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Phenolic profile of jujube fruit subjected to gut microbiota fermentation and its antioxidant potential against ethyl carbamate-induced oxidative damage

Key words: **Jujube; Gut microbiota fermentation; Polyphenols; Ethyl carbamate; Antioxidant activity**

Research Summary

Jujube fruit has rich bioactive components after gut microbiota fermentation, and shows strong antioxidant capacity. Fermented jujube fruitfruits can inhibit the cytotoxicity and DNA damage of Caco-2 cells caused by ethyl carbamate and reduce intracellular ROS generation, as well as restoringe GSH and mitochondrial membrane potential.

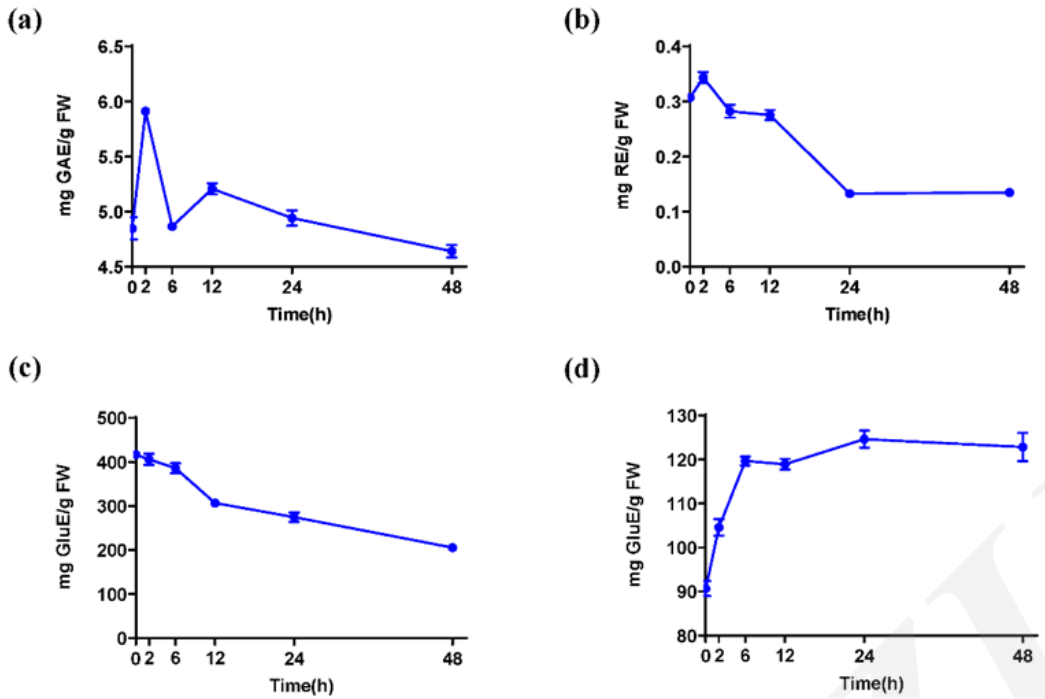
Content

- **Fermented jujube phenolics analyzed by HPLC**
- **Antioxidant activity(ABTS and FRAP)**
- **Cellular ROS and GSH**
- **Mitochondrial membrane potential**

