

Alteration in Serum Homocysteine Levels upon Ingestion of Monosodium Glutamate (MSG) to Adult Male Rats

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ABSTRACT The study was conducted to evaluate the alterations in serum homocysteine levels upon ingestion of monosodium glutamate at the dose levels of 4 mg and 8 mg per gram body weight for consecutive 7 days. A study revealed a significant increase in serum homocysteine levels by 27.06% ($p < 0.01$) and 73.98% ($p < 0.001$) in 4 mg monosodium glutamate per gram body weight (Group-2) and 8 mg per gram body weight monosodium glutamate (Group-3) treated animals compared to normal animals. These observations suggested that ingestion of monosodium glutamate at dose level of 4 mg/g body weight and 8 mg/g body weight produced hyperhomocysteinemia and thereby could initiate atherothrombosis.