## Effect of Ethanol Extract of Green Tea (Camellia Sinensis) to Lowering Iron Level in Ferrous Sulfate Induced Male Rats

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Abstract	Green tea (Camellia sinensis) has the potential to be developed as a natural agent for therapy of iron overload in thalassemia. The purpose of this research was to observe the ability of ethanol extract of green tea as a natural iron chelating agent in animal iron overload model. Ethanol extract of green tea leave (GTLE) was prepared by maceration using 70% ethanol. Sprague-Dawley male rats were divided into three groups (5 rats each), a normal control group (group I) received daily p.o. of deionized water, the iron overload group received 100 g/Kg BW (group II) of GTLE that given two hours before ferroussulfate0.5 g/Kg BW administrations and the last group (group III) received only 0.5 g/Kg BW of ferrous sulfate. GTLE and ferrous sulfate were given orally every day for 30 days. At the end of the experimental period, rat blood serum samples were collected. Iron content and alanine aminotransferase (ALT) levels were measured using a spectrophotometer followed by observing the histologic preparation of rat liver organ. The results showed that administration of green tea leaves ethanolic extract of 100 g/Kg BW was able to keep down iron and ALT levels in the rat blood to a normal level.
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