

Safer Cleaning



An A to Z Resource Guide of Safe Alternatives to Household Cleaning and Maintenance Supplies

- Originally Compiled by Sam Umscheid, MSW

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Cleaning your home doesn't have to be scary!



Effective cleaning is important to good home maintenance, but it doesn't have to involve hazardous chemicals. This book is a collection of time-honored recipes and suggestions to help you make the switch toward safer household products. Ingredients and instructions will guide you through an array of easy-to-make, easy-to-use, and most importantly, safe products for use around your home. Some ingredients recommended as alternatives are safer, but are still potentially hazardous, so use them carefully. To assist you in identifying them, anywhere these ingredients appear in this book, they have been marked with an asterisk(*). Making your own simple and effective products is fun and economical. We think you will be happily surprised with the results.

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.
- Orange, lemon, or lime, and cloves, orris root powder, and ground cinnamon. Make a citrus pomander by inserting cloves into the citrus fruit. If the skin is too tough, make small holes with a toothpick first. When the entire fruit is covered with cloves, roll in a mixture of 1/2 teaspoons orris root powder and 1 1/2 teaspoons cinnamon. Wrap in tissue and store in a drawer, cabinet, or closet.
- Pure Essential Oils. Add 10 drops per 8 ounce bottle of water. Essential oils (eucalyptus, cinnamon, etc.) can be found at most pharmacies.

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.

Antacid

- If aspirin gives you indigestion, add 1/2 teaspoon baking soda to the glass of water with which you swallow one.

Automatic Dishwasher Powder

- Create your own dishwasher detergent by mixing 2 tablespoons baking soda with 2 tablespoons borax*.

Arts and Crafts Ideas

- Make or buy stencils to create nontoxic designs on windows, paper, and cards with a baking soda-and-water paste, with food color added. Apply the paste with a sponge.

- Mix a small amount of baking soda into children's tempera paints to make cleanup easier. It also keeps paints fresher and smoother.

Baby Tips

- Keep baby bottles, nipples, and rims fresh by soaking overnight in a large bowl filled with hot water and 1/2 box baking soda. Or boil the bottles for three minutes in 3 tablespoons baking soda and water.
- Sprinkle a cup of baking soda on the bottom of the diaper pail before putting in the plastic liner, or sprinkle some in the disposable diaper pail before, after or during its use to control odors. Its deodorant effect is wonderfully effective.



- When your baby spits up on your shirt wipe up excess, then sprinkle the spot with baking soda. Let it dry and brush it off. Odor is gone and the stain doesn't set. Carry a small container of baking soda in your diaper bag or purse for such emergencies.
- Wash new baby clothes to remove any chemical finishes by washing them in mild soap and 1/2 cup baking soda.
- Clean a stuffed animal or fabric toy that can't be washed, by shaking it in a bag with baking soda which will absorb the dirt and grime. Let it sit for 15 minutes before brushing, shaking and/or vacuuming the dry baking soda off.

Cradle Cap

- Conquer cradle cap with a paste of baking soda and water. Leave it on the baby's head for a few moments before bath time, then rinse the scalp clean. (The same paste also removes sand from the beach or the sandbox from a toddler's scalp.)
- Or try this method: Apply baby oil to the scalp, then rub baking soda into the oily hair. Comb the baby's hair and scalp gently, loosening flaky skin. Shampoo and rinse clean.

Diaper Rash

- Fight diaper rash by sprinkling a little baking soda in warm water—NOT alone as a powder—for cleaning baby's bottom areas. The baking soda soothes and helps diaper rash heal by neutralizing the acid from urine.

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.

Stencil Carpet Fun

- Create a family tradition of carpet prints to mark the holidays. Make or buy stencils that you sprinkle baking soda on to create white powder prints. These clean up easily with a vacuum.
 - Bunny footprints to lead your children to their Easter baskets
 - Santa footprints from the fireplace or the front door.
 - Turkey feet at Thanksgiving
 - Heart shapes at Valentine's Day
- Use stencil letters to spell out names or happy holiday messages with baking soda or just to let little ones practice learning their letters and numbers.
- Make a WELCOME HOME stencil to use in your entry carpet—or front stoop—to greet returning loved ones.

Cooking Tips



- Clean dirt and residue off fresh fruit and vegetables by sprinkling baking soda on a wet sponge and scrubbing away. Rinse with water.
- Wash your fruits and vegetables in a large bowl of cool water to which you've added 2 to 3 tablespoons of baking soda. This, many feel, helps remove pesticides as well as any dirt and wax.

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.

