The countless plastic bottles of cleaning products are a significant contribution to our household rubbish. Fortunately, with a bit of background knowledge you can cut down on waste, avoid nasty chemicals and save money and the environment.

The principles of cleaning

Even the most sophisticated cleaning products are based on one or a combination of three simple features (mixed with some additives). Understanding your type of soil lets you pick the right eco-friendly alternative. All you really need is:

- **Soap**, e.g. liquid castile soap in bulk, to cut through grime, grease and dirt, and dissolve the soil in water. Use for body, dishes, floor, sinks and all general cleaning.
- **Acid** (e.g. white vinegar) to dissolve mineral salts (i.e. lime scale, urine stains). Caution: It will also dissolve the filling between tiles.
- **Mechanical force** (wooden brushes, metal scourers, reusable rags/old clothes, old toothbrushes and baking soda)

**Time:** The longer you scrub the cleaner it gets.

**Temperature:** Hot water increases the chemical reactivity, i.e. the efficiency of your detergent. Hence, with hot water you need less soap.

Grandma’s secret tips

- **Mould:** Scrub with baking soda, then spray with white vinegar.
- **Silver tarnish:** Soak in baking soda with boiling water.
- **Drains:** Pour in baking soda and then chase with white vinegar.
- **Oven:** Soak overnight in a thick paste of baking soda and white vinegar (watch out for the fizziness).
- **Hard water:** Add a cup of white vinegar as fabric softener.
- **Windows:** Wipe off fingerprints or squashed bugs with soapy water and hard water marks with vinegar. Rub dry with crumbled newspaper.
- **Toilet:** Soak with white vinegar.
- **Bleach:** Very reactive with other chemicals and dangerous in the environment. Bleach breaks down into substances that corrode the shells of shellfish and crustaceans. Better mix baking soda with whites and pre-soak clothes in white vinegar.
- **Glue** (from labels, gum etc.): Soak and rub with olive oil.
- **Protein** (e.g. milk, blood): Don’t heat over 40 degrees! Remove with soap (ox-gall soap for blood stains). Remove dried protein by scrubbing.

Handy hint: Look online for homemade recipes of multipurpose cleaner, dish soap and laundry detergent.

Glass, floor, surface and bathroom cleaner, oven cleaner, toilet cleaner, bleach, dishwashing and laundry detergent... The list goes on. Unfortunately, many ingredients of conventional cleaning products are linked to skin irritations, organ disorders and even cancer. Handling the product, inhaling the fumes, or absorbing the residues of detergents when eating from your dishes or wearing your clothes are ways of exposing yourself to these chemicals.