Brief Report

Actual eating habits among elite female athletes with irregular menstrual cycles

Yoshiko ISHII *1, Takahiro YOSHIZAKI *2, Sayaka NOSE-OGURA *1, *3, Akiko KAMEI *1

- *1 Japan Institute of Sports Sciences
- *2 Toyo University
- *3 Department of Obstetrics and Gynecology, University of Tokyo

ABSTRACT

[Aim]

This study sought to clarify differences in eating habits between elite female Japanese athletes with normal and those with irregular menstrual cycles.

(Methods)

One hundred and thirty elite female athletes who visited the National Sports Science Center Gynecology Department were enrolled. A self-administered qualitative food intake frequency questionnaire asked the respondents questions about their basic attributes, menstrual cycle, body weight awareness, eating knowledge, eating awareness, and eating behavior. Participants were divided into two groups based on whether they had a normal or irregular menstrual cycle.

(Results)

The body weight and BMI were 58.2 ± 9.5 kg and 21.9 ± 2.9 kg/m² in the normal menstrual cycle group and 53.1 ± 9.0 kg and 20.4 ± 2.1 kg/m² in the irregular menstrual cycle group, respectively. The body weight and BMI of the latter group were significantly lower. The proportion of participants in the normal menstrual cycle group who responded "I do not think this at all" to a question regarding whether they wished to lose weight was significantly high. No significant association was found between menstrual cycle and questions regarding food knowledge, food awareness, or eating behavior. Regarding food intake frequencies, only the consumption of noodles was found to be significantly associated with an irregular menstrual cycle.

(Conclusion)

The dietary habits of participants in the irregular menstrual cycle group might have been overestimated if appropriate amounts of food were consumed. For dietary improvement, and understanding of the actual intake and the presentation of specific target intakes are necessary.

Keywords: elite female athletes, irregular menstrual cycle, eating habits