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.

Floor Cleaners and Floor Polishes

- Vinegar. A few drops in the cleaning water will help remove grease particles. 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, Baby Oil, and Sour Milk or Skim Milk. Damp mop using a mild detergent and water for day to day cleaning. Keep water away from seams and edges to prevent loosening of the tiles. To preserve the linoleum floor you may wish to add a capful of baby oil to the mop water. Adding sour milk or skim milk to the rinse water will shine the floor without polishing.



- 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.
- Sour Milk or Skim Milk. Rather than polishing, mix sour milk or skim milk in the rinse water. The floor will shine.

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 min-

Special Problems

- To dissolve chewing gum, soak the area with vinegar.
- 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: Butter or Margarine. Scrape up excess tar with the side of a dull knife, then rub vigorously with



butter or margarine. 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.
- 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.

- Olive Oil and Vinegar. Mix 3 parts oil to 1 part vinegar. Apply and polish with a clean soft cloth.
- For Oak Wood: Beer and Sugar and Beeswax. Boil one quart beer with 1 teaspoon sugar and 2 tablespoons beeswax. Cool, wipe onto wood, and allow to dry. Polish when dry with a chamois cloth.
- For Mahogany: Vinegar. Mix equal parts white vinegar and warm water. Wipe onto wood and then polish with a chamois cloth.

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 parts of lemon juice and salad oil. Rub into scratches with a soft cloth until scratches disappear.

Glass and Plastic

- Clean baby bottles with baking soda. No danger of soap residue, and you're combatting the possibility of odor buildup.
- Get rid of spaghetti, catsup or crayon stains on a plastic high chair tray by sprinkling the tray with baking soda. Rub with a damp cloth, then rinse clean.

Ice Safety

- Forget de-icing or rock salts, cat litter or sand! Just sprinkle baking soda on your front steps to provide traction and melt the ice. It won't damage outside surfaces, shoes or indoor surfaces if it is tracked inside. Mix with sand if you need greater texture.

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 alkalines 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. 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.



— 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.

— Safe Laundry Soap: 1 oz. liquid castile soap, 1 cup washing soda (available in the laundry aisle of most supermarkets), 1 cup baking soda, and 1 cup white vinegar.

— 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.

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

—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.

Mold

- Molds are fungi and are a common household problem that has become big concern in recent years. However, molds are easily managed if you remember some simple facts. First, molds will only grow where it is wet all the time. That's why they are so commonly found around bathtubs and showers. Keep things dry! Molds also must have an organic material to grow on like wood, paper, carpeting and other building materials. So, if your concerned, look at these kinds of items in your home first.

Mold Prevention

- Water is the key. Without it, molds can't get started, much less spread. The easiest way to stop mold is to stop wetness. Fixing whatever it is that is causing the chronically wet conditions is critical. Don't let water spills or small floods sit for more than 48 hours. Soak up water from large areas as much as possible. Then use dehumidifiers and fans to dry area out completely. Other ways to slow mold growth include:
 - Use an air conditioner or a dehumidifier during humid months.
 - Add mold inhibitors to paints used in damp areas before application.
 - Clean and dry bathrooms routinely to prevent opportunities for mold growth.
 - Install exhaust ventilation in bathrooms to remove excess moisture.
 - Do not install carpeting in bathrooms and basements.
 - If carpets and upholstery are known to have been wet for 2 weeks or more, remove and/ or replace them.

Mold Clean Up

- Small non-porous areas (like tile) can be cleaned with strong detergent and water. For semi-porous and porous materials mix 1 cup of bleach into a gallon of water and apply to the area while wearing gloves. Remember, it might be better to simply discard the item.

Bathrooms

- Scrub surfaces with a solution of one cup of liquid chlorine bleach, one tablespoon of detergent that does not contain ammonia, and one gallon of water. Use a brush or old tooth brush to clean the grout. Keep the surface wet for about ten minutes, then rinse well with water. If the shower curtains can be washed by machine, add chlorine bleach with the detergent. Use a warm water rinse for plastic curtains and hang while warm to allow wrinkles to fall out.



Clothes and other textiles

- Work quickly when mildew is discovered. Brush, shake, sun, and air mildewed textiles outdoors. Microorganisms and stains that remain can be successfully removed with chlorine bleach. Check the care label to determine if chlorine bleach can be safely used. Pretest an inconspicuous area of the fabric for color change before using the bleach. Launder washable items with soap or detergent and chlorine bleach, when appropriate. Send non-washable items to the dry cleaner and inform the dry cleaner of the mildew stain. To remove stains on washable textiles that cannot be bleached with chlorine, use peroxide bleaches containing sodium perborate or potassium monopersulfate. Apply at the hottest temperature safe for the fabric and leave in place for up to 12 hours. Apply all detergents and bleaches according to the product instructions. Some mildew stains cannot be removed and advance mold growth may have rotted or weakened the material. These products cannot be salvaged and should be discarded.

