



Quality of honey as a risk factor to the health of Armenia's population

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In Armenia, honey has long been used as a valuable foodstuff and an effective medicinal agent both for treatment of diverse diseases and as an immune improving and tonic product in the period of recovery. The goal of the present pilot study was to assess Armenia's honey quality on a base of determination of the contents of heavy metals. Honey samples were taken from the sites with low natural geochemical background and from the territories of known biogeochemical provinces enriched by Cu, Zn and Mo. The latter are characterized by developed mining industries that predetermine environmental pollution not only with the noted commercial elements but also by accessory elements – Hg, Pb, As, Ni, which concentrations in ore are not high, but it is the elements, which pose eco-toxicological risk factors to public health when entering food chains. Collation between the obtained research results on honey samples taken from the sites with low geochemical background and those taken from the territories of biogeochemical provinces indicated high concentrations of Hg, Pb, Ni, Cu, Zn. A sanitary-and-hygienic assessment of the quality of honey from such territories indicated excessive concentrations of Hg and Pb vs. MAC values accepted for Armenia. So, the obtained research results support a conclusion that using honey produced in unfavorable ecological conditions of Armenia's biogeochemical provinces and polluted particularly with heavy metals poses a risk factor to the public health. Presently, practical eco-toxicological risk mitigation recommendations are being developed.