Why use natural cleaning agents?

The use of common household cleaners is responsible for placing many hundreds of chemicals into our environment.

More people are developing allergic reactions, chemical sensitivities and just plain toxic overload, than ever before.

Chemicals tend to linger in the air and get into our lungs and are absorbed through direct contact with chemicals such as cleaning agents.

Clean air results in better health, whether you have respiratory allergies or not.

To reduce the impact of allergies it may be advisable to:

- Increase the number of indoor plants
- Waste Receivals Area
- Dust with a damp cloth
- Reducing/Avoid the use of chemical cleaning products
- Vacuum floors and furnishings regularly

Natural cleaning agents are generally a fraction of the cost of commercially produced cleaners. Use the simplest, mildest product that will get the job done.

Did you know?

In 2002-03, there were over 4,000 hospitalisations of NSW residents for unintentional poisoning occurring in the home. One in three of these involved children under the age of three.

The average home today contains more chemicals than were found in a typical chemistry lab at the turn of the century and more than 300 man-made chemicals have been found in human bodies. The full extent of the risk is unclear

Thousands of litres of unused paint are being disposed of every year in NSW. By making some simple changes in the way you buy and use chemicals at home, you can reduce negative environmental impact as well as save money and reduce unnecessary packaging waste.

So what can I do?

Inside the home

- Do you know what effects cleaning products you buy have on your health?
- Have you explored the many non-toxic products available?
- Have you thought about how you can safely dispose of unwanted household chemicals?

Easy ways to make a difference:

- Reduce the use of household chemicals by buying less, using less and looking for safer alternatives
- Store household chemicals safely ensure containers are clearly labelled and out of the reach of children
- Use water-based paints only buy enough for the job at hand to avoid unnecessary wastage
- Use non-toxic ways to repel pests
- Don't pour unwanted oils and chemicals into drains, toilets or where they may end up in our waterways
- Take your unwanted household chemicals to free Hornsby Shire Councils free Household Chemical Collection events held biannually
- If there is no alternative, wrap unwanted chemical containers in several layers of newspaper and then seal in a plastic bag before disposing in the garbage bin
- Return your old and unwanted medicines to any pharmacy for free and safe disposal or call 1300 650 835.
- Dispose of old mobile phones through a recycling program
- Drop off your old household batteries (no car or boat batteries) to be recycled as part of Council's battery recycling to the Waste Depot,
 33 Sefton Road Thornleigh
- Never put chemicals in the recycling bin they could end up harming the people who sort through these materials, contaminate the recyclable materials, or end up in landfill, which can harm the environment
- Never mix chemicals they could react with one another and produce fumes, which could make you ill

Outside the home

- Have you chosen the least toxic product for the job?
- Are there any toxic pesticides, herbicides, baits, poisons or wood preservatives in your shed that are no longer needed or have been replaced with safer products?
- Have you thought of the benefits of organic gardening? Using compost and companion planting can eliminate the need for toxic pesticides and herbicides in the garden.

Easy ways to make a difference:

- Use paints, varnishes and glues with low levels of volatile organic compounds (VOCs), or those that are water-based
- Always keep paint tins sealed properly when in storage to prevent spilling or drying out
- Donate unwanted paint to a community group or someone who can use it
- Take your unwanted pesticides, herbicides, hobby chemicals and poisons to the Household Chemical Collection event held in Hornsby annually (call the Waste Hotline 9847 4856 or Clean Out info hotline on 1300 787 870 for dates)
- Change your gardening habits go organic to minimise the use of pesticides and herbicides
- Take your used motor oils, fuels and fluids to a participating service station or mechanic for recycling
- Use mouse or rat traps to get rid of rodents instead of using baits
- Try less toxic treatments to help keep fleas at bay
- Wear protective clothing and a mask when handling chemicals, if recommended
- Give your unwanted pool chemicals to a friend or neighbour – take to a chemical collection as a last option

Where do I start?

Store your chemicals safely

Start by checking whether there are any chemicals in and around the home that may be a risk to your safety or the environment.

