Green Cleaning



Why trust something as important as your family's health to chance.



## Modern chemicals create great conveniences..... *and* health hazards.

In our grandmothers' and great-grandmothers' day, the business of the household was a full-time job. Between hand-laundering, canning, baking, sewing and churning butter there was no time or energy left for work outside the home. These women did not know the conveniences that make today's lightning speed of life possible. They also did not know the pain, frustration or expense of health problems associated with the synthetic chemicals that help fuel our frenetic pace today.

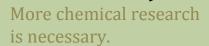
As women began to join the workforce, we began to rely upon innovations for convenience to get us to work on time and supper to the table on time. A quick inventory includes a number of consumer packaged "miracles" used since the 1950s to help women make it all happen: hairspray, juice boxes, vegetable washes, all-purpose cleaners, dryer sheets, dishwasher rinse agents, disinfectants and plug-in air fresheners to name a few. The irony is that common household products in every single one of these categories expose us to toxic chemicals which are known or suspected to be potentially damaging to health. Microwaves, mood relaxers and mobile phones also challenge our wellness.



### **CORRELATION:**

Influx of synthetic chemicals and increases in chronic illness rates.

Over 80,000 new chemicals have been introduced to the market since WWI. This coincides with a staggering increase in the incidence rate of several chronic and fatal diseases over the last several decades.

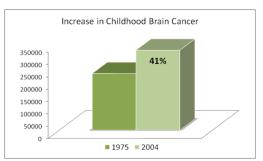


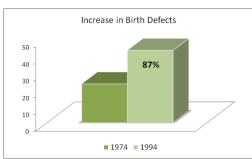
About 3,000 of these new chemicals are high production volume chemicals which we encounter practically daily from a variety of sources. Yet there is no basic toxicity information available to the public on nearly half of them. The EPA has only recently begun to address the need for more research.

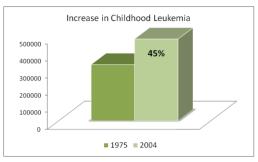
# hronic Exposures

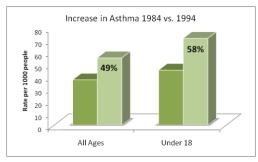
Most people think that inhaling a little bit of mist when they spray cleaning products doesn't really smell good, but won't really harm them. But many chemicals are fat soluble and difficult to purge from the body. Over time these accumulate. Scientists and medical experts believe there is inadequate research to fully assess the impact of these toxins over time in our body, and in combination with other chemical toxins.

Most people also don't realize that there are 4 points of exposure, some which occur without their knowledge. See side bar at right.









Sources: Centers for Disease Control and Mount Sinai Children's Environmental Health Center

### **Vulnerable Populations**

Children are the most vulnerable to the toxic effects of conventional cleaning products and other household chemicals.

Why? They're smaller than adults. Proportionately the same exposure or "dose" will be stronger for a child, pound for pound, than an adult.

Further, their organs are under-developed and can't process and purge what they take in as well as adults can. Their immune systems are also not fully developed. Another reason is their skin is more tender than ours.

Finally, children explore their worlds with their hands and their mouths. They crawl and play on the floor and due to their height they are always closer to the floor than adults. Floors are the largest collector of chemical residues.

Pets, the elderly, those with immune system disorders and chronic illnesses are also vulnerable populations.

## **Points of Exposure**

Think back over the last week and see if you've been exposed to chemicals in any of the following ways:

- 1. Ingestion the least likely mode of exposure. Most families keep cleaning products out of reach of children and have sense enough not to ingest them. But are you keeping all toxic chemicals out of reach? Are you sure your products aren't toxic? (see page 6.)
- 2. Inhalation a more likely mode of exposure.

  Minute mist particles from your pump or aerosol sprayer stay suspended in the air even the ingredient used to suspend the chemicals (in fragrances for example, to make them linger) are toxic (see page 4).
- 3. Dermal Contact the most likely mode of exposure, along with number 4. Chemical residues from cleaning products linger on surfaces and get trapped in the microscopic pores in every surface, even glass. The softer the skin, the greater the rate of absorption. Absorption through the skin usually goes unnoticed. Do you lean on the kitchen counter with your bare forearms? Does your infant crawl across the "clean" kitchen floor?
- 4. Vapor Absorption through the skin the other most likely mode of exposure. Few know that vapors are absorbed through the skin. Again, the softer the skin, the greater the rate of absorption.

## Body Burden Tests – what have YOU been exposed to?

They're not inexpensive, but you can be tested for the presence of toxic chemicals in your body.

The generational trends of these tests can be revealing. The experience of environmental health activist Laura Turner Seydel bares this out. She, her father and her son all underwent the Environmental Working Group's toxic body burden test, screened for the presence of about 80 chemicals in their bodies. "There was a clear distinction between the toxic chemical levels in the three generations," Seydel said. My father showed hardly any traces. I showed some and my son showed a lot of exposures to toxins such as flame retardants, Teflon, mercury, lead, plasticizers, phthalates, even rocket fuel."

