

A-Z of harmful chemicals

Aluminium

Aluminium chloride and aluminium chlorohydrate are EDCs and limited scientific evidence may suggest aluminium in antiperspirants may be associated with increased breast cancer risk (3).

Bisphenol A (BPA)

BPA is found in plastics, white dental fillings, lenses, computer and mobile phone casings, CDs and some till receipts. BPA is a known EDC and is linked to early puberty and breast cancer(4).

Flame retardants

Flame retardants (FRs) are used in TVs, furniture, computers, carpets, polyurethane foam and paints to make them less flammable. Several are EDCs with potential links to breast cancer (5). Many are suspected to be carcinogenic, toxic, persistent and bioaccumulative (6) There is an EU-wide restriction on several brominated flame retardants however new types of FR, including many organophosphorus FRs, are also likely to be harmful.

Glyphosate

Glyphosate is classified by the International Agency for Research on Cancer (IARC) as probably carcinogenic to humans (7) and there is some evidence that it is weakly oestrogenic at high concentrations (8).

Parabens

In the EU, parabens are permitted in confectionery, dry meat products, cereal or potato-based snacks and coated nuts (9). They act as preservatives and lengthen a product's shelf life. Parabens are known EDCs and may be linked to breast cancer (10). They can be ingested and absorbed through the skin.

Parfum

Parfum refers to fragrance ingredients used in cosmetics products, and may include phthalates or musks which are EDCs.

Perfluoroalkyl Substances (PFASs)

PFASs (e.g. PFOA) are used in non-stick cookware, some food packaging and as water-resistant coatings on clothing, furniture and carpets. PFASs release toxic fluorochemicals upon heating and over time. They are environmental pollutants, bioaccumulative, and are EDCs that have been linked to cancers (11) and possibly to breast cancer (12).

Pesticides

Pesticides (e.g. insecticides, fungicides and herbicides) are used on food crops, garden weeds and in the home to kill pests and weeds. Residues may remain in food, run-off into water supplies and sprays can be inhaled. Many of these are toxic (13) and classified as carcinogenic (14). Some are EDCs (15) with potential links to breast cancer.(16)

Phthalates

Phthalates increase the durability of plastics and are also used in inks, paints, perfumes and other fragranced products. Phthalates are used in nail varnish, shampoo, disposable medical products and polyvinyl chloride

(PVC) products such as flooring and window frames. They may sometimes be listed as DEHP or DBP. Phthalates are EDCs which may be linked to breast cancer (17) Some have been found to be toxic to human reproductive, developmental and immune systems (18).

Polyethylene terephthalate (PET)

PET is used to make plastic water and juice bottles, food containers and clothing (polyester). Although safe for short term use, after heat or prolonged storage, PET containers may release very small quantities of the heavy metal antimony (19), a suspected carcinogen and EDC, which may be linked to breast cancer (20).

Synthetic musks

Synthetic musks (e.g. galaxolide and tonalide) are often used to fragrance cosmetics, perfumes, aftershaves, laundry detergents and fabric softeners. They are EDCs with possible links to breast cancer (21). All are bioaccumulative, some are carcinogenic (22).

Triclosan

Triclosan is used in personal care products such as toothpaste, deodorants, soaps and liquid washes to prevent the growth of bacteria and fungi. It is sometimes added to consumer items such as socks and chopping boards. Triclosan is a known EDC which may be linked to breast cancer (23). It is also bioaccumulative.

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