



Health Fact Sheet Chemicals and You

The aim of this fact sheet is not to scare you – although the facts do make scary reading, but to **inform** you. You then are in a position to make fully informed choices about how you wish to live and the risks you want to expose yourself too, rather than believing the pleasant daydream that because it appears on the supermarket shelf its safe!

How many of us think as we go through our morning routines of the dangerous chemicals we are routinely exposing ourselves to? Not many of us, I'm sure as we have tucked away at the back of our mind the 'fact' that our government wouldn't let harmful things be sold to us – there are laws to prevent this aren't there! And yet....it is clear that something isn't working. There are over 84,000 chemicals in everyday use, but the number that have been robustly tested for 'consumer safety' only numbers in the low hundreds. The number of different chemicals being produced is too huge, and the lobbying power of the chemical industry too strong for consumer safety to be the first priority. Things tend to work on a 'we'll sort things out if there seems to be a problem' approach. They are considered safe until they are shown not to be! And the guinea pig is.....You!!!!

We all know that certain chemicals are immediately toxic to the human body and would not willingly swallow or expose ourselves to them, right? But what many people are unaware of is that low level toxicity can build to cause long term problems. The majority of the toiletries you have been using since you were a tot contain a cocktail of nasties. The skin is a huge sponge, so much of this cocktail ends up **inside** you! Up to 500 dangerous man-made chemicals have been found to be present in a single fat cell (a single cell from an Egyptian mummy was found to contain none)! Every day you are unknowingly and unwillingly exposing your body to this toxic overload and little by little it begins to tell on your health.

Consider also that this cocktail of chemicals – and every women (and man) using standard personal care items daily applies over 170 of them! – have never been tested **in combination**. So on its own something might be ok, but when it mixes with a chemical from a different product it causes a negative reaction.

This constant chemical exposure is a routine part of modern living – and it isn't just your toiletries. Household cleaning products, pesticides on food, chemicals in furnishings and paints, pollution, the list goes on. The number of harmful chemicals we are exposed to daily is cause for concern – and it is women who generally have the higher exposure in the home as they use more toiletries and do more of the housework. And, of course, we haven't even begun to look at the workplace!

Is it just coincidence that there has been a steady increase in serious diseases such as cancers, heart disease, diabetes, Alzheimer's, Parkinson's, multiple sclerosis, kidney disease, liver disease, asthma, infertility, birth defects and the many other chronic diseases that are so prevalent in modern life?

A recent study found traces of 350 man-made chemicals in breast milk – would any mother knowingly feed this mix to her child? Would she feed it to herself? And what effect is this having on both adult health and the vitality of children?

No-one knows – and at the corporate level very few care, as long as shareholders dividends hold up!

And whilst some of these chemicals might be safe others are known endocrine disruptors, carcinogens and neurotoxins – and yet they are still allowed to be used! Madness!

The American College of Obstetricians and Gynecologists reported in 2013 that there is ‘robust’ evidence linking ‘toxic environmental agents’ to ‘adverse reproductive and developmental health outcomes’, and yet nothing changes.

The National Institute of Occupational Safety and Health found that 884 chemicals used in personal care products are **known** to be toxic. So in all this madness it behooves YOU to look out for yourself, and arm yourself with the information to at least mitigate your – and your family’s - exposure. These are the main ones to look out for:

Sodium laurel sulphate and sodium laureth sulphate – used in most shampoos, bubble baths, shower gels, toothpastes and cleansers it is also used to clean garage floors and degrease engines! If it gets in the eyes it can permanently impair their normal functioning, it irritates skin tissue, corrodes hair follicles, can cause cataracts, hair loss, mouth ulcers, flaking skin and urinary tract infections. It can react with other chemicals found in products to form potentially carcinogenic (cancer-forming) cocktails. It also enters, and is residual in, the heart, liver, lungs and brain.

Formaldehyde (formalin, formal and methyl aldehyde) – used as a disinfectant, fixative, germicide and preservative in deodorants, liquid soaps, nail varnish and shampoos. It is a carcinogen and neurotoxin, and irritant and sensitizer. It can cause damage to DNA, irritate the eyes and lungs, is a leading cause of contact dermatitis and is implicated in asthma and headaches. Sweden and Japan have both banned its use. Look for **bronopol, quaternium 15, imidazolidinyl urea and DMDM hydrantoin** as these break down to release formaldehyde.

