

Assessment of Consumption Pattern and Awareness of Fast/Instant Foods among University Students in Sri Lanka

Mihiri Munasinghe, J. A. E. C. Jayawardena, Rumesh Liyanage, K. G. S. C. Katukurunda⁴
Department of Food Science and Technology, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka

Abstract— Changing dietary patterns have led the people to consume more convenient foods including fast/instant foods. Purpose of this study was to assess consumption pattern and awareness of fast/ instant foods by Sri Lankan university students. A survey was conducted and data collected from randomly selected 150 students aged 20-27 years representing four graduate faculties (Science, Medical Science, Management Studies, and Arts) in university of Sri Jayewardenepura using a questionnaire. The trend towards fast/instant foods, mostly consume such food types, awareness for labeled information of fast/instant foods, and beliefs and attitudes on associated health risks of fast/instant foods were determined. Majority (more than 50%) consume fast/instant foods for their main diets (70%), additional diets (89.2%) as well as for desserts (62.5%). According to them, prominent reason for selecting fast/instant foods was the convenience in preparation (36.7%). In buying such foods, no faculty wise (knowledge based) significant difference ($P>0.05$) was there among the students on the attention paid for the food label. The aspect on which they pay the least attention in buying such food was nutritional composition (60%). Students from the faculty of Applied Sciences have the highest awareness for labeled information related to health. A considerable proportion (95%) of students have gained an awareness regarding the health risks of fast/ instant foods and also such high proportion (85%) practically implement that awareness positively in their buying decisions of such foods.

Index Terms—Fast foods, instant foods, consumption, university students

I. INTRODUCTION

Globalization has greatly affected one's eating habits forcing them to rely on foods away from home (Ashakiran and Deepthi, 2012). Emerging trend of

“Fast” food restaurants can be considered as a result of more eating outs. Factors like ready availability, taste, low cost and marketing strategies make them popular among public. Term “Fast” food refers foods that can be served ready to eat (Kaushik et al., 2011). “Instant” food is a kind of food which can be prepared in short time (Macmillan dictionary). In this study, junk foods and precooked foods were considered as fast foods and foods required little preparation before eating were considered as instant foods.

Consumption of such foods has given rise for many non-communicable diseases such as type 2 diabetes and cardiovascular risk (Hu and Malik, 2010). Intake of fast foods and such dietary behaviors is associated with increased weight gain from adolescence to adulthood (Niemeier et al., 2006). The negative effects of consumption of excess salt containing junk foods on health include hypertension and calcium mal-absorption (Cruz et al., 2011).

University students represent the highest educated portion of a population in a particular country. Therefore, studying the consumption pattern and awareness of fast/instant foods among university students will be helpful in getting an idea about up to what extent education involves with consumption behavior of foods. On the other hand, university students have to depend more on fast/instant foods with their busy life styles. Therefore this will be a convenient sample in studying reasons behind the scenario. There are no previous studies regarding this issue done with university students and this study help to understand the underlying reasons of fast food consumption as well as up to what extent university

students' have gained an awareness regarding such foods.

The objectives of this study were to determine the degree of trend among university students' towards fast/instant foods, to identify the types of fast/instant foods which are mostly consumed by university students, to determine the awareness for labeled information of such foods and to evaluate the beliefs and attitudes on the associated health risks of fast/instant foods.

II. MATERIALS AND METHODS

The study was conducted in University of Sri Jayewardenepura, Sri Lanka during the month of June 2015. A convenience sample of randomly selected 150 students representing four undergraduate faculties (Science, Medical Science, Management Studies, and Arts) completed a questionnaire. From each faculty, 30 students were participated. A brief guidance was given to every student prior completing the questionnaire and asked them to fill up it with 100% accurate data.

In order to determine the trend for fast/instant foods, percentage of students who consume such foods for main/additional diets as well as for desserts were calculated. In addition to that, reasons behind consumption of fast/instant foods were evaluated.

A list of commonly consuming fast/instant foods was provided and participants were asked to rank them according to their frequency of consumption to determine the most commonly consuming fast/instant foods.

In determining the awareness for labeled information, few questions were provided regarding following areas.

- Whether they pay or not an attention for the label of food in buying such foods,
- If they pay an attention, what are the points they consider.

In assessing beliefs and attitudes of students for associated health risks of fast/instant foods, their awareness on that issue as well as ability of that awareness to make a positive health impact in buying decisions were determined.

The statistical analysis as well as the graphical representation of data was done using Minitab 17.0 software. Kruskal-Wallis test was used to determine the faculty wise differences for attitudes and beliefs of students.

III. RESULTS AND DISCUSSION

Sample represented the students in age group of 20-27 years. Of the participants 64% were female and 36% were male. From the sample, 78.3% were not employed and the rest (21.7%) were employed.

