Creating a Healthy Home

Simple things you can do NOW!
What we're covering today

1. Why we should worry about chemicals
2. A wander around the house
3. The worst household toxins
4. Seven simple steps to create a healthy home.
Fact: Babies are born contaminated with industrial chemicals
World Wildlife Fund (UK)

- 30 new-born babies
- Blood tests taken from the umbilical cord
- Analysed for the presence of 35 chemicals
- Every baby tested positive for chemicals
- Chemicals found have suspected links to birth defects, genital abnormalities and certain types of cancer
- All babies contained at least 5 of the 35 chemicals
- Some contained as many as 14 of the 35 chemicals

[A Present for Life: hazardous chemicals in cord blood; World Wildlife Fund UK.]
The research

Environmental Working Group (USA)

- 10 new-born babies
- Blood tests taken from the umbilical cord
- 287 chemical and pollutants detected
- Average body burden was 200 chemicals

Of the 287 chemicals detected:
- 180 cause cancer in humans or animals
- 217 are toxic to the brain and nervous system
- 208 cause birth defects or abnormal development in animal tests

[Body Burden — The Pollution in Newborns; Environmental Working Group report, WHO, 2002.]
What are our children contaminated with?

Pesticides, consumer product ingredients, and wastes from burning coal, gasoline, and garbage.

- perfumes
- plasticisers
- tin can linings
- cleaning fluids
- flame retardants
- cosmetic ingredients
- chemicals from baby bottles
- non stick and water-proof coatings
- non-stick chemicals flame-retardants
- banned, yet persistent, pesticides such as DDT
- artificial musks used in cosmetics and cleaning products

[A Present for Life: hazardous chemicals in cord blood; World Wildlife Fund UK.]
[Body Burden — The Pollution in Newborns; Environmental Working Group report, WHO, 2002.]
Toxins in the Kitchen

oven cleaners:
ammonia, monoethanolamine (MEA)

dishwashing liquid:
formaldehyde, fragrance, monoethanolamine (MEA), parabens

automatic dishwasher detergents:
bleach, fragrance, formaldehyde (released by preservatives)

all-purpose spray and wipe cleaners: ammonia, MEA / DEA / TEA, methyl ethyl ketone, methyl isobutyl ketone, toluene, parabens, fragrance
Toxins in the Beauty Cabinet

**nail polish removers:**
acetone, fragrance, methyl ethyl ketone, phthalates, toluene

**perfumes:**
acrolein, acetaldehyde, fragrance, phthalates

**hair dyes:**
ammonia

**cosmetics, hair care, skin care:**
formaldehyde, fragrance, parabens, phthalates
Toxins in the Laundry

**bleach:**
sodium hypochlorite, sodium hydroxide

**spot and stain removers:**
acetone, fragrance, monoethanolamine (MEA),
bleach, toluene, xylene

**mark and scuff removers:**
acetone, fragrance

**laundry detergents:**
benzene, ethoxylated surfactants,
formaldehyde, fragrance, parabens,
monoethanolamine (MEA), bleach
Toxins to Clean the House

**abrasive cleansers:**
morpholine, bleach, fragrance

**furniture & floor polishes:**
morpholine, phthalates, toluene, turpentine, xylene

**drain cleaner:**
bleach, sodium hydroxide

**glass cleaners:**
ammonia, phthalates

**shower, bath and tile cleaners:**
monoethanolamine (MEA), bleach
Toxins to Freshen and Disinfect

**air fresheners and deodorisers**: acetaldehyde, fragrance, paradichlorobenzene

**disinfectants**: acetaldehyde, bleach, triclosan

In no way, shape or form does a chemically-scented fragrance and/or aerosols propelled by butane, propane or other toxins create an indoor environment of fresh air!

