VIEWS | OPINION

Beware! Your green tea bag can be hazardous

In a recent study, researchers at McGill University in Canada have found that a single tea bag releases around 11.6 b microplastic particles, and 3.1 b even smaller nano plastic particles, into the cup - thousands of times higher than the amount of plasti

By **Pooja Yadav** | September 22, 2020



beware-your-green-tea-bag-can-be-hazardous

> WordPress post #11295

There is a chance of leachable & extractable in green tea preparation which can be hazardous to health

In a recent study, researchers at McGill University in Canada have found that a single tea bag releases around 11.6 b microplastic particles, and 3.1 b even smaller nano plastic particles, into the cup - thousands of times higher than the amount of plastic previously found in other food and drink. Another research done by the researchers at the University Medical Centre (UMC), Utrecht has found out that microplastics may cause damage to human immune cells.

Tea bags are made with a variety of packing material such as nylon, rayon, thermoplastic, PVC or polypropylene. So, there is a chance of leachable and extractable in green tea preparation and it will be hazardous to health. We assume that our tea bags are made simply from tea and paper, but in actual

fact an estimated 96 per cent contain polypropylene – a substance used to seal them and ensure they hold their shape.

Teabags often contain dust & fannings

In Tea bags, the size of the tea leaves is small because the whole leaves are chopped, sliced and diced into small particles ranging from 0.2 to 1.5 millimeters called fanning and dust when tea bags are produced. As a result, with all this slicing and dicing, the tea compounds interact with moisture and oxygen, leading to rapid quality loss.

Green tea bags have less EGCG content

Green tea generally has the highest amounts of EGCG (Epigallocatechin gallate), a chemical that contributes to higher antioxidant, weight reduction and anticancer properties, while oolong and black tea have significantly less because they are either partially or fully oxidized. In a study conducted by OLIVEIRA in 2012 confirmed low level of ECGG present in marketed tea bags.

A big threat to the environment

According to the Environmental Audit Committee, tea bags are the major source for polluting our water system due to the non-recyclable components. So, go for tea bags that are completely biodegradable, plastic-free, organic, or made with plant-based materials.

Considering these drawbacks, researches are underway in the industry to get an eco-friendly and healthier Green Tea

Sundeip Bhatia, Business Head- India, SHILPA MEDICARE, Hyderabad

---

Read online: https://nuffoodsspectrum.in/views/25/16421/beware-your-green-tea-bag-can-be-hazardous.html
© 2026 NUFFOODS Spectrum. All rights reserved.