

## عنوان مقاله:

Migration of chemical contaminants from HDPE packaging materials into foodstuffs

## محل انتشار:

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## خلاصه مقاله:

High Density Polyethylene (HDPE) is one of the most common polymeric materials used for plastic food packaging. To improve the physical and chemical properties of the packaging, different additives such as antioxidants, plasticizers, heat stabilizers, ultraviolet absorbents and etc. are incorporated in polymer matrix. Both plastic ingredients and additives can migrate from the packaging to the food or beverage over storage time. The presence of plastic components or additives in food may affect the organoleptic properties of food and endanger human health. The nature of the food, type of plastic material, time and temperature of contact and the characteristics of the migrant are some factors that affecting migration extent and rate. To protect human health, the European Union determined Specific Migration Limit (SML) for many compounds used in packaging and also established regulations for migration tests to determine the concentration of chemical compounds in food. In order to evaluate the safety of polymer packaging, chromatographic (GC/MS, HPLC) methods are used to measure the amount of migrated compounds in food. The aim of this study is investigating the migration of the most important additives from HDPE packaging into food which leads to undesirable effects on food quality and consumer health.

## کلمات کلیدی:

High Density Polyethylene, HDPE, Migration, Food, Packaging

## لینک ثابت مقاله در پایگاه سیویلیکا:

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