



BPA – a chemical Canada declared in 2010 to be toxic – is found in many everyday items.

# IS THIS WATER BOTTLE RUINING

# your fertility?

Cosmo investigates the toxic chemical cocktail in many plastics and cosmetics

**O**f all the nasties we encounter every day (it's thought we ingest about 168 hazardous toxins before we even leave the house), Bisphenol A, or BPA for short, seems the most impossible to avoid.

It's one of the most widely used synthetic chemicals in the world, found in a dizzying array of items – from Tupperware to toothpaste tubes. It lurks in the lining of canned food products, too – which will probably make you think twice the next time you buy a tin of tomatoes to use in spag bol.

## TOXIC SHOCK

The question is: should we be worried? It seems so. Since the 1930s, scientists have identified BPA as one of many known endocrine disrupting chemicals (EDCs), which mimic oestrogens and bind to the same cell receptors as natural female hormones.

"You could say that it disturbs basic processes," explains Professor Matti Lang, director of the National Research Centre for Environmental Toxicology (Entox) at the University of Queensland. "The biological effect of BPA, inasmuch as it's known, interferes with the hormonal system. If you disturb these functions, it may lead to diseases such as cancer."

Women in particular should be concerned, says clinical nutritionist and naturopath Tabitha McIntosh. "BPA has been linked to endometriosis, infertility, polycystic ovarian syndrome and breast cancer," she says. "It's also known to have an effect on thyroid function."

Despite countless studies linking BPA to a host of medical conditions, experts such as Lang are reluctant to dramatise the risk – for adults, at least. It is, however, thought to be more dangerous to babies, which is why the government initiated a voluntary phase out (not ban) of BPA baby bottles in 2010. The Food Standards Australia New Zealand (FSANZ) regulatory body says BPA is safe for everyone else in low doses. "Exposure to BPA, at the very low level of current exposure, is safe for the whole Australian population," says spokeswoman Lydia Buchtmann.

It's a confusing message when other nations, like Canada, have banned

## How safe is your lunch?

- \* Sunrice Medium Grain Brown Rice (in microwavable plastic pillow packs) does not contain Bisphenol A (BPA).
- \* The plastic pouches Pitango soups come in are food grade, containing no BPA.
- \* Many of Tupperware's polycarbonate products contain BPA. Sistema and Décor food containers and drink bottles are all free of BPA.
- \* Most domestic cling wraps (such as Glad Wrap) are now made from microwave-safe polyethylene, which is BPA free. Watch for foods packed in commercial cling wrap.
- \* BPA is found in the epoxy resin lining of canned food products. A recent Choice study found the highest level (more than 200 parts per billion) in Edgell Corn Kernels and John West Tuna Olive Oil Blend.

BPA. "We're not very progressive here in Australia when it comes to consumer protection policies," says McIntosh. "The way we rate certain chemicals is heavily influenced by industry." She points to phthalates as an example. Like BPA, they're widely thought to contribute to reproductive issues. Found in anything with a perfume or a fragrance, there's not a single law in Australia controlling their use. And don't bother searching the label – companies aren't required to register them among the ingredients.

## Chemical-free products

- \* Miessence is an Australian cosmetics company started by Narelle Chenery. All products are free from BPA and preservatives.
- \* In 2006, O.P.I reformulated all its nail polishes, treatments and hardeners to be free of phthalates and other chemicals like toluene.
- \* Bobble filtered water bottles are made out of recycled PET, and are free from BPA, phthalates and PVC.

## SCARY STATS

Another nasty, Triclosan, found in antibacterials such as dish-washing liquid and cleansers formulated to tackle acne, is equally toxic, affecting thyroid activity and exacerbating allergies, hay fever and eczema.

Until regulations come into place, the frustrating fact is we're drinking a cocktail of chemicals every single day. A recent study found that the amount of BPA leaching into plastic water bottles increased by 15 to 55 times at boiling point. It's a frightening thought, given how many of us reuse plastic water bottles for weeks on end.

Writer and thewellnesswarrior.com.au blogger Jessica Ainscough, 26, is a reformed plastic bottle user. She had never heard of BPA until she was diagnosed with cancer four years ago. "I was always the girl who continuously reused an old plastic bottle that had been heating up in the back of my car," she says. "I've since made it my mission to live as clean as I possibly can, and that includes being aware of the toxins I was being exposed to through plastics – BPA in particular."

These days Jessica and her family make sure to only use stainless steel and glass to store food and water. "And if we have to use cling wrap we always place a piece of paper towel between the plastic and the food," she adds.

If you want to eradicate chemicals, get to know your plastics – there's lots of information available.

"It's not about scaremongering, just being aware," says McIntosh. "You will never get chemical-free. None of us ever will. But if we can just reduce our load as much as we can, our bodies have a good chance of getting on top of it." Michelle Wranik 