



Does Hedonic Hunger Increase the Odds of Being Overweight/Obese? A Systematic Review And Meta-Analysis

Malihe Karamizadeh¹, Marzieh Akbarzadeh², Bahram Pourghassem Gargari³, Reza Mahdavi^{3*}, Zeinab Nikniaz⁴

¹Student Research Committee, Tabriz University of Medical Sciences, Tabriz, Iran

²Nutrition Research Center, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

³Nutrition Research Center, Department of Biochemistry and Diet Therapy, Faculty of Nutrition and Food Sciences, Tabriz University of Medical Sciences, Tabriz, Iran

⁴Liver and Gastrointestinal Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

OPEN ACCESS

*Corresponding Author:

Nutrition Research Center,
Dept. of Biochemistry and Diet
Therapy, of Nutrition and Food
Sciences, Tabriz University of
Medical Sciences, Tabriz, Iran

Citation:

Karamizadeh M, Akbarzadeh M,
Pourghassem Gargari B,
Mahdavi R, Nikniaz Z. Does
Hedonic Hunger Increase the
Odds of Being Overweight/
Obese? A Systematic
Review And Meta-Analysis.
Iranian biomedical journal.
Supplementary (12-2024): 147.

ABSTRACT

Introduction: Hedonic hunger, characterized by reward-driven eating focused on palatable foods beyond physiological needs, has been suggested as a significant contributor to overweight and obesity in recent years. The Power of Food Scale is the primary tool for assessing hedonic hunger. As far as we know, no systematic review/meta-analysis has been conducted to investigate the odds of overweight/obesity associated with hedonic hunger. Therefore, this systematic review and meta-analysis aimed to determine whether hedonic hunger increases the odds of being overweight/obese.

Search Strategy: We performed a comprehensive search on PubMed, Web of Science, and Scopus until January 19, 2023, using relevant keywords such as "hedonic eating", "hedonic feeding", "hedonic hunger", "hedonic appetite", "obesity", "overweight", "body weight", "anthropometry", "body mass index", and "BMI". We included all English-language original observational studies conducted on healthy adult subjects using the power of food scale to evaluate hedonic hunger. Data extraction followed a predefined form, and quality assessment was performed using the Joanna Briggs Institute Checklist. Meta-analysis was carried out using StataMP-17 software with the random effects method.

Results: A total of 1,294 articles were identified from electronic database searches, along with one study found through manual reference searching. After screening, two cross-sectional observational studies involving 1,286 participants were included. Both studies were cross-sectional and included participants of both sexes. The meta-analysis revealed that hedonic hunger increased the odds of overweight/obesity by 68% (OR = 1.68, 95% CI: 1.16, 2.21).

Conclusion and Discussion: Hedonic hunger may increase the odds of being overweight or obese. Given the limited number and low quality of included studies, additional longitudinal research is necessary for a more precise conclusion.

Keywords: Hunger, Obesity, Overweight