Abstract

Objectives: The bioavailability of dietary iron present in a nutritional formulation may be evaluated by in vitro and in vivo methods since they provide for a cohesive line study and provided in the literature. The aim of this study was to evaluate the bioavailability of iron targeting a comparative analysis of two nutritional supplement formulations (A and B). Methods: For this study were using in vitro and in vivo methods, both described in the literature for availability of iron in an enteral feeding after ingestion supplement nutrition with much nutrients. Results: The results obtained by in vitro simulation of the human gastrointestinal tract were 0.70 ± 0.02 and 0.80 ± 0.01 % iron availability by formulations A and B. In vivo studies, as measured by the curves of serum iron in humans after ingestion of formulations allowed the calculation of coefficient of variation < 0, indicating that there was a low absorption of iron. The bioavailability of iron as two multi-nutrients solutions obtained by in vitro and in vivo showed that there were comparisons of those methodologies used in this study.

Keywords