

# **Magnesium, the metabolic syndrome, insulin resistance, and type 2 diabetes mellitus.**

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## **Abstract**

Magnesium is an essential mineral and has been established as a cofactor for over 300 metabolic reactions in the body. Some research has indicated that lower intakes of magnesium and lower serum magnesium concentrations may lead to and are associated with the metabolic syndrome, insulin resistance, and/or type 2 diabetes mellitus. The goal of this review is to examine the research conducted on: 1) magnesium status, metabolic syndrome, insulin resistance, and type 2 diabetes mellitus, and 2) the effects of magnesium intake and/or supplementation on metabolic syndrome, insulin resistance, and type 2 diabetes mellitus. To make this review as current as possible, the majority of research articles reviewed were from 2000 to the present.