

Effect of lyophilized prune extract on hyperhomocysteinemia in mice

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Description

Altered homocysteine metabolism defined as hyperhomocysteinemia is implicated as pathogenic factor in several cardiovascular diseases and atherosclerosis. The purpose of this study was to investigate the efficacy of prune extract, a good source of phenolic antioxidants, on lowering plasma homocysteine level in male hyperhomocysteinemic mice from average weight of 28 g. The administration of lyophilized prune extract was carried out by intraperitoneal injection one day preceding and one hour before sacrifice of mice. Prune extract decreased significantly plasma homocysteine level, correlated with an increased activity of S-adenosylhomocysteine (SAH) hydrolase and NAD(P)H: quinone oxydoreductase-1 activities. Our results suggest a beneficial effect of prune extract on hyperhomocysteinemia with reduction of homocysteine level by its conversion on to SAH by S-adenosylhomocysteine hydrolase, which is ...

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