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Safer alternatives: Reducing the Risk

One of the best means of avoiding exposure to house-hold hazardous materials is to use safer alternatives whenever possible. Included in this section are time-honored recipes and suggestions to help you make the switch toward safer household products. Ingredients followed by instructions will guide you through an array of easy-to-make, easy-to-use safer alternatives. Some ingredients recommended as alternatives are safer, but not nontoxic. These ingredients have been marked with an asterisk(*) to assist you in identifying their presence.

Making your own simple and effective products is fun and economical. We think you will be happily surprised with the results.

Source:
Michigan State University Extension

Borax* or Washing Soda*. Two tablespoons of borax or washing soda mixed into 3 cups water makes a good window cleaner. Apply to surface and wipe dry.

Lemon Juice. Mix 1 tablespoon lemon juice in 1 quart water. Apply to surface and wipe dry.

Baking Soda. To clean cut glass, sprinkle baking soda on a damp rag and clean glass. Rinse with clean water and polish with a soft cloth.

Scratches, Stains, and Discoloration In Windows And Glass

Toothpaste. Rub a little toothpaste into the scratch. Polish with a soft cloth.

Dry Mustard* and Vinegar. Mix 1 pan dry mustard and 1 pan white vinegar into a paste. Apply paste to the scratch. Polish with a soft cloth. AVOID EYE CONTACT; DRY MUSTARD CAN BE DAMAGING TO THE CORNEA.

Windshield Wiper Fluid

Vinegar. When you have to leave your car outside overnight in the winter, mix 3 pans vinegar to 1 pan water and coat the windows with this solution. This vinegar and water combination will keep windshields ice and frost-free.

This information comes from the Guide to Hazardous Products Around the Home, part of the Household Hazardous Waste Project in Missouri.
Baking Soda. To clean grout, put 3 cups baking soda into a medium-sized bowl and add 1 cup warm water. Mix into a smooth paste and scrub into grout with a sponge or toothbrush. Rinse thoroughly and dispose of leftover paste when finished.

Window And Glass Cleaner

A few tips on window washing: (1) never wash windows while the sun is shining on them because they dry too quickly and leave streaks; (2) when polishing windows use up and down strokes on one side of the window and side to side strokes on the other to tell which side requires extra polishing; and (3) to polish windows or mirrors to a sparkling shine, try a natural linen towel or other soft cloth, a clean, damp chamois cloth, a squeegee, or crumpled newspaper. One word of warning about newspaper: while newspaper does leave glass lint-free with a dirt-resistant film, persons with sensitivities to fumes from newsprint may wish to avoid the use of newspaper as a cleaning tool.

Vinegar: Wash windows or glass with a mixture of equal pans of white vinegar and warm water. Dry with a soft cloth. This leaves windows and glass streakless. To remove those stubborn hard water sprinkler spots and streaks, use undiluted vinegar.

Air Fresheners

Most commercial air fresheners do not freshen the air at all. Instead, they mask one odor with another, coat your nasal passages with an undetectable oil film, or diminish your sense of smell with a nerve-deadening agent.

For a safer alternative, you may wish to try one of the following.

Ventilation. Open windows or doors in the house for at least a short period every day. This will also help to reduce toxic fumes that may be building up indoors.

Vinegar. Distribute partially filled saucers of vinegar around the room or boil 1 tablespoon of white vinegar in 1 cup of water to eliminate unpleasant cooking odors.

Cinnamon and Cloves. Boil these spices for a fragrant smell. For ease of cleaning, make a cheesecloth bag to contain these spices, and boil the cheesecloth bag. An excellent alternative when entertaining is to steep spiced tea or cider.

Potpourri. Buy or make your own potpourri from your favorite herbs and spices. Place the potpourri in a small basket or jar or in small sachet bags.
Kitchen And Food Odors

Vanilla*. Place pure vanilla on a cotton ball in a small saucer. Place the saucer in the car or refrigerator to remove odors. It is reported to remove even skunk odors. Keep the cotton ball out of reach of children; vanilla has a high alcohol content.

