



PLASTIC MAKES US SICK.

A Parent's Guide to
Reducing Exposure



TOXIC PLASTIC CHEMICALS: THE BAD NEWS. AND THE GOOD.

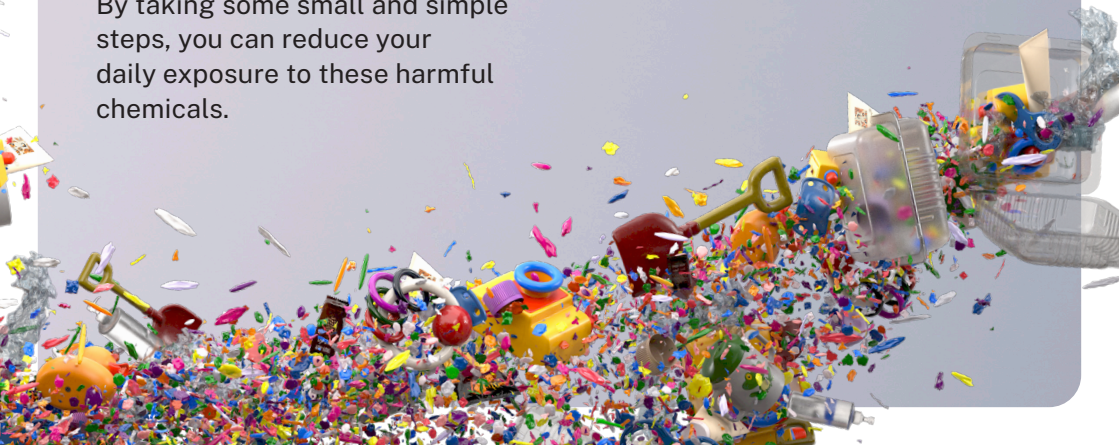
We've all heard that drinking from plastic bottles or heating food in plastic containers isn't the healthiest choice. But what many parents don't realise is how much plastic is woven into our daily lives, especially in the products our children use.

Toxic chemicals from plastic may be lurking in surprising places — like your child's cuddly teddy bear, the play mat they crawl on, or even the bath toys they love.

These chemicals can seep out of everyday items and enter your child's body, potentially contributing to serious health impacts. **Although this sounds worrying, there's positive news: our bodies can flush out some of these chemicals relatively quickly.** The problem arises when we're exposed to them continuously. By taking some small and simple steps, you can reduce your daily exposure to these harmful chemicals.

We know that many of the choices around plastics can feel overwhelming or even impossible to avoid. As parents, we're all trying to do our best with the information we have. Plastics are everywhere, and it's hard to navigate these challenges.

This ebook will guide you through three potential health risks linked to toxic chemicals in plastics, how to avoid them, and safer alternatives to protect your family — **so you can make informed decisions that work for you.**



THOUSANDS OF CHEMICALS ARE USED TO MAKE PLASTICS. WE RESEARCHED WHAT THEY ARE DOING TO US.

Minderoo Foundation and the University of Adelaide examined five groups of chemicals which are found in everyday products and are known to enter your body. All of them have alarming health impacts.

BPA



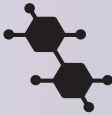
BPA (Bisphenol A), is a chemical used as a main building block in many common plastics as well as a hardening agent in many of the plastic items we are accustomed to using every day.

PHTHALATES



Phthalates are used to make plastics flexible. They are often found in polyvinyl chloride (PVC) and are present in a host of other common plastic materials.

PCBs



PCBs (polychlorinated biphenyls), one of the chemical classes previously used as flame retardants in some plastics. PCB exposure can occur through the handling of old plastics, electrical waste, paints and yellow chalk.

PBDEs














PBDEs were designed to slow down the ignition and spread of fire. In recent years, PBDEs have raised international concerns due to their widespread presence in the environment and their toxicity.

PFAS



PFAS, often referred to as “forever chemicals”, are used as coatings to repel water, grease and stains, as well as in fire-fighting foams.

THESE CHEMICAL GROUPS ARE LINKED TO OBESITY, HEART DISEASE AND TYPE 2 DIABETES.

Chemical type	Linked health harms	Products in which it is commonly used	Plastic types	Plastic codes
BPA	Heart Disease	Drink bottles Food storage containers Picnic wear Teething toys Coatings inside metal products, such as food cans and bottle tops Polyester Thermal (shiny) shopping receipts	PET	
	Obesity		PP	
	Type 2 Diabetes		PS	
			PA	
			PC	
			PE	
Phthalates	Obesity	Children's toys Clothing Food packaging and processing materials Cosmetics and personal care products Vinyl floor coverings and other building products Flexible PVC pipes	PET	
	Type 2 Diabetes		PP	
			PS	
			PA	
			PVC	
			PE	
			PC	
			PVA	
PFAS	Obesity	Non-stick cookware Plastic food packaging Grease-resistant food packaging Cosmetics Water- and stain resistant coatings Adhesives and sealants	PET	
			PP	
			PS	
			PA	
			PVC	

HEART DISEASE

CHEMICALS IN
PLASTICS LINKED TO
HEART DISEASE IN KIDS

BPA

Isn't BPA banned in Australia?

No. The Australian Government encouraged a voluntary phase out of BPA in polycarbonate baby bottles in 2010, but the chemical is not regulated/banned in this country. In the midst of growing public awareness about the health effects of BPA, many manufacturers have switched to alternative bisphenols such as BPS and BPF. Being chemically similar to BPA, these substitutes may well have similar health effects.

Is BPA also linked to heart disease in adults?

Yes, BPA exposure is linked to heart disease in adults.

Can we flush out these chemicals by reducing our usage?

