

In The Name Of GOD



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Evaluation of the cytotoxicity of Amaranth extract on human hepatocytes cell line

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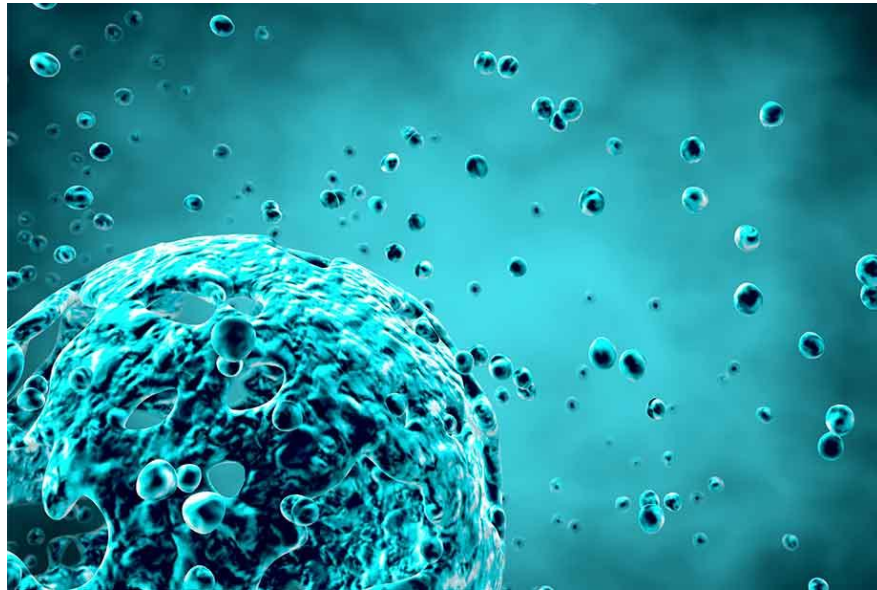


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Aim

- ▶ In the history of many people who referred to Kerman medical centers with acute liver failure, a history of Amaranth plant consumption was reported.
- ▶ Evaluate the cytotoxicity of Amaranth extract on human hepatocytes cell line in Afzalipour hospital.



