



## Analysis of toxic contaminants lead and cadmium in bottled drinking waters of Iran's market

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**Background and Aims:** As the consumption of bottled water has increased remarkably in Iran due to their taste low cost, better quality and availability, the quality control of it is a major public concern. The polluting and contaminating of bottled water can be arising from filling by contaminated water, Leakage heavy metals through packaging, releasing of metals from polyethylene terephthalate bottle in inside water after long time storing. The aim of this study was to determine the Lead and Cadmium content in 10 popular brands of bottled water. This study was conducted for determination of Lead and Cadmium in ten famous brands of bottled water from Iran's market in two seasons. After sampling, heavy metals Lead and Cadmium contents were analyzed by Atomic Absorption Spectrophotometer in Food and Drug Organization Laboratories. Lead and Cadmium contents were less than Iranian standards. These heavy metals were not present in detectable amounts in all samples. The total dietary exposure levels of Lead and Cadmium determined in this study were compared with the provisional tolerable weekly intakes (PTWLS) by the JECFA and showed lower than it.

All of the examined bottled water brands in Tehran in present study is not polluted and Lead and Cadmium concentrations are below WHO guidelines, EPO standards and Iranian drinking water Standards (NO.6694) and have good quality and no public health problem by their consumption, but constantly determination of heavy metals should be measured by responsible organizations.

**Keywords:** Drinking bottled water; Contaminants; Lead; Cadmium