

Microbeads Affecting the Environment

Teenagers are obsessed with personal care products. It might be the latest clay moisturizer or the Neutrogena Deep Clean. They don't know how much some of these products are affecting the ocean. Nor do some of them care. They don't check what ingredients these products contain and how they affect the environment. The ingredients **POLYETHYLENE, POLYPROPYLENE, POLYETHYLENE TEREPHTHALATE** and **POLYMETHYL METHACRYLATE** are the plastics that microbeads are made of.

Microbeads are mostly found in personal care products, and there is no proof they help. They are designed to go down the drain and into lakes, rivers and oceans. Microbeads are too small to be retained by the standard filters used at sewage treatment plants, since they are not designed to filter out microplastics. When they reach the body of water they absorb toxins and get eaten by fish. 2.8 trillion microbeads are released into the ocean per year.

CBC has done research on behalf of Orb Media. A team tested 259 bottles of water purchased in nine countries (none were bought in Canada). The 11 brands tested include the world's dominant players: Nestle Pure Life, Aquafina, Dasani, Evian, San Pellegrino and Gerolsteiner. As well as major national brands across Asia, Africa, Europe and the Americas. Researchers found 93 per cent of all bottles tested contained some sort of microplastic, including polypropylene, polystyrene, nylon and polyethylene terephthalate.

Microbeads are mostly made of polyethylene but can be made of other plastics such as polypropylene and polystyrene. They are used in exfoliating personal care products, toothpastes and in biomedical and health-science research. Microbeads can cause plastic particle water pollution and pose an environmental hazard for aquatic animals in freshwater and ocean water.

The American NGO 5Gyres, found a huge number of microplastics in the Great Lakes and estimates that one single cosmetic product (Neutrogena's Deep Clean) contains 330,000 microbeads.

If they don't help at all why are companies using them in the first place? Well, plastic is cheaper than natural care products people used in the past and those natural care products are so good you could only use them once a week but you have to use the other products multiple times a day so it finishes early and you have to buy more. So they get more money, it is easier than having to pay so much more to make the natural care products and getting less money. So they chose the better option for them but the planet has to suffer.

Marine species are unable to tell the difference between food and microplastics, therefore are feed microplastics. Some species of fish can tell the difference between plastic and food easily, but others do not and so end up eating plastic. Around 35% of 670 fish examined (total of 6 species) had microplastics in their stomachs. The highest number of fragments found in one fish was 83. Through that, microplastics do not only directly enter the sea, they can also enter the human food chain.

The microbeads absorb the toxins in the ocean, so they become 1 million times more toxic than the water around them. Soon they get eaten by fish. Since they don't digest, you might be eating microplastics. Maybe in the salmon you ate last night or the sushi you plan to eat when you get home. When you eat fish what guarantee do you have that, the fish you are eating does not contain microbeads.

We need to raise awareness, by using social media. Another solution would be to 'Ban the Bead' a phrase I learned during my research. Another solution is to avoid microbeads. To avoid buying products with microbeads, avoid these ingredients in products. **POLYETHYLENE, POLYPROPYLENE, POLYETHYLENE TEREPHTHALATE and POLYMETHYL METHACRYLATE.** These are the plastics used to make microbeads. Another way to solve this problem is to get filters used at sewage treatment plants that are designed to filter out microplastics.

These days we all use personal care products it may be toothpaste or cosmetics, it's everywhere. There are so many option for so many products but do you check what are the ingredients in the product you put on your face or in your mouth. Even if you do there are people out there that don't bother checking and buy what costs less money or which has good reviews. They need to know to check these things. Because if people know what to buy and what not too, microbeads will run out of business and companies will start using natural products. Small changes can have a big effect.

The Ultimate solution is to ban microbeads everywhere. There are some countries that have already ban microbeads. Though there are very few. What we could do to help is to take initiative and get involved. We could write a letter or email to the government to 'Ban the Bead'. Another thing we need to do is to educate. Educate the students to take initiative and help the environment.

Stop using microbeads! We need to spread awareness! We are all in this together. For that to happen we all need to take part and make sure we AVOID MICROBEADS! Even small things make a big difference. So if we all help we can get rid of these tiny pieces of microplastic. Get them out of our live, out of our planet, out of our waterways and out of our bodys.

Thanks for reading!!!

Credit goes to:

<https://storyofstuff.org/plastic-microbeads-ban-the-bead/>
<http://www.beatthemicrobead.org/product-lists/>

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