

## Magnesium and Cardiovascular Disease Risk

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### ABSTRACT

**Introduction:** Magnesium (Mg) is an essential dietary element for humans involved in biological processes. Most of the epidemiological studies have indicated inverse associations between Mg and cardiovascular diseases (CVD). The aims of present review is summarize recent scientific evidence on the topic, with a focus on data from epidemiological studies assessing the associations between Mg and major CVD risk factors such as mainly metabolic syndrome, diabetes and hypertension. We also aimed to review literatures on Mg and CVD, as potential biological processes underlying these observations.

**Material and methods:** This study includes papers reporting major CVD risk factors. Our search was conducted in the following databases; PubMed, Web of Science and Scopus for studies published before 2018.

**Results:** Higher serum Mg level was associated with lower risk of hypertension in four out of seven studies and lower risk of metabolic syndrome in five of eight studies. In populations those with diabetes, pointed effects were observed.

**Conclusion:** Available evidence suggests High Mg is associated with lower risk of major CVD risk factors.

### Keywords:

Magnesium ,cardiovascular disease