

Abstract

This study has been conducted to determine the concentration of heavy metals like Nickel, Chromium, Lead, Zinc and Cadmium in different fruit samples some are fresh fruits, and some are canned fruits. Fresh fruits were collected from the areas which were irrigated with wastewater and grown near the industrial areas. All the samples were mostly collected from different areas of Lahore. Atomic absorption spectrophotometry was used for the analysis of heavy metals in different fruit samples. The result of this study showed that the mean concentration of different heavy metals detected in pineapple: BDL, 0.1829, 0.314, 2.665 and 1.5712 respectively. And the mean concentration of these metals detected in papaya is BDL, BDL, 0.5481, 2.2881 and BDL respectively. And the mean concentration of above-mentioned metals in cherry is BDL, 0.1452, BDL, 2.009 and 0.6778 respectively. Detected concentration of these metals in strawberry is 0.8687, 5.7747, 0.8686, 0.1133 and BDL respectively. Concentration of metals in coconut is BDL, 0.2474, BDL, 3.1850 and BDL respectively and in case of banana the concentration of metals is BDL, 0.3914, 0.249, 6.4090 and 2.5310 respectively. While in case of canned fruits the concentration of above-mentioned heavy metals for canned pineapple is BDL, 0.2177, 1.5712, 3.7463 and 0.3140 then for Canned papaya is BDL, 0.1046, 1.6451, 3.1214 and 1.6451 respectively, while in case of Canned cherry the concentration of above-mentioned heavy metal is BDL, 0.2639, 1.3271, 3.057 and 1.1451 respectively.

With the help of orange peel, we remove heavy metals in few samples of fruits like canned pineapple and canned papaya. The detected concentration of above-mentioned metals in canned pineapple is 0.5904, 0.0858, 0.2814, 2.0093 and 0.0103, while in case of Canned cherry the concentration of heavy metals are 0.022, 0.0643, 0.3147, 1.2413 and 2.6101 respectively.