

You said:

Does recent research show that resveratrol supplementation might be harmful?

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ChatGPT said:

Thought for 1m 14s

Short answer: At the doses used in most human trials ( $\leq 1$  g day<sup>-1</sup> for a few weeks-to-months) resveratrol still looks largely safe, but three red-flag areas have emerged in the last 2-3 years—high-dose liver-enzyme bumps, clinically relevant drug interactions (especially with anticoagulants and CYP-metabolised medicines), and a lingering concern that it can blunt some exercise-induced cardiovascular adaptations. None of these findings amount to a blanket “danger” warning, yet they are solid reasons to treat resveratrol as a drug-strength molecule, not a harmless grape extract.

### 1. High doses push liver enzymes up in older adults

A 2023 umbrella review of 71 RCTs found that doses  $> 1\,000$  mg day<sup>-1</sup> raised ALT and ALP in people  $\geq 60$  y, even though tests stayed in the reference range. The effect disappeared when the supplement was stopped, but it shows a clear dose-response safety limit.  
Frontiers

LiverTox (updated late-2024) also notes “rare, reversible serum enzyme elevations” at 1.5–3 g day<sup>-1</sup>, with no jaundice cases so far.  
NCBI

### 2. Drug-interaction & bleeding risk signals

Anticoagulants / antiplatelets Resveratrol inhibits platelet aggregation and several CYP isoenzymes; murine work shows it can amplify warfarin’s anticoagulant effect at  $\geq 0.5$  % w/w.  
PMC

WebMD and Memorial Sloan Kettering now list enhanced bleeding/bruising risk and CYP3A4/1A1 interactions as clinically meaningful cautions.

WebMD

Memorial Sloan Kettering Cancer Center

Polypharmacy A 2024 literature review documents indirect interactions that either inhibit or over-activate drug transporters/CYP450, urging prescribers to check for narrow-therapeutic-index medications.  
PMC

### 3. Possible interference with exercise benefits

The original 2013 Danish RCT showed 250 mg day<sup>-1</sup> resveratrol blunted exercise-induced gains in VO<sub>2</sub>max, blood pressure and plasma lipids in 65–80 y men.  
PMC

Later pilot studies are mixed—some report neutrality or small benefits—but none have convincingly overturned the first trial, so the “don’t pair high-dose RSV with endurance training if you’re trying to maximise conditioning” warning remains prudent.

### 4. Routine side-effects remain mostly mild

Across ~200 modern trials the dominant complaints are GI–diarrhoea, nausea, abdominal cramps –especially above 500 mg day<sup>-1</sup>.

PMC

A 2024 diabetes meta-analysis that specifically tracked adverse events found no serious problems at <500 mg day<sup>-1</sup>.

Frontiers

5. No hard evidence of carcinogenicity, mortality increase, kidney harm, etc.

Recent kidney and vascular trials actually trend neutral-to-beneficial, and large safety datasets have yet to flag resveratrol as hepatotoxic, nephrotoxic or genotoxic at customary doses.

PubMed

NCBI

How to supplement (if you still want to)

Guard-rail      Practical take-home

Keep daily dose ≤500 mg unless you have specialist supervision. Higher doses drive most enzyme and GI issues.

Avoid if on warfarin, NOACs, clopidogrel, NSAIDs, or strong CYP-substrate drugs unless your clinician okays it and monitors INR / drug levels.

Skip it around endurance-training blocks if performance adaptations are your priority.

Cycle rather than chronically megadose; long-term data (>1 y) are still sparse.

Buy GMP-certified brands–dietary-supplement regulation is lax and contamination (or exaggerated label claims) is common.

EatingWell

Bottom line: No dramatic new danger has surfaced, but the “it’s just red-wine magic” narrative is out-dated. Treat resveratrol like any bioactive drug: moderate the dose, respect contraindications, and monitor liver enzymes and coagulation status if you’re in a risk group.

Sources

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