

From these results we conclude that there is no relation between smoking and Mg serum levels. Previous studies have indicated that low Mg serum levels lead to development for nicotine addiction (M. Nechifor *et al.*, 2004; Mihai Nechifor, 2012).

Mg role in CVD has been studied for the past decades, and several researchers indicated a correlation between low serum Mg and CVD, especially in IHD and some type's arrhythmia. Yet in our study, there was no significant difference between Mg serum levels in patients and healthy subjects, with the mean of both groups relay in the normal range. Further on, there was no correlation between Mg level and sex or smoking.

We hypothesize that low Mg serum levels caused by low intake of dietary Mg, might be a leading cause or a risk factor for a CVD, but not necessary a sign for an existing CVD condition. This has been previously implied in a follow up studies, where low Mg serum levels predicted future CV complications (Reffellmann *et al.*, 2010).

Our results are not consistent with those observed by other authors who suggest a correlation between hypomagnesemia and cardiovascular diseases here in Jordan.

Some electrolytes levels can affect the homeostasis of magnesium, in our study, normalization of potassium levels may be caused by such abnormalities .

However, as most of the studies that prove the presence of correlation between magnesium levels and cardiovascular diseases are conducted in western countries, diet