# **Newsletter**

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## **GOOD HOUSECLEANING:**

### FIVE NON-TOXIC, GET-THE-DIRT OUT BASICS

Annie Berthold-Bond (Mothering Magazine May/June 2002)

My friend Rachel is pregnant with her second child, like many pregnant women, she is distilling all of society's free-floating anxiety about exposure to toxic chemicals into nine months of serious worrying. Rachel asked me to teach her how to do nontoxic cleaning, and she was pleasantly surprised to find out how easy and effective it can be.

There are five basics that I use for nontoxic cleaning: baking soda, vinegar, a good soap or detergent, washing soda and tea tree oil. I believe you can clean everything in the house with these items. Rachel liked the simplicity of having to learn about only five ingredients. She also felt less vulnerable the more she took charge of the number of chemicals coming into her house.

My rule of thumb about nontoxic cleaning is this: use only ingredients that have been used without harm for so many years that they are "generally regarded as safe"; otherwise they would have long since been abandoned.

#### **Baking Soda**

A commonly available mineral full of many cleaning attributes, baking soda is made from soda ash and is slightly alkaline (its pH is around 8.1; 7 is neutral). It neutralizes acid-based odors in water and absorbs odors from the sir. Sprinkled on a damp sponge or cloth, baking soda can be used as a gentle, nonabrasive cleanser for kitchen countertops, sinks, bathtubs, ovens and fiberglass. It will eliminate perspiration odors and even neutralize the smell of many chemicals if you add up to a cup per load to the laundry. It is also a useful air freshener and a fine carpet deodorizer.

#### Washing Soda

A chemical neighbor of baking soda, washing soda (sodium carbonate) is much more strongly alkaline, with a pH around 11. It releases no harmful fumes and is far safer than a commercial solvent formula, but you should wear gloves when using it because it is caustic. Washing soda cuts grease, cleans petroleum oil, removes wax or lipstick and neutralizes odors in the same way as baking soda. Don't use it on fiberglass, aluminum or waxed floors unless you intend to remove the wax. Washing soda is found in the laundry section of most supermarkets.

#### Vinegar

Vinegar is a mainstay of old folk recipes for cleaning and with good reason. The vim of the vinegar is that it kills bacteria, mold and germs. It is also the opposite of baking and washing soda; it is acidic and therefore neutralizes alkaline or caustic substances. If your tap water is hard and you have trouble with mineral buildup (which looks like a corroded dirty powder) soak a cloth in vinegar and rest it on the problem area for a few hours. The acid will break down the minerals and they can be wiped away. Acids dissolve gummy buildup and eat away tarnish. I have also found vinegar particularly good for removing dirt from wood surfaces. Heinz company spokesperson Michael Mullen references numerous studies to show that a straight 5 percent solution of vinegar kills 99 percent of bacteria, 82 percent of mold and 80 percent of germs (viruses). Heinz's packaging cannot claim that vinegar is a disinfectant, since the company has not registered it as a pesticide with the Environmental Protection Agency (EPA) however, it seems to be common knowledge in the industry that vinegar is powerfully antibacterial. (The CBS news show 48 Hours aired a special report on tests from the Good Housekeeping Institute showing this.) Use white distilled vinegar, since apple cider vinegar can leave stains.

#### Soap or Detergent

Many people are confused about the difference between soaps and detergents. Both are surfactants or surface agents, which basically means they are washing compounds that mix with grease and water. But soaps are made of materials found in nature and detergents are synthetic (although some of the ingredients are natural); they were developed during World War II, when oils to make soap were scarce.

There is little doubt that soap is better for your health and the environment than detergents. Detergents are very toxic to fish and wildlife. Washing with soap has a big drawback, however—the minerals in water react with those in soap, leaving an insoluble film. This can turn clothes grayish and the film can leave a residue (such as is found on shower stalls, for example). Detergents react less to minerals in water and for all practical purposes, are the product of choice for laundry, unless you have very soft water. Those of you with hard water, which has a high mineral content, undoubtedly already know this. If you do use detergent, you can ensure the least possible damage to the environment by selecting the most biodegradable products. (See For More Information) Health food stores carry brands of detergent made with renewable materials instead of petroleum-based ingredients and with natural essential oil fragrance and no dyes. They also sell liquid vegetable-oil soap called castile soap.