Never store chemicals near sources of heat, sparks or flames. Leaving the aerosol deodorant or hair spray on the bathroom windowsill in the sun could create an explosion hazard.

Choose and use less toxic products

Chemicals do not guarantee perfect results – therefore using less toxic products does not mean you have to compromise on quality or accept an inferior result.

Selecting safer products means we reduce the risk of accidents and improve the health of our family and the environment. Less toxic products also have the added benefit of being made from renewable resources.

Domestic products containing chemicals include paints, cleaning agents such as detergents, varnishes, cosmetics, weed killers, insecticides, baits and treatments for timber, pools and pets.

Product packaging and most manufacturing processes involve the use of chemicals too. Look for unbleached paper products or packaging, or those bleached with hydrogen peroxide or oxygen as this method produces less pollution during the papermaking process.

Many commercial cleaning products contain a range of toxic chemicals, these include:

- Petroleum-based detergents slow to biodegrade
- Phosphates stimulate algae growth in waterways
- Chlorine bleaches highly toxic and carcinogenic
- Synthetic perfumes and colours usually petroleumbased and often toxic
- Optical brighteners slow to biodegrade, and
- Formaldehyde (a preservative) highly toxic and carcinogenic

There are many natural alternatives that are equally effective and often cheaper too. Informed choices and purchases directly influence industry. Request and select plant-based products and remember, regardless of product, only buy and use as much as you need. You won't get twice the results by using twice as much!

If you must use chemicals, then buy the least poisonous variety available – use the label as a guide:

- The most toxic feature a strong warning:
 Dangerous Poison Keep out of reach of children
- The next level states:

 Warning (or Caution) Keep out of reach of children
- And the lowest level: Keep out of reach of children

For a guide on hazardous materials and safer alternatives download the information sheet from the Total Environment Centre.

For more information on toxic chemicals visit the Total Environment Centre.

Disposing of unwanted chemicals

Before you dispose of your unwanted chemicals see if someone else could use them, for example, unwanted paint.

Think about where your chemicals could end up and the impact this will have on the environment.

Hornsby Shire Council and the Department of Environment and Conservation (NSW) work together to provide drop-off events for old or leftover chemicals around the home for dates call the Waste Hotline on 9847 4856 or Clean Out info hotline on 1300 787 870 for dates.

The Household Chemical Collection program accepts the following materials:

- Paint and paint related products (thinners, strippers, varnish etc)
- Pesticides and herbicides (fungicides, baits, poisons, wood preservatives)
- Solvents and household cleaners
- Motor oils and fuels
- Batteries
- Gas bottles
- Fire extinguishers
- Pool chemicals
- Acids and alkalis
- Hobby chemicals (photography chemicals etc.)
- Florescent bulbs

Note that only household quantities are accepted.

Your old mobile phones and their batteries can be recycled. **MobileMuster** is the official recycling program of the mobile phone industry. Find out where the nearest mobile phone recycling centre is or call 1300 730 070.

For the disposal of empty farm chemical containers contact Hornsby Council conducts an annual **drumMUSTER**. Phone the Waste Hotline on 9847 4856 or **drumMUSTER** on 02 6230 6712 for dates.

Fire alarms contain small amounts of radioactive materials. Wrap fire alarms in plastic and dispose of in the garbage bin.

How can I find out and do more?

Keeping your house clean

When buying cleaning products, select products that are plant-based and biodegradable.

The following common household products can often clean as well as the commercial products and can save you money too:

- Bi-carb of soda works well on sinks and toilets and freshens as well
- Vinegar and water in a pump spray bottle for cleaning mirrors and shining chrome
- Plant-based soaps
- Eucalyptus oil
- Washing soda
- Borax
- Salt
- Lemon juice

Use dishwasher detergents that are free of chlorine bleach and lowest in phosphates.

Use bathroom cleaners that are free of aerosol propellants and antibacterial agents.

If your carpet needs professional cleaning, enlist a carpet service that uses less-toxic cleaners that are low in VOCs and irritants.