Propylene Glycol – a cosmetic form of refined crude oil it is also used as anti-freeze and brake fluid. Found in hair conditioners, deodorants, cosmetics, after shave, body lotions, skin creams, baby wipes, sunscreens, and toothpaste and – increasingly – human and pet foods. It is implicated in contact dermatitis, kidney and liver abnormalities, eye and skin irritation, nausea and headaches and can be found in even hypoallergenic and baby products. It gives the ‘glide’ factor to creams, but is in fact, robbing the lower layer of skin of moisture, causing skin to age faster than if nothing was used.

Phthalates – also called ‘gender benders’ they are a family of industrial plasticizers banned in the EU from plastic toys but still used in hair sprays, nail varnishes and perfumes. They can cause damage to the liver and kidneys, lungs and reproductive system. Some studies have linked them to male infertility.

Parabens (alkyl parahydroxy benzoates – butyl/methyl/ethyl/propyl/isobutyl paraben) – used as a preservatives they have been found in breast cancer tumours. Found in the majority of personal care products they are oestrogen mimics and thus linked to testicular cancer and low sperm count also.

Fluoride – found in the majority of toothpastes it is lethal at a dose of 5 mg/kg. One tube of toothpaste will kill anyone weighting up to 4.5 kg. It is also bio-accumulative and is linked to cancer, fertility problems, thyroid issues and neurological conditions such as hyperactivity, attention deficit disorder, increased aggression and reduced IQ. It is also directly linked to fluorosis (fluoride poisoning) which causes blotching on teeth and skeletal problems. In areas where the water is fluoridated the number of hip fractures in older people can double.

Toluene – found in nail enamels, hair gels, hair spray and perfumes it is a neurotoxin and can lead to liver damage, asthma and disrupt the endocrine system.

Diethanolomine (DEA), triethanolomine (TEA) and monoethanolomine (MEA) – common ingredients in many toiletries they accumulate in the body's organs and induce cancer.

Alpha Hydroxy Acid (triple fruit acids, lactic acid, sugar cane extract, glycolic acid)– used for exfoliating they remove not just damaged layers of skin but the protective barrier as well and can lead to long term skin damage. This in turn leads to more chemicals being absorbed and more sun damage.

Alcohol – found in mouthwash, it has been linked to mouth, tongue and throat cancers.

Talc – a recognized carcinogen it is linked to ovarian cancer.

Perfumes/scented products – mainly synthetic compounds made from petroleum and linked to allergies and breathing difficulties.

Aluminium – found in deodorants and linked to Alzheimer's disease.

Hair Dyes – particularly darker colours are associated with an increased risk of cancer, particularly lymphatic and myeloma

The list could go on and on.....

And this is just the toiletries!!!!!!!!!!

Think next of the food you eat, sprayed in pesticides and insecticides. It is estimated that if you eat a non-organic diet you will consume about 150 mcg of pesticides **a day!** Think of those luscious strawberries we so love – grown using methyl bromide, a category 1 acute toxin! And then there's the monosodium glutamate, aspartame, saccharin, growth hormones, colourants and additives, and let's not forget GM.....

From there we can move to household cleaning and laundry detergents – it has been found in various studies that women who work primarily in the home, and therefore spend more time cleaning than

those in the workplace, routinely carry much higher chemical loads in their body from their increased exposure to these chemicals. So look for the more ecologically friendly alternatives.

And then the chemicals we use in the garden – lawn treatments, sprays for roses, weed killers (Roundup, for example doesn't damage just plants but wildlife, pets and children as well as adults exposed to it).

And then there's the workplace – paints, varnishes, finishes etc. Many professions are daily exposed to toxic fumes – mechanics, hairdressers, painters, nail technicians and others.

Frightening isn't it? But frightening you isn't the aim of this article – you need to be informed, and once armed with the right information you can then make choices to ensure you are not compromising your health and well-being without even realizing it!

The choices you make, from your shampoo, makeup, dishwasher liquid and floor cleaner, to the paint you put on your walls, and the food you choose to buy will all have a cumulative effect on the health and vitality – or otherwise – of you and your family.

Fortunately, many people are awake to these issues now, and a quick search of a health food shop or the internet, gives many safe products. It requires little extra effort these days and can repay in improved health and vitality down through the years.