

Heavy Metals among Female Adolescents Attending Secondary Schools in Kano, Nigeria

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Abstract : This study was conducted to examine the level of heavy metals among 192 apparently healthy female adolescents randomly selected from three different boarding secondary schools in the urban area of the most populated city in north-western part of Nigeria. Atomic absorption spectrometry (AAS) was used to determine the plasma levels of the heavy metals which include cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo), nickel (Ni), lead (Pb) and zinc (Zn). Our findings revealed the following mean \pm SD values for each of the heavy metal; 0.11 \pm 0.01 μ g Cd/L, 0.09 \pm 0.02 μ g Co/L, 0.19 \pm 0.02 μ g Cr/L, 0.91 \pm 0.02 μ g Cu/L, 1.53 \pm 0.31 μ g Fe/L, 0.01 \pm 0.04 μ g Mn/L, 0.3.8 \pm 0.04 μ g Mo/L, 0.04 \pm 0.01 μ g Ni/L, 0.04 \pm 0.01 μ g Pb/L and 2.80 \pm 0.24 μ g Zn/L respectively. It was concluded that toxicity from heavy metals did not exist among female adolescents.

Keywords : heavy metals, female, adolescents, Nigeria

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