Abstract

Background: The nutritional therapy with enteral diets has been getting specialized and those formulations to substitute the traditional diet for those patients who need to be fed by probe. This work's aim was to study the effect of the components of enteral diet formulation: fiber, calcium and medium-chain triglycerides, seeking optimize a formulation for the best dialysability of iron by Response Surface Methodology (RSM). Methods: The ingredients used for the formulations of the diet were chosen according to the ones commercialized in the modules of a standard enteral diet, with which it was made an experimental diet and the applicability of the experimental limits. Results: The found results in the model have shown that it depends on the proportion of the nutrients that were manipulated in the experimental design. When the level curve was obtained for the iron dialysable, it could be verified that the binary interaction fiber-calcium was the one that presented more synergism for the appraised formulation. Before the analyzed facts, the best formulation of enteral diet optimized for the dialysability of the iron was the proportion of 60% of fiber and 40% of calcium, showing to be the best formulation of the enteral diet for the availability of the iron.

Keywords