

## Effect of Calcium Supplementation on Iron Absorption in Iron Deficiency Anaemia in Pregnancy

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### Abstract

**Background:** Iron deficiency anaemia is a common problem worldwide. It is more problematic in case of pregnancy. Usually irons along with minerals specifically calcium are advised during pregnancy to fulfil the deficient state. In the present study the effect of calcium supplementation on iron absorption in iron deficiency anaemia in pregnancy was investigated. **Materials & Methods:** A total of 36 patients, aged 19-35 years with moderate degree of iron deficiency anaemia in their second trimester participated in the study. The patients with haemoglobin concentration between 7.0 to 9.9 gm/dl were included in the study. Haemoglobin concentration, packed cell volume, mean corpuscular volume (MCV), mean corpuscular haemoglobin (MCH), mean corpuscular haemoglobin concentration (MCHC) and red blood cell count (RBC), serum iron, total iron binding capacity (TIBC) and serum ferritin level were measured at baseline (day 0), day 30, day 60 and day 90. **Results:** Inhibitory influence of calcium on iron absorption was observed initially but on chronic administration this inhibitory influence lost. Statistically significant increased observed in all parameters except serum iron and TIBC in which there was no significant difference from baseline level seen. **Conclusion:** It is recommended that women should consume an iron supplement containing more than 30 mg elemental iron per day from meals during the second and third trimesters, to diminish the risk of developing iron-deficiency anaemia.