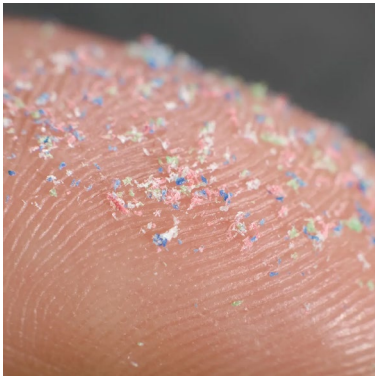


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### The Ugly Side of Beauty

**D**oes plastic look good on you? Over 87% of the products from best selling cosmetics brands include microplastic. This means that every time you wash your face or apply your favorite blush, you are absorbing microscopic pieces of plastic!



hp“Magnets, Vacuums and Tiny Nets: The New Fight against Microplastics.” *The Guardian*, Guardian News and Media, 18 Feb. 2021, <https://www.theguardian.com/environment/2021/feb/18/microplastics-oceans-environment-science>.

So what are microplastics? Microplastics, also known as microbeads, are tiny plastic particles that are less than 5 mm in length. The majority of micro plastics are not visible to the naked eye. They cause pollution when they enter natural ecosystems such as the ocean, air, blood or food. We find them in cosmetics, clothing and food packaging. A study conducted by Harvard university shows that micro plastics can get absorbed through the skin, enter your bloodstream and even infiltrate your placenta and reach your unborn child. There are two types of microplastics: primary and secondary. Primary microplastics are produced for commercial usage such as clothing, cosmetics and other everyday items. Secondary microplastics come from larger plastics breaking down, this is usually caused by environmental factors such as the sun's radiation or waves. Microplastics are widely spread around our planet. They have even been found in the mountains, far from industries, carried vast distances by the wind. Microplastics do not decompose and become harmless molecules. They take hundreds and thousands of years to biodegrade. In the ocean they are often eaten by marine life and transferred into the fish we put on our dinner tables.

Philippe Goldin, PhD and professor in neuroscience at University Of California Davis, is currently guest lecturing at the Lund university course “Psychology and climate change”. Dr Goldin describes the focus of the course as understanding what are the physiological mechanisms that are related to behavioral change. What makes people take action, or not take action for the benefit for the earth, the ecosystems and the reduction of carbon footprint? Policy change can be discussed on an individual level, a group level or a system level. Policies that impact everyone on the planet are made by groups of individuals who have behaviors and beliefs that are either pro social, pro planet, pro human beings, or beliefs that harm people, ecosystems and climates.

All over the world, beauty and cosmetics is a focal point for people of all generations. In fact this industry generated approximately 341 billion US dollars in 2020. And this number is only increasing. Research done by “plastic soup” shows that 10 world wide most famous cosmetic companies were tested for microplastics (Rexona, and Axe, Elvive/Elseve, Garnier, Nivea, Gillette, L’Oréal Paris, Oral-B, Head & Shoulders, Dove,) Out of the 7,704 products that were researched and investigated only 13 % were microplastic free. This shows that we need to make a change to this major problem.

Microplastics are not the only environmental issue in the cosmetic industry. The personal care and beauty industry produces more than 120 billion units of packaging every year. Only about 32% of people recycle. This means that about 82 billion units of plastic go unrecycled, and this is just from cosmetics production. All plastics are categorized in 7 different classes (PET, HDPE, PVC, LDPE, PP, PS and Other). Only 2 of these are considered recyclable and unfortunately, most cosmetics and beauty products are not either.

The UN global goals are 17 sustainable development goals that are a “shared blueprint for peace and prosperity for people and the planet now and into the future” (“History "). We chose goal number 3: “health and wellbeing”. Micro plastics are constantly invading our bloodstream, respiratory system, stomach and many other parts of our system.

Dr. Goldins says that it is crucial that we stop creating microplastics and using them. “Cosmetics and scrubs used to use natural substances but now they use small pieces of plastics that get into your face, body and skin, which then get into the water etc.” This is causing damage to human cells and can lead to cell death, allergic reactions and other severe conditions. “They are potentially harmful because they have little toxic properties, and we don’t even know the effect as they accumulate in our food and bodies.” says Dr Goldin.



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Why did the use of microplastics appear? "Products that include microplastics are cheaper to produce and simpler to get the ingredients for than naturally made products. Business is about cost, an ease of access" says Dr Goldin.

There are however solutions to the problem with microplastic usage. The first step, according to Dr Goldin, is to spread awareness. Lobbying for changes in industry is a crucial step forward. "We need to start using more natural materials. Cotton and wool are natural fibers in contrast to for example polyester which contains plastic fibers" says Dr Goldin. When it comes to cosmetics there are a great number of companies that are striving towards a more sustainable lifestyle. These companies are using natural, plastic free, zero waste ingredients. Some of these companies are Dab Herb makeup, clean faced cosmetics, axiology and so many more. Recycling and reuse should be the worldwide standard. Sweden is in the forefront of recycling but many more countries need to have strict policies. This should be the standard and the norm when working towards a better future and more sustainable tomorrow



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