

A STUDY ON AWARENESS ABOUT MICROPLASTIC WASTE MANAGEMENT AMONG CONSUMER IN THANE DISTRICT & NMMC

* *Siddhi Ganesh Tipale*, ***Riya Ashok Surwade*, ****Omkar Yashwant Ghone*,
*****Prof. Kadambari Nandlal Khairnar*,

* *Department of B.Voc. in Sales and Marketing Management, K.G. Joshi College of Arts and N.G. Bedekar College of Commerce, Thane (W)*

** *Assistant Professor, K.G. Joshi College of Arts and N.G. Bedekar College of Commerce, Thane (W)*

Abstract:

It can be seen that pollution the world is increasing now a days, Pollution, like throwing trash in the air, water, or soil, adds plastic to the environment. This plastic eventually breaks into tiny pieces called microplastics, creating another pollution problem. The Microplastic pollution happens because plastic breaks down into tiny pieces over time. Microplastic pollution is a global issue because it not only affects human but also affects the Ecosystem. These tiny particles easily spread in the environment. They team up with harmful pollutants, making them more toxic to aquatic life.

Keywords: *Microplastic, Waste Management, Consumer Awareness, Plastics.*

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial Use Provided the Original Author and Source Are Credited.

Importance:

Microplastics are the minute plastic particles which are less than 5 mm in size. Microplastic is generated through breaking down of large plastic into small plastic particles. Microplastic is present everywhere from air we breathe to the water we drink. It is said that A average human consumes around 5 grams of Microplastic per week – almost around a weight of credit card. Microplastic are so minute particles of plastic that we can't see them with naked eyes.

Microplastic is generated by us in many ways through – improper disposal of plastic, by using microbeads, by cutting plastic into smaller pieces, by synthetic cloths, etc. Microplastic not only affects us but also affects Our Environment. It is estimated that over 50 trillion to 75 trillion particles of Microplastic are present in Oceans. Because of its presents in ocean, it harms the aquatic animals within the oceans. For example, A plastic thrown into Ocean breaks into small particles due to sunlight these small particles are consumed by fishes, these fishes are consumed us. In this way the Microplastic present in the fish enter into our body & results to harmful diseases. We still need more research on how exactly microplastics harms the environment, how they move through different animals, how they spread, and their impact on upcoming future. The small steps we can take are - avoid plastic products, properly recycling the plastic, reuse the plastic, avoiding single use plastic, generating more awareness, etc.

Intitiatives Taken:

Under Zero Plastic Waste Strategy, Canada is initiating aa comprehensive approach in decrease plastic pollution, which involves studying the gap between macroplastic and microplastic. The government is providing the required funding for the research work.

Under Trash Free Waters Program, the US EPA is interacting with industries research projects in order to identify & find solution on Microfibre Pollution. Several Government agencies has sponsored for this research project. According to Plastic Waste Management Rules, 2016, India has prohibited the manufacturing, importing, stocking and use of single use plastic items with low utility and high littering potential.

Role Of Generating Awareness among Consumers About Microplastic:

- Can help in Reducing & Reusing the plastic.
- Can help in creating new ideas to replace plastic.
- Increase the use of Bio- Degradable Plastic.
- Help in innovating new ideas for Packaging.
- Can help in healing the Environment.
- Learn various ways to recycle and reuse the plastic.
- Make our environment clean and pollution free.
- Find substitute of plastic to avoid increase of plastic production.

Objectives of the Study:

- To Drive Consumer Awareness About Microplastic.
- To study the awareness about Microplastic among Consumers.
- To Educate the consumer about Microplastic Waste Management.
- To make changes in policies to control Microplastic.

Hypothesis:

The studies have shown that there is a direct relation between increasing awareness of Microplastic and waste management of the same in consumers. More consumers get aware about the Microplastic more they are concerned about managing the same

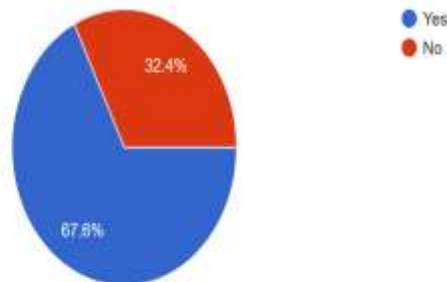
Research Methodology:

The current research paper is based on Primary Data & Secondary data. The data is collected through observation, survey, and questionnaire. Whereas secondary data is collected through websites, newspapers and magazines

Data Analysis:

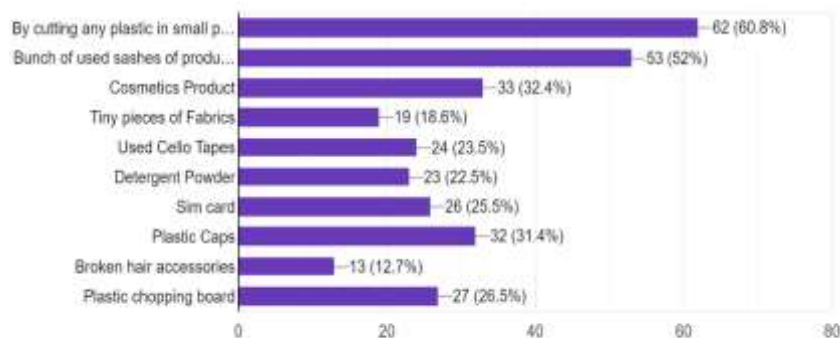
Are you aware of what microplastic is?