Baking Soda. Place a partially filled saucer of baking soda on the refrigerator shelf. Replace every two months and when you do, pour the contents of the used box down the drain to remove odors and keep the drain clean. Baking soda can also be used to deodorize bottles by filling them with undiluted baking soda and allowing the bottles to soak overnight. Then wash as usual.

Borax*. Empty the garbage frequently and clean the can as needed. To inhibit growth of odor-producing molds and bacteria, sprinkle 1/2 cup Borax in the bottom of the garbage can.

Vinegar or Celery Stalk. To avoid or remove onion odors from your hands, rub white vinegar on your hands before and after slicing. Rubbing hands with the end of a celery stalk will also remove the odor.

Baking Soda and Vinegar. Sprinkle baking soda into the bowl, then drizzle with vinegar and scour with a toilet brush. This combination both cleans and deodorizes.

Borax* and Lemon Juice. For removing a stubborn stain, like toilet bowl ring, mix enough borax and lemon juice into a paste which can cover the entire ring. Flush toilet to wet the sides, then rub on paste. Let sit for 2 hours and scrub thoroughly. For less stubborn toilet bowl rings, sprinkle baking soda around the rim and scrub with a toilet brush.

Tub And Tile Cleaner


Vinegar and Baking Soda. To remove film buildup on bathtubs, apply vinegar full-strength to a sponge and wipe with vinegar first. Next, use baking soda as you would scouring powder. Rub with a damp sponge and rinse thoroughly with clean water.

Vinegar. Vinegar removes most dirt without scrubbing and doesn't leave a film. Use 1/4 cup (or more) vinegar to 1 gallon water.
Clothes

**De-yellow silk or wool:**
Vinegar. Mix 1 tablespoon white vinegar in 1 pint of water. Sponge with this solution and rinse. Wash as usual.

**Chocolate:** Club Soda. Soak stain with club soda before washing.

**Cola:** White Vinegar. Apply undiluted vinegar directly to the stain within 24 hours. Wash as usual.

**Perspiration stain:** White Vinegar or Lemon Juice. Sponge stains with a weak solution of white vinegar or lemon juice.

**Grease on suede:** Vinegar. Sponge spot with a cloth dipped in vinegar. Dry and restore nap by brushing with a suede brush.

**Toilet Bowl Cleaner**

IF YOU DO USE BLEACH TO CLEAN YOUR TOILET BOWL, NEVER MIX BLEACH WITH VINEGAR, TOILET BOWL CLEANER, OR AMMONIA. The combination of bleach with any of these substances produces a toxic gas which can be hazardous.

All Purpose Cleaner

Vinegar and Salt. Mix together for a good surface cleaner.

Baking Soda. Dissolve 4 tablespoons baking soda in 1 quart warm water for a general cleaner. Or use baking soda on a damp sponge. Baking soda will clean and deodorize all kitchen and bathroom surfaces.

Carpet And Rug Cleaner

(See also Spot removers)

IF YOU PLAN TO SHAMPOO YOUR CARPET, FIRST TRY A PRE-CLEANING TREATMENT. Sweep the carpet, which will make the nap stand up and loosen the imbedded dirt. Next vacuum. With this work alone, the rug should show a noticeable improvement, so much in fact that you may decide to delay the shampooing.

To neutralize odors: Borax* and cornmeal. Sprinkle the carpet with a mixture of 1 cup Borax and 2 cups cornmeal. Let this mixture stand for an hour before vacuuming.

Another alternative is Baking Soda. Making certain that the carpet is dry, sprinkle baking soda liberally over the entire carpet. Wait at least 15 minutes, or overnight if the odor is particularly bad, before vacuuming.
Decal Remover

Vinegar. To remove no-slip decals from the bathtub, saturate a cloth or sponge and squeeze hot vinegar over decals. Vinegar also removes stick-on hooks from painted walls. Saturate a cloth or sponge with vinegar and squeeze the liquid behind the hook so that the vinegar comes in contact with the adhesive. In addition, vinegar can be used to remove price tags and other decals from glass, wood, and china. Paint the label or decal with several coats of white vinegar. Give the vinegar time to soak in and after several minutes the decal can be rubbed off.

Disinfectant

Soap. Regular cleaning with plain soap and hot water will kill some bacteria. Keep things dry. Mold, mildew, and bacteria cannot live without moisture.