Avoid air fresheners – consider how you can eliminate odour problems rather than just covering them up.

Use reusable unbleached cotton towels, rags, and non-scratch scrubbing sponges for all-purpose cleaning instead of bleached disposable paper products.

The Easy Guide to Natural Cleaning provides further useful tips for safe and effective cleaning in and around the home.

Controlling Pests

Pests can be controlled without the use of toxic chemicals. The best start to controlling pests is prevention.

Easy ways to make a difference:

- Keep your home as clean as possible particularly food areas
- Avoid using pest strips they contain pesticides that are released into the air in your home
- When storing winter clothing, use cedar blocks or bags of cedar chips hung with your clothes – avoid mothballs that contain p-dichloro benzene or naphthalene, which are toxic and can contribute to respiratory problems
- Consult your veterinarian for non-toxic pest control products for your pets
- Use non-toxic head lice treatments, including combing and enzyme-based treatments
- Use mouse or rat traps instead of baits
- Ask your pest exterminator to use non-toxic and environmentally friendly products if your pest problem is larger than you can manage

For more information check the Chemical Cleanout dates.

Building and renovating

If you are building or renovating try to minimise the harm that many materials and chemicals can have on our health and safety.

During renovating you can be exposed to a range of products including paints, solvents, varnishes, preservatives, pesticides, oils and sealants which may contain toxic chemicals, especially VOCs.

Easy things you can do include:

- Using less toxic products, eg. use paints, varnishes and glues with a low or no VOC content, or those that are water-based VOCs are found in many paints and cleaning agents and they contribute to air pollution, which is linked to asthma and other breathing problems
- Taking precautions if there is the risk of lead contamination from old lead-based paint or from lead dust in ceiling cavities
- Asking for building materials and supplies that have the least amount of formaldehyde and other VOCs – toxic fumes can come from unexpected sources like new carpet and cabinets
- Asking for carpeting that meets standards for indoor air quality established by the Carpet and Rug Institute

 once a carpet is installed thoroughly air your house for at least 48 hours
- For decks and playground equipment, use reclaimed cedar or redwood, which is naturally resistant to fungus and insects – or use recycled plastic – ask about these products at your home improvement store
- Paint strippers contain highly dangerous solvents, including methylene chloride, that give off toxic fumes and burn on contact with the skin. Less toxic products are available from some suppliers but if you have no choice, try to work outdoors with proper protection, or indoors in a well-ventilated area
- Avoid using "green-treated" timber, which is treated with the toxic compound copper chromium arsenate (CCA). In particular, don't use it for eating surfaces on picnic tables or children's play equipment. Clean up all scraps and sawdust from treated wood and dispose of it properly – it should go to a lined landfill or licensed waste incinerator. Treated wood should not be burned at home in bonfires, stoves or fireplaces

For more information and tips, visit the DIY Safe website and use the Do-it-yourself Safely Easy Guide.

Doing the laundry

Think about making these changes today:

- Avoid having clothes dry-cleaned where the toxic chemical perchloroethylene is used as the primary cleaning solvent – this is classified as a probable carcinogen. Ask for a safer alternative such as 'Wet Cleaning' or buy clothes that don't need dry-cleaning
- Use a laundry detergent that doesn't contain phosphates, is readily biodegradable, is made without petrochemicals, is low allergy, and contains no optical brighteners or enzymes
- Avoid bleach when possible if whitening is needed use non-chlorine bleach
- When possible hang clothes to dry outside to avoid using the dryer, which uses energy and depletes resources

Personal products

Are you concerned about the products you use?

Here are some ideas you may like to try:

- Avoid using antibacterial soaps, as antibacterial agents, while not directly harmful to you, contribute to the growing problem we face when bacteria mutate to strains that are more drug-resistant
- Use eye drops, contact lens solutions, and nasal sprays or drops that are free of thimerosal or other mercury-containing preservatives
- Look for unscented and natural dyes in products this will also avoid potential allergic reactions
- Choose pump spray containers instead of aerosols, as pressurised aerosol products often produce a finer mist that is more easily inhaled – aerosols also put unnecessary VOCs into the air you breathe

What you eat

Like it or not, there are chemicals in and on the food we eat.

