

FACT SHEET

Out of Kids' Hands: Green Tea Extract Is a Liver Toxin

What You Need to Know About Green Tea Extract

Green tea extract is a concentrated supplement ingredient containing catechins, including epigallocatechin-3-gallate (EGCG). Green tea extract is often included in dietary supplements marketed for weight loss but is not FDA-approved for weight loss or to treat any disease or medical condition. Unlike medications, dietary supplements do **not** undergo FDA premarket approval for safety and effectiveness before they are sold.

What is covered by our model legislation?

Supplement Facts		
Serving Size 1 Veg Capsule		
	Amount Per Serving	% Daily Value
Vitamin C (as Ascorbic Acid)	60 mg	100%
Green Tea Extract (Leaf) (up to 32 mg of naturally occurring caffeine) (min. 40% Catechins)	400 mg	†
† Daily Value not established.		

NOTE: Supplements with green tea extract will have a "Supplement Facts" label on the package and will be covered by our model legislation if sold for weight loss or muscle building.

Hidden Danger with Disproportionate Risks

- **Green tea extract can seriously damage the liver:** In a U.S. study of green-tea-associated liver injury, **35% of cases were severe and 8% required a liver transplant.** Rare cases of liver injury associated with green tea extract have also resulted in death.^{1,2}
- **Weight-loss supplements do not affect all communities equally:** Women and Latine communities, who are especially targeted by societal dieting pressures and weight-loss supplement marketing, have higher rates of supplement-related severe liver injury compared to men or white communities.³

Teen's Tragic Liver Injury Caused by Green Tea Extract

When just **16 years old**, Christopher Herrera was hospitalized with **severe liver injury** after using a weight-loss supplement containing concentrated green tea extract. His condition became serious enough that he was **evaluated for a liver transplant.** His liver function ultimately recovered after the supplement was stopped. Christopher's case underscores the need to protect young people from the **marketing and promotion** of weight-loss supplements that can carry **serious health risks.**⁴

What is not covered by our model legislation?

Nutrition Facts	
20 servings per container	
Serving size 1 Tea Bag(1.5g) (makes 8 fl oz prepared)	
Amount per serving	
Calories	0
	%Daily Value
Total Fat 0g	0%
Sodium 0mg	0%
Total Carbohydrate 0g	0%
Protein 0g	
Not a significant source of saturated fat, trans fat, cholesterol, dietary fiber, total sugars, added sugars, vitamin D, calcium, iron and potassium	

NOTE: Ordinary green tea (not the extract) is sold as food and will have a "Nutrition Facts" label on the package, therefore is not impacted by our model legislation.

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1. Hoofnagle J H, Bonkovsky HL, Phillips EJ, et al. (2021). HLA-B35:01 and green tea-induced liver injury. *Hepatology*, 73(6), 2484–2493.
<https://doi.org/10.1002/hep.31538>

2. National Institute of Diabetes and Digestive and Kidney Diseases. (2020). Green tea. In *LiverTox: Clinical and research information on drug-induced liver injury*. National Institutes of Health.
<https://www.ncbi.nlm.nih.gov/books/NBK547925/>

3. Vitagliano JA, Beccia A, Mattei J, Cory H, Austin SB. (2022). Disproportionate use of over-the-counter diet pills among Latinx youth and increased use over time among Latinx females: Results of US national study. *Journal of Adolescent Health*, 70(6), 993–996.
<https://doi.org/10.1016/j.jadohealth.2022.01.126>

4. Patel SS, Beer S, Kearney DL, Phillips G, Carter BA. (2013). Green tea extract: A potential cause of acute liver failure. *World Journal of Gastroenterology*, 19(31), 5174–5177.
<https://doi.org/10.3748/wjg.v19.i31.5174>

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