

Brief Report

Frequency of milk and dairy product consumption in elite Japanese athletes

Masae YOSHINO ^{*1}, Takahiro YOSHIZAKI ^{*2}, Jun YASUDA ^{*3}, Kaori YAMAMOTO ^{*4},
Masako OTA ^{*5}, Takashi KAWAHARA ^{*1}, Akiko KAMEI ^{*1}

^{*1} Japan Institute of Sports Sciences, Japan Sport Council

^{*2} Department of Food and Life Sciences, Faculty of Food and Nutritional Sciences, Toyo University

^{*3} Graduate School of Sport and Health Science, Ritsumeikan University

^{*4} Graduate School of Food and Nutritional Sciences, Toyo University

^{*5} Department of Nutrition and Health Science, Faculty of Food and Nutritional Sciences, Toyo University

ABSTRACT

[Aim]

The aim of this study was to investigate the frequency of the consumption of milk and other dairy products during periods of training and competition among elite Japanese athletes. We also investigated the differences according to sports categories.

[Methods]

In this study, elite Japanese athletes who were candidates for the Rio de Janeiro Olympic Games (Summer group) and the PyeongChang Olympic Games (Winter group) underwent medical evaluations at the Japan Institute of Sports Sciences and completed self-reported questionnaires.

[Results]

The frequencies of milk consumption during the competition period were significantly lower than those during the training period in women in the Summer group (3.2 ± 2.7 and 3.6 ± 2.8 days/week, respectively), in men in the Winter group (3.6 ± 2.7 and 3.9 ± 2.7 days/week, respectively), and in women in the Winter group (2.6 ± 2.7 and 2.8 ± 2.7 days/week, respectively). The frequency of dairy products consumption during the competition period (4.8 ± 2.1 days/week) was significantly higher than that during the training period (4.6 ± 2.2 days/week) in women in the Winter group. In each sports category (power, aesthetic, and endurance sports in the Summer group; speed skating and short track in the Winter group), the frequencies of milk consumption during the competition period were significantly lower than those during the training period in women. In women competing in strength sports and in men competing in Nordic sports, the frequencies of dairy products consumption during the competition period were significantly higher than those during the training period.

[Conclusion]

In elite Japanese athletes, the frequencies of milk and dairy products consumption differed between the training and competition periods and according to sports category.

Keywords: elite athletes, milk and dairy products, training period, competition period, sports category