Turkish Journal of Medical Sciences

Turkish Journal	In vivo Interaction Between Cadmium and Essential Trace Elements Copper and Zinc in Rats
of	
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Medical Sciences	Ege University Bornova, İzmir 35100, ² Department of Biochemistry, Faculty of Medicine, Dokuz Eylül University İnciraltı, İzmir 35340, TURKEY Abstract : The complex in vivo interaction between Cd, a toxic metal and essential trace elements, mainly Zn and Cu, has not been elucidated yet. The objective being the elucidation of this interrelationship, Cd was subcutaneously administered as CdCl ₂ (1 mg/kg/day) for
A <u>Keywords</u> A <u>uthors</u>	5 consecutive days to Swiss albino male rats (n=10). After 5 days, the rats were decapitated. Cd, Zn and Cu levels were estimated in hepatic, renal, cardiac and skeletal muscle specimens. Cd was found to be significantly elevated in all tissues (p < 0.001). Zn was increased in hepatic and renal tissues (p < 0.001 and p < 0.05) compared to the controls. Cu was also significantly increased in these tissues. Myocardial and skeletal muscle tissues also manifested a significant increase in Cu and Zn in this group. It is concluded that Cd administration alters the Zn and Cu status in vivo. However, the
@	mechanism underlying the interactions between toxic and essential elements should be further investigated.
medsci@tubitak.gov.tr	Key Words: Cadmium, copper, zinc, metallothionein. The abbreviations used are: Cd, cadmium; Cu,
Scientific Journals Home Page	copper, zn, zinc, wr, metallothionein.
	Turk J Med Sci 2001; 31 (2): 127-129. Full text: pdf

Other articles published in the same issue: Turk J Med Sci,vol.31,iss.2.