Books and other paper products

— Dry the item because mold and mildew on paper products is easier to remove when dried. (Don't try to remove fuzzy or slimy mold.) Remove the items from hot, humid or stagnant air and darkness, if possible. (Do not place in an oven.) Lower the temperature and humidity and dry the items immediately, or freeze to buy time. (Never freeze photos or negatives.) If the mold remains after freezing, expose to one or two hours of sunlight to dry out. Observe the following procedures as you dry the item: Handle soggy paper gently. Place wet items on paper towels or unprinted newsprint paper. Use fans to circulate air around (but not directly at) the documents. Spread loose material in single layers. Use waxed paper between every page of bound books, place paper towels inside the covers and then intermittently throughout the book. Open the books and stand them on edge. Replace the inserted paper towels as they become soaked and invert the book. Some distortion and staining is probable. Air-dry most photos, negatives, and slides face up, placing blotting material beneath the photographs. Avoid touching the surfaces. Photos that are stuck together may separate after soaking them in cold water. But once dried, they may not separate and may need to be reprinted. Remove framed items, backing first, from frames. If the items are not stuck to glass, air-dry them. If the materials are stuck, dry them intact with the glass side down. After the item is dry, remove the dry and powdery mold by brushing it outdoors. Remove stains that remain by wiping gently with a cloth that has been soaked with suds, and wrung out. Then rinse the stain. For stubborn stains, use a chlorine bleach and water solution. (Test in an inconspicuous area to determine if a bleach solution can be safely used.) Try to not wet the paper and do not scrub. Air-dry the item.

Carpeting and Rugs

— If a musty mildew odor is detected, stop its growth immediately. Discard pads containing mildew. It is nearly impossible to clean and destroy all the mildew in a pad. (Compared to carpet, padding is a relatively low-cost item.) It is best to hire a professional rug cleaner or restorer to clean wall-to-wall carpet. If you try to save the carpet yourself, you will have best results with carpet that can be removed from the floor. Apply rug shampoo with a carpet shampooer according to the manufacturer's directions. Remove all detergent used in cleaning. Detergent left in the carpet will accelerate soiling. Expose mildew growing on the back of the carpet to the direct rays of the sun. Paint the carpet backing with a weak chlorine solution of 1/4 teaspoon of chlorine bleach to one cup of water or another sanitizing product applied according to the label directions. Rinse several times. After shampooing and sanitizing, dry rugs or carpets quickly. Hang rugs on an outdoor clothesline or lay them out flat in a warm, dry place. Use electric fans to speed drying. Dry carpets and rugs thoroughly.

Upholstered Furniture and Mattresses

— Take upholstered pieces and mattresses outdoors and brush the surface mold away with a broom. Vacuum using an upholstery attachment on the surface to draw out more mold. Discard the disposable vacuum cleaner bag immediately or empty the non-disposable bag outdoors to prevent the spread of mold spores. Place the mildewed item in the sun for a few hours and air it thoroughly to stop further mold growth. If the mildew remains, use the services of a professional upholstery cleaner. If you are doing the cleaning yourself, sponge the item with thick, dry soap or detergent suds and wipe with a clean, damp cloth. Avoid getting the stuffing wet. Wipe the furniture with a cloth moistened with a solution of one cup of denatured or rubbing alcohol to one cup of water and dry thoroughly. If the mold is growing deep in the padding of an upholstered piece or mattress, nothing will eliminate the mold or odor except renovation by a trained upholsterer or replacement of the item.

Painted Surfaces around the home

— Interior: Scrub mildewed surfaces with a solution of one cup of chlorine bleach to one gallon of water. A detergent such as trisodium phosphate (TSP) or liquid dish washing detergent may be added to the solution. Do not mix bleach with cleaners that contain ammonia. Rinse with clean water and allow to dry thoroughly before painting or papering.

— Exterior: Scrub mildewed paint with a solution of 1/3 cup detergent that does not contain ammonia, 1 quart chlorine bleach, and 3 quarts of water. Repaint with a mildew-resistant paint.

