

**HEAVY METALS LEVELS IN GOAT MILK OF THE
MEDITERRANEAN REGION OF TURKEY**

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ABSTRACT

Concentration of the essential elements as Zn and Cu and potentially toxic elements as Pb, Cr and Cd in goat milk samples from two different farming systems were measured, to assess whether the toxic and essential elements are within recommended levels. Quantitative analysis of Cd, Cr, Cu, Pb and Zn were performed using an atomic absorption spectrophotometer. Toxic heavy metals from intensive and extensive farms for Pb and Cd were found 0.187, 0.038 and 0.019, 0.037 ppm, respectively while essential metals such as Zn, Cu and Cr were 0.641, 0.533; 0.168, 0.093 and 0.021, 0.023 ppm, respectively. No significant differences were found for Cr ($P > 0.05$) among the two farms while Pb, Cu, Zn and Cd were differed statistically significant ($P < 0.05$). Further investigations of heavy metal levels in milk in a greater number of farms from Mediterranean region of Turkey are necessary to determine the situation more profound.

Key words: *Goat milk, heavy metals, essential elements, Turkey*