Consider making the following changes:

- Rinse all fruits and vegetables thoroughly to remove fertiliser residues (rinse over a bowl, capture and reuse the water in the garden or for rinsing out recyclables for collection)
- Don't microwave foods in plastic containers, as chemicals from the plastic container can become absorbed by food during microwaving
- Avoid food that is overly processed and heavily packaged

Although organic food might seem more expensive than conventional foods, conventional food prices don't reflect hidden costs borne by taxpayers, including federal subsidies. Other hidden costs include pesticide regulation and testing, hazardous waste disposal and clean-up, and environmental damage.

Other information about chemicals at home

The Department of Environment and Heritage provides information about chemicals in and around your home and disposal options.

For information on taking action to make homes safer and keep families healthy, please visit Safer solutions.

Use indoor plants to improve air quality. NASA claims that plants remove toxins from the air.

Poisoning can occur through swallowing, skin contact, inhalation or eye contact. Kidsafe provides information to help you prevent poisoning. Contact the Poisons Information Centre on 13 11 26 (24 hours).

The National Toxics Network Australia Inc (NTN) is a community-based network working for pollution reduction, protection of environmental health and environmental justice for all. It provides non-government organisations (NGOs) with a national and international voice on chemical and toxic issues and functions as Australia's "toxic watch dog".

Information was obtained from various sources including Teresa Rutherford, who conducts non-toxic cleaning and beauty workshops.

Contact: trutherford@ozemail.com.au



Ingredients for green cleaning

Bicarbonate of Soda

A natural compound which cleans, disinfects (kills some bacteria and fungus), cuts grease, deodorises, softens water and scours (mild abrasive, without scratching the surface of what you are cleaning).

White vinegar (Mild acetic acid CH3COOH)

It cleans, sanitises, cuts grease, freshens and is a mild disinfectant. It kills many bacteria, yeast and moulds.

Pure soap

A simple detergent made from natural products like vegetable oils. It biodegrades completely, is non-toxic, and is available as liquid soap, soap flakes, soap powder, or bars.

Borax

(poisonous if ingested) – Naturally occurring mineral salt. Borax is a useful cleaning agent and industrial chemical. When dissolved in water, it forms an alkaline antiseptic solution used as a disinfectant, detergent, deodoriser, bleach and water softener. It aids in dissolving resinous substances and cleans most delicate fabrics, silver, glass and china.

Washing soda

Crystallised sodium carbonate. Cuts grease, removes stains and softens water.

Ammonia: Ammonia (NH3)

is not damaging to the environment and is quickly converted to neutral salts like ammonium sulphate, ammonium phosphate or ammonium carbonate. Alkaline. The vapours are highly irritating to the eyes and nose so should not be used by people with chronic respiratory problems. Never use in enclosed spaces.

One possible drawback is that animals will often pick up the scent of ammonia as they cannot distinguish between ammonia and urine hence may mark their territory!

Olive oil

natural fruit oil which gives a shiny polished appearance to floors and furniture.

Salt

Sodium Chloride, an excellent scourer and disinfectant.

Lemon juice

Citric acid, acts as a mild bleach (hard surfaces or fabrics) and degreaser.

Eucalyptus

(poisonous if ingested) essential oil which is distilled from gum leaves. The oil evaporates rapidly and is used to remove sticky substances (eg. grease, tar and glue). It has antiseptic, medicinal, deodorising and insect repelling properties. It is not recommended for garden use, as it can harm many beneficial plants and micro organisms.

Kitchen

Surfaces

Cleaning kitchen benches and cupboards with vinegar is said to repel cockroaches, whilst disinfecting.

Alternatively, the kitchen benches, sinks, refrigerator and table tops can be cleaned with bicarbonate of soda on a damp cloth and then dried to avoid chalky residues.

