



CBD Safety: What a Clinical Trial Found About the Liver

Research into cannabinoids isn't only about discovering potential benefits. Understanding safety is equally important.

An FDA-associated randomized clinical trial studied 201 healthy adults receiving CBD or placebo for four weeks. The CBD dose was 5 mg/kg of body weight per day — a relatively high dose compared with typical amounts found in many consumer products.

Among participants receiving CBD, 5.6% developed elevations of the liver enzymes ALT or AST greater than three times the upper limit of normal. This occurred in none of the placebo participants.

After CBD was discontinued, enzyme levels moved back toward normal.

Potential application

The finding doesn't mean that CBD simply "damages the liver." It tells us something considerably more useful: CBD safety needs to be understood in the context of dose, duration, other medications and the individual using it.

It also demonstrates why results from high-dose pharmaceutical CBD studies should not automatically be extrapolated to substantially lower-dose consumer products — in either direction.

Understanding safety is part of understanding cannabinoids.

Reference

Florian J, Salcedo P, Burkhart K, et al. Cannabidiol and liver enzyme level elevations in healthy adults: a randomized clinical trial. *JAMA Internal Medicine*. 2025;185(9):1070–1078.

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