Borax has long been recognized for its disinfectant and deodorizing properties. Mix 1/2 cup Borax into 1 gallon hot water and clean with this solution.

Isopropyl Alcohol*. This is an excellent disinfectant. Sponge and allow to dry. (It must dry to do its job.) Use in a well-ventilated area and wear gloves.

Isopropyl Alcohol* Be sure to wear gloves and work in a well-ventilated area. Blot rubbing alcohol onto stain.

Non-oily stains: Vinegar and Liquid Soap. Mix together 1 teaspoon of white vinegar, 1 teaspoon liquid detergent, and 1 pint lukewarm water. Apply this mixture to the non-oily stain with a soft brush or towel. Rub gently. Rinse with a towel dampened in clean water. Blot dry. Repeat this process until the stain is removed. Dry the carpet quickly using a fan or blow dryer. There is a chance that vinegar may bleach some dark, sensitive colors, so try it on an inconspicuous area first.

Soot stains: Salt. Sprinkle the area generously with salt. Allow the salt to settle for at least 15 minutes before vacuuming.

Stains and odors: Vinegar and Liquid Soap. Vinegar will kill the odor of urine and prevent staining if you can get to the spot right away. First absorb as much moisture as you can with dry paper towels. Next rinse the area with warm water and apply vinegar and soap solution into the stain using a clean cloth or paper towel and leave on for 15 minutes. Rinse with a towel dampened in clean water and blot dry. There is a chance that vinegar may bleach some dark, sensitive colors, so try it on an inconspicuous area first.
**Spot Removers**

To remove grease from concrete flooring: Dry Cement. Sprinkle dry cement over grease. Allow it to absorb the grease, then sweep up.

**Carpet**

General tips on stain removal: Clean up spills as fast as you can. Blot or scrape up as much of the spill as possible, blotting from the outside toward the center. Test the stain remover on an area under the sofa and wait 15 minutes to see if it damages the carpet color. After you clean the carpet, blot it dry and weigh down a small cushion of paper towels with a heavy object to soak up all the moisture. Don't panic!

**General stains:**
Borax*: Use according to label directions. Borax can be toxic if ingested.

**Blood stains:** Cold water or Club Soda. Sponge stain immediately with cold water or club soda and dry with a towel. Repeat as necessary.

**Ink stains:** Cream of Tartar and Lemon Juice. Place cream of tartar on the ink stain and squeeze a few drops of ice on top. Rub into the stain for a minute, brush off the powder with a clean brush and sponge immediately with warm water, being careful not to saturate the carpet backing. Repeat if necessary.

**Drain Cleaners and Drain Openers**

Prevention. To avoid clogging drains, use a drain strainer to trap food particles and hair; collect grease in cans rather than pouring it down the drain; pour a kettle of boiling water down the drain weekly to melt fat that may be building up in the drain; or weekly put some vinegar and baking soda down your drain to break down fat and keep your drain smelling fresh.

Plunger. A time-honored drain opener is the plunger. This inexpensive tool will usually break up the clog and allow it to float away. It may take more than a few plunges to unclog the drain. DO NOT USE THIS METHOD AFTER ANY COMMERCIAL DRAIN OPENER HAS BEEN USED OR IS STILL PRESENT IN THE STANDING WATER.

Baking Soda and Vinegar. Pour 1/2 cup baking soda down the drain. Add 1/2 cup white vinegar and cover the drain if possible. Let set for a few minutes, then pour a kettle of boiling water down the drain to flush it. The combination of baking soda and vinegar can break down fatty acids into soap and glycerine, allowing the clog to wash down the drain. DO NOT USE THIS METHOD AFTER ANY COMMERCIAL DRAIN OPENER HAS BEEN USED OR IS STILL PRESENT IN THE STANDING WATER.
Salt and Baking Soda. Pour 1/2 cup salt and 1/2 cup baking soda down the drain. Follow with 6 cups boiling water. Let sit overnight and then flush with water. The hot water should help dissolve the clog and the baking soda and salt serve as an abrasive to break through the clog.

