

## Original Research

## Open Access

### Article History:

Received 20 September 2020

Accepted 23 October 2020

Published 1 August 2021

Available online 30 July 2021

<https://doi.org/10.47544/johsk.2021.2.2.8>

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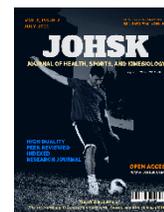
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# Eating Behavior Psychoregulation As a Resource for Increasing the Achievements of Athletes

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**Keywords:** eating behavior, psychological factors, athletes

## Introduction

The realities of today's sport indicate that the achievement of high sports results is not only due to high-quality technical-tactical preparation for the competitions but is also associated with a number of medical-biological character factors (Dmitriev & Gunina, 2020). For instance, one of the most important constituents of the training process in all sports events is a properly selected balanced diet, which takes into account the competitive activity specifics, the peculiarities of physical loads, the athlete individual physiological and psychological characteristics (Gunina et al., 2018; Malkina-Pykh, 2007).

Therefore, every year the attention of scientists in the field of sport is more and more focused on the issue of athlete eating behavior management as a factor of increasing the competitive activity efficiency, which determines the urgency of this research topic.

Besides, in the scientific literature, the psychological components of nutritional support in sport have received almost no attention. Available publications have mainly addressed the peculiarities of athlete nutrition in certain sports events (Polievsky, 2015) almost neglecting external and internal factors that influence the athlete eating behavior, which makes the presented topic especially interesting for study.

## Purpose

The purpose of this study was to identify the psychological factors that determine the peculiarities of nutrition and diet in sports, and to determine the degree of their influence and methods of psychoregulation. Previous researchers have reported changing of CAL affect cycling power production (MacDermid & Edwards, 2010; Martin & Spirduso, 2001; Too & Landwer, 2000), lower limb joint angle, cadence (Barratt et al., 2011 & 2016; Candotti et al., 2007; Christiansen et al., 2013), pedal torque (Hull & Gonzalez, 1988), lower limb muscle activity (Watanabe, 2020), and  $VO_2$  (Ferrer-Roca et al., 2017; Morris & Londeree, 1997).

## Methods

To reveal the key psychological factors determining the success of following a meal plan by the athletes, an expert survey of 32 skilled athletes of different sports events has been conducted. Athletes were offered a list of factors that influence eating behavior. From this list, we have selected the main influencing factors and combined them into three groups. Methods of mathematical statistics were used to determine the consistency of expert opinions: the Kendall's coefficient of concordance (W).

## Results

According to the results of this survey, it was revealed that the main psychological factors influencing the athlete eating behavior are **severe restrictions** (55%, weight cutting before the competitions, refusal of favorite foods, permanent ban on exceeding the calorie limit, etc.); **unwanted habits** (26%, dependence on alcohol, cigarettes, etc.), **stress** (19%, including (a) *under the influence of internal irritants*, associated with unsuccessful performances at competitions, personal problems such as disappointment, deception, betrayal), feelings of uncertainty or inconsistency between results and needs, sense of guilt; and (b) *under the influence of external irritants*, caused by communication issues, such as unsatisfactory relationships with colleagues or coach, conflicts in the family.

The Kendall's coefficient of concordance (W) was 0,72, which indicates a high degree of agreement among experts and the reliability of the data obtained.

## Discussion

It should be noted that such a distribution of expert opinions is associated with the peculiarities of their lifestyle, developed volitional qualities, discipline, the ability to control desires and needs, as well as a high level of responsibility. The listed qualities are developed in professional athletes under the influence of long-term regular volitional efforts applied while practicing sport (Vysochina, 2016; Vysochina et al., 2018).

In addition, an important aspect determining the peculiarities of an athlete eating behavior is the ability to distinguish between hunger and appetite. Hunger is the bodily and physiological need for food, while appetite represents a psychological need, caused by strong feelings and emotions. Appetite may be evoked by food memories, delicious smells, emotional expectations, or anticipation of food. An interesting feature is that hunger leads to the appearance of negative emotions in a person, whereas appetite – positive ones.

Appetite often occurs as compensation for unsatisfied emotions, such as loneliness, melancholy, boredom, anxiety, guilt, shame, anger, irritation, fatigue. The main causes of appetite disorder are (a) un-lived emotions (suppressed or forbidden feelings), (b) unmet needs, "I want", "do not do", and "I postpone", (c) "tension-relaxation" cycle disruption (constant tension, stress).

All listed causes result in a decrease of vital power and activity. Therefore, it is extremely important for an athlete to work through destructive emotions in due time and identify the sources of their appearance. Such work is carried out by the athlete's rational understanding of his thoughts, actions, and their consequences.

Athlete eating behavioral psychoregulation also includes analysis of problems caused by anxiety, low self-esteem, guilt, conflict situations, and difficulties in interpersonal relationships. Regardless of the eating behavioral psychoregulation method, the athlete should consistently perform the work including tasks to analyze and work through a specific issue and correct irrational affirmations that prevent to tackle it at the given stage. In addition, the athlete should evaluate the existing and form the ideal body image.

## Conclusion

This study suggests that the major psychological factors, influencing the athlete eating behavior include severe food restrictions, unwanted habits, and stress. At the same time, the ability to distinguish hunger from appetite may serve as an important aspect determining the peculiarities of nutrition and diet in sport, which is formed under the impact of certain emotions. The development of the skills of self-regulation and control over the eating behavior is one of the key factors for an athlete to improve achievements and maintain good physical condition.

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