ABSTRACT

Magnesium plays a role in a numerous enzymatic reactions, as such, it fulfils various intracellular physiological functions. Therefore, irregularity in magnesium status-mainly hypomagnesaemia as it is seen more often than hypermagnesaemia-might result in unwanted neuromuscular, cardiac or nervous disorders. Measuring total serum magnesium is a practical and affordable way to monitor changes in magnesium status, although it does not necessarily reflect total body magnesium content.

To date, we couldn’t find group has evaluated magnesium as a cardiovascular risk factor in Jordanian population. Thus, a simple colorimetric method (Xylidyl blue method), was used to determine the magnesium serum levels in a population of healthy students from university of Petra and cardiac patients from Jordan Hospital.

The blood sampling was conducted between September and November, 2014 .The experiment population was (151) subject .

There was no significant difference found between healthy and patient subjects (P value > 0.05), with Mg serum levels of healthy subjects showed low elevation compared to patient Mg serum levels (Cohen's d= 0.1007). Our findings indicate that we couldn’t prove a correlation between Mg serum levels and cardiovascular diseases among Jordanian . Similarly, no effect for gender or smoking magnesium.