

## THE EFFECTS OF INDUSTRIAL CHEMICAL CONTAMINANTS AT FOOD AND HUMAN HEALTH

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Sufficient and healthy nourishment are required, besides consuming enough and safe foods for good health, maintenance life, and physical growing of human beings. Problems related to the food safety have increased day by day. The causes of increasing this problem have been arranged as environmental pollution, changing consumption habits of the society, increasing collective food and food production, looseness level of education and income, inadequate or unapplied legislations sufficiently, increasing of the preservation period of foods, uncontrolled food production, inadequacy of controlling or non-applying as required, using new technologies at food production and increase in population. Primary factors which are threatening of food safety are contaminants as physical (glass, plastics, bone, paper, stone, soil, wood, metal fragments, hair, etc.), chemical (contaminant metals from environmental waste, dioxins, pesticides, detergent wastes passed from poor rinsed dishes, chemicals contaminated from food packages, residues of veterinary medicines, etc.) and biological (indigenous toxic chemicals, microorganisms, and genetically modified organisms, etc.). Industrial chemical contaminants are very significant from the standpoint of food safety and human health in these hazards. Heavy metals (lead, mercury, cadmium, etc.), dioxins, furans, poly-aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), radioactive contaminants, organic chemicals (benzene), and organotins (OTC) are found foremost among industrial chemical contaminants. Industrial chemical contaminants can be passed to aquatic fishes, vegetation, meat, and milk of animal that are feeding at meadow. These foods, which used as raw material, can easily pass to the human beings. These agents have negative effects on the human beings such as teratogenic, neurotoxic, colon, lung, kidney, liver, bone, and bladder cancer and arteriosclerosis. In general, chromatographic techniques have been used for the determination of chemical contaminants.

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