## What does it mean



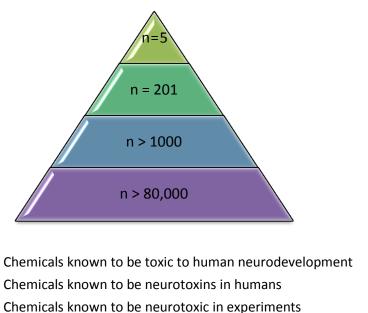
Technology advancements and innovations for convenience in every facet of our lives

.....commonly introduce poisons to our bodies

.....through exposures we often do not notice

....and put our children at greater risk

## Lots of chemicals – *NOT* a lot of knowledge



Source: Mount Sinai Children's Environmental Health Center

### Primary toxins of concern

### **Endocrine Disruptors**

Chemical universe

Endocrine disruptors mimic human hormones, confusing the body with false signals. Think of them as hormone disruptors. Exposure to endocrine disruptors can lead to numerous health concerns including reproductive, developmental, growth and behavior problems. Endocrine disruptors have been linked to reduced fertility, premature puberty, miscarriage, menstrual problems, challenged immune systems, abnormal prostate size, ADHD, non-Hodgkin's lymphoma and certain cancers.

#### **Neurotoxins**

Neurotoxins alter neurons, affecting brain activity, causing a range of problems including headaches, dizziness, disorientation, memory loss, and even loss of intellect.

### Carcinogens

Carcinogens cause cancer and/or promote cancers' growth.

## What chemical groups should my family be most concerned about?

Countless chemical ingredients in daily life may be harmful to our health – too numerous to outline here. Consumers should know of some general categories of chemicals that should be avoided, however. The following list is not all-inclusive.



One of the most counter-intuitive health threats is that of products that disinfect. Common sense tells us that killing household germs protects our health. However disinfectants are pesticides and the ingredients in pesticides that are designed to kill bugs and microorganisms often include carcinogens and endocrine disruptors. Pesticides are fat-soluble, making them difficult to eliminate from the body. Pesticides, including disinfectants, may also include alkylphenol ethoxylates (APEs).

#### **APEs**

APEs act as surfactants, lowering the surface tension of liquids and helping cleaning solutions spread more easily over the surface and penetrate solids. APEs are found in detergents, disinfectants, all-purpose cleaners and laundry cleansers. They are also found in many self-care items including spermicides, sanitary towels and disposable diapers. APEs are endocrine disruptors.

#### **FORMALDEHYDE**

Formaldehyde is a preservative. Many people do not know that it is also a germicide, bactericide and fungicide. It is often found in cleaners, disinfectants, nail polish and other personal care products. Formaldehyde is a carcinogen.

#### **PHTHALATES**

Phthalates are most commonly used in

the manufacture of plastics. Phthalates are also used as carriers for perfumes and air fresheners and as skin penetration enhancers for products such as moisturizers. Classified as inert, they are not required to be listed on product labels. They are endocrine disruptors and suspected carcinogens. Phthalates are known to cause hormonal abnormalities, thyroid disorders, birth defects and reproductive problems.

#### **ORGANOCHLORINES**

Organochlorines result from the combination of hydrogen and carbon. Some types are highly deadly, such as DDT. OCs are bio-accumulative (difficult to purge thus build up in your body) and highly persistent in the environment. OCs are present in pesticides, detergents, de-greasers and bleaches. OCs are also present in dry-cleaning fluids. OCs are carcinogens and endocrine disruptors.

#### **VOCs**

Volatile Organic Compounds are emitted as gases suspending themselves in the air. VOCs include an array of chemicals, some of which have short- and long-term adverse health effects, and are present in perfumes, air fresheners, disinfectants and deodorizers. VOCs commonly include propane, butane, phthalates, and/or formaldehyde. These compounds pose a variety of human health hazards and are collectively thought to be reproductive toxins, neurotoxins, liver toxins, and carcinogens.



### What about your...

Chemicals from these groups aren't in *every* product. Do you know what's in your

- ► Furniture polish
- ► Air freshener
- ▶ Dishwashing detergent
- ▶ Oven cleaner
- Floor cleaners
- Disinfectants
- Metal cleaners
- ► Grout and tile cleaner
- Glass cleaner
- ► Laundry detergent
- Fabric softener
- Jewelry cleaner
- ► Mothballs
- ▶ Bug repellents
- ▶ Bug killers
- Hair colorants
- ▶ Deodorant
- Sun screen
- Nail polish
- **▶** Lotion
- Lipstick



## What's under //oww kitchen sink / ???

Take a look at your arsenal – the products you trust to make your home clean and enjoyable for your family – your tried-and-true "stash".

Do you know what ingredients are in your favorites? What about the ones in the back, that only get used sometimes?

Don't feel lonely. Ingredients are not required on cleaning product labels and, if they are posted you're not likely to be able to pronounce, or recognize them.

Mincing no words, it's time-consuming and cumbersome to research all of the cleaning products in our cabinets. Since the product ingredients aren't required to be printed on the label most people don't have a starting point. But without some education more informed decisions cannot be a reality.

### Caution! Warning! Danger!

Some say, "If you can't pronounce it, do you really want it in your home?" Others use the Signal Words as a general guide. Signal Words are required to be posted on the product label. The Signal Words are a universally recognized way to categorize household products by toxicity levels, and places all household products on a

relative scale, with Caution! on the mild end of the toxic spectrum and Danger! on the end to avoid. You can use Signal Words as your filter when deciding what can stay and what must go.

