Nutrition Perception, Knowledge, and Practices of Elite Junior Footballers in Singapore

Ho YSM*, Tan WJJ, Ang LHL, Nurhafizah BAS, Sirisena UDC

1Nutrition & Dietetics Department, Khoo Teck Puat Hospital, Singapore
2Sports Medicine Centre, Khoo Teck Puat Hospital, Singapore
3Yong Loo Lin School of Medicine, National University of Singapore
4Football Association of Singapore

*Corresponding author: ho.magan.ys@ktph.com.sg

Abstract

Introduction: Without sufficient nutrition education, elite athletes cannot optimise their sporting performance and recovery. In Southeast Asia, football represents one of the most popular sports. Previous sports nutrition studies were from non-Asian countries or not football-specific (Manore et al, 2017; Folasire et al, 2015; Nazni et al, 2010; Montecalbo et al, 2015). Current validated questionnaires are impractical to employ (Callela et al, 2017; Trakman et al, 2017). This pilot study aims to assess the nutritional literacy and practices of junior elite football academy footballers.

Methods: 74 elite football academy players were surveyed using visual pictorial resources. Questions focused on balanced diets, healthier cooking methods, and food groups.

Results: Players who perceive themselves to have balanced diets are more likely to possess better knowledge $X^2(1, n=74) = 4.009 (p=0.045)$. Based on linear regression, gender and education has little impact, and ethnicity has a weak to moderate negative impact on nutrition knowledge.

Table 1 Regression table of gender, ethnicity, and education as predictors of nutrition knowledge

<table>
<thead>
<tr>
<th>Independent</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.023</td>
<td>0.026</td>
<td>0.124</td>
<td>0.887</td>
<td>0.076</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-0.029</td>
<td>0.014</td>
<td>-0.239</td>
<td>-2.052</td>
<td>0.044</td>
</tr>
<tr>
<td>Education</td>
<td>0.013</td>
<td>0.027</td>
<td>0.065</td>
<td>0.469</td>
<td>0.641</td>
</tr>
</tbody>
</table>

*Corresponding author: ho.magan.ys@ktph.com.sg
Figure 1 Path analysis with beta coefficients of demographic factors (blue) and responses (orange).

Conclusions: There is inadequate knowledge about balanced diets, healthy cooking methods, and food groups. This is concerning as developing athletes represent future talent pool. If uncorrected, this may impair performance and recovery, increasing injury risk. It may persist into adulthood, leading to nutritional deficiencies.

Keywords: Diet, Malnutrition, Football, Athlete