

Introduction

Proper nutrition is significantly associated with athletic performance^[1]. Appropriate dietary intake supports athletes by meeting their energy requirements^[2-3]. Thus, food selection plays a pivotal role in optimising athletic performance. The Hong Kong Sports Institute (HKSI) provides meals for elite athletes at the Elite Corner (EC). EC is a canteen specifically provides meals for elite athletes. The HKSI's menu is monitored and revised by dietitians or nutritionists at the Sport Nutrition Monitoring Centre (SNMC) to ensure that the athletes' diverse nutritional needs are met. In addition, the nutrition education materials available at the EC are regularly updated to guide athletes' food selection. Food selection itself is influenced by factors such as personal taste, health beliefs and nutrition knowledge,^[4-6] and food selection behaviour directly impacts athletes' recovery and performance. Therefore, this study aimed to examine dietary habits, food selection behaviour and the applicability of nutrition education materials at the EC from the athletes' perspective.

Methodology

11 full-time and part-time athletes who were training at the HKSI and using the services provided by the EC were potential participants in this study. An online questionnaire was created by dietitians at the SNMC to determine the athletes' opinions on dietary habits and the quality of service provided by the EC.

Results

A total of 163 responses were collected from September to October 2023, and 137 respondents completed the survey and were included in the analysis.

	5 - 7 Days	3 - 4 Days	1 - 2 Days	Never
Breakfast	26.3%	20.4%	21.2%	32.1%
Lunch	29.9%	29.2%	19%	21.9%
Dinner	27%	21.2%	20.4%	31.4%

Table 1. Frequency of visiting the Elite Corner

Answer choice	No. of respondents (%)
Filling the stomach	59 (43%)
Free takeaways/dine in	24 (17.5%)
Deliciousness	20 (14.6%)
*EAT to WIN – acquired enough nutrients for better performance	19 (13.9%)
Other	15 (11%)

Table 2. First thought that comes to mind when visiting the Elite Corner

*EAT to WIN implies improving athletes' exercise performance and pursuing the best outcome through proper nutrition.

Answer choice	No. of respondents (%)
Nutrition cards	107 (89.2%)
Mini-nutrition newsletter	35 (29.2%)
Posters	42 (35%)

Table 3. Applicability of nutrition education materials at the Elite Corner

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Answer choice	No. of respondents (%)
Broadcast of TV programme about nutrition knowledge	56 (40.9%)
Podcast at the Elite Corner	34 (24.8%)
Nutrition consultation service provided by HKSI nutritionist at the Elite Corner	68 (49.6%)

Table 4. Methods of providing nutrition education at the Elite Corner

Discussion

Over 26% of the respondents reported eating meals at the EC on 5 to 7 days per week, suggesting that their feedback was representative of the services received at the EC (Table 1). However, only 30% of the respondents agreed that they could translate their meal plans into practice, which can be attributed to a lack of nutrition education. Spronk et al.^[7] suggested that a lack of nutrition knowledge is closely associated with low health literacy.

Although a majority (57.7%) of the respondents valued 'taste' as a very important factor when choosing meals, only 14.6% of respondents reported visiting the EC because the food was delicious (Table 2). Studies^[8-9] have found that taste is one of the strongest factors determining an individual's food selection. In the future, food quality and variety could be improved systematically by collaborating with the catering team.

Regarding nutrition education, printed education materials could be replaced by other media, such as broadcast TV programmes and consultation services, to increase athletes' interest in and understanding of nutrition knowledge. This finding echoes that of other studies^[6, 11], which found that printed materials engage athletes less effectively than other modes of education, e.g., cooking classes and face-to-face consultation. Materials with less words and more images can increase their understanding with the education content.

Furthermore, onsite nutrition consultation services could perfectly fulfil athletes' needs. Athletes tend to absorb conflicting information from teammates, coaches and social media, and timely access to a sports nutritionist could provide them with optimal nutrition knowledge^[6]. The study findings showed that 33.6% of the respondents had never visited the SNMC for a nutrition consultation or dietary analysis. Athletes would have easier access to consultation services if they were located at the EC (Table 4).

The cards that provide nutrition information about dishes on the menu were deemed useful and easy to understand (Table 3). However, only 59.1% of the respondents referred to the nutrition cards before eating. Some athletes suggested adding electronic scales so that they could measure the exact amounts of calories or nutrients they consumed. More group setting activities, such as cooking classes, supermarket tours and presentations, are suggested to enhance engagement with athletes and promote peer interaction and active learning^[10].

Conclusion

Athletes might struggle to adhere to a nutritional plan, or might not even have a plan, due to a lack of nutrition knowledge. This study identified several means of delivering nutrition knowledge that could considerably improve the guidance provided for athletes. 1. Cooking classes, face-to-face consultations, and TV programmes can be more effective than printed materials in helping athletes to understand nutrition knowledge. 2. Onsite nutrition consultation services at the EC can also effectively address athletes' needs by providing timely access to a sports nutritionist. 3. At the EC, the addition of electronic scales for measuring calorie and nutrient intake would enhance athletes' engagement with and understanding of nutrition information. Hence, the catering department and SNMC should continue to work collaboratively to provide athletes with not only meals with satisfactory levels of quality and variety but also different types of nutrition education. Scientifically sound guidance from the SNMC at the HKSI is required to help athletes to meet their substantial nutritional needs and meet our ultimate goals: EAT to WIN.