A word to the wise: never have Warning! or Danger! chemicals under your sink. If you must have them, store them in a room you can partition off from the main traffic flow. We don't yet know about emanation levels through packaging over time. Vapors are an exposure point. Note that relative toxicity is based on a 180-pound male for the Signal Words. Women and children tend to be lighter. Pound for pound, their exposure will be greater.

### **Green Cleaning**

One of the main philosophies of green living in general is to use the mildest method that is still effective. This holds true in the realm of house cleaning and is central to the philosophy of various green certifications for the cleaning industry. A healthy home is, after all, clean. Which is what makes a good green cleaning program a reliable

**SOlution** for a home that is clean and safe.

### Signal Words

Try to eliminate any product stronger than a Caution! from your home. Use up what you have (extreme situations are different) then replace with a healthier choice for the long-term.

Signal Word	Toxicity level [for a 180-pound male]	
Caution!	1 ounce – 1 pint may be harmful or fatal	
Warning!	1 teaspoon – 1 ounce may be harmful or fatal	
Danger!	1 taste – 1 teaspoon is fatal	

## More Resources We Like...

Safer Chemicals, Healthy Families

Safe Cleaning in Schools and Institutions

Safe Cleaning Collaborative

**Healthy Child Healthy World** 

**Beyond Pesticides** 

**Campaign for Safe Cosmetics** 

Healthy Schools Network, Inc.

**U.S.** Green Building Council

**Low Impact Living** 

Center for Children's Health and the

**Environment** 

**Cosmetics Database** 

GreenCleanCertified.com

## **Digging Deeper**

#### HOUSEHOLD PRODUCTS DATABASE

A great place to start is with an internet visit to the database compiled by the National Library of Medicine and the National Institutes of Health: <a href="http://householdproducts.nlm.nih.gov/">http://householdproducts.nlm.nih.gov/</a>. Here you can search by product category, chemical ingredient or product name to find out about chemicals in your household and any documented medical cases that may be associated with them. Admittedly, it is time-consuming and does not offer conclusions – these are up to the individual to determine – but it is a trustworthy site.

the internet is both a reliable resource and a repository of random sources..... validate what you find.

There are a lot of reasons for all the conflicting information but ultimately it's because there is so much research yet to be done. If you *do* poke around online, look for a majority consensus for information across several sites.

#### **ENVIRONMENTAL WORKING GROUP**

Here's a good touchstone to help you stay abreast of the latest research, legislation and green living developments and sift through all the conflicting information you might find online.

Visit <a href="http://www.ewg.org/">http://www.ewg.org/</a>

#### WOMENS' VOICES for the ENVIRONMENT

This one's pretty close to home for mommas - this issue is so central to house cleaning!

Visit http://www.womenandenvironment.org/



Looking for safer alternatives?

Fortunately there are lots of options for people who would like to reduce or eliminate toxins from their cleaning products – both ready to use products and concoctions made from common, inexpensive ingredients you probably already have. Here are some ideas to get you started:

More Uses for Lemon

Lemons are acidic and offer some antibacterial and antiseptic benefits when you are cleaning, naturally. Here are some additional ways to use lemons around the house:

- Clean copper pots with lemons.
   Cut a lemon in half, dip the cut
   side in a saucer of table salt to
   coat, then use the lemon to scrub
   your pot. The acid in the lemons
   and the grit from the salt will
   remove stains from the bottom of
   your pots and polish oxidation
   away.
- Clean stains on counters by letting lemon juice set on the stain for a few minutes, then dust with baking soda and scrub.
- Lemon juice is a natural bleach.
   Put diluted lemon juice on linens
   and clothing and allow them to sit
   in the sun. This is a great natural
   way to whiten real linen.

#### IN THE KITCHEN

To clean the microwave, heat a bowl of water and lemon slices in your microwave for about 45 seconds, then wipe. Stains will be easier to remove and old food odors will be neutralized.

A teaspoon of lemon juice added to your dishwashing detergent can help boost grease cutting power.

Hot lemon juice and baking soda makes a good drain cleaner that's safe for septic systems.

Rub lemon juice into your wooden chopping board, leave overnight and then rinse. Wood chopping boards appear to have anti-bacterial properties anyway, but the lemon will help kill off any remaining germs plus neutralize odors.

For a great oven cleaner, combine 5 C warm water, 2 tsp borax, and 2 T castile soap in a spray bottle. Shake to mix. Spray and wait 20 minutes, then wipe clean and rinse with water.

Clean stainless steel sinks with a paste of baking soda and vinegar. Mix it up and apply with a sponge. Don't let the foaming scare you – it works great!

#### **IN THE BATHROOM**

Spray fresh lemon juice on hard water scale build-up around faucets, wait 10 minutes and rinse.

Use a scrub paste made from baking soda and a tiny bit of water to scrub soap scum in tubs and showers.

For tile, mix ½ C. vinegar with ½ tsp all purpose liquid detergent and 2 C. very hot tap water. Combine in a spray bottle and mix well. Spray on, then rinse with a sponge.

To clean the toilet bowl, pour 1 C. borax into the bowl and let it sit for a few hours. Use the toilet brush to scrub, then flush. Spray straight vinegar onto the rim, seat and top. Scrub the rim with the brush and use a sponge or cloth to wipe. Re-spray the rim and don't rinse.

