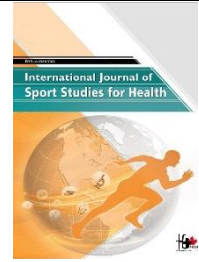


# International Journal of Sport Studies for Health

Journal Homepage



## Comparison of the Effects of Yoga Exercises and Moderate-Intensity Aerobic Training on Irisin and Insulin Resistance in Women with Type 2 Diabetes




Dahshti Abbas Mohammed. Al Jammour<sup>1</sup>, Rahman. Soori<sup>2\*</sup>, Parisa. Pournemati<sup>3</sup>

<sup>1</sup> Department of Exercise Physiology, Faculty of Sport Sciences and Health, University of Tehran, Tehran

<sup>2</sup> Professor, Department of Exercise Physiology, Faculty of Sport Sciences and Health, University of Tehran, Tehran, Iran

<sup>3</sup> Assistant Professor, Department of Exercise Physiology, Faculty of Sport Sciences and Health, University of Tehran, Tehran, Iran

\* Corresponding author email address: Soori@ut.ac.ir

Editor	Reviewers
<p>Pantelis Theo Nikolaidis School of Health and Caring Sciences, University of West Attica, Athens, Greece l.youzbashi@znu.ac.ir</p>	<p><b>Reviewer 1:</b> Seyed Mohammad Hosseini Assistant Professor, Department of Health and Rehabilitation in Sports, Shahid Beheshti University, Tehran, Iran. Email: moh_hosseini@sbu.ac.ir</p> <p><b>Reviewer 2:</b> Hooman Namvar Assistant Professor, Department of Psychology, Saveh Branch, Islamic Azad University, Saveh, Iran. Email: hnamvar@iau-saveh.ac.ir</p>

### 1. Round 1

#### 1.1 Reviewer 1

Reviewer:

The introduction states, "In recent years, scientists' research in the field of metabolism and energy homeostasis has led to the identification of new factors associated with homeostasis and metabolism, among which irisin is noteworthy." Consider elaborating on the scientific importance of irisin discovery by including more specific studies that underline its significance in metabolic health to strengthen the argument.

The Methods section mentions, "Participants were advised to refrain from engaging in any other physical activity during the 12-week intervention." It would be beneficial to specify how adherence was monitored and if there were any deviations from this protocol, which could influence the results.

The description, "Thirty middle-aged diabetic women...were randomly assigned to three groups," lacks detail on the randomization procedure. Please explain the method used for randomization (e.g., computer-generated random numbers) to improve the study's reproducibility.

You mention that "The intensity of the training was monitored using a Polar heart rate monitor." It would be useful to include the calibration details of the device and how you ensured consistency in heart rate monitoring among participants.

The description of blood sample collection and irisin level analysis, "using a sandwich ELISA method," would be improved by specifying the reliability and sensitivity of the assay. Including details about the assay's reproducibility and any validation processes can strengthen the methods section.

Author revised the manuscript and uploaded the updated document.

## 1.2 Reviewer 2

Reviewer:

In the introduction, "lifestyle modification has been suggested (2)." The statement needs clarification on the types of lifestyle modifications recommended. This could help contextualize the effectiveness of the interventions being studied.

The objectives of the study could benefit from a more explicit hypothesis. For instance, the statement "This study was designed to investigate the impact of yoga and combined aerobic exercise on serum irisin levels and insulin resistance" could clearly state the expected outcomes to guide readers on the study's premise.

The statement, "The principle of overload in the yoga training protocol was applied," could use more detail. Specify the exact nature of the progression in intensity, such as how rest periods and repetitions were altered, to offer better insight into the training regimen.

The figures, such as Figure 1 and Figure 3, could be more informative. Consider providing error bars or including a more detailed explanation of what the graphs illustrate, as well as any trends that might not be immediately apparent.

Author revised the manuscript and uploaded the updated document.

## 2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.