conferenceseries.com

J Community Med Health Educ 2019, Volume 9
DOI: 10.4172/2161-0711-C3-060

Cadmium contamination in consuming foods and biological samples in Iran

Mohammad Hadi Dehghani, Mahboobeh Ghoochani, Noushin Rastkari, Masud Yunesian, Ramin Nabizadeh Nodehi, Alireza Mesdaghinia, Anahita Houshiarrad and Mansour Shamsipour
Tehran University of Medical Sciences, Iran

Cadmium is an important environmental contaminant. High consumption of chemical fertilizers and industrial activities in recent decades has caused people to be worried about exposure to cadmium. There is no policy for environmental and biological monitoring of exposure to cadmium in the general population in Iran. This study was aimed to review cadmium content in consuming foods and biological samples in Iran, systematically. We developed a comprehensive search strategy and used it to search on Web of Science, Scopus, Science Direct and Scientific Information Database until 28 December 2016. The totals of 285 articles were identified and finally 31 original papers were selected. Cadmium contamination was found in Iranian food groups such as rice, cereal and legumes, canned tuna fish, vegetables, fruit juice and egg. This study showed that cadmium amount in 75% of the consumed rice samples (domestic and imported) was higher than the maximum limits approved by institute of standards and industrial research of Iran. Lettuce samples in Yazd were recorded the highest concentration of cadmium compared to other studies. In addition, high amount of cadmium was observed in the blood of the general population. Regarding the cadmium contamination in food and blood samples in Iran, policies must be adopted to reduce exposure to cadmium through different matrices as much as possible.

hdehghani@tums.ac.ir

Notes: