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Popular Article

## Packaged food and health risks

**M.S. Jyothi & N. Suma,**

Senior Liaison Officer, Coffee Board, Bengaluru,  
Asst. Professor, Veterinary College, Bengaluru and Smt. Rekha, Asst. Professor, UAS,  
Hassan.

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### Introduction

For years, ancient people consumed fresh food which they could gather from their natural surroundings / kitchen garden without storing the food in refrigerators, which may have influenced in better health and longevity of life. Whereas in the modern-day life style, raw materials as well as cooked food is packed and stored in refrigerators and reused for many days. Further, in the 21<sup>st</sup> century, online food delivery system has created a revolution in the food industry as it's been very convenient for working people, students, aged people etc.,

With the revolution of online food delivery to door steps, usage of more and more plastics, aluminum foils, laminates, metals, glass, tin plate, papers are seen everywhere. Packing hot food and beverage in such containers leads to leaching and chemicals migrate to food from packaging materials. Materials such as glass, stainless steel, and ceramic are known to be more inert (stable) and less likely to allow chemical migration to contents. Plastic, paper, and cardboard are, on the contrary, non- inert materials, so chemicals can more easily migrate directly from the material to the food.

Plastic, paper and cardboard packaging is largely single-use, and accounts for more than 70% of food packaging sales globally (compared to glass which represents about 10% of the market share). The way food is currently packaged and distributed is harmful to human health and the environment.





Despite, innovations in food packaging systems help to meet the evolving needs of the market, intelligent packaging technologies provide numerous innovative solutions for prolonging shelf-life and improving the quality and safety of food products, but health concerns are not prioritized. These highly advanced packaging material and processing of foods undergo high temperatures, sterilization, carbonation and the packing material used may have many toxic chemicals, mutagens etc., which come in contact with the food material & reacts, which will definitely have health risks. With my observation and analysis of present and olden days life style, we feel this is one of the reason to increase number of diabetics, obesity, cancer cases and other health hazards.

### **Health implications of food packaging:**

As the chemicals in packaging material is leaching due to exposure to temperature

- Phthalates can disrupt the endocrine system and have been linked to various health issues, including reproductive and developmental problems. They can leach from packaging materials into food, particularly when heated, posing a potential health risk to consumers Children are at a higher level of exposure and more vulnerable to phthalates



- Obesity, cancer, cardiovascular disease, reproductive and developmental problems and long-term dangers associated with chemicals in packaging.
- Ultra-processed foods, tend to be high in sugar, artificial ingredients, refined carbohydrates, and trans fats. Because of this, they are a major contributor of illness around the world.

In olden days, the natural freshness, taste, shelf life and quality of food was maintained by sun drying, salting/sugaring, cooking, smoking, fermentation etc. which used to have very less shelf life rather than the recent days shelf life ranging from minimum of 3 months to 18 months. In the modern world the product undergoes high temperature treatment, sterilization, carbonation, smoking, preservations / additives and the packaging materials contain carcinogens, toxic chemical, mutagens etc., come in food contact and the shelf life of the product is preserved by adding preservatives/additives to maintain shelf life.

In our opinion entire world is consuming such products daily, which will definitely lead to various health hazards, especially in younger generation and kids. As we advance in food processing and packaging, we may achieve more shelf life but at the same we are ignoring the safety of food, freshness, taste, nutritional values and health risks. In this regard, there is a need for stronger regulatory body to ensure that all food packaging is safe.

### **Conclusion**

As processing and packaging advances, shelf life of the product may increase but the safety of food, freshness, taste, nutritional values etc., keeps declining resulting in more and more health hazards/risks. It seems to be a major social concern.

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