Antibacterial spray can be made from water and pure essential lavender oil. Mix 1 C. water and 1 tsp lavender oil in a spray bottle and shake to mix. Spray and wait 15 minutes before wiping or don't rinse at all.

**NOTE**: Label all home concoctions and date them so you can be sure of what you're using. Vinegar and baking soda cannot be used on all surfaces. Do some research first!

## The basic ingredients for natural cleaning products might already be in your pantry:

**DISTILLED WHITE VINEGAR** – good for dissolving grease, dirt, soap, scum and mineral deposits. Also absorbs odors.

BAKING SODA – an effective replacement for harsh scouring powders. Mildly abrasive and naturally deodorizing.

BORAX - good for cleaning, disinfecting and deodorizing.

**LEMON JUICE** – cuts grease, freshens and deodorizes, fights household bacteria.

WATER – distilled is best, but tap is fine.

CASTILE SOAP – all-purpose cleaner for around the house.

HYDROGEN PEROXIDE - (3%) a natural anti-bacterial. whitener and mold cleaner

### Buy green cleaning products OR......

## make your own.

#### THROUGHOUT THE HOUSE

For an all-purpose cleaner, combine 3 T white vinegar, ½ tsp washing soda, ½ tsp castile soap and 2 cups hot water in a spray bottle. Shake and spray!

To remove rust, sprinkle a little salt on the rust. Squeeze a lime over the salt until it is well soaked. Let the mixture set for two to three hours. Use the leftover rind to rub the residue.

For a good window cleaner, mix 3 T white vinegar with 1 gal cool water. Wipe with a newspaper to avoid streaks.

Sprinkling baking soda in the bottom of garbage bags will help control odors as you add trash.

Half a lemon stored in your fridge, uncovered, will help control and eliminate unpleasant smells.

Anywhere that moisture is a problem such as cupboards and under sinks, place a bowl of baking soda to help control humidity. You will need to stir the powder occasionally for maximum effective life.

#### **LAUNDRY**

Make a paste with baking soda and a tiny bit of water and work it into stains prior to washing to help remove them from the fabric. For perspiration stains, let the paste set for about an hour before washing. Half a cup of baking soda added to a full load of laundry will help brighten your wash and remove odors.

Add 1 - 2 T Epsom salts to the wash cycle to keep clothes bright.

To remove ring around the collar rub undiluted shampoo on the stain and launder as usual.

#### **NATURAL PET SHAMPOO**

Mix 2 C warm water, 2 tsp liquid castile soap, 2 T pure aloe vera gel and 1 tsp vegetable oil. Combine all ingredients in a jar and shake to blend. Wet your pet's coat, then work in shampoo a few tablespoons at a time, lathering as you go. Rinse thoroughly and dry.

## GREEN PRODUCT CERTIFICATIONS

Various independent organizations and industry associations review and certify cleaning products and pesticides according to specific criteria related to reduced health or environmental impact as compared to conventional products used for the same purpose. Looking for these certification symbols is a good start to help you steer clear of toxic chemicals, however the certifications differ, either in purpose, process, product or all three.

Be sure you understand what the certifications mean in order to make the best decisions when buying green products. This <u>comparison grid</u> is a good place to start.

Certifications you might want to learn more about...













This list is not comprehensive. Inclusion in no way constitutes endorsement of any program or organization. These symbols represent some of the larger certifications programs that relate to cleaning and the indoor environment. The symbols have been displayed to help consumers recognize them on product packaging. No compensation or special consideration was accepted in exchange for mention.





Choose a few ideas to implement at a time. Make the change to green practical and manageable for your lifestyle."

- Marie Stegner, Consumer Health Advocate.



#### Easiest

▶ Get good quality micro fiber cloths to clean better with fewer (maybe no) chemicals ▶ use these cloths in a color-coded fashion, using separate cloths for the kitchen, bathroom, etc. to prevent cross-contamination of germs throughout the home ▶ use micro fiber mops, not brooms, to remove daily traffic dirt and pet hair without stirring up more allergens ▶ use the mildest cleaning solution possible for the job ▶ watch the Signal Words on the product labels, avoiding anything stronger than a Caution! label ▶ spray cleaners onto the cleaning cloth, not the surface to be cleaned; overspray is a leading cause of unnoticed residues and airborne chemicals ▶ wear rubber gloves to prevent absorption of chemical solutions and vapors through the skin

# Proclicaling tips.

#### Medium

▶ Select products with low VOC content ▶ find products with a moderate pH, from 4 to 11 ▶ purchase products that come in recyclable containers ▶ purchase green cleaning solutions in concentrated form and dilute into reuseable spray bottles ▶ use a micro fiber mop system ▶ select products designed to work in cold water ▶ avoid products containing pesticides, organochlorines, formaldehyde, or APEs ▶ avoid products containing known or suspected carcinogens, neurotoxins, reproductive toxins, developmental toxins or endocrine disruptors ▶ get high quality entry mats to reduce the introduction of new dirt particles and chemical residues from the outdoors

