Effect of Plastic on Human Health and Environment

Submitted by

Affiliation

 Date

Plastics are used to make many products that are essential to humankind, such as sewage treatment pipes, electrical conductor insulation and medical equipment. Birds, fish and sea creatures of all sizes think plastic is food. Fish and turtles die as they become entangled in plastic waste. The sea does not lose the plastic either, but over time it grinds into ever smaller crumbs and fibers, i.e. micro-plastics. In nature, micro-plastics collect environmental toxins and carry up the food chain to our plate. Micro-plastics found in fish and shellfish. Because plastic builds up toxins, eating it is a health risk for all living things. The littering and the discharge of plastic waste into the environment need to stop. Consumers' choices alone are not enough. The legislation is necessary because plastic ends up in the environment, not only in plastic bags and packages but also in micro-plastics and car tires, for example, added to cosmetics. This research aims at determining the possible link between plastic and risk associated with plastic.

Plastics decompose very slowly in nature. As they disintegrate, the plastics primarily broke into smaller pieces, and gradually the polymer chains they contain are broken, in particular by UV radiation and oxygen. Human malfunction can also cause direct plastic damage to the environment. Disposed plastic in the sea and the atmosphere is harmful to fauna. For example, in the stomachs of dead waterfowl, plastics have been found that the birds have eaten after they thought the plastic was food. Burning plastics increases carbon dioxide emissions because plastics are made from oil-based raw materials. There are also plastics made from biomass as well as fillers therefor which are carbon neutral in this respect.as stated by Thompson, Moore, Vom Saal, & Swan (2009), Plastics made from pure polymers are often unsuitable for use as such but are added with additives to improve the properties of the plastics. These additives can leach into the environment from landfills or from plastic in the environment and cause environmental damage.

References

North, E. J., & Halden, R. U. (2013). Plastics and environmental health: the road ahead. Reviews

on environmental health, 28(1), 1-8.

Thompson, R. C., Moore, C. J., Vom Saal, F. S., & Swan, S. H. (2009). Plastics, the environment

and human health: current consensus and future trends. Philosophical Transactions of the Royal Society B: Biological Sciences, 364(1526), 2153-2166.

Vethaak, A. D., & Leslie, H. A. (2016). Plastic debris is a human health issue.