

Evaluation of Bixin antioxidant potential and its plasma lipids effects in hypercholesterolemic hamsters.

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The annatto seeds extracts are well known foods colorants and has been used to reduce serum cholesterol. Bixin is one of its pigments and effective extinguisher of the reactive oxygen species. In this work were investigated 0.08% bixin effects on plasma lipids levels and oxidative stress indicators in female hamsters for 60 days. Bixin reduced total cholesterol levels, but did not affect HDL-cholesterol. Oxidation of sulphhydryl groups results in injury in the cell. Bixin treatment, when associated with hypercholesterolemic diet increased the serum total sulphhydryl groups. Paraoxonase is an antioxidant enzyme envolved in stress oxidative-induced oxidation of lipoproteins. No effects were observed. Bixin did not showed modifications in alanine aminotransferase, in aspartate aminotransferase, neither in alkaline phophatase serum activities. These data indicated bixin showed hypocholesterolemic effect without interfering in liver function.

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