These products do absolutely nothing to improve the quality of indoor air, and in fact, can contribute to a host of ailments from headaches, high pulse rate and nausea; to mention a few.
Toxins around the Home and Garden

**plastic toys:** phthalates

**colouring pens and markers:** toluene

**mothballs:** paradichlorobenzene

**pesticides:**
acrolein, arsenic, benzene, methyl ethyl ketone, methyl isobutyl ketone, polycyclic aromatic hydrocarbons (PAHs), paradichlorobenzene

**weed killers:** acrolein, arsenic

**pet flea and tick products:**
methyl isobutyl ketone
Monoethanolamine (MEA), Diethanolamine (DEA), Triethanolamine (TEA)

**What are they?**
Aliphatic amines are toxic, flammable, corrosive, colourless, viscous liquids. They are used as pH adjusters.

**What are the risks?**
They may cause liver, kidney and reproductive damage, as well as depression of the central nervous system. Inhalation of high concentrations - when cleaning an oven for example - can cause dizziness or even coma. The chemical can also be absorbed through the skin. It is a moderate skin irritant, and a severe eye irritant.

**Where are they found?**
Many cleaning products, including oven cleaners, tub and tile cleaners, laundry pre-soaks, floor strippers and carpet cleaners.
Worst household toxins - ammonia

What is it?
Ammonia is both caustic and hazardous. It is used in commercial cleaning products.

What are the risks?
A severe eye and respiratory irritant that can cause severe burning pain, and corrosive damage including chemical burns, cataracts and corneal damage. It can also cause kidney and liver damage. Repeated or prolonged exposure to vapours can result in bronchitis and pneumonia. Ammonia will react with bleach to form poisonous chlorine gas that can cause burning and watering of eyes, as well as burning of the nose and mouth.

Where is it found?
A wide range of cleaning products and hair dyes.
What is it?
Sodium hypochlorite solution, commonly known as bleach, is frequently used as a disinfectant or a bleaching agent.

What are the risks?
A corrosive chemical, sodium hypochlorite is an eye, skin and respiratory irritant, as well as a sensitiser. It is especially hazardous to people with heart conditions or asthma, and can be fatal if swallowed. It may be a neurotoxin and toxic to the liver.

Where is it found?
A wide range of household disinfectants and bleach products.
Worst household toxins -

**What is it?**
Cosmetic biocide; denaturant; preservative.

**What are the risks?**
Classified as a Category 2 carcinogen. Low level exposure causes irritation of the eyes, nose, and throat, and can cause skin and lung allergies. Higher level exposure to formaldehyde may cause joint pain, depression, headaches, chest pains, ear infections, chronic fatigue, dizziness and loss of sleep.

**Where is it found?**
Waxed paper, detergents, cosmetics, shampoos, bubble baths, and hair conditioners, athlete's foot treatments, skin disinfectants, mouthwashes.
## Worst household toxins - fragrance

### What is it?
Used a deodorant; masking agent; and for perfuming.

### What are the risks?
Can contain up to 4,000 separate ingredients, mostly synthetic. Known to trigger asthma attacks. The US EPA found that 100% of perfumes contain toluene, which can cause liver, kidney and brain damage as well as damage to a developing foetus. Symptoms reported to the FDA from fragrance exposure have included headaches, dizziness, rashes, skin discolouration, violent coughing and vomiting, and allergic skin irritation.

### Where is it found?
Air fresheners, perfumes, cosmetics, personal care products, laundry detergents, cleaning products, household perfume products.
Worst household toxins - parabens

**What are they?**
Widely used as preservatives in the cosmetic and pharmaceutical industries and as a food additive.

**What are the risks?**
Parabens are hormone disruptors and have been shown to be a reproductive toxin in animal studies. High levels of parabens have been detected in breast tumours, with one UK-based study finding high concentrations of parabens in eighteen out of twenty samples of breast tumours. Parabens may cause contact dermatitis in some individuals.

**Where are they found?**
Pharmaceuticals, cosmetics and cleaning products.
Worst household toxins - phthalates

**What is it?**
Fragrance ingredient; plasticiser; solvent.

**What are the risks?**
High level exposure causes irritation of the eyes, nose and throat, nausea, vomiting, dizziness, and headache. An endocrine disruptor that harms the developing foetus and the male testes. Long-term exposure causes liver and kidney damage.

**Where is it found?**
Colognes, perfumes, cosmetics, hairspray, nail polish, paints, plastics, floor polish, window cleaning products, adhesives, toys, shower curtains.
What is it?
Disinfectant, deodorant, and pesticide.

