

Do Energy Drinks and Alcohol Effect Myocardium and Skeletal Muscle?

To the Editor,

In previous issues of the journal, we have just read with great interest the article by Demirel et al¹ entitled "Histopathological Changes in the Myocardium Caused by Energy Drinks and Alcohol in the Mid-term and Their Effects on Skeletal Muscle Following Ischemia-reperfusion in a Rat Model."

The study can reveal whether long-term energy drinks and alcohol use may cause damage to the heart muscle and endothelium. But we have several criticisms regarding the methodology and results of the study.

Firstly, the authors stated in the introduction that they aimed to examine the histological changes in the aorta as well as cardiac structures. However, aortic changes are not mentioned in the rest of the article.

Secondly, in the statistics section, it was stated that the comparisons of the 2 groups were made with the Mann–Whitney *U*-test. However, we think that it would be more accurate to make pairwise comparisons in groups of 4 using posthoc analysis; the Dunn's test mentioned by the authors should have been used for this purpose anyway.

Finally, which troponin level was measured is not specified in the article (total troponin, cardiac troponin I or cardiac troponin T). We assumed the cardiac troponin level was measured. Then, researchers found that the troponin value was higher in the control group in biochemical tests, while cardiac damage was higher in the *Redbull-Alcohol* group (RA) group in histological examinations. We think that more explanation is needed about this contradictory situation. If total troponin levels were measured, another control group without surgical intervention was needed to compare these groups properly. Because the shame group was also affected due to operation.

REFERENCE

1. Demirel A, Başgöze S, Çakıllı K, et al. Histopathological changes in the myocardium caused by energy drinks and alcohol in the mid-term and their effects on skeletal muscle following ischemia-reperfusion in a rat model. *Anatol J Cardiol.* 2023;27(1):12-18. [\[CrossRef\]](#)

LETTER TO THE EDITOR

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Cite this article as: Barış VÖ, Erdem A. Do energy drinks and alcohol effect myocardium and skeletal muscle? *Anatol J Cardiol.* 2023;27(7):440.



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DOI:10.14744/AnatolJCardiol.2023.3283