the average number of VOCs emitted was 17. They wrote in the journal *Environmental Health Perspectives*:⁴

"A single fragrance in a product can contain a mixture of hundreds of chemicals, some of which (e.g., limonene, a citrus scent) react with ozone in ambient air to form dangerous secondary pollutants, including formaldehyde. The researchers

detected 133 different VOCs. Most commonly detected were limonene, α - and β -pinene (pine scents), and ethanol and acetone (often used as carriers for fragrance chemicals).

Each product emitted [one to eight] toxic or hazardous chemicals, and close to half (44 percent) generated at least 1 of 24 carcinogenic hazardous air pollutants, such as acetaldehyde, 1,4-dioxane, formaldehyde or methylene chloride. These hazardous air pollutants have no safe exposure level, according to the U.S. Environmental Protection Agency."

You can't tell what types of toxic chemicals might be lurking in your favorite cleaning supplies because such labeling is not required. Steinemann's research even found that products labeled green, natural and organic emitted hazardous air pollutants.⁵

Fragranced products (which most commercial cleaning products could be classified as) are particularly problematic, with another of Steinemann's studies revealing that nearly 35% of Americans reported health problems, such as migraine headaches and respiratory difficulties, when exposed to them.⁶

That being said, a typical professional cleaning product contains more than 132 different chemicals, fragrances among them, but also glycol ethers, surfactants, solvents, phosphates, detergents and more. "Cleaning products potentially give rise to simultaneous exposures to different chemical substances," researchers wrote in the International Journal of Occupational and Environmental Health,⁷ which is why you're far better off cleaning the truly natural way.

Five Essentials for Your Natural Cleaning Arsenal

Are you ready to ditch your toxic cleaners in favor of a safe, naturally clean home? Go ahead and purge your cabinets of your old cleaning supplies to make room for these natural cleaning essentials. You might find that you have some of them in your kitchen cabinets already:

1. Baking Soda — In preparation for the Statue of Liberty's 100th anniversary in 1986, 99 years' worth of coal tar had to be removed from its inner copper walls, without causing damage. Baking soda — more than 100 tons — was the cleaner of choice,⁸ so there's a good chance it can remove dirt and grime around your home too.

- **Use as a safe non-scratch scrub** for metals and porcelain.
- **To clean your oven**, sprinkle a cup or more of baking soda over the bottom of the oven, then cover the baking soda with enough water to make a thick paste. Let the mixture set overnight. The next morning, the grease will be easy to wipe up because the grime will have loosened. When you have cleaned up the worst of the mess, dab a bit of liquid detergent or soap on a sponge and wash the remaining residue from the oven.
- **To unclog a drain**, pour one-half cup to 1 cup of baking soda down the drain, then slowly pour one-half cup to 1 cup of vinegar in after it. Cover the drain and let it set for 15 minutes. If it bubbles like a volcano, it means it's working as planned. Flush with a gallon of boiling water.
- **Deodorize dry carpets** by sprinkling liberally with baking soda. Wait at least 15 minutes, then vacuum.

2. White Vinegar — Distilled white vinegar has been found to be useful for disinfection against *Escherichia coli* (E. coli), provided it's used in a freshly prepared solution of at least 50% vinegar.⁹ For disinfecting, one study found that spraying vinegar, then spraying hydrogen peroxide, was effective for killing a variety of bacteria, including E. coli, listeria and salmonella.¹⁰

You can also combine vinegar and water for an excellent window cleaner, or spray it onto a dusting of baking soda to clean your sinks, tubs and tile floors.

Vinegar and water makes a great all-purpose countertop cleaner as well, but for stone counters, use rubbing alcohol or vodka with water instead, as the acidity may harm certain surfaces like marble and granite. For heavier duty cleaning, like

mildew on your bathroom grout, spray vinegar straight onto the area, let set for 30 minutes, then scrub with a sponge and warm water.

3. Lemons – Lemons, both the juice and peels, can be used throughout your home for cleaning and deodorizing. Consider the following uses:

Garbage disposal – Freeze lemon slices and vinegar in ice cube trays. Place a few frozen cubes down your disposal for cleaning and freshening.

Refrigerator – Soak a sponge in lemon juice and let it set in your fridge for a few hours; it works better than baking soda to remove odors.

Room freshener – Simmer a pot of water and add lemon peels, cloves and cinnamon sticks.

Humidifier – Add lemon juice to the water in your humidifier, then let the machine run for deodorizing.

Breath – Drinking lemon water helps freshen your breath (rinse your mouth with plain water afterward since lemon juice may erode your teeth).

Trash cans – A few lemon peels added to your garbage can will help with odors.

Fireplace – Dried citrus peels can act as kindling in your fireplace, adding a wonderful smell and acting as a flame starter.

Hands – Add lemon juice while washing your hands with soap to help remove stubborn odors like garlic.