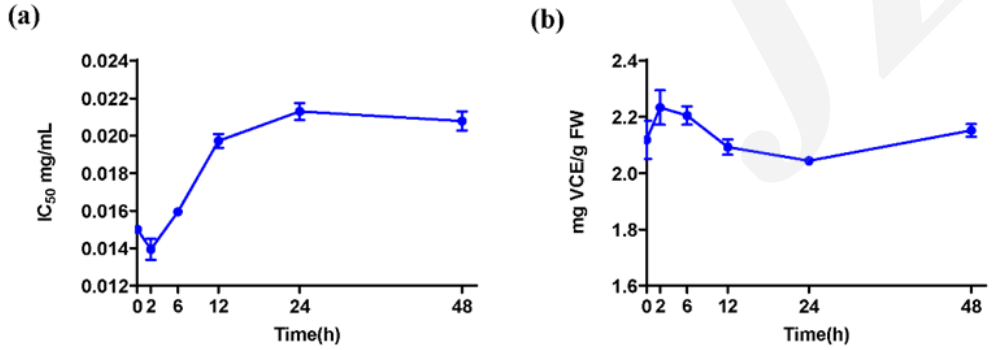


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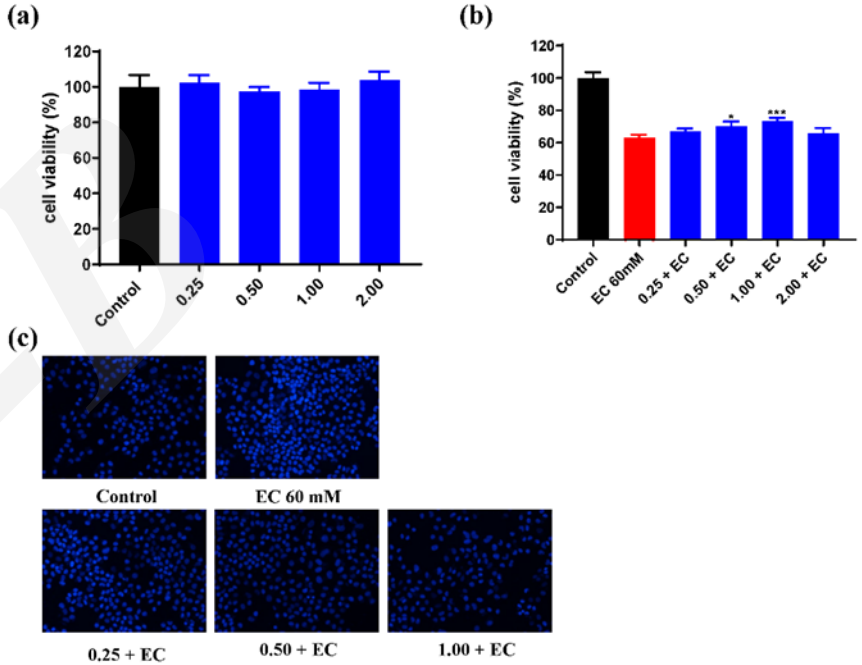
Jujube phenolics, flavonoids, total sugar and reducing sugar



Antioxidant activities

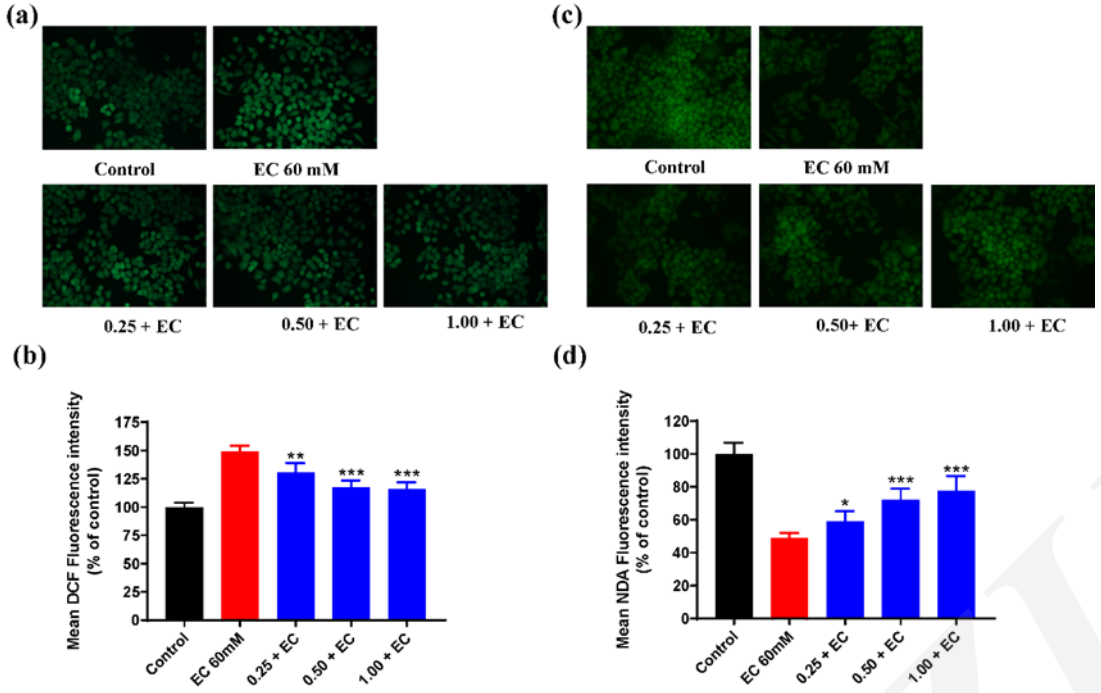


Cell viability

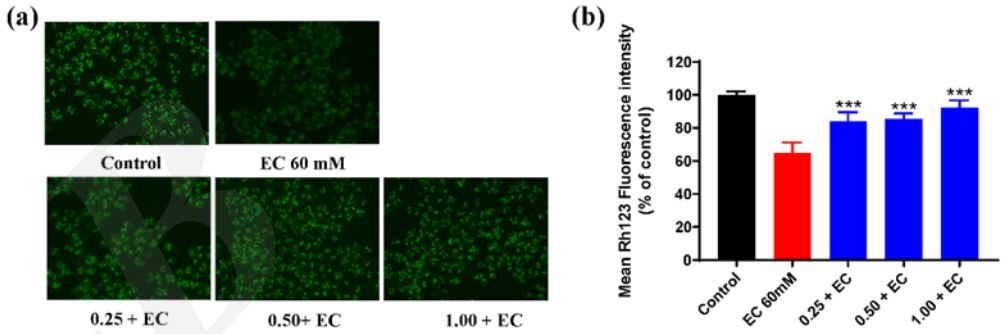


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Cellular ROS and GSH



Mitochondrial membrane potential



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