

Possible Toxicity of Green Tea Extract

There are [reports of possible liver toxicity](#) with high doses of green tea extract (GTE), and since I've discussed GTE on this site, I felt I should address the issue here also.

The report mentions "dozens of cases" since 1999, and also that they're caused by "high doses", so given the huge number of people who have taken it for the past 18 years, the potential for toxicity is probably low. However, we can't be sure.

[The National Library of Medicine states:](#)

Drinking green tea has not been associated with liver injury or serum aminotransferase elevations; indeed, cross sectional studies suggest that heavy use of green tea is associated with lower serum ALT and AST values. Nevertheless, case series and a systematic review by the United States Pharmacopeia illustrate evidence for the potential for green tea extract to cause hepatotoxicity. **The prevalence of green tea extract induced liver injury is not known, but is probably low in comparison to the wide scale use of these products. Liver injury typically arises within 3 months, with latency to onset of symptoms ranging from 10 days to 7 months.** The majority of cases present with an acute hepatitis-like syndrome and a markedly hepatocellular pattern of serum enzyme elevations. Most patients recover rapidly upon stopping the extract or HDS, although fatal instances of acute liver failure have been described. Biopsy findings show necrosis, inflammation, and eosinophils in a pattern resembling acute hepatitis. Immunoallergic and autoimmune features are usually absent. A small number of similar cases have also been described after drinking green tea "infusions" rather than taking oral preparations of extracts of green tea.

The most prominent regulatory action against green tea containing products concerned Exolise, a weight loss product which was withdrawn from Spain and France in 2003. Also, green tea is an ingredient in other supplements including most over-the-counter weight loss agents, some of which have been implicated in causing rare instances of clinically apparent acute liver injury.

While instances of liver injury appear to be rare, given the severity of liver injury, it may not be a good idea to take green tea extract.

I've taken green tea extract myself, but will now be stopping.