Mechanical Snake (and Garden Hose). A flexible metal snake can be purchased or rented. It is threaded down the clogged drain and manually pushes the clog away. If used in conjunction with a running garden hose, it can even clear a blockage in the main drain to the street. First crank the snake and feed it into the pipe. Next withdraw the snake and flush the pipe by inserting a garden hose with the water turned on full. With some luck, it may save you the expense of a plumber.

**Floor Cleaners and Floor Polishes**

Vinegar. A few drops in the cleaning water will help remove grease panicles. Dull, greasy film on no-wax linoleum can be washed away with 1/2 cup white vinegar mixed into 1/2 gallon water. Your floor will look sparkling clean.

For Linoleum: Mild Detergent. Damp mop using a mild detergent and water for day to day cleaning. Keep water away from seams and edges to

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**Shoe Polish**

Cold Pressed Nut Oil, Olive Oil, Walnut Oil, or Beeswax. Apply oil to leather product and buff with a chamois cloth to a shine.

Lemon Juice. Lemon juice is good polish for black or tan leather shoes. Follow by buffing with a soft cloth.

Vinegar. Remove water stains on leather by rubbing with a cloth dipped in a vinegar and water solution.

Petroleum Jelly. A dab of petroleum jelly rubbed into patent leather gives a glistening shine and prevents cracking in the winter.

Vinegar. To shine patent leather, moisten a soft cloth with white vinegar and wipe clean all patent leather articles. The color of the leather may be slightly changed.

Art-Gum Eraser and Sandpaper or Emery Board. Dirt marks on suede can be rubbed out with an art-gum eraser. Then buff lightly with sandpaper or an emery board.
**Rust Remover**

Peeled Potatoes and Baking Soda or Salt. To remove rust from tinware, rub with a peeled potato dipped in a mild abrasive such as baking soda or salt.

Aluminum Foil. Briskly scrub rust spots on car bumpers with a piece of crumpled aluminum foil, shiny side up. Also works well on the chrome shafts of golf clubs.

**Scouring Powder**

The amount of chlorine in scouring powder is not significant enough to cause harm, but if you want to totally avoid chlorine or are sensitive to it follow these recipes.

Non-Chlorine Scouring Powder. Several commercially available products.

Baking Soda or Dry Table Salt. Both of these substances are mild abrasives and can be used as an alternative to chlorine scouring powders. Simply put either baking soda or salt on a sponge or the surface you wish to clean and then scour and nose.

prevent loosening of the tiles. To preserve the linoleum floor you may wish to add a capful of baby oil to the mop water.

For Wood Floors: Vegetable Oil and Vinegar. Mix a 1 to 1 ratio of oil and vinegar into a solution and apply a thin coat. Rub in well.

For Painted Wooden Floors: Washing Soda®. Mix 1 teaspoon washing soda into 1 gallon hot water and wash the floor with a mop, sponge, or soft bristled brush. This solution can also be used to remove mildew. For Rubber Tiles: Mild Detergent. Avoid oils, solvents, and strong alkalis as they will harm the surface. Wash with clear water, a mild detergent, and a clean mop.

For Brick and Stone Floors: Vinegar. Mix 1 cup white vinegar into 1 gallon water. Scrub the floor with a brush and the vinegar solution. Rinse with clean water.

For Ceramic Tile: Vinegar. Mix 1/4 cup white vinegar (more if very dirty) into 1 gallon water. This solution removes most dirt without scrubbing and doesn't leave a film. Washing ceramic tiles with soap does not work very well in hard water areas as it leaves an insoluble film.

Club Soda. Polishing your floor with Club Soda will make it sparkle.

Oil Soap. Use according to package directions.
Wax Remover

For Vinyl and Asbestos Tiles: Club Soda. Remove wax buildup by pouring a small amount of club soda on a section. Scrub this in well. Let it soak in a few minutes and wipe clean.

For Linoleum Flooring: Isopropyl Alcohol*. To remove old wax by mopping, mix a solution of 3 pans water to 1 pan rubbing alcohol. Scrub this in well and rinse thoroughly. Be sure the area is well-ventilated and wear gloves.

Special Problems

To remove black heel marks: Baking Soda. Rub the heel mark with a paste of baking soda and water. Don't use too much water or the baking soda will lose its abrasive quality.

