

Information

Relationship between Food Consciousness and Use of Dietary Supplements among Participants of the Sochi 2012 Winter Olympic Games

**Nagisa MATSUMOTO *1, Akiko KAMEI *1, Etsuko KAMIHIGASHI *1, Michiko DOHI *1,
Takao AKAMA *2, Takashi KAWAHARA *1**

*1 Japan Institute of Sports Sciences, Japan Sport Council

*2 Waseda University School of Sport Sciences

ABSTRACT

The rate of use of supplements among athletes around the world is reported to be in the range of 65%-88%. According to previous surveys, the reported rate of use of dietary supplements among elite Japanese athletes is as high as over 80%, and the main purpose of their use is said to be "recovery from fatigue." The purpose of this study was to examine the relationship between food consciousness and the use of dietary supplements by athletes participating in the Sochi 2012 Winter Olympic Games, and to build basic data for future nutrition education. The analysis was conducted at the Japan Institute of Sports Sciences from April 2012 to March 2013, based on the responses provided in the medical check-up questionnaire for the Olympic Games by the athletes. The subjects were a total of 113 athletes aged 25.2 ± 7.3 years, including 48 male athletes (age 25.8 ± 5.9 years) and 65 female athletes (age 24.9 ± 4.7 years), who represented Japan in the Sochi 2012 Winter Olympic games. The rate of use of supplements among these athletes was 92.0%, which was higher than that in the athletes from other countries. This rate was consistent with the rate of use of supplements by the athletes who participated in the Summer Olympic Games. In addition, there was a relationship between food consciousness and the use of supplements, suggesting that athletes with greater food consciousness showed a greater tendency to use supplements. In this study, athletes who answered "yes" to the question "Do you try to eat a nutritionally balanced diet?" were considered to have high food consciousness, while those who answered "no" were considered to have low food consciousness. The most common supplements used by athletes with low food consciousness were amino acids, followed by protein, and the most frequently stated purposes of their use were "recovery from fatigue" and "muscle/weight gain," respectively. This possibly suggests that athletes with low food consciousness had some issues with "recovery from fatigue" and "muscle and weight gain". Since the information source for the use of supplements did not include professionals such as dietitians, physicians, pharmacists, it is possible that the athletes with low food consciousness did not receive adequate nutritional education from a sports dietitian. It is important for athletes to review their own dietary habits, including whether the "basics of an athlete's diet" are in place, and to eat a diet that enables maintenance of good nutrition. Supplements should only be used as a "supplement." This study suggested that there is an urgent need to provide nutrition education focusing on the importance of diet and a correct knowledge on supplements at sports training and competition venues.

Keywords: athletes, food consciousness, use of supplements, Winter Olympics