Outdoor Gardens

- Sprinkle baking soda lightly on the soil around tomato plants. It sweetens tomatoes by lowering their acidity and discourages pests. (Here's a good place to dispose of that box of baking soda that has served its purpose as a deodorizer in the refrigerator.)



- Sprinkle baking soda lightly—and just occasionally—around flower beds to discourage rabbits from nibbling on buds.
- Make-Your-Own Safe, Organic Pesticides
Combine:
1 teaspoon baking soda
1/3 cup cooking oil
From this mixture, measure 2 teaspoons to combine with 1 cup water and fill plant sprayer. This spray is said to kill aphids, spider mites and white flies, and to be benign to beneficial insects.

- Prevent grass and weeds from growing in sidewalk cracks by sprinkling baking soda on the cement and sweeping it into the cracks. The excess sodium is what does them in. You can also sprinkle baking soda on any other unwanted grass or weeds, such as moss growing on patio bricks.
- Dip cut flowers in a solution of baking soda and water to extend their life, rather than using commercial package solutions.
- To clean plants—real or silk—wash them in a solution of 1/2 cup baking soda to 1 gallon cold water. The leaves will shine with no risk of damage.

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.



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 counter tops, cabinets, and floor with equal parts 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.
- Bone meal or powdered charcoal or lemon. Set up barriers where ants are entering. They will generally not cross lines of bone meal 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.
- Eliminate outdoor ants in their dirt mounds by first sprinkling baking soda on the mound when it is damp. After a half-hour or so, pour a small amount of vinegar on the ant hill. Ants will ingest the combination and their body enzymes will do the rest.

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 flies. 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.
- Fly Swatters, Fly Traps, or Fly Paper. Use according to label directions.
- 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.
- Egg, Molasses, and Black Pepper. Beat the yolk of an egg with a tablespoon each of molasses and finely ground black pepper. Set it about in shallow plates. Flies will be rapidly killed.



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, inter-planting, 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 center for details on integrated and natural pest control.

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.

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.

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.
- Repellent: Add 10 drops of eucalyptus oil to 8 oz. of water in spray bottle. Spray on skin as needed and rub in. For young children, add 2 tablespoons of olive oil to the same solution to keep skin moist.
- Tansy or Basil. Plant tansy or basil around the patio and house to repel mosquitoes.

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 the moths you see 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 part molasses with 2 parts vinegar and place in a yellow container to attract moths. Clean regularly.
- Clothes Dryer. Kill moth eggs by running garment through a warm dryer.

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 overnight. 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.
- Oatmeal, Flour, and Plaster of Paris. Mix equal parts and set in dishes. Keep out of reach of children and pets.
- Baking Soda and Powdered Sugar. Mix equal parts and spread around infested area.

Slugs And Snails

- Natural Predators. Garter 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 part of the day. Remove slugs and snails regularly and drop in a bucket of soapy water.
- Beer. Set out saucers or jars full of stale beer, placed below ground level near the garden. The fermented liquid draws them and they drown.
- 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.

Scouring Powder

- 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 rinse.

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.



- Coffee. Give black suede a face lift by applying a sponge slightly moistened with cool, black coffee. Rub in the coffee gently.
- Vinegar and Linseed Oil*. To clean leather, rub equal parts of vinegar and linseed oil into the leather and then polish with a soft cloth.

Shower Secrets

- Pour 1/4 cup baking soda and 1 cup vinegar into a strong, sandwich-sized plastic bag and tie it onto and over a scummy shower head. Let the bubbling brew set for an hour. Remove the bag, then turn on the water. Hard water build-up will be gone and your shower head will sparkle again.
- Clean shower stall doors by first spraying them with clear vinegar. Let it set for a few minutes, then scour with a sponge sprinkled with baking soda. Rinse and wipe or squeegee dry.

Smells

- Add 2 tablespoons baking soda to the water in your humidifier to eliminate musty smells.

Spot Removers

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!



- 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 lemon juice 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.
- 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.
- Pet 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.

Clothes

Stain Pre-Treatment

- Before laundering stained clothes, make a thick paste of 4 tablespoons or more baking soda and 1/4 cup warm water. Rub the paste on the spot and wash.
- Treat ring-around-the-collar by rubbing the same paste into the soiled area. Pour a little vinegar over this area just prior to washing.
- Remove perspiration stains and odor from washable fabrics by rubbing a paste of baking soda into the area before laundering. If stains are bad, allow paste to remain in place for two to three hours.
- 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, Shortening, or Milk. Soak stain with club soda before washing; or rub shortening into stain and wash; or apply milk to stain to keep from setting.
- Cola: White Vinegar. Apply undiluted vinegar directly to the stain within 24 hours. Wash as usual.
- Perspiration stain. White Vinegar or Lemon Juice or Aspirin. Sponge stains with a weak solution of white vinegar or lemon juice; or soak the fabric in water in which 2 aspirins have been dissolved.
- 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.