BPA can pass through human systems relatively quickly. The problem arises with our continuous and excessive exposure. Rather than looking for BPA free plastic, it is better to use non-plastic items such as glass or stainless steel, as many manufacturers simply replace BPA with other Bisphenols, which aren't required to be labelled.

What can we use instead?

To minimise BPA or other bisphenols use:

- Teething items made from organic cotton, natural rubber, and untreated wood
- Bath toys made from natural rubber
- Metal lunch boxes
- Baby food from jars
- Check to make sure clothing is not made from polyester.
- Check community marketplaces or second hand stores for good quality hand-me-downs.



OBESITY

CHEMICALS IN PLASTICS LINKED TO OBESITY IN KIDS

BPA

PHTHALATES

PFAS

Aren't BPA, PFAS and Phthalates banned in Australia?

No. The Australian Government encouraged a voluntary phase out of BPA in polycarbonate baby bottles in 2010, but none of the bisphenols are restricted or banned in this country. Of the many phthalates used, only one (DEHP) is banned in children's toys and childcare products (and a small number of others are restricted/banned in cosmetics/personal care products). Of the thousands of PFAS, just three will be prohibited in Australia as of July 2025.

Are these plastic chemicals also linked to obesity in adults?

Yes, exposure to BPA and phthalate is linked to increased waist circumference and obesity in adults.

Can we flush out these chemicals by reducing our usage?

BPA and phthalates can pass through human systems relatively quickly. The problem arises with our continuous and excessive exposure. Rather than looking for BPA and phthalate free plastic, it is better to use non-plastic items such as glass or stainless steel, as many manufacturers simply replace BPA with other bisphenols, and are not required to declare any bisphenols or phthalates on product labels.

PFAS are also known as 'forever chemicals' and these accumulate in our bodies. It is best to avoid items that could contain PFAS.

What can we use instead?

To minimise BPA or other bisphenols:

- Teething items made from organic cotton, natural rubber, and untreated wood
- Bath toys made from natural rubber
- Metal lunch boxes
- Baby food from jars
- Check to make sure clothing is not made from polyester. Check community marketplaces or second hand stores for good quality hand-me-downs.

To minimise PFAS:

- Organic cotton bibs
- Avoid if the label says 'stain resistant'
- Undyed wool or organic cotton rugs
- Stainless steel straws

To minimise phthalates:

- Bath toys made from natural rubber
- Toys made from organic cotton, natural rubber, and untreated wood
- Metal spoons
- Check to make sure clothing does not have a plastic print/motif that could flake off. Check community marketplaces or second hand stores for good quality hand-me-downs.



TYPE 2 DIABETES

CHEMICALS IN PLASTICS LINKED TO TYPE 2 DIABETES

BPA | PHTHALATES | PCBs

Aren't Phthalates, BPA and PCBs banned in Australia?

Of the many phthalates used, only one (DEHP) is banned in children's toys and childcare products. The Australian Government encouraged a voluntary phase out of BPA in polycarbonate baby bottles in 2010, but the chemical is not regulated/ banned in this country. Many manufacturers have switched to alternative bisphenols such as BPS and BPF. Being chemically similar to BPA, these substitutes may well have similar health effects. Australia banned the importation and use of PCBs in 1975, but they persist in the environment and are found in some products.

Are these plastic chemicals linked to type 2 diabetes in kids and adults?

Yes and no! Phthalate exposure is linked to insulin resistance in both kids and adults. Insulin resistance is a related health issue that shares similar risk factors and can sometimes progress to type 2 diabetes. BPA exposure is specifically linked to type 2 diabetes in adults.

PCBs (polychlorinated biphenyls), one of the chemical classes previously used as flame retardants in some plastics, are also linked to type 2 diabetes in adults. PCB exposure can still occur through the handling of old plastics, electrical waste, paints and yellow chalk.

Can we flush out these chemicals by reducing our usage?

BPA and phthalates can pass through human systems relatively quickly. The problem arises with our continuous and excessive exposure.

PCBs accumulate in our bodies over time and are toxic. It is important for children and adults to avoid items that could contain PCBs.

What can we use instead?

To minimise phthalates:

- Bath toys made from natural rubber
- Toys made from organic cotton, natural rubber, and untreated wood
- Metal spoons
- Check to make sure clothing does not have a plastic print/motif that could flake off. Check community marketplaces or second hand stores for good quality hand-me-downs.

To minimise BPA or other bisphenols:

- Teething items made from organic cotton, natural rubber, and untreated wood
- Bath toys made from natural rubber
- Metal lunch boxes
- Baby food from jars
- Check to make sure clothing is not made from polyester. Check community marketplaces or second hand stores for good quality hand-me-downs.

To minimise PCBs:

- Avoid handling e-waste, yellow chalk, yellow and green finger paints.











ABBREVIATIONS EXPLAINED.



Toxins (plastic chemicals)

- BPA** Bisphenol-A
- PBDEs** Polybrominated Diethyl Ethers
- PCBs** Polychlorinated Biphenyls
- PFAS** Per- and Polyfluoroalkyl substances

Plastic types	Plastic code
PA Polyamide	
PC Polycarbonate	
PE Polyethylene	
PET Polyethylene Terephthalate	
PP Polypropylene	
PS Polystyrene	
PVA Polyvinyl Acetate	
PVC Polyvinyl Chloride	

WE'RE TAKING ACTION.

Countries around the world have acknowledged the profound impact these toxic chemicals are having on you, your family, and the environment. In response, they are currently negotiating a new global agreement - the Global Plastics Treaty - aimed at safeguarding your health and well-being for future generations.

LEARN MORE

globalplastictreaty.com