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R. Aasha
ECE - B - I / LV
Roll no: - 118

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PLASTIC FREE WORLD

[The term 'plastic free world' is a little misleading because people often think it means living without plastic altogether and this may not be possible in today's world.]

To me a plastic free lifestyle is a protest against the misuse of plastic – a material that is designed to last forever but is used and thrown away in minutes! You can still own a phone, laptop, car, and take your medication but you should continue to monitor your use of these items to manage resources less wastefully.

The first plastic based on a synthetic polymer was made from phenol and formaldehyde, with the first viable and cheap synthesis methods invented in 1907, by Leo Hendrik Baekeland, a Belgian-born American living in New York state. Plastic free living is about eliminating single-use and semi disposable plastic items from your life e.g. straws, water bottles, bags, coffee cups, toothbrushes, razors, and most packaging

The advantages of plastic: It is durable, low cost, water resistant, lesser energy and heavy chemicals requirements in manufacture and is light weight. Many studies comparing plastic versus paper for shopping bags show that plastic bags have less net environment effect than paper bags, requiring less energy to produce, transport and recycle; however these studies do note that recycling rates for plastic are significantly lower than for paper.

The disadvantages of plastic: Plastics bags are made of a non-renewable resource, which give us more reasons to use recyclable shopping bags. Plastic bags are also flimsy and do not sit as well as either paper or cloth. They are a hazard to wildlife animals, if they are not disposed properly. Lastly, plastic bags clog roadside drains, which could cause the flooding of the street a heavy rain falls.

The risk of upward trends

A world without plastic seems unfathomable, even though mass production started as recently as 1950. Due to a compound annual growth rate of 8.6%, production rose from a mere 1.5 million tons in 1950 to 335 million tons in 2016.

A scientific study earmarks the shift from reusable to single-use goods as the reason behind the now widespread plastic pollution, flagging that no commonly-used plastic is biodegradable. Therefore; the only practical means of managing plastic circulation is through recycle or incineration. Otherwise, plastics end up in a landfill. Or worse, the ocean. Given that only 9% of all plastics have ever been recycled, and 12% incinerated, this leaves a significant volume potentially polluting the environment.

Say no to straws

Plastic straws are traditionally made of polypropylene - plastic 5. While the material itself poses no distinct health hazards, just 3% of polypropylene products are recycled in the US and straws are deadly to marine life.

Only buy the clothes you need

Polyester is a polymer, most commonly referred to as a PET – or plastic Polyester now dominates the fashion industry, with usage easily outstripping both cotton and wool
Overproduction and overconsumption of clothing have led to high volumes of clothing disposal, resulting in pollution. Consumers must be mindful of what is in their wardrobe, making the most of their selection and donating to a local charity or consignment store.

Try cooking at home

Reduce reliance on takeaways, unnecessary packaging, disposable cutlery and containers.
Single-use items are a scourge of the ocean. You can save home-cooked leftovers or compost the scraps from the cooking process.

Avoid single use carrier bags

Keep cloth bags in your car, store them in a visible position in your house and always remember to take them with you when you head out.

Purchase a reusable water bottle

Most plastic bottles are unsuitable for multiple-use: they leach toxic by-products and harbour bacteria. Choose BPA-free bottles, reuse old glass jars and stay hydrated with an office water dispenser for your work or home.

Seven steps towards plastic free living

Do you think it's possible to live life without plastic? There are effective ways to limit your exposure and you can implement these practices to start your journey towards plastic-free living



Biodegradable plastics and bioplastics

The first step in attempting to reduce the plastic footprint of the human being is producing biodegradable polymers by using additives. However, this does not solve the problem of its petrochemical origin, which still involves the use of a non-renewable resource. Therefore, the next step is to obtain substitutes that do not depend on oil.

Microbes that eat plastic

Even in an ideal situation, with petrochemical plastics limited to those applications where there was no other option and always in durable applications, with all disposable uses covered by biodegradable bioplastics, and with extensive recycling ... even then there would still be millions of tons of plastic waste to be eliminated. What to do with it all? Almost all eyes are on biotechnology, the use of microorganisms capable of degrading plastics. There are bacteria, such as the soil microbes of the genus Pseudomonas, and even fungi like those that grow on wood, that can digest plastics naturally. The downside is that the biodegradation of plastics in this way usually requires special conditions, such as high temperatures or ultra Recently, a team of researchers from the Beihang University Beijing (China) has found a route that avoids the need for laboratory conditions. The scientists observed that the caterpillar of a particular type of moth usually feeds on food containers. Upon examining their gut, they found two kinds of bacteria that break down polyethylene without the need for other treatments. According to researchers, it is "promising evidence for the degradation of polyethylene in the environment". Olet light.