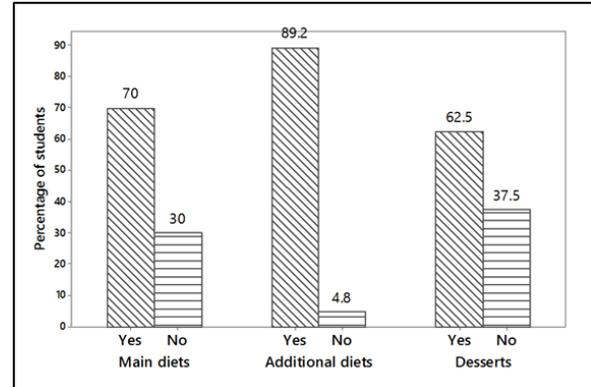


Fig. 1-Percentage of students who consume fast/instant foods for different diets

Fig.1 illustrates the overall percentages of students who consume fast/instant food for their main diet, additional and as a dessert. Considering main diet, 70% of participants consume fast/instant foods. Of the participants, 89.2% consume fast/instant foods as additional diet and it achieves the highest consumption among all three diets and 62.5% of the participants consume as a dessert.

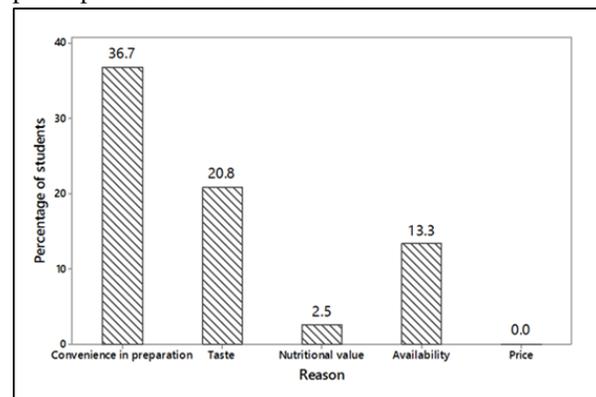


Fig. 2-Percentage of students for each reason which selected as their 1st choice

According to Fig.2, 36.7% of participants have selected "Convenient in preparation" term as their 1st choice to choose instant/fast foods and it was the highest percentage compared to other reasons.

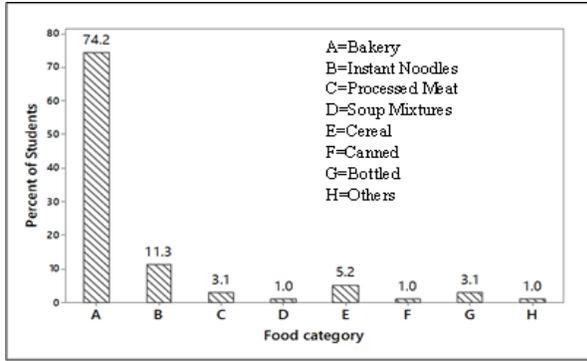


Fig. 3- 1st choice for given food categories in main diets

Fig. 3 illustrates percentage of students who assigned number 1 for different food categories as main diets. The highest percentage of 74.2% is achieved by Bakery foods. Other products were also consumed for main diets, however in small percentages of population.

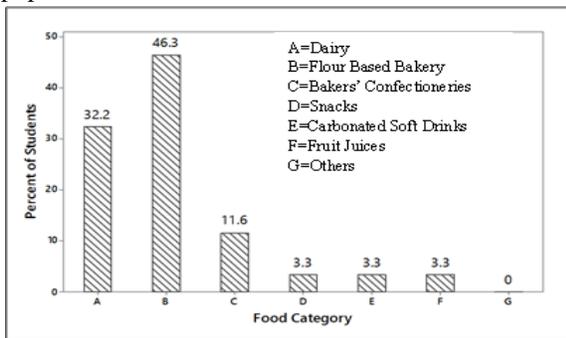


Fig. 4- 1st choice for given food categories in additional diets

Of the participants, 46.3% were taken Flour based bakery products for additional diets and it is the highly consumed food category. Rests of the products were consumed in less compared to it.

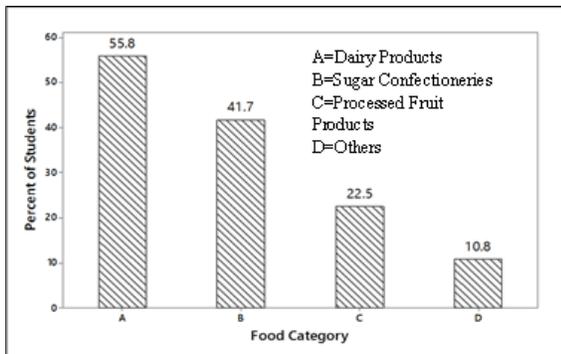


Fig. 5-Percentage of students for different food categories of desserts

According to the results in Fig 5, 55.8% of the participated students consume Dairy products which were the highly consumed food category. 41.7% of them consume sugar confectioneries also. Rests were consumed in fewer quantities.

Students were asked whether they pay any attention towards the labeled information of fast/instant foods in consuming them and a lickert scale was provided to gather the data. According to the results of Kruskal-Wallis test, there was no significant difference ($P>0.05$) among the 4 faculties regarding the degree of attention they paid. Here, the highest average rank value has reported by the faculty of Medicine (68.7). Management studies (65.5), Science (54.3) and Arts (53.6) faculties have shown the other values from highest to lowest order respectively. Thereby, it can say that, students from Faculty of Medicine pay the highest attention for the label compared to the other faculties in consuming a fast/instant food.

