Knowledge, attitudes and practices on the use of European Number System and International Numbering System for coding food additives, among medical students of the Faculty of Medicine, University of Kelaniya.

Faculty of Medicine, University of Kelaniya

Introduction
Food additives are natural or synthetic substances which are added to food items to increase the durability & properties. When labeling food additives are cited on ingredient section using E-numbers or INS. The literature suggests consumers do not appear to pay attention to labeling information.

 Objective
To describe the knowledge on the use of European Number and International Numbering System for coding food additives among the medical students of Faculty of Medicine University of Kelaniya.

Method
 Design - Cross sectional descriptive study
 Study setting - Faculty of Medicine, University of Kelaniya
 Study period - From December 2019 to January 2020
 Study population - Medical undergraduates at the Faculty of Medicine, University of Kelaniya.
 Sample size: 384
 Sampling technique - Simple random sampling
 Data collection instrument - MCQ & check list type questionnaire focused on responder’s knowledge on food labelling, food additives and E number and INS coding systems.
 Data collection - Self administered questionnaire
 Data processing & Analysis - Descriptive statistics used to recognize the distribution of the students demographic factors collected during the study. Data was analyzed using IBM SPSS Statistics (version 25) statistical software.

 Results

Table 1: Basic demographic data of the study population.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>241</td>
<td>62.8</td>
</tr>
<tr>
<td>Male</td>
<td>143</td>
<td>37.2</td>
</tr>
<tr>
<td>Mother’s education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>50</td>
<td>13.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>158</td>
<td>41.1</td>
</tr>
<tr>
<td>Tertiary</td>
<td>176</td>
<td>45.8</td>
</tr>
<tr>
<td>Monthly income of the family (Rs.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;10 000</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td>10 000 – 20 000</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td>20 000 – 50 000</td>
<td>109</td>
<td>28.4</td>
</tr>
<tr>
<td>50 000 - 100 000</td>
<td>152</td>
<td>39.6</td>
</tr>
<tr>
<td>100 000 – 500 000</td>
<td>83</td>
<td>21.6</td>
</tr>
<tr>
<td>&gt;500 000</td>
<td>14</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Knowledge on food additives was higher among females(Figure 1), students of mothers with higher education (Figure 2) and students with monthly family income between Rs.50,000-100,000. (Figure 3)

Majority of the population is ill informed on E-numbers /INS coding system and health issues arising from harmful food additives. (Figure 4 and Figure 5)

Conclusion
Majority of the population was ill informed on E-Numbers and INS coding system irrespective of gender, maternal education level and monthly income of the family. Most of them used their knowledge on food additives while purchasing food products rather than using the knowledge on E-numbers. There was no significant variance in the knowledge on health issues arising from harmful food additives between gender, mother’s education level and monthly income of the family. Most of them were intended to use internet based sources to improve their knowledge on E-number/INS coding system.

Recommendation
Publish a poster in faculty canteen to improve the knowledge on E-Numbers and INS coding system among the medical students.

References


Acknowledgement
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