Basic spray

Mix warm water with soap OR vinegar.

Alternative to Spray and Wipe

Mix ½ cup of grated pure soap with 5 cups of boiling water, 3 tablespoons of washing soda and 3 tablespoons cloudy ammonia. Transfer to a spray bottle and shake. Add a few drops of eucalyptus oil if desired.

Heavy Duty All purpose cleaner

1/4 cup ammonia, 1/4 cup white vinegar, 4 litres of water, 1 teaspoon bicarbonate of soda. Store in a labelled spray bottle.

Gumption

Use instead of harsh cleaning agents.

Antibacterial spray

Pour 1 cup of warm water into a spray bottle. Add 20 drops of orange oil (good for ants), 10 drops of lavender oil and 10 drops of eucalyptus oil. Shake. Spray on required surface and leave for 15 minutes (leave on appropriate).

Wooden chopping boards

Clean with salt and a scourer under tepid water

Dishwashing detergent

Wash dishes with pure soap (either grate and dissolve in hot water, or put ½ cake into a jar (500ml) and top up with hot water, once cool transfer to a pump or squirt bottle for use. Squeeze in the juice of half a lemon to act as a degreaser if desired.

Use vinegar in the rinse water to remove soap residues and achieve shine, especially on glass ware.

Cleaning your dishwasher

Run it empty on a hot cycle with vinegar in the detergent section.

Smelly fridge

Put in an open box of bicarbonate of soda, which inhibits odorous bacteria, or use vanilla to scent the fridge.

Oven cleaner

Once the oven has cooled, leave a paste of baking soda and water on for several minutes before scrubbing with steel wool. (Not suitable for selfcleaning ovens)

Burnt saucepans

Soak overnight with 50:50 vinegar, water solution.

Dirty teacups/coffee mugs

Mix a paste of bicarbonate of soda and water and rub onto the inside of the cup. Then wash as normal.

Enamel ware

To maintain the sparkle on all enamel surfaces, (refrigerators, stoves, sinks, baths, tiles etc.), use 4 tablespoons of borax to each 4 to 5 litres of hot water.

Toilets and bathrooms

Basic soapy cleaner

Put half a cake of pure soap into a wide necked jar (500ml size) and top up with hot water. It will gel. This can be watered down and used in pump containers as liquid hand soap, dishwashing or general cleaning. This is great for cleaning brass or chrome tapware.

Bathroom (and pots and pans) Cleaning paste

Stir 1 bar of pure soap (grated) with 500ml water in a saucepan until dissolved. Take it off the heat and add 1½ cups of borax, 1 cup of vinegar, 1 cup of salt, ½ cup of bi-carbonate of soda and 1 cup of vinegar and mix thoroughly. As it cools stir occasionally.

Toilets

Make a paste of bicarbonate of soda and water. Clean surface with a sponge or firm bristled brush (to cleanse and deodorise). Wipe clean with water. For badly stained toilets vinegar can be left in the bowl overnight, or a borax and lemon juice paste can be left on for 10 minutes.

Showers and tiles

Clean with undiluted vinegar to remove soap scum, lime deposits and mildew effectively. Alternatively wipe over with a hot wrung cloth and eucalyptus oil.

Mildew remover

Scrub with a vinegar and sea salt mixture.

Mould

Eliminate by using a stiff brush or scourer and bicarbonate of soda. Alternatively use cloudy ammonia on grout. A ceiling fan or open windows help eliminate the dampness that causes mould.

Mirrors

Spray on a solution of 50:50 vinegar and water, wipe dry with dry newspaper or squeegee, then put a little eucalyptus oil on the newspaper and wipe over to prevent fogging.

Air Fresheners

Open boxes of bicarbonate of soda to absorb odour. Alternatively use fresh flowers, sprigs of fresh herbs, or bunches of cinnamon sticks.

Air freshener spray

Mix 50ml gin or vodka with 200ml water (spring or rain water). Add a few drops of your preferred essential oil and shake. Be careful which furniture and furnishings you spray it above and avoid naked flames because of the alcohol content.