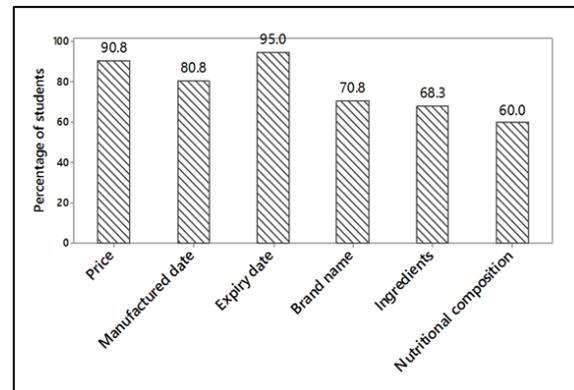


Fig. 6-Percentage of students for different aspects of a food label

Among students who pay attention towards labeled information of fast/instant foods, majority pays the attention for expiry date, with a 95.0%. Fig. 6 shows how the percentage of students varies for different aspects of a food label. The aspect, students consider the least was the nutritional composition.

When considered about the awareness for labeled information related to health, there were significant differences ($P<0.05$) among the faculties. Faculty of Arts was significantly different from both Medical and Science faculties and it has the lowest average rank (44.5) value. Here, students from Science faculty have the highest awareness for labeled information related to health. Medical and

Management faculties have the next higher average rank values.

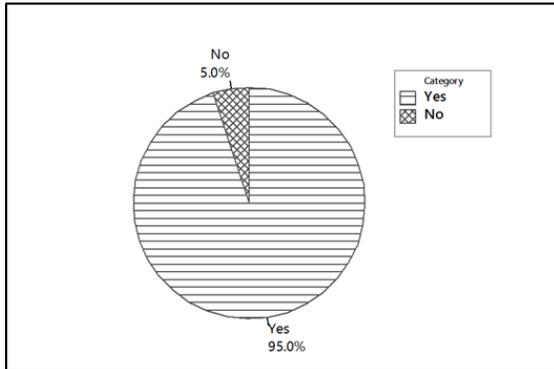


Fig. 7-Awareness for health risks associated with fast/instant foods

According to Fig.7, 95.0% of the overall student population in the University aware about consumption of fast/instant food may have health risks and rest of 5.0% students not aware about that issue.

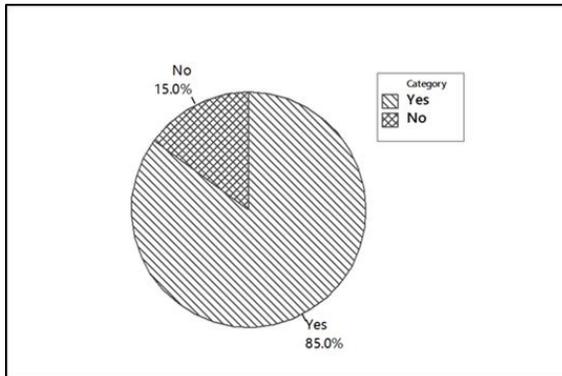


Fig. 8-Does the awareness related to health issues of fast/instant foods capable in making a positive impact on buying decisions?

As shown in Fig. 8, of the participants, 85.0% said that awareness about health risks of instant/fast food having a positive impact on the buying decision and 15.0% of students not having a positive impact on it.

IV. CONCLUSION

Findings reveal that, consumption of fast/instant foods by university students is considerable for all three tested diet types. They consume fast/instant mainly for their additional diets. Convenience in preparation is the main reason for consumption. The majority consume bakery foods for main diets and additional diets. For desserts, dairy products are the prominent category. No faculty wise significant difference

among students in paying attention to a label of fast/instant food in consuming them. Least attention is paid for nutritional composition in buying such foods. Students from Science faculty have the highest awareness for labeled information related to health. Significant proportion has gained the awareness regarding the health risks of fast/instant foods and also that awareness is capable in making a positive health impact to a higher proportion of students in their buying decisions.

REFERENCES

- [1] Adriano Cruz, José Faria, et al. Cheeses with reduced sodium content: Effect on functionality, public health benefits and sensory properties. *Trends food sci technol* 2011; 22: 276-291
- [2] Ashakiran and Deepthi R. 2012. Fast Foods and their Impact on Health, *Journal of Krishna Institute of Medical Sciences University*, 2(1), 7-15.
- [3] Hu FB, Malik VS. Sugar-sweetened beverages and risk of obesity and type 2 diabetes: epidemiologic evidence. *Physiol behave* 2010; 1:47-54.
- [4] Jaya Shankar Kaushik, Manish Narang and Ankit Parakh, 2011. Fast Food Consumption in Children, *Indian Pediatrics*, 48, 97-101
- [5] Niemeier HM, Raynor HA, et al. Fast food consumption and breakfast skipping: predictors of weight gain from adolescence to adulthood in a nationally representative sample. *J Adolesc Health* 2006; 39: 842-849