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Effect of an Aerobic Exercise Program and Gymnema Supplementation on Plasma Ghrelin Levels and Sweet Taste Preference in Obese Women

Roya. Azadi[1], Khadijeh. Irandoust[2*], Morteza. Taheri[3]

[1] Master of Science in Exercise Physiology, Department of Exercise Sciences, Faculty of Social Sciences, Imam Khomeini International University, Qazvin, Iran
[2] Associate Professor, Department of Sport Sciences, Imam Khomeini International University, Qazvin, Iran
[3] Department of Motor Behavior, Faculty of Sport Sciences, University of Tehran, Tehran, Iran

*** Corresponding author email address**: irandoust@soc.ikiu.ac.ir

Editor	Reviewers
Gholamreza Zourmand Department of Physical Education and Sport Science, Huanggang Normal University, Huanggang, China gh.zourmand@hgnu.edu.cn	Reviewer 1: Mohammad Reza Khodabakhsh Department of Psychology, Neyshabour Branch, Islamic Azad University, Neyshabour, Iran. Email: hodabakhsh@ut.ac.ir Reviewer 2: Yaghob Badriazarin Associate Professor of Sport Sciences, Tabriz University, Tabriz, Iran. Email: badriazarin@tbzmed.ac.ir

1. Round 1

1.1 Reviewer 1

Reviewer:

The statement "However, findings remain mixed..." should be supported with specific contradictory studies to demonstrate the extent of inconsistencies in the literature regarding exercise and ghrelin modulation.

The claim that ghrelin levels were “significantly reduced” contradicts the results section where ghrelin was reported to have significantly increased post-intervention in both experimental groups. Please correct this inconsistency.

The phrase “greater reductions in ghrelin levels compared to those in the exercise-only group” is inaccurate; ghrelin increased post-intervention. This appears to be a reversal of expected hormonal outcomes and warrants explanation.

The review by Kokkorakis et al. (2024) is cited in the context of Gymnema’s pharmacological potential. Consider integrating how Gymnema compares to other pharmacotherapies discussed in that review.

Authors revised the manuscript and uploaded the updated document.

1.2 Reviewer 2

Reviewer:

The claim that Gymnema may affect central nervous system pathways is speculative. Please provide a stronger empirical basis or clearly label it as a hypothesis.

The justification for focusing solely on women is mentioned briefly. Please elaborate more fully on the relevance of sex-specific hormonal dynamics, possibly with supporting references.

The exercise intensity calculation using the Karvonen formula is sound, but detail on how adherence was monitored (e.g., were heart rate monitors consistently used?) would improve replicability.

When citing Devi & Jain (2015), the manuscript could benefit from specifying the magnitude of reduction in sweet preference, and whether those results were replicated in this study.

The discussion of leptin-ghrelin ratio is insightful, but speculative. Since leptin was not measured, please clearly label this as a hypothesis and not an interpretation of the current data.

Authors revised the manuscript and uploaded the updated document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.

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