Drain cleaner

½ cup baking soda, ½ cup of vinegar and boiling water. Firstly pour the baking soda down the drain, followed by the vinegar. Let fizz for a few minutes, and then pour a kettle of boiling water in to clear it. Use a plunger if the blockage is stubborn and repeat process if necessary.

Laundry

Liquid Laundry detergent

Dissolve $\frac{1}{2}$ a bar of (grated) pure soap with 2 litres of water in a pan. Add 2 additional litres of hot water and mix a cup of washing soda and $\frac{1}{2}$ cup of borax. As it cools, the liquid will start to gel. Once cool and $\frac{1}{2}$ cup bicarbonate of soda, $\frac{1}{2}$ cup sea salt and $\frac{1}{2}$ cup of vinegar. Mix thoroughly. Amount required depends on washer try using 1 cup per washload, and adjust as necessary .

Add 1 tablespoon of borax (don't add this for wool, silk or delicates) if using in a dirty wash or to brighten whites.

Wool wash

Dissolve 1 cake of (grated) pure soap with 2 litres of boiling water. Dissolve 1 cup of washing soda and 1 cup of sea salt in 2 litres of hot water in a bucket. Strain the soap mixture into the washing soda/salt before it cools. Mix well and add a teaspoon of eucalyptus oil (as this deters moths and silverfish).

Washing powder recipe

½ bar pure soap (grated finely), ½ cup of borax, ½ cup of sea salt, ½ cup of washing soda (limestone based)

Brightening whites and colours

In front loaders, substitute 1 tablespoon usual powder with 1 tablespoon of borax (in the powder compartment).

Rinse Aid

Pour a cup of vinegar into the rinse cycle/softener compartment, and it acts as an effective rinse aid removing detergent build up, is also credited with removing fluff and is a mild disinfectant/anti-bacterial for clothes. It also softens to a degree.

Softener

Mix 1 cup of washing soda to 8 cups of hot water to dissolve. When it cools add 2 drops of essential oil (eg. eucalyptus or lavender). Use as you would a fabric conditioner.

Cleaning your washer

Every 3-12 months, run the washer through its hottest cycle with a cup of Epsom salts.

Bleach

Use borax or lemons to bleach whites. Nappies and clothing with perspiration stains can be soaked in a bucket of water with one cup of lemon juice overnight.

Keeping white shirts white

Prior to washing spray white vinegar onto the collar, cuffs and marks. Follow with a sprinkle of borax and roll up clothing. Soak in warm water and detergent mix overnight and then wash as normal.

To reduce the collar stains

Prior to ironing sprinkle lightly with cornflour (brush off excess with a clothes brush) and iron as normal. The cornflour absorbs the grease, reducing staining, thus making washing easier.

General stains

Rinse with cold water before stains dry, followed with bicarbonate of soda. Particularly stubborn stains (eg. oil, grease, tar, gum, ink and grass) can be rubbed with a few drops of eucalyptus oil, which evaporates prior to washing. Or use methylated spirits on biro stains.

Shoe polish

Use olive oil to polish leather shoes.

Floors

Carpet soap

Grate ½ cake of pure soap. Add 5 cups of boiling water, 3 tablespoons washing soda and 3 tablespoons cloudy ammonia. Store in wide necked jars. To use, lather with hot water using a soft brush or cloth.

Carpet deodoriser

Clean carpets regularly by vacuuming (sprinkle on bicarbonate of soda first as a deodoriser). Act on spills immediately using cold water and blotting cloths.

To remove red wine/beer/milk/tea/coffee spills on carpets, rub plenty of salt on immediately (or bicarbonate of soda), vacuum/brush off when dry.

Cork, tiles, lino, slate floors

Mix ½ cup white vinegar in a bucket of hot water. Mop floor. Alternatively squirt liquid soap into ½ bucket of hot water and add 1 tsp of eucalyptus oil.

