



# INTERNATIONAL CONGRESS ON NATURAL, HEALTH SCIENCES AND TECHNOLOGY

## BOOK OF ABSTRACTS



9<sup>TH</sup> International Balkan  
Conference in Sport Sciences



8<sup>TH</sup> International Scientific  
Conference on Applied Sciences



7<sup>TH</sup> International Scientific  
Conference of the Faculty of  
Medical Sciences



6<sup>TH</sup> International Conference of  
Natural Sciences and Mathematics



4<sup>TH</sup> International Conference of  
Food Technology and Nutrition



2<sup>ND</sup> International Conference on  
Sustainable Agriculture Farming  
Systems

15 – 17 May, 2024  
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**International Congress on Natural, Health Sciences  
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Mathematics**
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- **2<sup>nd</sup> International Conference on Sustainable Agriculture  
Farming Systems**

# **FRUIT CONSUMPTION AND ITS INFLUENCE ON THE DEGREE OF INSULIN RESISTANCE**

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## **Abstract**

Fruit is rich in fiber, antioxidants and phytochemicals that can have beneficial health effects. Its consumption is recommended for the primary prevention of many chronic diseases, but opinions are divided regarding its preventive role in the development of hyperinsulinemia and diabetes.

The purpose of this research is to assess the influence of the frequency and quantity of fruit consumed on the degree of insulin resistance (expressed through HOMA-IR), in people who have hyperinsulinemia and increased body mass. Through a survey questionnaire, a group of 104 women and 71 men answered questions related to the representation of fruit in their diet. All 175 subjects were older than 25 years, had an increased body mass index (BMI>25 kg/m<sup>2</sup>) and diagnosed hyperinsulinemia. Most of the respondents, 95 (55.23%) consume fruit in a quantity less than 250g, the most common frequency of intake in 57 (32.57%) is from three to five times a week. There is a statistical dependence between the HOMA - IR index and the frequency of eating fruit on a weekly basis, among respondents aged between 41 and 55 years. Women consume a larger quantity of fruit on a weekly basis, and it was notable that those with

a lower HOMA - IR index consume a smaller quantity than those with a higher value on this index.

Fruit is recommended as part of diet for people with insulin resistance, but it should be represented in adequate quantities, to take advantage of its benefits.

*Keywords:* insulin resistance, HOMA-IR, nutrition, fruit.