#### Hardest

▶ Get a high filtration vacuum with a closed canister systems to trap and remove 99.7% of particles 1 micron or larger (including dust, dirt, pollen, dust mites, pet dander, hair and mold – really tiny stuff) ▶ go to a chemical-free dry steam vapor system to clean, deodorize, disinfect and kill mold, mildew and dust mites using water alone ▶ purchase a water-ionizing system for a chemical-free portable device that effectively tackles just about everything (you may need something stronger on heavy grease and soap scum) ▶ make your own natural cleaning products − like baking soda, lemons, vinegar, borax and vegetable-based oil soaps for ultimate knowledge and control of what is in your home ▶ de-clutter your home to make a more enjoyable environment for recharging and to make routine cleaning easier and faster

### More practical advice...

#### Infectious disease

Frequent hand washing is an important strategy to prevent infectious diseases. It's not the type of soap that presents the spread of bacteria and viruses, it's how you wash your hands. Vigorously rub soap in hands to produce lather and wash for a full minute (sing the Birthday Song twice). Rinse well. Dry hands with a clean towel.

Cough and sneeze into your sleeve. Get plenty of rest and eat healthy portions of vitamin and nutrient rich foods to boost your immune system.

#### Dust mite control

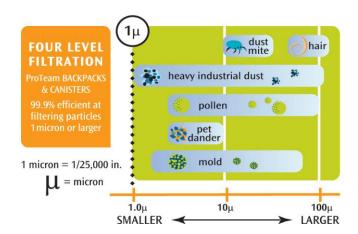
Dust mites, and their detritus, are a major allergy trigger. In fact, 80% of allergy sufferers are allergic to the waste and decomposed body parts of dust mites. Did you know that 42,000 dust mites can live in just an ounce of dust?

Your bed is the perfect environment for dust mites – your mattress may house between one million and ten million dust mites. What can you do to control them?

Vacuum upholstery and carpeting regularly. Launder your sheets in water that is 130° F or warmer to kill dust mites. Vacuum your mattresses frequently when you change the sheets. Vacuum bed pillows when you change the sheets and replace them every six months. Flip mattresses every few months and replace them every few years.

Direct sunlight kills dust mites so hang blankets outside on the line on sunny days. Leave the window blinds open and the beds unmade during the day.

If sunlight is the enemy, darkness is the friend of dust mites. Be sure to vacuum under your bed regularly and thoroughly. Dust gets trapped under your bed – offering a perfect food source. With darkness and a food source you're offering a very hospitable environment for dust mites to thrive.



Tests have shown that upright vacuums do not effectively remove these biologic allergens from your home. Use a professional-grade, closed canister vacuum with 4-level filtration to remove 99.9% of all particulate matter in the air that is 1 micron or larger. This includes mold, fungus spores, pet dander, pollen, dust and dust mites.

## 10 Ways to Recycle Plastic Grocery Bags

- 1. Small trash can liner
- 2. Trash container for car
- 3. Lunch bag
- 4. Bag for snowy or wet shoes, mittens or glove
- 5. Dirty diaper disposal
- 6. Walking the dog
- 7. Temporary containers when transplanting plants
- 8. Packing materials when moving
- Return to grocery store recycle bins
- Organize a plastic bag collection at a local school or church, then return to grocery recycle bins

#### Allergy & Asthma Control

Look into a **home evaluation** for the presence of indoor allergens if a family member displays chronic symptoms.

Reduce moisture in your home to prevent the growth of mold and mildew. Your basement should have a relative humidity of about 60%. If it exceeds this, run a dehumidifier and routinely empty the reservoir. Always run the bathroom exhaust fan when showering (during the shower and for several minutes afterwards) or open a window to allow moisture to escape so that mold and mildew will have a less hospitable environment.

Consider hard surface flooring instead of carpeting, which can trap dirt, dust, dust mites, pet dander, pollen and other allergens. If you choose carpet, select a low VOC product that has the Carpet & Rug Institute's IAQ label.

Routinely and properly maintain your carpet; vacuum with a HEPA (High Efficiency Particulate Air) filtering vacuum.

- Take a walk around your home and identify the clutter areas where things pile up the quickest, like kitchen countertops, kitchen drawers, and closets. Make a list of these separate areas.
- 2. Tackle one area at a time. De-cluttering is really a series of small projects, not one massive one. Instead of saying, 'I have to go through *every* single closet and give *everything* we don't wear to charity' say 'I will fill up one box today. I can do fill another box next Saturday.' Don't think about the next area until you have completed this one.
- 3. Free is not always good. Lessen the "free" items that come into your home. Do you really need every free t-shirt, bag and coffee mug that is offered to you? Limit the free items to those that you will actually use and enjoy. There are hidden costs to "free" such as the added clutter and ultimate energy you will spend freeing yourself of these items later.
- Make it green. Recycle or donate your discards to reduce landfill waste and help someone in need.
- Every couple of days, scan your home for clutter spots and manage them before they become a major project.





Purging and de-cluttering is not easy and involves physical and often emotional effort. We all have to do it from time to time. Most people find this task tedious and time-consuming at best. For others, the decisions to keep personal belongings or discard them can be very troubling psychologically.

The good news is that de-cluttering will help you feel calmer and more balanced AND your home will look better and be more organized and functional because of it. It's all about finding the right place for the things you have in your home and letting go of those things which no longer need to be there. To get the most benefit and enjoyment out of this annual ritual, here are some ideas to make the task more manageable.