To remove tar: Scrape up excess tar with the side of a dull knife. Rub again with your fingernail, a Popsicle stick, or anything that won't scratch the floor. Finally, wipe up the tar with a dry cloth.

To remove crayon marks: Toothpaste. Crayon marks on the floor may be removed by rubbing them with a damp cloth containing toothpaste. Toothpaste will not work well on wallpaper or porous surfaces.

Slugs And Snails

Natural Predators. Gardener snakes, grass snakes, ground beetles, box turtles, salamanders, ducks, and larvae of lightning bugs all feed on snails.

Clay Pots. Place overturned clay flower pots near the shady side of a plant. Rest one edge on a small twig or make sure that the ground is irregular enough for the slugs and snails to crawl under the rim. They will collect there during the warmest pan of the day. Remove slugs and snails regularly and drop in a bucket of soapy water.

Sand, Lime, or Ashes. Snails avoid protective borders of sand, lime, or ashes.

Tin Can. Protect young plants by encircling them with a tin can with both ends removed. Push the bottom end of the can into the soil.

Porcelain Cleaner

Cream of Tartar. To clean porcelain surfaces, rub with cream of tartar sprinkled on a damp cloth. Works well on light stains.
Roaches
Prevention. Close off all gaps around pipes and electric lines where they enter the house by using cement or screening. Caulk small cracks along baseboards, walls, cupboards, and around pipes, sinks, and bathtub fixtures. Seal food tightly. Rinse food off dishes that are left over night. Do not leave pet food out overnight.

Hedge Apples (Osage Orange). Cut hedge apples in half and place several in the basement, around in cabinets, or under the house to repel roaches.

Flour, Cocoa Powder, and Borax*. Mix together 2 tablespoons flour, 4 tablespoons borax, and 1 tablespoon cocoa. Set the mixture out in dishes. CAUTION: Borax is toxic if eaten. Keep out of reach of children and pets.

Borax* and Flour. Mix 1/2 cup borax and 1/4 cup flour and fill a glass jar. Punch small holes in jar lid. Sprinkle powder along baseboards and doorsills. Caution: Borax is toxic if eaten. This recipe may not be for you if there are young children or pets in the house.


Baking Soda and Powdered Sugar. Mix equal pans and spread around infested area.

To remove grease from wood floors: Ice Cube or Cold Water. If you spill grease on a wood floor, immediately place an ice cube or very cold water on the spot. The grease will harden and can then be scraped off with a knife. Then iron a piece of cloth over the grease spot.

Furniture Polish

The idea behind furniture polish for wood products is to absorb oil into the wood. Many oils commonly found in our kitchens work very well, Vegetable Oil or Olive Oil and Lemon Juice. Mix 2 parts oil and 1 part lemon juice. Apply and polish with a soft cloth. This leaves furniture looking and smelling good.

For Unfinished Wood: Mineral Oil*. Mineral oil is flammable. Apply sparingly with a soft cloth. For lemon oil polish, dissolve 1 teaspoon lemon oil into 1 pint mineral oil. CAUTION: Mineral spirits should never be substituted for mineral oil as it can be dangerous when inhaled or ab-
Special Problems

For Grease Spots: Salt. Immediately pour salt on the grease spot to absorb grease and prevent staining.

For Scratches: Lemon Juice and Vegetable Oil. Mix equal pans of lemon juice and salad oil. Rub into scratches with a soft cloth until scratches disappear.

For Water Spots: Toothpaste. To remove water marks, rub gently with toothpaste on a damp cloth.

For Washing Wood: Mild Soap. Dampen cloth with a solution of water and mild soap, such as Ivory or Murphy's Oil Soap. Wring the cloth almost dry and wipe the furniture section by section, drying with a clean dry cloth as you go so that no section stays wet.

For Refinishing Old Furniture: Commercial Oil Soap. Before you set to work on an old piece of furniture with chemical finish removers, try Vegetable Oil Soap. This simple, non-toxic solvent may be all the help an antique needs. Follow label directions

Moths
If you can see moths, these aren't the ones to worry about. Moths that cause damage to clothes are too small to notice. It is the larvae of these moths that eat fabric. Prevention. Store items in a clean condition; moth larvae especially like areas soiled with food stains.