- 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.

Tub And Tile Cleaner

- Prevention. Add 2 tablespoons baking soda to your bath water and you won't have to worry about ring-around-the-tub! Your bath water will be soft, too.
- Baking Soda. Sprinkle baking soda like you would scouring powder. Rub with a damp sponge. Rinse thoroughly.
- Saturate a cloth with vinegar before sprinkling baking soda on the tub. Then clean fiberglass tub with the cloth—no elbow grease needed! Rinse well and wipe dry for a spotless shine.
- 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.

- 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.

Upholstery

- Clean upholstery by sprinkling it liberally with baking soda and letting it set for a few minutes before vacuuming. Smoke odors will also be eliminated.

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 parts of white vinegar and warm water. Dry with a soft cloth. Leaves windows and glass streakless. To remove those stubborn hard water sprinkler spots and streaks, use undiluted vinegar.
 - Cornstarch and Vinegar. Mix 3 tablespoons cornstarch and 1/2 cup white vinegar into 1 gallon warm water. 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.

Windshield Wiper Fluid

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

Vinegar & More

- Use vinegar as you would a liquid fabric softener.
- Wash any meat, poultry or fish with vinegar before cooking to reduce the bacteria.

Bibliography

- Dadd, Debra Lynn. 1986. "The Nontoxic Home", Los Angeles: Jeremy P. Tarcher.
- Florman, Monte, et al. 1986, "How to Clean Practically Anything", Consumer Report Books. Mt. Vernon, NY: Consumers Union.
- Fritsch, Albert J. 1978. "The Household Pollutants Guide"- Center for Research in the Public Interest. Garden City, NY: Anchor Books.
- Golden Empire Health Planning Center and the Sacramento League of Women Voters. 1986. "Making the Switch: Alternatives to Using Toxic Chemicals in the Home", Sacramento, CA.
- Hansfield, Leicester, and Harriet Hansfield (eds.). 1974. "Dick's Encyclopedia of Practical Recipes and Processes", New York: Funk & Wagnalls.
- Hopping, Carol, Cheryl W. Tetreau, and Roger B. Yepsen, Jr. (eds). 1985. "Rodale's Book of Hints, Tips and Everyday Wisdom", Emmaus, PA: Rodale.
- Kansas Dept. of Health & Environment 1995, "Controlling Mold Growth In the Home" Kansas State University.
- Tarcher, Jeremy P., "Nontoxic and Natural: How to Avoid Dangerous Nontoxic and Natural Everyday Products and Buy or Make Safe Ones", 1984. Los Angeles.
- Vinegar Institute. 1983. "Virtues of Vinegar: Best Recipes and Household Hints", Atlanta, GA.
- Versatile Vinegar: "Household Hints and Recipes", 1979 Atlanta, GA.
- Wallace, Dan (ed). 1982. "The Natural Formula Book for Home & Yard", Emmaus, PA: Rodale Press.
- Western Washington Toxics Coalition. 1985, "Home Safe Home: An Educational Open House", 4516 University Way, N.E., Seattle, WA.
- Yepsen, Roger B., Jr. (ed.). 1984. "The Encyclopedia of Natural Insect & Disease Control", Emmaus, PA: Rodale Press.

Internet Resources for Safe Cleaning

ALA on Asthma and Home Health: www.healthhouse.org/ Children's Health Protection:

<http://yosemite.epa.gov/ochp/ochpweb.nsf/homepage> Children's Environmental Health Network: www.cehn.org/cehn/ Children & Chemicals: www.epa.gov/pesticides/kids/hometour/ Finding Community Hazards: www.scorecard.org/ Food & Pesticides: www.epa.gov/pesticides/food Healthy House Institute: www.hhinst.com/ Holistic Medicine on Chemical Avoidance: www.holisticmed.com/toxic/ Healthe House: www.checnet.org/healthhouse/home/index.asp Household Product Ingredients: <http://hpd.nlm.nih.gov/> Natural Resources Defense Council: www.nrdc.org Physicians for Social Responsibility:

www.psr.org/home.cfm?id=environment Pure Essential Oils are available at: www.humco.com/

For more information on safer cleaning, contact: Sam Umscheid via email at lowwins@aol.com, or call the Children's Mercy Hospital Environmental Health Program at 816-235-6331.

