

HARMFUL EFFECTS OF PAPER CUPS

Paper cups are very popular at tea and coffee stalls / shops and eating joints.

Paper cups have replaced glass / steel cups in lieu of hygiene requirements in which cleaning of glass and steel cups was always an issue.

Paper cups are being used for dispersal of food items (Hot drinks / cold drinks).

Facts about paper cups:

Paper cups are not manufactured from only paper (as name suggests) but there is lining of Polyethylene inside the paper cups to hold the hot / cold liquid.

Whenever we put hot liquid in such paper cups, some of the plastic gets dissolved leading to **pollution of micro plastic** in our food cycle.

According to a study by IIT Kharagpur, approx. 25,000 micron-sized microplastic particles are released into 100 mL of hot liquid. Temperature range selected is 85 – 90 degree celsius in the paper cups for 15 mins. After calculation, it comes to 75000 tiny plastics being consumed by a person on daily basis if he consumes 3 cups of hot liquid per day. These microplastics are invisible for human eye.

Harmful effects of micro plastics:

- Microplastics act as carrier for toxins and contaminants which are hydrophobic in nature. Since these particles are very small, they pass into our body through food chain and cause severe harms
- As per studies, these micro particles lead to health issues such as Endocrine system, reproductive system, neurological disorders and even cancers.
- Microplastics can even cause hormonal issues

Since these cups are disposed off in soil, these microplastics again enter in our system through food chain.

Alternative:

If we can avoid, we should use glass / steel cups or glasses for hot liquids

These paper cups should not be used for storage of food items in our refrigerators also