# Make fewer messes ... make more time.

#### Cooking

Use re-useable plastic bags, or grocery bags, to catch messes while you work. Example: crush graham cracker crumbs or cookie crumbs for pie crust by placing in a re-useable bag, laying it on the counter and going over it several times with a rolling pin (you can also use a wine bottle). This is a good way to crush pecan halves or almond slices too. Then, spread the crumbs into your pie plate by placing your hand in the empty bag before pressing the crumbs into place The bag will keep the crumbs form sticking to your hand and makes for a much quicker clean-up.

Sauté vegetables and cook bacon in a stock pot instead of a pan. The high sides will prevent grease spatters from escaping the pot and keep your stove top much cleaner.

Control overspray from nonstick cooking spray by opening your dishwasher door, placing your baking pan on the door and spraying as needed. The excess spray will be washed away with the next dish cycle.

Spray nonstick cooking spray on the inside of plastic containers before you pour tomato based soups and sauces into the container. The layer of oil will prevent the food from staining the container.

Use the top drawer of your dishwasher as a draining rack for large pots and pans that normally don't fit in your dry rack. Water drips right onto the dishwasher door and not all over your counter.

#### Carpet

Sprinkle baking soda over your carpet before every vacuuming. Regular use will help control odors and prevent the need for air fresheners, which can contain endocrine disruptors and suspected carcinogens or trigger asthma and allergy attacks.



#### General

Be mindful of gravity. Dust and dirt will fall towards the ground during cleaning. To prevent having to re-clean an area too soon, clean from top to bottom. Vacuum and mop the floor last.

Be efficient. Take the fewest steps possible. Start at the door of each room, and clean from left to right until you have made your way back to the door. Also, keep your cleaning supplies in a bucket. They will be easier to transport from room to room and prevent you from having to stop what you are doing to retrieve something from another part of your home,

Don't chase loose hair with a wet rag or mop — you'll never remove it and get frustrating trying. Instead, wipe out dry sinks and tubs with a paper towel or tissue to pick up hair, then dispose.

Prevent hard water buildup on shower doors. Invest in an inexpensive squeegee and use it after every shower. Your door will stay clear and sparkling much longer

#### Pets

Groom your pets frequently to prevent loose hair and pet dander from taking over your home. Use herbal flea collars and repellents, rather than chemical flea collars, to prevent pests. Some essential oils, like lavender and rosemary, are effective and safe around pets but others can be dangerous. Do some research first!

## Maybe a cleaning service that cleans is right for you.

#### Most people feel like house cleaning duty is their "2<sup>nd</sup> shift" –

yet another job to do after spending a full day in the paid workforce. They know house cleaning is necessary and important, but also time-consuming. A house cleaning service alleviates the burden of regular cleaning routines, but one that is expert in green cleaning also frees you from time consuming and often confusing research.

#### A green cleaning service can make it easier

to maintain a clean and healthy indoor environment. Not all green cleaning services follow the same processes and some are more committed than others. But a service that is *TRULY* green will stay on top of emerging scientific and medical developments and use the healthiest, most effective green cleaning technologies and practices available. Did we mention the fact that they bring the supplies and equipment? You don't have to know what to buy, which surfaces you can clean with a particular solution and which you can't, or whether your equipment meets green standards for indoor air quality.

#### Ask around & compare

to find a company you know you can trust in your home and to understand their similarities and differences in what they offer. Not all green cleaning services are totally green, for instance. Some emphasize individual elements of a green program and others take a more holistic approach. But if you're choosing green cleaning for health reasons, you should go with the holistic approach. Why rid your home of certain contaminants only to introduce others?

## Choose a service that's committed to protecting your health.

#### It's not just about the chemicals

you use. That's a big part of it, for sure. But don't forget about the other equipment and supplies. Paper towels OR re-useable cleaning cloths? Cotton OR powerful and durable microfiber? Cloth-bag vacuum OR closed canister? All of these choices contribute to the quality of the indoor environment and a true green cleaning program will use every method available to clean your home in the healthiest manner possible.

#### A healthy indoor environment

starts with a focus on preventing cleaning liquids, and their residues and vapors, to contaminate the air with chemical toxins. But don't underestimate the importance of removing microscopic particles from the air. Specialized vacuum technology powerful enough to remove dust, dirt, mold, pollen and dust mites will go a long way towards reducing asthma and allergy triggers so everyone can breathe more easily.



## **Check out** green cleaning services before you hire one.

#### Ask these

## **five** essential questions

- 1. Does the company use cleaning solutions that are recognized and/or certified by Green Seal or a similar specific and tangible standard? Ask for a list. Better yet, ask for the Material Safety Data Sheet, or MSDS. This information will help you determine the chemicals they will use in your home. If they don't have an MSDS sheet for every product they use, move on.
- 2. What about the vacuums? Are they multi-level filtration systems with closed canisters? This will ensure removal of 99.9% of all pollen, pet dander, hair, mold, dust, dust mites and other respiratory irritants, which are common asthma and allergy triggers.



