



## The Role of Vinegar in Liver Disease and Lipid Profile

S. Ferdows Jazayeri<sup>1</sup>, Ali Moraveji<sup>1</sup> and Asie Shojaii<sup>1,2,\*</sup>

<sup>1</sup>Department of Traditional Medicine, School of Persian Medicine, Iran University of Medical Sciences, Tehran, Iran

<sup>2</sup>Research Institute for Islamic and Complementary Medicine, Iran University of Medical Sciences, Tehran, Iran

\*Corresponding author: Ph.D, Associate Professor, School of Persian Medicine, Research Institute for Islamic and Complementary Medicine, Iran University of Medical Sciences, Tehran, Iran. Tel: +98-2155152192, Fax: +98-02155613191, Email: shojaii.a@iums.ac.ir

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### Dear Editor,

We read with great interest and attention the recent study by Khavasi et al., “Daily consumption of the *Capparis spinosa* reduces some atherogenic indices in patients with non-alcoholic fatty liver disease: A randomized, double-blind, clinical trial” (1). The results of this study are very interesting for us; however, the control group needs some modifications. In this paper, the type of intervention for the control group did not mention, but it seems that the participants in the control group did not receive any intervention and the test group received capper fruit pickle with their meals.

Iranian traditional medicine (ITM) recommends some herbs or herbal preparations for liver problems or as liver tonics. According to some ITM texts such as Al-Shamel, vinegar (Khal in ITM) has some beneficial effects on liver obstruction (2). In addition, in recent studies, fruits and especially apple vinegar showed a significant effect on liver damage and oxidative stress, as well as hepatoprotective effect in rats (3, 4). Indeed, the beneficial effect of apple vinegar on blood lipids has been reported in clinical trials (5).

In conclusion, it seems that vinegar can affect liver parameters and lipid profile. Therefore, some beneficial ef-

fects of capper fruit pickle may be due to the effect of vinegar. Thus, it is suggested that in future studies, the control group receives vinegar to omit the effect of vinegar in capper pickle and show the efficacy of only capper fruit in the study.

### References

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