Rosemary, Mint, Thyme, Cloves, and Ginseng (optional). Chicago area weavers and spinners use 1/2 pound rosemary, 1/2 pound mint, 1/4 pound thyme, 1/4 pound ginseng (optional), and 2 tablespoons cloves. Mix and put in cheesecloth bags and place in closets or drawers.

Dried Lavender or Rosemary and Mint. Make sachets of dried lavender or equal portions of rosemary and mint. Place in closets, drawers, or closed containers to mothproof garments.

Rosemary, Sage, Mint, Dried Lemon Peel, and Cinnamon. Mix handfuls of first three ingredients. Add a little lemon peel and a pinch of cinnamon. Place in muslin bags.

Molasses, Vinegar, and Yellow Container. To trap moths, mix 1 pan molasses with 2 pans vinegar and place in a yellow container to attract moths. Clean regularly.

Clothes Dryer, kill moth eggs by running garment through a warm dryer.
Moles
Castor Oil* and Liquid Detergent. Whip together 1 tablespoon castor oil and 2 tablespoons liquid detergent in a blender until the mixture is like shaving cream. Add 6 tablespoons water and whip again. Keep this mixture out of the reach of your children and pets. Take a garden sprinkling can and fill with warm water. Add 2 tablespoons of the oil mixture and stir. Sprinkle immediately over the areas of greatest mole infestation. For best results, apply after a rain or thorough watering. If moles are drawn to your lawn because of the grubs feeding in the soil, you may be able to rid yourself of both pests by spreading milky spore disease to kill the grubs.

Mosquitoes
Prevention. Encourage natural predators such as dragonflies or praying mantises. Eliminate pools of stagnant water. Avoid wearing perfume, bright colors, flowery prints, and bright jewelry as these items attract mosquitoes.

Citronella. Burn citronella candles to repel insects.

Tansy or Basil. Plant tansy or basil around the patio and house to repel mosquitoes.

Hair Products
For Hair Gel: Gelatin. Dissolve 1/2 to 1 teaspoon of unflavored gelatin in 1 cup warm water. Keep refrigerated and use as you would a purchased gel.

For Hair Spray: Citrus. Chop 1 lemon (or orange for dry hair). Place in a pot and cover with 2 cups of hot water. Boil until only half remains. Cool and strain. Add more water if needed. Refrigerate in a spray bottle.

Laundry Products
White Vinegar. Eliminate soap residue by adding 1 cup of white vinegar to the washer’s final rinse. Vinegar is too mild to harm fabrics but strong enough to dissolve alcalies in soaps and detergents. Vinegar also breaks down uric acid, so adding 1 cup vinegar to the rinse water is especially good for babies’ clothes. To get wool and cotton blankets soft and fluffy as new, add 2 cups white vinegar to a full tub of rinse water. DO NOT USE VINEGAR IF YOU ADD CHLORINE BLEACH TO YOUR RINSE WATER. IT WILL PRODUCE HARMFUL VAPORS.
Baking Soda. 1/4 to 1/2 cup baking soda per wash load makes clothes feel soft and smell fresh.

Dry Bleach*. Dry bleaches containing sodium perborate are of low toxicity (unless in strong solution, then they can be irritating to the skin). Use according to package directions.

Baking Soda. You can cut the amount of chlorine bleach used in your wash by half when you add 1/2 cup baking soda to top loading machines or 1/4 cup to front loaders.

Vinegar. To remove smoky odor from clothes, fill your bathtub with hot water. Add 1 cup white vinegar. Hang garments above the steaming bath water.

Cornstarch. For homemade laundry starch, dissolve 1 tablespoon cornstarch in 1 pint cold water. Place in a spray bottle. Shake before using. Clearly label the contents of the spray bottle.

**Lime And Mineral Deposit Remover**

Vinegar and Paper Towels. Hard lime deposits around faucets can be softened for easy removal by covering the deposits with vinegar-soaked paper towels. Leave the paper towels on for about one hour before cleaning. Leaves chrome clean and shiny.