Floor polish

Mix beeswax, 1 part lemon juice to 2 parts olive/veg oil

Removing heel marks from floors

Paste of baking soda and water.

Others

Glass/windows

Spray on a solution of 50:50 vinegar and water, wipe dry with dry newspaper or squeegee. If the glass is particularly dirty, wash it with warm soapy water first.

Furniture polish

1 teaspoon olive oil, mixed with the juice of 1 lemon and 1 teaspoon of water. Polish onto furniture using a soft cloth. Beeswax is a good natural alternative.

Copper polish

Mix 1 tablespoon vinegar and 1 tablespoon salt, and apply to surface with a cloth. Rinse thoroughly with water to prevent corrosion. Polish with a cloth with a little vegetable oil to achieve a shine.

Indoor plants

Wipe weekly with a damp dishcloth to keep leaves glossy, help photosynthesis and help remove pests. Spray with water in air conditioned environments.

Garden

Concrete paths

Wash with a solution of 5 tablespoons of borax to 4 to 5 litres of hot water

Killing weeds

Use boiling water (or steamer) or spray with neat vinegar.

Killing slugs and snails

Sprinkle salt around affected areas. Make the areas around plants inaccessible by sprinkling egg shells and sawdust as this hinders their movement.

Pests

Moth Balls

Cedar chips, dried lavender or peppercorns. Store woollens in plastic bags. Add a few drops of eucalyptus to wash to deter moths and silverfish.

Ants

A mixture of borax and hot water poured on troublesome ant hills should eliminate the problem. Boiling water alone may prove effective. Inside the home, wipe neat vinegar around doors and window openings to deter them.

Cockroaches

Mix equal parts of baking soda and icing sugar, or mix a little borax with icing sugar and leave as baits. Exercise caution around children and pets.

Eucalyptus and tea tree essential oils deter cockroaches.

Finely crushed bay leaves sprinkled around cupboards. The chemical 'cineole' in the leaf repels cockroaches.

Mix 2 cups of cold mashed potato and 1 tablespoon of bicarbonate of soda roll into 1cm balls. Place 2 balls wherever cockroaches gather and replace until eaten no more.

Flies

Stick cloves in an orange as a repellant.

Mosquitos

Rub skin with vinegar as a repellant. A splash of vinegar in pot plant saucers is said to kill off mosquito larvae. Alternatively, fill the saucers with gravel leaving the larvae nowhere to swim.

Dust mites

Eliminate dust mites from clothing, bedding or soft toys by placing the affected item in the freezer overnight and then out in the sunshine for a day.

Cleaning the car

Washing

Use a bucket of warm soapy water for washing, rinse with clean water.

Polish

Once dry, sprinkle the bodywork with cornflour, and polish it off for extra shine.

Chrome polish

Use a dry clean cloth with bicarbonate of soda.

Windows

A cloth moistened with vinegar is effective at cleaning windows without streaking.

Tar Remover

Use a damp cloth with a little eucalyptus oil to remove.

Battery cleaner

Terminals can be cleaned using a mixture of 2 teaspoons of bicarbonate of soda with 1 litre of water, applied generously. Smearing Vaseline around the base of the terminals prevents further build up.

New car smells

Wipe vinyl surfaces with a strong vinegar solution and air well.

Dog and cigarette smells

Keep an open carton of bicarbonate of soda to absorb smells, or fill the ashtray with it.

Air freshener

Hang a bunch of cinnamon sticks with a few drops of lavender oil over the air vents.

Pet care

Pet shampoo

Use liquid pure soap (1/4 cake of pure soap grated and dissolved in boiling water) when cool add 1 teaspoon of orange oil.

In-between wash refresher

Pour a bucket of warm water containing a teaspoon of eucalyptus oil over dog.

Pet flea spray

Fill a spray mist bottle with water and add a few drops of either eucalyptus, bay laurel, citronella, clove lavender or pennyroyal essential oil. Pennyroyal deters fleas. Spray daily or as required.