- 3. What about the cleaning cloths? Are they re-useable? Do they contain post-consumer recycled material or organically grown material? Do they reduce landfill waste or manufacturing processes?
- 4. What about staff training? Does the staff undergo formal training and certification to properly use green products and procedures? What assurances are there that every cleaning adheres to these standards?
- 5. Has the company conducted tests to substantiate the health and/or environmental benefits of their total system? Ask for proof.

Green Cleaning Service Comparison Checklist	Service A	Service B	Service C	Service D
Uses cleaning solutions that are certified to be effective, yet safer				
Uses multi-level filtration closed canister vacuums for improved indoor air quality				
Has a color-coded cleaning system using micro fiber cloths and dust mops for an effective clean while avoiding cross-contamination				
Their environmental and/or health claims are substantiated with proof				
Adheres to certified cleaning standards, for consistent and safe cleanings				
Implements formal green training program according to standard operating requirements				
All cleaning staff undergoes certification in accordance with recognized cleaning standards				

#### **GREEN CLEANING**

"Green" house cleaning is commonly defined as using products, equipment and methods that are safer for human health as well as the environment while still being effective.

#### **ENVIRONMENTALLY FRIENDLY**

This generally refers to a product's biodegradability, lack of aquatic toxins, low phosphorous levels, use of postconsumer waste in manufacturing, and recyclability. Your product might be a low impact cleaning solution, but did you buy it already diluted? Packaging and transport waste are green no-no's.

#### **NON-TOXIC**

To make this claim, a manufacturer must have reason to believe that the products won't pose any significant risk to people or the environment.

#### RECYCLED CONTENT

Unless the product or package contains 100% recycled materials, the label must tell you how much is recycled.

#### BIODEGRADABLE

Refers to the ability of a material to decompose into elements found in nature when exposed to natural elements. Degradation is a slow process. Paper and food can take decades to decompose in a landfill because sunlight, air and moisture are scarce in a landfill.

#### **ORGANIC**

The organic designation is reserved for products with a minimum of 95% organic ingredients. It is not a content claim or statement that a product is totally free from synthetic additives. "Made with organic ingredients" can be used if at least 70% of the ingredients are organic.



Is it green cleaning......

## OR green washing?

### Watch out for me-T00-ism

More and more "green" products and services have been introduced on the market lately, as more consumers become concerned with global warming and the environment. That's great – except when the product or service claims to be green but it really isn't. Green washing is when companies use exaggerated or inaccurate claims that can't be substantiated with proof. Green washing is on the rise, so much so that the Federal Trade Commission (FTC) accelerated their time table for reviewing their marketing guidelines for green terms by over a year. The agency's Green Guides are intended to help marketers avoid making false or misleading environmental marketing claims. Ultimately this will help consumers make more informed choices for themselves and their families, but in the meantime, we'll try to clear up some confusion.

### The Green Guides aim to clean all this up

First, what they DO NOT do is establish standards for environmental performance or prescribe testing protocols. Designed to protect the consumer and focused on message *interpretation*, the FTC's Green Guides are intended to address what the marketing claims convey to the consumer.

- An environmental marketing claim should specify whether it refers to the product, the packaging or both, or just to a component of the packaging.
- Environmental claims should be clear to avoid consumer confusion about what is being compared
- Environmental claims should not exaggerate or overstate attributes or benefits
- Above all, claims should be substantiated

## Truth in Advertising – The Green for Conco.

#### **EXAMPLES - MISUSE AND VAGUE LANGUAGE**

#### "Ozone-friendly"

Ozone friendly – CPCs, chlorofluorocarons, can deplete the ozone layer which protects the earth. Even though a product does not contain CFCs it may contain other chemicals which deplete the ozone. Also, products may be safe for the upper ozone layer but produce ground-level ozone, commonly referred to as smog. The release of volatile organic compounds (VOCs) can contribute to ground-level ozone. Household cleaning products and personal care products contain VOCs like alcohols, butane, propane and isobutene. EXAMPLE: A hair gel package is labeled "ozone friendly" – presumably because it is a better alternative than an aerosol hairspray – yet it contains VOCs and may contribute to ground level ozone. The claim is exaggerated at best.

#### "Non-toxic"

Consumers understand non-toxic claims as statements that the product is not only safe for human health but also the environment. The assumption is broader than merely "non-lethal". A product that presents significant risk for humans or the planet would be using this claim falsely. EXAMPLE: Simple Green® claims its all-purpose cleaner is biodegradable and non-toxic. The main ingredient in Simple Green is a solvent called 2-butoxyethanol (2-butyl). This is an OSHA Table Z Hazardous Substance and the EPA's Design for the Environment program has identified 2-butyl as having potential effects on blood, the central nervous system, kidneys and liver. It may not kill you, but it's hardly non-toxic. The non-toxic claim is false.

#### "Organic, natural"

Citrus oils are natural, powerful cleaning agents. Consumers infer that a product based on citrus oils is a safer choice for their families and the planet. What are the other ingredients though? EXAMPLE: Zep Citrus Cleaner and Degreaser® makes claims of biodedradable, environmentally safe and organic. One of the other ingredients is monoethanolamine (MEA). MEA is highly corrosive to the skin, can cause respiratory damage or asthma attacks if inhaled. Repeated exposures can damage the liver and kidneys and it is proven toxic in animal lab tests. The claims are misleading.



