

Original Article

# Validity and reproducibility of a self-administered diet-history questionnaire (DHQ) answered by junior athletes and their mothers

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## ABSTRACT

### **【Aim】**

We examined the validity and reproducibility of a DHQ for junior athletes.

### **【Methods】**

Junior athletes and their mothers answered the DHQ over a 6-month period. There were a total of 59 participants in the validity study and 108 participants in the reproducibility study. The validity of the DHQ was evaluated based on a 3-day dietary records (DHQ1 and DR, respectively). The reproducibility was compared twice with DHQ (DHQ1 and DHQ2, respectively). For average estimation, a paired t-test was performed, and for rank estimation, Pearson's product moment correlation analysis was performed.

### **【Results】**

The median correlation coefficient between DHQ1 and DR was 0.36 energy/nutrient intake and 0.30 for each food group; for seven items, the t-test revealed no significant difference and the correlation analysis revealed no significant correlation: energy, carbohydrate, calcium, vitamin B<sub>2</sub>, green-yellow vegetables, seafood, and milk.

The median correlation coefficient between DHQ1 and DHQ2 was 0.54 for energy and each nutrient intake, and 0.50 for each food group.

### **【Conclusion】**

The results suggest that DHQ could be used as an effective questionnaire for assessing dietary intake in junior athletes.

**Keywords:** answered by junior athletes and their mothers, DHQ, validity, reproducibility