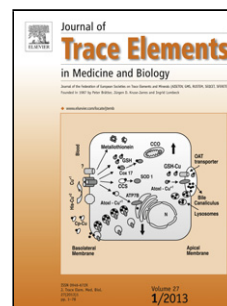


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**Effects of Green Tea Polyphenols on Trace Metals level of Rats on food restriction and high-fat diet**

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**Short title:** Effects of GTPs on Trace Metals level of Rats on different diets

**Abstract**

Little evidence showed the interplay between tea and diet in the regulation of trace metal. Here, we examined the effects of green tea polyphenols (GTPs) on the level of trace elements (TEs) in rats on food restriction or high-fat diet. Thirty-six rats (Wistar, male) were randomly divided into 6 groups and fed on standard diet, food restriction and high-fat diet with or without GTPs (200 mg/kg bw/day) supplementation, respectively. Levels of vanadium (V), manganese (Mn), iron (Fe), copper (Cu), zinc (Zn), selenium (Se), molybdenum (Mo) and cobalt (Co) in feed, whole blood, femur and urine were measured by inductively coupled plasma mass spectrometry (ICP-MS). Blood glucose, total cholesterol (TC), triglycerides (TG), high and low density lipoprotein-cholesterol (LDL-C, HDL-C) in serum were determined. Decreased daily

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