## Understand the product's "green" claims

- Read product labels. Don't use products with a signal word stronger than "Caution!"
- Research the chemicals listed on product labels through the Household Products
   Database, the Cosmetics Database, Toxnet
- Avoid products with fragrances. A clean home should smell like nothing at all.
- Use homemade cleaning solutions you'll know the ingredients are safe.
- Find and purchase cleaning solutions that are certified by an organization you trust and a standard you understand.



#### Greening Your School/Greening Your Cleaning

For most of the past decade, Deirdre Imus has dedicated herself to identifying and preventing children's exposure to environmental toxins that could cause or contribute to diseases such as autism, asthma, cancer and other neurodevelopmental health problems. Her 'Greening Your School' and 'Greening Your Cleaning' programs seek to eliminate toxic cleaning supplies, lawn maintenance products and pesticides from an environment where children spend so much time. At least 300 schools, hospitals and businesses have adopted the 'Greening the Cleaning' program. These institutions report spending less on deaning supplies, making another kind of green.

Consumer Advocacy

National Children's Study

Ignorance is perhaps amoral."

- Dr. Phil Landrigan

Dr. Phil Landrigan, Chair of Mount Sinai's Department of Community and Preventive Medicine, is one of the key figures behind the National Institutes of Health study that was launched in January 2010 to examine the influences of childhood exposures to toxic chemicals on health, disease and development by following 100,000 children from early in pregnancy through 18 years of age. Landrigan previously chaired a National Academy of Science Committee on Pesticides and Children's Health and worked as Senior Advisor to the Environmental Protection Agency. Although the study will be decades long, expect landmark results. Dr. Landrigan documented widespread lead poisoning in children in 1976, seminal to government mandates to get lead out of paints and gasoline.

#### GreenCleanCertified.com

This website is the educational sister site of an international house cleaning service, Maid Brigade. The company says that the biggest challenges to eradicating toxic chemicals from the home are consumer lack of knowledge, followed by confusion. This consumer advocacy site is intended as a repository of information where consumers can easily find information to help them make the most informed decisions possible in order to protect their families from the hidden health dangers found in ordinary household products, especially cleaning products. The site has informative articles, videos, and an interactive Q&A column managed by Consumer Health Advocate Marie Stegner.

## **Legislation** to remove consumer guesswork:



HOUSE VERSION: HOUSEHOLD PRODUCTS LABELING ACT — H.R. 3057 was introduced by Steve Israel and is jointly sponsored by several congressmen. In straightforward language, the Act would require any household cleaning product to include a complete and accurate list of the product's ingredients on the package label. This bill has been referred to the House Committee on Energy and Commerce.

**SENATE VERSION**: S. 1697 was introduced by Al Franken. This bill has been referred to the Senate Committee on Commerce, Science and Transportation.

## In on the Act ....

Rep. Steve Israel [D, NY-2]

Rep. Timothy Bishop [D, NY-1

Rep. Peter DeFazio [D. OR-4]

Rep. Diana DeGette [D, CO-1]

Rep. Raul Grijalva [D, AZ-7]

Rep. Nita Lowey [D, NY-18]

Rep. James McGovern [D, MA-3]

Rep. Timothy Ryan [D, OH-17]

Rep. Joe Sestak [D, PA-7]

Rep. Carol Shea-Porter [D, NH-1]

Sen. Al Franken [D, MN]





# Did you KNOW...

- The US comprises about 5% of the world's population and annually produces 27% of the world's garbage
- The US uses 6 billion pounds of chemical products yearly
- The US uses 4.5 billion pounds of paper products yearly
- The US disposes 500 million pounds of cleaning equipment yearly
- EPA rates indoor air quality as a top 5 health risk
- 80% of our time is spent indoors
- Two thirds of commercial buildings are rated "sick"
- 10 million work days are lost each year due to poor indoor air quality

#### Green Cleaning benefits your health and our environment

- Improves indoor air quality
- Improves morale and productivity
- Improves health, reduces sick days
- Minimizes exposure to aggressive, even toxic chemicals
- Reduces water and air pollution
- Reduces landfill waste
- Reduces packaging waste
- Reduces long term costs from health and environmental impacts

#### REFERENCES

This guide was created from original and published sources. We'd like to thank the following informational resources:

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#### Annie Bond

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#### **EPA**

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Home Improvement Magazine www.homeimprovementmagazine.com

#### Marie Stegner

Consumer Health Advocate, Maid Brigade, Inc.

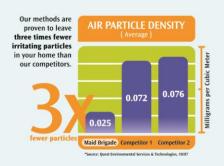
#### GreenCleanCertified

www.greencleancertified.com



Maid Brigade is the leader in green cleaning for the health of you and your family. We've developed the nation's first **Green Clean Certified**® cleaning standard that is designed to protect your home and your family from the harmful effects of most traditional cleaning methods. Our proprietary and exclusive green cleaning program is not only safer for your family, but you can also count on us for reliable service that is consistent and thorough every time.

Trust Maid Brigade.





For a free estimate, call 888.79GREEN or visit www.maidbrigade.com



For more information about protecting your home and family from the hidden dangers in most cleaning systems, visit <a href="https://www.greencleancertified.com">www.greencleancertified.com</a>



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