#### Tea Tree Oil

A friend once offered me a very beautiful but musty bureau. I thought that setting the bureau in the sun for a day or two might kill the mold, but that didn't do the trick. Much to my surprise, the solution I finally discovered was easy, used all natural materials and removed 100 percent of the musty smell.

I have found three natural ingredients that kill mold: tea tree oil (an essential oil found in most health food stores) grapefruit seed extract and vinegar. Each has its pros and cons. Vinegar is far the cheapest. Tea tree oil is expensive, but it is a broad-spectrum fungicide and seems to kill all the mold families it contacts; the problem is that it has a very strong smell, but that dissipates in a few days. Grapefruit seed extract is also expensive but has no smell.

Mold can be dangerous to your health, even if you aren't allergic. Many people react to mold by getting tired and even depressed. Try to stay on top of moisture and mold as soon as either arises. Dry out anything that is damp, such as basements (use a dehumidifier) and carpets. Fix leaks in plumbing and roofs. Wipe up spills. Make sure water doesn't escape from shower curtains. Vigilance will pay off!

#### My Seven Favorite Recipes

#### **Creamy Soft Scrubber**

1/2 cup baking soda, liquid detergent

Pour the baking soda into a bowl and add enough liquid detergent to give the mixture the texture of frosting. Scoop it onto a sponge to wash surfaces. This is the perfect recipe for cleaning the bathtub, because it rinses easily and doesn't leave grit.

#### Window Cleaner

1/4 to 1/2 teaspoons liquid detergent, 3 tablespoons vinegar, 2 cups water

Put all the ingredients in a spray bottle, shake it, and use as you would a commercial brand. The detergent in this recipe is important—it cuts the wax residue left by products you might have used in the past.

#### **Oven Cleaner**

1 cup or more baking soda, water, squirt or two of liquid detergent

Sprinkle water generously over the bottom of the oven, then cover the grime with enough baking soda that the surface is totally white. Sprinkle more water over the top. Let the mixture set overnight. You can easily wipe up the grease the next morning 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. Note: If this recipe doesn't work, you probably didn't use enough baking soda and/or water.

#### All-Purpose Spray cleaner

1/2 teaspoon washing soda, dab of liquid soap, 2 cups hot tap water

Combine the ingredients in a spray bottle and shake until the washing soda has dissolved. Apply and wipe off with a sponge or rag.

#### **Furniture Polish**

1/2 teaspoon oil, such as olive (or jojoba, a liquid wax), 1/4 cup vinegar or fresh lemon juice

Mix the ingredients in a glass jar. Dab a soft rag into the solution and wipe wood surfaces. Cover the glass jar and store indefinitely.

#### Vinegar Deodorizer

Keep clean spray bottles filled with straight 5 percent vinegar in your kitchen near your cutting board and in your bathroom and use them for cleaning. I often apply the vinegar to my cutting board before going to bed and let it set overnight. The smell of vinegar goes away within a few hours. Straight vinegar is also great for cleaning the toilet rim. Just spray it on and wipe off.

#### Mold Killer1: Tea Tree Treasure

2 teaspoons tea tree oil, 2 cups water

Nothing natural works as well as this spray for mold and mildew. I've used it successfully on a moldy ceiling and shower curtain and a musty bureau and rug. Tea tree oil is expensive, but a little goes a very long way. It also has a very strong odor, but that dissipates in a few days. Combine tea tree oil and water in a spray bottle, shake to blend and apply to problem areas. Do not rinse. Leave in the bottle-it has a long shelf life.

#### Mold Killer2: Citrus Seed Extract

20 drops citrus seed extract, 2 cups water

The advantage of using citrus seed extract instead of tea tree oil for killing mold is that it is odorless. Combine the citrus seed extract and water in a spray bottle, shake to blend and apply to problem areas. Do not rinse. Leave in bottle it also has a long shelf life.

#### Mold Killer 3: Vinegar Spray

Straight vinegar reportedly kills 82 percent of mold. Pour some white distilled vinegar into a spray bottle and apply to moldy areas. Let set without rinsing, if you can put up with the smell, which will subside in a few hours.

Annie Berthold-Bond is the Healthy Living content producer for Care2.com and the author of a number of books, including Better Basics for the Home and Clean & Green.