**Garden**

There are many strategies for controlling garden pests without unduly upsetting the local ecology of your garden. These strategies include cultural controls (nutrition, resistant varieties, interplanting, timed planting, crop rotation, mulch, trap crops, and cultivation), mechanical controls (handpicking, physical barriers, traps), biological controls (predatory and parasitic insects, microbes), and sprays and dusts. Because information is too varied to make suggestions in this limited space, we refer you to your library, colleges, and Extension Office for details on integrated and natural pest control. Extension offices can be found under local government in the phone book.

**Mice**

Mashed potato powder or buds. Place instant mashed potato powder or buds in strategic places with a dish of water close by. After eating the powder or buds mice will need water. This causes fatal bloating.

Mouse Traps. Use according to label directions.
**Fleas**
Vacuum. Vacuum, remove the vacuum bag, seal it, and dispose of it immediately outside your home.

Vinegar. A ratio of 1 teaspoon vinegar to 1 quart water (per 40 pounds of pet weight) in their drinking water helps to keep your pets free of fleas and ticks.

Fennel, Rosemary, Red Cedar Shavings*, Sassafras*, Eucalyptus*, or Pennyroyal*. Spread leaves or shavings of these plants under and around the pet's bed.

**Flies**
Prevention: Keep kitchen garbage tightly closed. Sprinkle dry soap or borax into garbage cans after they've been washed and allowed to dry; it acts as a repellent.

Orange. Scratch the skin of an orange and leave it out; the citrus acts as a repellent.

Cloves. Hang clusters of cloves to repel flies.

Mint or Basil. Mint planted around the home repels flies. A pot of basil set on the windowsill or table helps to repel fleas. Keep basil well-watered from the bottom so that it produces a stronger scent. Dried ground leaves left in small bowls or hung in muslin bags are also effective.

Sugar and Corn Syrup. Make your own fly paper by boiling sugar, corn syrup, and water together. Place mixture onto brown paper and hang or set out.

For Plastic and Metal Showerheads: Vinegar. To remove deposits which may be clogging your metal showerhead, combine 1/2 cup white vinegar and one quart water. Then completely submerge the showerhead and boil 15 minutes. If you have a plastic showerhead, combine 1 pint white vinegar and 1 pint hot water. Then completely submerge the showerhead and soak for about one hour.

**Metal Cleaners and Metal Polishes**

**Aluminum**
Cream of Tartar. To remove stains and discoloration from aluminum cookware, fill cookware with hot water and add 2 tablespoons cream of tartar to each quart of water. Bring solution to a boil and simmer ten minutes. Wash as usual and dry.

Vinegar. To clean an aluminum coffeepot and remove lime deposits, boil equal pans of water and white vinegar. Boiling time depends upon how heavy deposits are.

**Brass**
Olive Oil. Brass will look brighter and require less polishing if rubbed with a cloth moistened with olive oil after each polishing. Olive oil retards tarnish.

Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste.
Lemon and Salt or Baking Soda. Make a paste of lemon juice and salt and rub with a soft cloth, rinse with water, and dry. Or use a slice of lemon sprinkled with baking soda. Rub brass with the lemon slice, rinse with water, and dry.

Vinegar and Salt. Pour vinegar over the surface. Sprinkle salt over the acid and rub in the mixture. Rinse with warm water and polish dry.

Lemon Juice and Cream of Tartar. Make a paste of lemon juice and cream of tartar. Apply, leave on for 5 minutes and then wash in warm water. Dry with a soft cloth.

Bronze
Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste. Apply paste to bronze and let sit for 15 minutes to 1 hour. Rinse with clean, warm water, and polish dry.

Bronze
Vinegar. To clean chrome, wipe with a soft cloth dipped in undiluted white or cider vinegar.

Baby Oil. Apply baby oil with a soft cloth and polish to remove stains from chrome trim on faucets, kitchen appliances, vehicles, etc.

Pest Control
Helpful predators around the home include frogs, spiders, ladybugs, praying mantis, and dragonflies. Keeping these beneficial creatures around can help you reduce pest populations.

Ants
Vinegar. Wash countertops, cabinets, and floor with equal pans vinegar and water to deter ant infestations.

Flour and Borax*. Mix 1 cup flour and 2 cups borax in a quart jar. Punch holes in the jar lid. Sprinkle the contents around the house foundation. Keep borax out of the reach of children and pets.

