Microplastics

Plastic pollution is affecting our environment and water supplies, microplastics in particular. But what exactly are microplastics? What are they doing to our water, and should we be worried?

Microplastics are small particles of plastic that are smaller than 5 mm. Regulators are taking the first steps towards quantifying the risk to people's health and measuring exposure. The tiniest specks, called nanoplastics, smaller than 1 micrometre, worry researchers most of all. Some might be able to enter cells, potentially disrupting cellular activity.

Microplastics come from a variety of sources. While much hype has been made about the presence of microplastics in facial scrubs and cosmetic products (take a look at your scrubs or toothpaste at home, if they list polyethylene in the ingredients, those are microplastics), these sources actually make up a relatively small quantity in most regions.

It is estimated that up to 75 per cent of the microplastics found in the ocean are from the breakdown of larger material (bottles, plastic bags, fishing gear, etc.). For anyone who has participated in a litter pick, this should not be terribly surprising. More recently, another major culprit of microplastic fibers is turning out to be synthetic clothing.

Wastewater treatment plants can effectively remove a large quantity of microplastics (up to 98%), but a 2016 study determined that the average wastewater treatment plant was still releasing 4 million particles per day (and as many as 65 million) despite the high removal rates. River beds that are heavily contaminated with microplastics provide a clear indication of poor wastewater management. The discharge of raw sewerage to rivers is already controversial and has generated widespread condemnation. An inquiry into Water Quality in Rivers is currently underway by the UK Parliament's Environmental Audit Committee. Another recent study also demonstrated that microplastic particles are airborne and settle in large quantities in urban settings.

Do you know what products or packaging contain plastics?
Here are some surprising Items that contain plastic:

- Chewing Gum. It's hard to believe, but chewing gum is made of plastic.
- Clothing. Clothing is the one area that gives the biggest headache…
- Disposable Coffee Cups.
- Disposable Wet Wipes.
- Disposable nappies and menstrual products.
- Drink Cans.
- Glass Jars with Lids.
- Glitter.
- PLAs and Corn-Based Biodegradable Packaging.
- Produce Stickers.
- Cigarette butts.
- Sea salt.

(https://moralfibres.co.uk/11-surprising-items-that-contain-plastic/ gives more information of some of these).

Maybe you buy biodegradable plastic products whenever you can, however it's worth noting that in 2020 the British Standards Institute introduced a voluntary standard to verify biodegradable plastic claims, but it only applies to products left to break down in the open air, **not those disposed of in landfill**.

So, what can we do?

- Buy clothing made of natural fibres, although always mindful of other environmental effects (e.g. cotton production – so buy responsibly sourced organic cotton, bamboo or wool).
- Don't microwave food in plastic food containers as these can shed huge numbers of microplastics into the hot water.
- Re-use plastic containers/packaging wherever possible.

However, **reducing our use of plastics is the most certain way**.

……there are big and bold things we can do to reduce our use of plastics (asking garden centres to use coir pots for example, or taking our own mug to the coffee shop), but how about our favourite cuppa, tea! Swap to loose tea, or ensure your teabags either don't contain plastic or are appropriately disposed of, click on the link to see how https://moralfibres.co.uk/is-there-plastic-in-your-tea/