



# Toxins in the Home

Not only do the foods we eat impact the state of our health but so does the environment in which the food has been prepared in. Many of our standard cookware, storing containers, kitchen aids and cleaning products contain heavy metals, plastics and synthetic chemicals that are toxic when ingested. Therefore how we cook, heat and store our food also plays a role in our health.

## Toxicity and disease

Many ask themselves the question 'where to start?' and feel that the advice is conflicting and overwhelming. The truth is that materials such as Teflon, BPA, aluminium, lead, phthalates and melamine have been linked with

- Asthma
- Migraines
- Depression
- Chronic fatigue syndrome (CFS)
- Fibromyalgia
- Obesity and metabolic syndrome
- Cancer
- Alzheimer's/Dementia
- Parkinson's
- Autoimmune disease
- Leaky gut<sup>3</sup>

the following:<sup>1</sup>

It is important to understand that it is the accumulation of toxins that create the foundation of a toxic body which can lead to disease. Minimising exposure to harmful agents whenever possible is essential to lessen the overall toxic load.

## Safer cooking methods and materials

1. Store your food in **glass, stainless steel** and **food-grade silicone** as these do not leach chemicals into the food.
2. Utensils made from **bamboo, wood, silicone or stainless steel** are stable to use in high heat.
3. For heating cookware and bakeware use **glass, stainless steel, cast iron, ceramic** and **enamel coated** cookware.

**Note:** With stainless steel, scratching may cause metals such as nickel and chromium to leach

## What to avoid

### Plastics

Plastic is safer avoided as studies show all types of plastics risk leaking synthetic chemicals into your food or beverage and has been linked with certain cancers, impaired immune function, obesity, diabetes, hyperactivity and early onset of puberty. For example, hard plastic melamine dishes are made with formaldehyde which is a known carcinogen and can leach into food. Most studies have focused on BPA, which have been established as toxic even in low levels. If you have to use plastic choose BPA-free and PVC-free plastic. To minimise the risk of transference of chemicals into food and beverage:

- never use in the microwave
- do not store fatty or acidic foods in plastic containers
- throw away any plastic which has been scratched or appear cloudy
- avoid washing in the dishwasher to minimise the risk of damage
- don't cook with plastic utensils

### Teflon

As convenient as non-stick pans are, this coating is manufactured with the use of perfluorooctanoic acid (PFOA) which is a potential carcinogen. The coating also produces fumes that may kill birds and are harmful to humans. Any scratching or overheating of this material can trigger the release of harmful chemicals.

### Aluminium

As aluminium is a soft and highly reactive metal it increases the risk of it migrating into food when used in cooking. Aluminium toxicity has been linked with certain brain disorders including behavioural abnormalities and Alzheimer's/Dementia. Recent production companies have switched to treating the aluminium in a chemical bath to increase endurance however with wear and tear the risk of these chemicals leaching into food will increase.<sup>1</sup>

into food but these are not toxic and are only a concern in specific allergies. <sup>1,7</sup>



## What else can we do to reduce our toxic load?

- **Filter tap water:** By using a high quality filter or distiller this can help to reduce contaminants e.g. heavy metals, VOC's, chlorine, fluoride, synthetic hormones and chemicals.
- **Ban the microwave:** Although the microwave serves as a convenient tool of food preparation and heating, research shows that cooking food in the microwave both destroys and reduces nutrients, alters the chemicals structure and produces toxins and carcinogens. <sup>1</sup>
- **Minimise mould:** The mycotoxins produced by fungal moulds can cause allergic reactions, irritation of mucous membranes, suppress the immune system and certain cancers. Damp problems can be caused by frequent temperature changes, building contamination and air conditioning. To minimise the risk of developing damp, make sure ventilation and air conditioning systems are kept clean, use a dehumidifier to keep humidity below 60% and address water sources in mould affected areas. <sup>6</sup>
- **Change cleaning products:** Most cleaning products will contain harmful chemicals and additives that have been linked with blood disorders, kidney and liver damage, asthma, skin burns, breathing difficulties, cancer, cardiovascular disease and death. They also pollute the environment and may cause reproductive damage in fish. Below are some commonly used toxic ingredients to look out for:

- ✓ Bleach (Sodium hypochlorite)
- ✓ Ammonia
- ✓ 2-bytoxyethanol
- ✓ Ethoxylated nonyl phenols (NPEs)
- ✓ Methylene chloride
- ✓ Naphthalene
- ✓ Silica
- ✓ Toulene



**Alternatives:** Apple cider vinegar, white vinegar and lemon juice, baking soda, washing soda, biodegradable soap (without petroleum distillates), Ecover range. <sup>5</sup>

- ✓ Trisodium nitrilotriacetate (NTA)
- ✓ Xylene
- ✓ Phosphates <sup>4</sup>

## Useful resources:

- Non-toxic ceramic cookware - <http://www.evolutionorganics.co.uk/xtrema-ceramic-cooking>
- Enamel coated cast iron pans - <http://www.lecreuset.co.uk/Product/le-creuset-products/Material-/Cast-Iron/>
- Stainless steel bottles and lunch boxes - <http://www.onegreenbottle.com/bottles/800ml>
- Stainless steel baby bottles - [http://littleacornstomightyoaks.co.uk/shop/Klean\\_Kanteen](http://littleacornstomightyoaks.co.uk/shop/Klean_Kanteen)
- Environmentally friendly cleaning and washing products - <http://uk.ecover.com/>
- How to make your own cleaning products - <http://www.goodhousekeeping.com/home/cleaning-organizing/make-at-home-cleaners>

## References:

- 1 Mighty Nest: '12 ways to avoid toxins in the kitchen'. Available at: <http://mightynest.com/learn/getting-started/healthy-living-guides/12-ways-to-avoid-toxins-in-the-kitchen#.VAF7TB84i4E.mailto>
- 2 Health Science: 'The hidden hazards of microwave cooking'. Available at: [http://www.health-science.com/microwave\\_hazards.html](http://www.health-science.com/microwave_hazards.html)
- 3 Body Ecology: 'Cleansing environmental toxicity and heavy metals'. Available at: <http://bodyecology.com/articles/cleansing-environmental-toxicity-and-heavy-metals#.VEKl4LktDIU>

4 Pure Zing: Harmful ingredients in household cleaning products'. Available at:

[http://www.purezing.com/living/toxins/living\\_toxins\\_harmfulhousehold.html](http://www.purezing.com/living/toxins/living_toxins_harmfulhousehold.html)

5 Care2: '5 basics for non-toxic cleaning'. Available at: <http://www.care2.com/greenliving/five-basics-for-nontoxic-cleaning.html>

6 Earth Easy: 'How to reduce exposure to indoor toxins'. Available at: [http://eartheasy.com/live\\_reducing\\_indoor\\_toxins.html](http://eartheasy.com/live_reducing_indoor_toxins.html)

7 Chris Kresser: 'The best (and worst) cookware materials'. Available at: <http://chriskresser.com/the-best-and-worst-cookware-materials>