Bonemeal or powdered charcoal or lemon. Set up barriers where ants are entering. They will generally not cross lines of bonemeal or powdered charcoal. If you can find a hole where ants are entering the house, squeeze the juice of a lemon in the hole or crack. Then slice up the lemon and put the peeling all around the entrance.

Pennyroyal*, Spearmint, Southernwood, and Tansy. Growing these plants around the border of your home will deter ants and the aphids they carry.
**Oven Cleaner**

Prevention. Put a sheet of aluminum foil on the floor of the oven, underneath but not touching the heating element. Although this may slightly affect the browning of the food, the foil can be easily disposed of when soiled. Clean up the spill as soon as it occurs.

Salt. While the oven is still warm, sprinkle salt on the spill. If the spill is completely dry, wet the spill lightly before sprinkling on salt. When the oven cools down, scrape away the spill and wash the area clean.

Vinegar. Retard grease buildup in your oven by dampening your cleaning rag in vinegar and water before wiping out your oven.

Baking Soda and Very Fine Steel Wool. Sprinkle water followed by a layer of baking soda. Rub gently with a very fine steel wool pad for tough spots. Wipe off scum with dry paper towels or a sponge. Rinse well and wipe dry.

Arm & Hammer Oven Cleaner. Consumers Union chemists declared this product nontoxic. Use according to label directions.

**Paint Brush Renewer**

Vinegar. Soften hard paintbrushes in hot vinegar for a few minutes. Then wash paintbrush in soap and warm water and set out to dry.

**Copper**

Vinegar and Salt. If copper is tarnished, boil article in a pot of water with 1 tablespoon salt and 1 cup white vinegar for several hours. Wash with soap in hot water. Rinse and dry.

Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste. Apply the paste to copper and let sit for 15 minutes to 1 hour. Rinse with clean warm water, and polish dry.

Lemon and Salt or Baking Soda. Make a paste of lemon juice and salt, and rub with a soft cloth, rinse with water, and dry. Or use a slice of lemon sprinkled with baking soda. Rub copper with the lemon slice and rinse with water and dry.

Vinegar and Salt. Pour vinegar over the surface. Sprinkle salt over the acid and rub in the mixture. Rinse with warm water and polish dry.

Lemon Juice and Cream of Tartar. Make a paste of lemon juice and cream of tartar. Apply, leave on for 5 minutes, and then wash in warm water. Dry with a soft cloth.
Gold
Soapy Water. Wash in lukewarm soapy water and dry with a cotton cloth. Polish with a chamois cloth.

Toothpaste. Clean with toothpaste and a soft toothbrush.

Pewter
Salt, Vinegar, and Flour. Dissolve 1 teaspoon salt in 1 cup white vinegar. Add enough flour to make a paste. Apply paste to pewter and let sit for 15 minutes to 1 hour. Rinse with clean warm water, and polish dry.

Silver
Polishing silver while wearing rubber gloves promotes tarnish. Instead, choose plastic or cotton gloves.

Baking Soda. Apply a paste of baking soda and water. Rub, rinse, and polish dry with a soft cloth. To remove tarnish from silverware, sprinkle baking soda on a damp cloth and rub it on the silverware until tarnish is gone. Rinse and dry well.

Aluminum Foil, Baking Soda, and Salt. Place a sheet of aluminum foil in the bottom of a pan, add 2-3 inches of water, 1 teaspoon baking soda, 1 teaspoon salt, and bring to a boil. Add silver pieces, boil 2-3 minutes, making sure the water covers the silver pieces. Remove silver, rinse, dry, and buff with a soft cloth. This method cleans the design and crevices of silver pieces.

Toothpaste. To clean off tarnish, coat the silver with toothpaste, then run it under warm water, work it into a foam, and rinse it off. For stubborn stains or intricate grooves, use an old soft-bristled toothbrush.

Stainless Steel
Olive Oil. Rub stainless steel sinks with olive oil to remove streaks.

Vinegar. To clean and polish stainless steel, simply moisten a cloth with undiluted white or cider vinegar and wipe clean. Can also be used to remove heat stains on stainless steel cutlery.

Club Soda. Remove streaks or heat stains from stainless steel by rubbing with club soda.