Scientists believe that a recently tested way of transforming cactus into another type of earth-friendly plastic, could be the answer to the current plastic epidemic we are facing. And even thought there currently is earth-friendly plastic that is made from corn, cactus growth doesn't require the same amount of resources and isn't also needed for food production.

According to National Geographic, 73% of all beach litter is plastic.The litter includes filters from cigarette butts, bottles, bottle caps, food wrappers, grocery bags, and polystyrene containers.

A study conducted by the University of Queensland in Australia, based on data collected since the late 1980s, found that Green sea turtles now ingest twice the plastic they did 25 years ago. And according to the United Nations, ingestion of plastic kills an estimated 1 million marine birds and 100,000 marine animals each year.

Around nineteen billion pounds of plastic ends up in the ocean every year. However, if it actually makes it way into a landfill, as it breaks down it makes its way into the food system resulting in people now eating a diet of more than 70,000 pieces of microplastic a year. That works out to about 100 bits of microplastic over the course of just one meal, according to a study published in Environmental Pollution. A team of UK-based researchers put petri dishes with sticky surfaces next to dinner plates in three homes in the UK. After just 20 minutes, the dishes accumulated an average of 14 microplastics.

Things need to start changing, and quickly, if we are to turn this plastic epidemic around.

That is why in a university lab near Guadalajara, Mexico, researchers have been analyzing cactus leaves as a possible biodegradable plastic substitute. They start by trimming the cactus leaves and feeding them into a juicer, creating a bright green liquid. When it is mixed with other natural materials and processed, it becomes a biodegradable plastic.

Even though the cactus made plastic won't help to stop the flow of trash into our oceans, researchers believe that this new material will biodegrade more quickly. Added bonus – it will also be nontoxic if it's consumed.

Another added benefit of this new cactus-based plastic is that it is carbon neutral and as it breaks down, the carbon dioxide it emits will equal the carbon dioxide it took in as a plant as it grew. Unlike the gas that fossil fuel made plastic currently emits.

Sandra Pascoe Ortiz, a chemical engineering professor at the University of the Valley of Atemajac, who is leading the research team said, "the cactus of this species contains a large amount of sugars and gums that favor the formation of the biopolymer."

The created material isn't as long-lasting as plastic made from fossil fuels, however, it could still be useful for single-use, disposable, or non-durable items. The scientists say that this cactus-based plastic can biodegrade in a backyard compost within a few months.

The researchers are currently working with a company that is interested in bringing the material to market, so hopefully you will be able to buy cactus juice plastic water bottle in the next few years!

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