What are the risks?
It is a suspected carcinogen, and may cause lung, liver and kidney damage. A highly volatile registered pesticide is in the same chemical class as DDT. Under California's Proposition 65, it is listed as "known to the State to cause cancer".

Where is it found?
Mothballs, room deodorisers, urinal blocks, pesticides.
Worst household toxins - triclosan

**What is it?**
Antibacterial, anti-fungal ingredient.

**What are the risks?**
Triclosan is linked to liver and inhalation toxicity. Low level may disrupt thyroid function. Triclosan may encourage bacterial resistance to antibiotics. The American Medical Association recommends that it not be used in the home. Wastewater treatment does not remove triclosan completely, which means it ends up in our lakes, rivers and water sources, where it forms dioxins, which are extremely toxic.

**Where is it found?**
Toothpastes, deodorants, antibacterial hand washes, mouthwashes, toys, bedding, socks, garbage bags.
Creating a Healthy Home

Tip 1: Eat fresh, organic foods.
Tip 2: Choose your personal care products wisely.
Tip 3: Wash your hands, but ditch the antibacterials.
Tip 4: Green clean your home.
Tip 5: Choose plastics with care.
Tip 6: Skip the non-stick.
Tip 7: Clear out indoor air pollution.
Tip 1 - Eat fresh, organic foods

Avoids toxic pesticides associated with:
• Cancers
• Hormone disruption
• Abnormal brain and nervous system development

Avoids toxic Bisphenol A (tin can linings), associated with:
• Hormone disruption
• Reproductive system abnormalities
• Cancer
• Adult-onset diabetes
• Obesity

Avoids growth hormones and antibiotics.
Only certified organic foods can guarantee the integrity of such claims.
Tip 2 - Choose personal care wisely

Be warned... not all products are what they claim to be!

Labels that claim 'natural', 'organic', 'pure' 'herbal', 'botanical', 'hypoallergenic', or 'gentle' without independent certification, can use almost any chemical, regardless of risks.

Always read the ingredient list before you buy.

If you wouldn't eat it, don't put it on your skin!
Tip 3 – Ditch the antibacterials

Don't use anti-bacterial products.
Microbiologists found soap and water best for washing hands and removing germs.

Choose safer soaps.
Look for certified organic liquid and bar soaps. Look for words like “saponified” and “soap”, which indicates it's a true soap, and not a synthetic detergent.

Avoid leave-on hand sanitisers.
Leave-on hand sanitisers don't remove the dust and dirt that can be contaminated with chemicals. Essential oil-based sanitisers are better bet because they don't contain triclosan.
Tip 4 - Green clean your home

Buy cleaning products that list their ingredients.

Keep it simple – less is more.

Clean toilets with bicarb soda and vinegar.

Clean glass with vinegar.

Clean surfaces and tiles with probiotics.

Use a multipurpose green cleaner.

Use microfibre cloths and mops.
Tip 5 - Choose plastics with care

Don't buy toys marked with a #3 or "PVC" (phthalates).

Avoid polycarbonate containers #7 or "PC" (BPA).

Never microwave food or drinks in plastic containers.

Don't reuse single-use plastics.

Wash plastics on the top rack of the dishwasher or by hand.

Don't allow your baby or young child to handle or chew on plastic electronics (the remote, your phone).
Tip 6 - Skip the non-stick

Non-stick surfaces are aluminum pans coated with polytetrafluoroethylene (PTFE), also known as Teflon.

Teflon emits toxic fumes when overheated.

Better options are **stainless steel** and **cast iron**.

Open your kitchen windows whilst cooking.
Tip 7 - Clear out indoor air pollution

Avoid sick building syndrome
Open up your windows.
Ditch household perfumes, candles and deodorisers.
Use safe, non-toxic cleaning products.
Use non-toxic, natural and organic personal care products.
Use non-toxic paints and flooring.
Quit smoking, or at least smoke outside!
Use natural and organic essential oils and perfumes.
Reduce or eliminate the use of pesticides and bug sprays.
Create your Healthy Home

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