Simply let the peels set out for a few days before using.

Cat box – Place lemon slices in a bowl near your cat box to help freshen the air.

Cutting boards – Sprinkle coarse salt on your cutting board then rub with a cut lemon to freshen and remove grease.

This trick also works for wooden salad bowls and rolling pins.

Furniture polish — Combine lemon oil, lemon juice, and olive or jojoba oil to make a homemade furniture polish. Simply buff with a cloth.

Windows — Lemon juice cuts through grease and grime on windows and glass.

Try combining it with cornstarch, vinegar and water for a phenomenal window cleaner.

Coffee maker — Run a cycle with plain water, then add a mixture of lemon juice and water to the water tank. Let it set then run the cycle through.

Hardwood floors — Combine lemon and vinegar to make a grime-fighting nontoxic floor cleaner.

Repeat this process once more, then run another plain water cycle (you'll want to wash the coffee pot and filter afterward to remove any lemon taste).

All-purpose cleaner — Combine water, baking soda, vinegar, lemon and lemon essential oil for a wonderful kitchen or bathroom cleaner.

- 4. Castile Soap** — Castile soap is natural, biodegradable and chemical-free, plus incredibly versatile (as are most natural cleaning supplies). You can use it for personal care, laundry and cleaning around your home. For instance, mixing baking soda with a small amount of liquid castile soap makes an excellent paste for cleaning your tub and shower.

For a homemade antibacterial solution, mix 2 cups of water with 3 tablespoons of castile soap and 20 to 30 drops of tea tree oil. Spray onto the surface (such as toilet seat and sink), then wipe off. You can even make a homemade dishwasher detergent by mixing equal parts of liquid castile soap and water.

5. Coconut Oil – Antiviral, antibacterial and antifungal compounds in coconut oil have been shown to inactivate microorganisms such as bacteria, yeast and fungi. Around the home, coconut oil is particularly useful for cleaning, sanitizing and conditioning wood items, such as cutting boards and furniture, but you can also use it for lubricating squeaky hinges and sticky mechanisms instead of WD-40.

It also works well for moisturizing and softening leather goods in lieu of leather conditioners and for removing chewing gum from virtually any area, including carpets and hair.

Essential Oils for Household Cleaning and Diffusing

Essential oils deserve a category of their own, as their uses for household cleaning are only limited by your imagination. Many essential oils have antibacterial, antifungal and antiviral activity and can be added as a boost to your homemade cleaners. For instance, to make a homemade cleaning scrub with antibacterial activity, simply add a few drops of lavender oil to baking soda.

Some of the most popular essential oils for cleaning include lemon, peppermint and tea tree, with the latter showing antiviral activity against viruses like influenza A.¹¹

Sweet orange is another option, which has been shown to work against E. coli and salmonella.¹² In addition to adding them to your cleaning supplies, essential oils can be diffused around your home for a natural, therapeutic air freshener. Ditch the toxic sprays, candles and plug-ins for an essential oil diffuser instead. They not only smell wonderful but can have beneficial effects on your mood and stress levels.

And unlike synthetic fragrances, which pollute your air, essential oils may help to improve indoor air quality. In the case of fungi and mold, for instance, essential oils from

heartwood, marjoram, cinnamon, lemon basil, caraway, bay tree, fir, peppermint, pine, cedar leaf and manuka are known to have antifungal potential.¹³

In addition, you can easily freshen your laundry without risking your family's health simply by spritzing your wet laundry with a mix of water and a few drops of essential oil before placing it in the dryer. Alternatively, add a dozen or so drops to an old wool sock, and put it in the dryer with your laundry.

Cleaning Your Home Naturally: The Sky's the Limit

Once you dip your toe into the world of natural cleaning, you'll realize the possibilities are endless. There's virtually no reason to resort to toxic chemical sprays. You can reach a superior level of clean and sanctity using simple ingredients you probably have under your kitchen sink right now. And feel free to be creative, as some of the best combinations may surprise you.

For instance, some people rave about a glass cleaner made from white vinegar (one-fourth cup), cornstarch (1 tablespoon) and warm water (2 cups).¹⁴ You can even make your own laundry detergent, adding in any essential oils you like for a natural scent. Here's a recipe from Mommypotamus to get you started.¹⁵ Happy natural cleaning!

Homemade Natural Laundry Detergent¹⁶

Ingredients

- 6 cups washing soda
- 3 bars coconut oil soap (4.5 to 5 ounces each)
- Lemon essential oil (optional)

To Make

1. Cut soap into small chunks. Add to a food processor along with the washing soda.
2. Blend until you have a fine powder. You may want to lay a dish towel over the top of your food processor to prevent a fine mist of powder from floating into the air. Also, let it settle a bit before opening the container or the powder will float onto your kitchen counter!
3. Pour into a clean container (keep the essential oil next to the jar and add five drops with each load)

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