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In vitro* cytotoxicity testing of polyethylene and polystyrene cup noodles container*Young J Jeon**

Chosun University, South Korea

Polyethylene and polystyrene are frequently used resins for making food container including cup noodle bowls. In the present study, we investigated the potential risks of polyethylene and polystyrene cup noodle containers by cytotoxicity tests such as agar diffusion assay, filter diffusion assay, and 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) assay. We exposed CCL-1 mouse fibroblast cell line to the polyethylene and polystyrene cup noodle containers indirectly through agar gel. We also used eluents derived from the cup noodle containers by storing them for 24 h at 70°C in liquids, such as distilled water or dimethylsulfoxide (DMSO). Both polyethylene and polystyrene cup noodle container specimen were found to be non-cytotoxic in agar diffusion assay as well as filter diffusion assay. The eluents from polystyrene using DMSO showed slight cytotoxicity in MTT assay.

Biography

Young J Jeon has his expertise in Pharmacology and Toxicology. He has completed his PhD from Korea Research Institute of Science and Technology. He is a Professor and Safety Supervisor of radioisotope Laboratory of Chosun University School of Medicine and Review Board Member of Institutional Review Board of Chosun University Hospital.

yjjeon@chosun.ac.kr

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