

Bisphenol A (BPA) and concerns for breast cancer

BPA is a chemical used in the production of polycarbonate plastic and epoxy resins. It is one of the highest volume chemicals produced worldwide. It is found in a large range of consumer products such as food packaging and the lining of some tin cans, water and baby bottles, compact discs, bottle tops, white dental fillings, nail polish, contact lenses, false teeth, adhesives, and flooring.

Unfortunately, like many toxic chemicals in consumer products, BPA rarely remains in the product itself. The potential for exposure exists right along the production and disposal line from cradle to grave. During manufacture where workers can be exposed, and through to usage especially when the product is washed or scratched. Even a product's final resting place can leach a toxic chemical like BPA from landfill sites and into water supplies.

BPA is an endocrine disruptor, which means it has the capacity to mimic hormones and to interfere with the hormonal messaging systems that regulate our normal everyday body functions.

The US National Toxicology Program (US NTP)

<http://cerhr.niehs.nih.gov/chemicals/bisphenol/bisphenol.html> states that BPA can cause changes in behaviour and changes within the brain, the prostate and mammary glands, and can alter the age at which females attain puberty. Both early puberty and potential changes to the mammary gland can contribute to breast cancer. The US NTP stated that "the possibility that Bisphenol A may alter human development cannot be dismissed."

Some studies have shown that pre-birth and early exposures to BPA can lead to changes in the mammary gland which may then predispose the body to develop breast cancer later in life. Predisposition can mean even very low dose exposure to BPA or another carcinogen could put women at an increased risk of breast cancer.

Although the report from the US NTP was published less than a month ago, Canada has already stated that it proposes to ban the substance from baby bottles to protect its population from any long term effects from exposure to BPA. However, in the UK, the Food Standards Agency (FSA) declared the level of the chemical in baby bottles is too low to cause any health effects and has proposed no such ban.

BCUK is very concerned about the widespread use of BPA in consumer products. This is especially relevant for women given its link with breast cancer. Consumers have little publicly available information to enable them to make an informed choice about whether a product contains BPA or not.

These cumulative low doses, combined with other daily exposures, are of very serious concern given the oestrogenic activity of BPA. Also, the timing of the exposure can be more important than the dose, e.g. prebirth or early childhood.

What Breast Cancer UK would like to see happen now we know about BPA

- Labelling of all consumer products which contain BPA.
- The FSA initiate a precautionary approach to this substance and ban it from all baby bottles and food containers.
- The UK government to implement a phase out of BPA from all consumer products, especially those used by women and girls, in order to reduce their risk of breast cancer.

How to avoid BPA

For babies bottles, avoid bottles made from hard clear polycarbonate plastic which may be labelled #7 or bottles made from PVC labelled #3. Return scratched or unwanted bottles to the retailer or manufacturer stating why you no longer wish to use them.

Types 1 (PET), 2 (HDPE), 4 (LDPE), 5 (polypropylene), do not use bisphenol A during polymerization or package forming, and thus will not leach Bisphenol A into your food or drinks.

Choose glass or BPA free plastic bottles – see www.evenflo.com and www.angelbaby.co.uk

What you can do

Write a letter to your MP <http://findyourmp.parliament.uk/commons/l/> and then send a copy of your letter and this information to your local newspaper.

Links

National Institute of Environmental Health Sciences - www.niehs.nih.gov/news/media/questions/sya-bpa.cfm

Environmental Health Perspectives article - www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1280330

BBC report – <http://news.bbc.co.uk/1/hi/health/7384838.stm>

US Environmental Working Group on BPA – www.ewg.org/featured/218

US Breast Cancer Fund - www.breastcancerfund.org/site/pp.asp?c=kwKXLdPaE&b=2638145&msource=news0508&tr=y&auid=3643064

US Our Stolen Future - www.ourstolenfuture.org/NewScience/oncompounds/bisphenola/bpauses.htm