102 responses



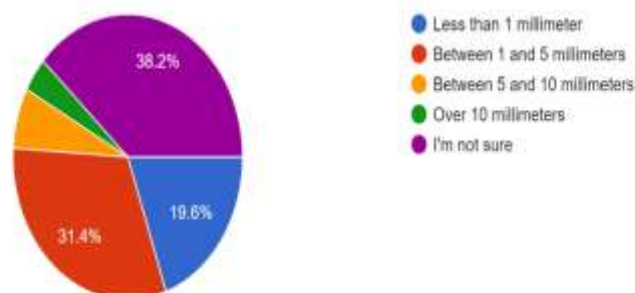
As a consumer which products do you buy from which Microplastic is generated?

102 responses



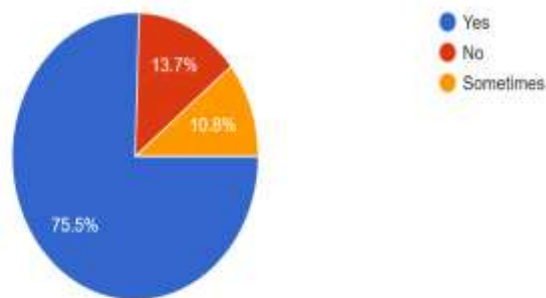
Do you know what is the maximum size of a Microplastic like Shampoo sachets, Cello tape etc.

102 responses



Do you wish to take a lead to reduce your use of products that contain microplastics ?

102 responses



Findings:

- Majority of consumers are aware about Microplastic But they don't know the exact size of it.
- Majority of them agree to take initiative for Microplastic Waste Management.
- Very few consumers practice to use the plastic.
- Most of them have attended any Recycling Program.
- Over a large number of consumers are interested to learn more about Reduction Of Microplastic.
- Most of them are willing that Government should take initiative to reduce Microplastic.

Suggestions:

Consumer choosing recycled plastic can help prevent the risk of micro-plastic pollution.

The government should reform waste collection system to ensure effective waste management and promote recycling.

Companies should adopt eco-friendly packaging for the product. which has less impact on environment.

Carrying your own container or cutlery can also create an impact on environment in way like avoiding disposable plastic container for food, plastic or wooden spoons, paper dish or even newspaper.

By adopting 3Rs reduce, recycled and reuse we can make a big change on environment.

Consumers should take an initiative to manage the waste generated through the buying preferences they made.

The government should enforce policies on microplastic and raise awareness among consumers about its health risks.

A consumer can also make a impact by having sustainable life style which also helps the environment.

While shopping avoid unnecessary plastic such as, single use plastic bags and packing materials (SAY NO TO PLASTIC).

Conclusion:

Creating Awareness about Microplastic is not enough to Stop Harmful Effects of Microplastic the active participation of Consumers is needed in order to fight microplastic. By taken small steps in the beginning we will be able to achieve Microplastic Free Environment gradually.

We contribute in removing the microplastic from Sea by participating in clean-up drives, participating in various campaigns, etc. To stop the generation of microplastic in the face place we have to stop the use of Plastic and Should move towards Eco-Friendly options.

Creating Awareness About Microplastic was the first step further there are more...

References:

[https://www.bonappetit.com/story/microplastics-](https://www.bonappetit.com/story/microplastics-food#:~:text=How%20much%20plastic%20are%20we,annually%20from%20various%20food%20sources.)

[food#:~:text=How%20much%20plastic%20are%20we,annually%20from%20various%20food%20sources.](https://www.bonappetit.com/story/microplastics-food#:~:text=How%20much%20plastic%20are%20we,annually%20from%20various%20food%20sources.)

Bon Appetit

<https://www.oecd-ilibrary.org/sites/6e06626c-en/index.html?itemId=/content/component/6e06626c-en>

OECD iLibrary

<https://www.iastoppers.com/articles/management-of-microplastic-pollution-in-india>

IAS Toppers

[https://www.aljazeera.com/news/2023/6/8/how-much-plastic-is-in-our-oceans-](https://www.aljazeera.com/news/2023/6/8/how-much-plastic-is-in-our-oceans-infographic#:~:text=Microplastics%2C%20which%20are%20less%20than,are%20in%20the%20ocean%20today.)

[infographic#:~:text=Microplastics%2C%20which%20are%20less%20than,are%20in%20the%20ocean%20today.](https://www.aljazeera.com/news/2023/6/8/how-much-plastic-is-in-our-oceans-infographic#:~:text=Microplastics%2C%20which%20are%20less%20than,are%20in%20the%20ocean%20today.)

ALJAZEERA

Cite This Article:

Tipale S.G., Surwade R.A., Ghone O.Y., & Prof. Khairnar K.N. (2024). *A Study on Awareness about Microplastic Waste Management among Consumer in Thane District & NMMC.* In Educreator Research Journal: Vol. XI (Number I, pp. 62–66). **ERJ.** <https://doi.org/10.5281/zenodo.10797465>