Understanding Chemicals

Chemicals are everywhere. All cleaning and personal care products are essentially chemicals. However, there are good chemicals and bad chemicals. Each individual, will also have their own personal response or reaction to any chemical whether it is a 'natural' or man-made product.

Many of the chemicals used today in commercial care products are derived from petroleum. The world is learning more about these chemicals and their effects. Some once-common petroleum distillates have all but disappeared.
As chemicals are in our everyday products it is impossible to eliminate our exposure altogether. The aim is to minimise our exposure to the harmful chemicals. This starts by understanding what we are being exposed to.

Read the labels:

Xenoestrogens
Look out for: Parabens, phenoxyethanol, benzophenone, BPA, phthalates, APE's, chemicals that end in phenol ethoxylate
What are they: chemical estrogens
Found in: Skincare products, makeup, sunscreen, nail varnish, cleaning products
Concern: Too much estrogen in the body can promote unnatural growth such as fibroids, cysts, tumours and weight gain. It also interrupts the balance of the entire endocrine system.

Phthalates
Found in: Cosmetics, perfumes, beauty products, cleaning products, soft plastics - just about everything! Phthalates are commonly labeled as "fragrance."
Purpose: used as plasticizers - make plastic rubbery, or as gelling agents, film formers, stabilizers, dispersants, lubricants, binders, emulsifying agents, and suspending agents
Concern: they have been identified as endocrine disruptors, causing infertility, lower sperm count, and smaller penis size.
**several phthalates have now been banned for use in cosmetics in Australia: dibutylphthalate, diethylhexylphthalate, diisobutylphthalate and di(methyloxyhexyl)phthalate.

Sodium Lauryl sulphate
Found in: dish soap, liquid laundry detergents, cleaning towelettes, and toilet bowl cleaners, sudsy cosmetics such as toothpaste
What is it: Surfactant, detergent, and emulsifier
Concern: Contamination with 1,4 dioxane (a carcinogenic byproduct) often occurs in the manufacturing process as well as mimicking estrogen.
Linked to: Irritation of the skin and eyes, organ toxicity, developmental/reproductive toxicity, neurotoxicity, endocrine disruption, ecotoxicology, and biochemical or cellular changes.

The wider environment

The fertilizers, pesticides, and the chemicals we may use every day for both personal and general cleaning have a big impact on our soils, water systems and our wider environment. Remember when you wash your face and hands hair all the products you use to wash as well as make up and moisturize goes down the drain with the water.
Whilst our water treatment systems filter many contaminants out of the water, the less strain we put on this system the better off we all are.

Chemicals enter our water systems and water ways to become biosolids. Whilst biosolids undergo stringent filtering and processing, there are some chemicals which do not break down during this process, such as phthalates.
Although deemed to be within safe levels, it is the accumulation of all of the chemicals we come into contact in everyday life, including through our soils, that is of concern
Bioaccumulation: Once chemicals enter the body, they tend to accumulate over time as we lack the necessary enzymes to break them down.
Biomagnification: Increase in concentration of a pollutant from one link in a food chain to another - e.g. small fish gets eaten by bigger fish, concentration is higher in the bigger fish. Some foods, eg leafy greens, if grown in polluted soils will absorb higher levels of toxicity from the soil.
Companion planting and attracting the good bugs to your garden reduce the use of chemicals in our backyard gardens. See our resources page: Kitchen Gardens that Work

Lots of personal care and cleaning products only list the active ingredients. Go to the following websites for more information:
http://www.ewg.org/guides/cleaners for cleaners
http://www.ewg.org/skindeep/ for cosmetics

Make your own:
Rather than becoming a private investigator to find out what's in your cleaning products, make it yourself and you will know!
Key ingredients include vinegar, Bicarb soda, citric acid, eucalyptus/tea tree oil, salt and castile liquid.
More resources on this site.