

## Heavy Metals in Selected Infant Milk Formula

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**Abstract :** To test for the presence of toxic heavy metals, specifically Arsenic, Lead, and Mercury in formula milk available in Misrata city north of Libya for infants aged 6-12 months through Atomic Absorption Spectrophotometer, 30 samples of imported milk formula in Libyan markets subjected to test to accurate their pollution with heavy metals, We get concentration of Hg, Ar, Pb in milk formula samples was between 0.002-1.37, 1.62-0.04-2.16, 0.15-0.65 respectively, when compared the results with Libyan & WHO standards, they were within standards of toxic heavy metals. The presence or absence of toxic heavy metals (Lead, Arsenic, and Mercury) in selected infant formula milk and their levels within or beyond standards set by the WHO. The three infant formulas tested, all were negative for Arsenic and Lead, while two out of the three infant formulas tested positive for Mercury with levels of 0.6333ppm and 0.8333ppm. The levels of Mercury obtained, expressed in parts per million (ppm), from the two infant formulas tested were above the Provisional Tolerable Weekly Intake of total Mercury, which is 0.005ppm, as set by the FAO, WHO, and JECFA.

**Keywords :** heavy metals, milk formula, Libya, toxic

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