







# The effects of HIIT exercise and omega-3 supplementation on appetite levels in obese women

## **Poster Presentation**

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#### **Abstract**

Introduction: Appetite has the main role in energy regulation and weight loss in obesity. The purpose of this study is to investigate the effect of Omega-3 supplements and HIIT exercises on appetite in obese women. Methods: In a controlled, randomized clinical trial, 60 subjects (35-45 yrs.) with 27≤ BMI ≥40 (kg/m²) were assigned to four groups (HIIT, Supplement +HIIT, Supplement, Control). Twelve-weeks HIIT sessions (each session of an interval training includes 60 s of high-intensity training (85–95% of reserve heart rate)) + running for 60 s at low intensity (55–60% of reserve heart rate) were applied. Subjects consumed 2 g omega3 daily. Appetite and anthropometrical characteristics were assessed prior and 48 hours following training and at the end of the luteal phase. One-Way Anova and Tukey tests were used to analyze the data.

Results: The results suggested appetite decreased significantly in HIIT and supplement+HIIT groups (p=0.0001) while didn't change in supplement and control groups (p=0/052).

Conclusion: It was concluded that Omega-3 supplement has no significant effect on appetite, whereas HIIT may decrease appetite in obese women.

## **Keywords**

HIIT; Obese women; Omega 3; Appetite

### **Reference:**

- 1. Parker, B. A., Sturm, K., MacIntosh, C. G., Feinle, C., Horowitz, M., & Chapman, I. M. (2004). Relation between food intake and visual analogue scale ratings of appetite and other sensations in healthy older and young subjects. European journal of clinical nutrition, 58(2), 212-218.
- 2. Afrasyabi, S., Marandi, S. M., & Kargarfard, M. (2019). The effects of high intensity interval training on appetite management in individuals with type 2 diabetes: influenced by participant's weight. Journal of Diabetes & Metabolic Disorders, 18(1), 107-117.
- 3. Young, I. E., Parker, H. M., Cook, R. L., O'dwyer, N. J., Garg, M. L., Steinbeck, K. S., ... & O'connor, H. T. (2020). Association between Obesity and Omega-3 Status in Healthy Young Women. Nutrients, 12(5), 1480.