Deodorising pet bedding

Sprinkle liberally with bicarbonate of soda, leave for at least 15 minutes and then vacuum.

Personal care – hands and body

Liquid hand/body soap

Put half a cake of pure soap into a wide necked jar (500ml size) and top up with hot water. It will gel. This can be watered down and used in pump containers as liquid hand soap. Pure soap cakes can be used instead of synthetic soap for hand and body washing.

For really dirty hands

Rub with sugar and olive oil/lemon juice OR use oatmeal and lemon juice.

Bath Salts

Mix 1 cup of sea salt (or washing soda) and 5-10 drops of your preferred essential oil. This is enough for about 5 baths.

Antibacterial bath salts

Mix in 1 tablespoon ground cinnamon (or cinnamon essential oil) with 1 cup of washing soda or sea salt for an antibacterial wash (prevents thrush etc.)

Body scrub

Mix 6 tablespoons of honey with 1 tablespoon of sifted bicarbonate of soda. Store in a wide necked jar so you can get your hand in. Use instead of soap. Honey is said to be good for the treatment of burns.

Body Moisturiser

Spray olive oil, jojoba oil or sweet almond oil onto skin and massage in. (Other natural oils are also suitable, eg. hemp oil, emu oil, evening primrose oil etc.)

Deodorant

Either use witch hazel or dust underarms with bicarbonate of soda (add a few drops of essential oil if required).

Body Spray

Put 50ml lavender oil (or preferred oil) with 150ml spring water into a spray bottle and shake well prior to use.

Shoe odour

Smelly shoes can be sprinkled with bicarbonate of soda and left overnight.

Personal care - face

Refreshing spray

Spray on rose water (or witch hazel for oily skin).

Moisturiser

Use olive oil on dry skin

Face masks

Combine ingredients in a bowl and use enough ground oatmeal to make a paste. Smooth over face and neck, place cucumber over eyes and leave on for 15 mins prior to rinsing with tepid water.

Oatmeal absorbs excess grease, soothes and softens skin.

Honey is anti-microbial, so cleanses and refines the skin.

- Dry skin: 1 tsp olive oil, 1 egg yolk, 1 tsp honey and oatmeal. The honey locks in moisture from the egg and olive oil..
- Normal Skin: ¼ cooked peach, 2 strawberries, ¼ cup mashed paw paw, 1 tsp honey and oatmeal. The fruit acids remove dead skin cells leaving glowing skin.
- Oily skin: ½ cooked apple, 1 tspn honey and oatmeal.
 Fruit acids remove dead skin cells and clear pores.

Personal care - hair

Shampoo

Put 1 cup of soapwort and 1 cup of chamomile flowers into a jar and add 1 litre of boiled spring/rain water. Leave until cool and strain for immediate use. Alternatively use Neem (from a tree native to India) shampoo (its antibacterial properties are good for dandruff).

Rosemary Hot Oil Treatment

Mix ½ cup of dried rosemary leaves with ½ cup of soy bean oil. Place bowl into hot water to warm and infuse. Strain through a sieve, coat hair and clip up. Put on a reusable shower cap and wrap in a warm towel. Leave on for 15 mins then wash hair until all oil is removed.

Ginger Dandruff Treatment

Mix 1 tspn of pureed/squashed ginger with 1 tsp sesame oil and 1tsp lemon. Apply to scalp and allow to dry before shampooing. Use 3 times per week.

Hair dye

Use natural henna dyes, as these are one of the safest, though asthmatics should use with caution.

Oral hygiene

Toothpaste

Mix 4 teaspoons of bicarbonate of soda with either 2 drops of peppermint or spearmint essential oil (OR a put a pinch of a herb called stevia in 1cm boiling water for 10 mins, use one teaspoon of the infused water). Avoid products containing sodium lauryl sulphate as this is most easily absorbed under the tongue.

Antibacterial Mouthwash

Mix 1 teaspoon of ground cinnamon and 1 teaspoon sea salt with 1 cup of warm water. Use as a rinse particularly following tooth removal.