Amaranth plant

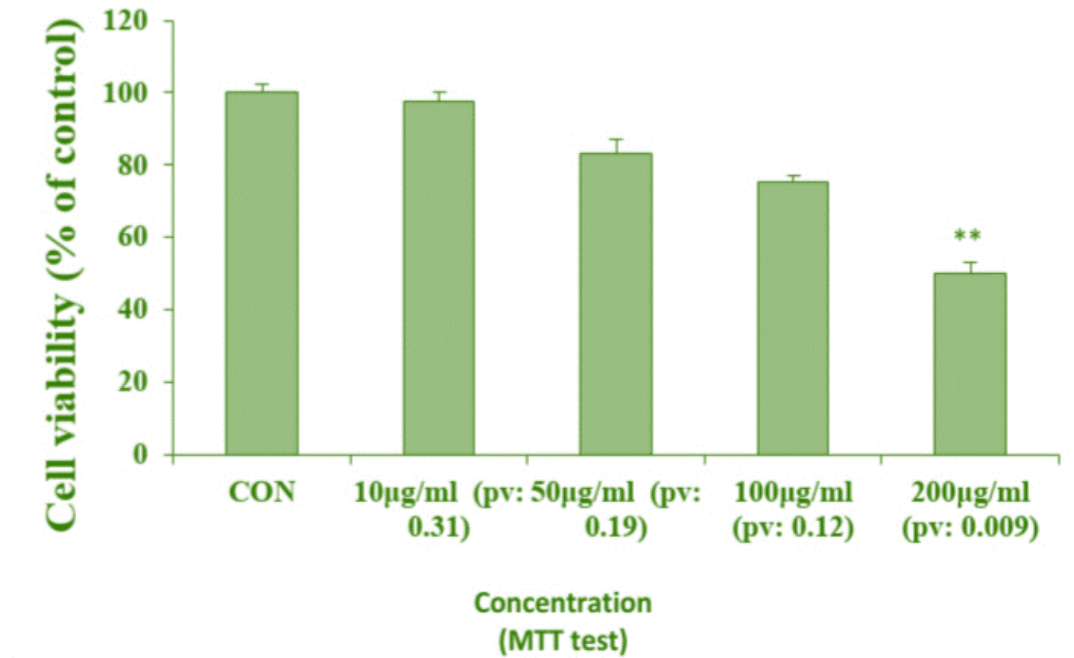
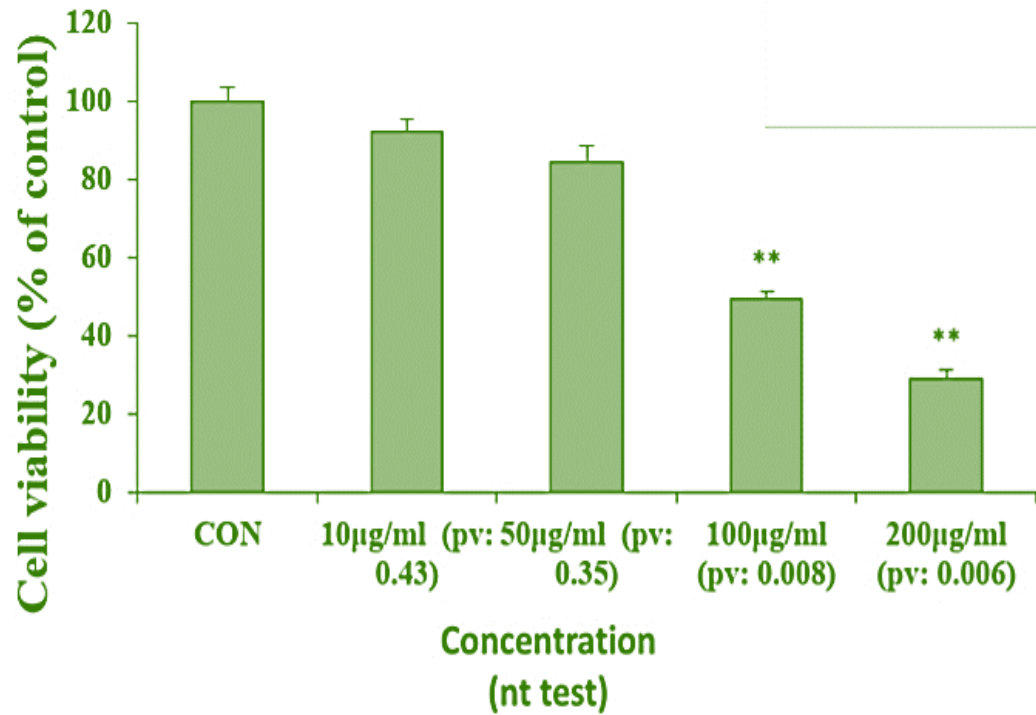
- ▶ Amaranthus is a cosmopolitan genus of annual or short-lived perennial plants collectively known as amaranths.



Methods

- ▶ Experimental study
- ▶ The Amaranth extract was prepared by Faculty of Persian Medicine, Kerman University of medical sciences.
- ▶ Hepatocytes were obtained from research center for hydatid diseases, Afzalipour hospital.
- ▶ Cells were grown in Dulbecco's Modified Eagle's Medium with 10% (v/v) heat-inactivated fetal bovine serum, penicillin and streptomycin with 95% humidity at 37 °C in an atmosphere of 5% CO₂.
- ▶ The culture media were replaced with fresh media in three days later and then every two days.
- ▶ After a few weeks of passage and after making sure that the cells came out of stress and returned to regular conditions, the percentage of cell growth and reproduction of Amaranth extract was measured using cell survival tests including MTT assay and Neutral red.

Results



Conclusion

- ▶ It should be noted that in addition to the benefits and positive effects of Amaranth plant, its hepatotoxicity effects should also be considered.
- ▶ Intractable consumption of this plant should be limited.





**THANK YOU FOR YOUR
ATTENTION!**