

# **Blood Zinc Levels in Nursing Women from Different Regions of the West Bank of Palestine**

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## **Abstract:**

Pregnant and nursing women are at higher risk of zinc deficiency which can have detrimental consequences on health. We assessed blood zinc levels in 72 nursing women from the West Bank of Palestine and investigated the association between sociodemographic variables and blood zinc levels. Blood samples were analyzed for their zinc contents using graphite furnace atomic absorption spectrophotometry. Blood and data collection were performed between July and December 2016. The median blood zinc level was 4.53 mg/L (IQR of 0.38 mg/L). In unadjusted analyses, blood zinc levels were higher in nursing women who lived in cities (p-value < 0.001), had higher household income (p-value < 0.001), whose husbands had a white collar job (p-value < 0.05), were non-smokers (p-value < 0.05), did not use hair dyes (p-value < 0.05), and consumed energy beverages (p-value < 0.001). Multiple linear analysis showed that living in cities and consuming energy beverages remained significantly associated with higher blood zinc levels (p-value < 0.05). Blood zinc levels were in the range previously reported for similar non-malnourished populations. Nursing women living in cities and those consuming energy beverages tended to have higher blood zinc levels. Urbanized lifestyle might have enhanced blood zinc levels in nursing women.