



## **SOCIO-CULTURAL PARAMETERS INFLUENCING MEAT CONSUMPTION PATTERNS AMONG UNDERGRADUATES IN SRI LANKA**

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Meat is a primary source of protein. The market offers two major types of meat: raw and processed. Undergraduates with tight schedules of academic and extracurricular activities pay little attention to nutrition. The consumption of meat and meat related products among the undergraduates of Sri Lanka has rarely merely been discussed. Especially, studies about the effect of socio-cultural parameters on undergraduate meat and meat product consumption are rare. Therefore, this study investigated the effect of several socio-cultural parameters on the consumption pattern of meat and meat related products among undergraduates with 203 randomly selected undergraduates from all six faculties of Wayamba University of Sri Lanka. Data analysis was done by using Microsoft Office Excel 2021 and chi-square test of R statistical software. Out of the total respondents,  $n = 164$  (80.9%) were meat consumers, whereas  $n = 38$  (19.1%) were non-meat consumers. Moreover, among all meat consumers  $n = 128$  (78.8%) respondents consumed both raw and processed meat types, while  $n = 23$  (14.5%) consumed only processed meat, and  $n = 11$  (6.7%) consumed only raw meat. The chi-square results of the study suggested that both raw and processed meat consumption has no significant effect ( $p > 0.05$ ) from gender ( $\chi^2 = 0.212$ ,  $p = 0.900$ ). Similarly, this study showed neither the economic status of the family ( $\chi^2 = 14.393$ ,  $p = 0.881$ ), nor the engagement in a part-time job ( $\chi^2 = 0.254$ ,  $p = 0.156$ ) has a significant effect ( $p > 0.05$ ) on meat and meat product consumption among undergraduates. Out of all the tested socio-cultural parameters, it is inevitable to conclude that meat consumption was significantly influenced ( $p < 0.05$ ) by religion ( $\chi^2 = 24.570$ ,  $p = 0.0004$ ). Health concerns due to the presence of a high amount of sodium and saturated fats in processed meat were reasoned by non-consumers of processed meat as the justification for their decision. Religion was a significant factor among undergraduates to have concerns on meat and meat product consumption. Rejecting processed meat suggested that undergraduates have a considerable health concern about themselves.

**Keywords:** Health concerns, meat consumption, Socio-cultural factors, undergraduates, Wayamba University of Sri Lanka

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### **INTRODUCTION**

Meat is an abundant source of protein and micronutrients that make up a typical balanced diet (Jung et al., 2015). For Sri Lankans, the per capita meat availability for is highest for chicken as 10.68 kg/head, followed by beef (1.20 kg/head), mutton (0.44 kg/head), and pork (0.15 kg/head) (Department of Animal Production and Health, 2021). In the context of meat and meat products, consumers prioritize safety assurance, quality standards, and reliable product information along with animal welfare and convenience factors (De Silva et al., 2011). Additionally, the consumption patterns of meat and meat products are influenced by a complex set of interrelated factors including cultural norms, socioeconomic status, social reference groups, and household responsibilities (Apata et al., 2017).

In general, the community of university undergraduates in Sri Lanka is highly variable due to its multi-ethnic and multi-religious nature. Additionally, University undergraduates face economic hardships (Mahees, 2020) due to the challenging economic conditions of the country and this eventually limits their access to meat and meat products (Nasith et al., 2023). Only a few studies have been conducted about the consumption of meat and meat products by university undergraduates in Sri Lanka. Among those, studies about socio-cultural effects on meat consumption are extremely rare. This study aimed to investigate the effect of different socio-cultural parameters on the consumption pattern of raw and processed meat among undergraduates of Wayamba University of Sri Lanka.

### **METHODOLOGY**

#### **Questionnaire preparation**

The questionnaire was designed to collect preliminary data on the socio-cultural factors influencing the consumption patterns of raw and processed meat products among undergraduates of Wayamba University of Sri Lanka.

#### **Structure of the questionnaire**

The questionnaire was composed of six main categories. In the first category, demographic information of respondents was recorded. In the second category,



out of the total respondents, “non-meat consumers” were identified and asked to provide reasons for their dietary choice. In the third category, out of total respondents, “meat consumers” were identified and categorized based on their meat consumption (only raw meat, only processed meat, and both raw and processed meat). The fourth category targeted individuals who consume “only raw meat”, with specific questions related to their consumption pattern. The fifth category addressed those who consume “only processed meat”, asking detailed questions about their preference. Finally, the sixth category included respondents who consume “both raw and processed meat”, with questions designed to understand their dual consumption pattern.

### **Sampling and data collection**

This study was carried out at Wayamba University of Sri Lanka and data were collected from July 2023 to February 2024. Data were collected from all six faculties by interviewing 30 undergraduates from each faculty. This was done to include a diverse range of student perspectives and to cover all faculties within the university. In total, 180 undergraduates were interviewed, with participants approached randomly. Out of the total number of questionnaires, 178 were usable, representing a 99% successful response rate.

### **Data analysis**

The data management and analysis were done using Microsoft Office Excel (2016) and R Studio (R 4.4.2 version). To examine the effect of socio-cultural parameters on meat consumption, the Chi-Square test was employed. The main purpose of employing the Chi-Square test was to determine the statistical independence and association of the tested categorical variables. The significance level was set at  $P < 0.05$  for the Chi-Square test.

## **RESULTS AND DISCUSSION**

Out of the total respondents, 182 (89.7%) were identified as Buddhist. According to the gender, the majority of 149 (73.4 %) respondents were female. Regarding the monthly family income, 78 (38.4%) respondents were reported to have a monthly income below 50,000 LKR. Additionally, 19 (9.4%) respondents were engaged in part-time jobs.

Out of the total respondents of 203, 164 (80.8%) consumed meat, whereas 39 (19.2%) were identified as non-meat consumers. Among all meat consumers 128 (78.8%) respondents consumed both raw and processed meat types, while 23 (14.5%) consumed only processed meat, and 11 (6.7%) consumed only raw meat. Moreover, out of non-meat consumers, 8 (20.5%) respondents claimed that the primary reason for not consuming meat was an ethical concern about animal welfare, followed by 5 respondents (12.8%) due to religious beliefs and 4 respondents (10.3%) due to financial constraints. The effect of each socio-cultural parameter on the consumption of raw and processed meat is shown in



table 01, and findings indicated that only the religion of undergraduates had an impact ( $P < 0.05$ ) on the consumption of raw and processed meat.

Table 1: The effect of socio-cultural parameters on consumption of raw and processed meat (n = 164)

Socio-cultural parameter	p value	Effect on consumption of raw and processed meat
Gender	0.900	NS
Religion	0.0004	*
Monthly family income	0.881	NS
Engagement in a part-time job	0.156	NS

**Note: \* denotes the significance at  $p < 0.05$ ; NS denotes non-significance**

According to the results, the statistical analysis of socio-cultural parameters indicated that there is no significant effect of gender on consumption of either raw or processed meat. Similarly, neither the monthly income of the family nor the engagement in a part time job has a significant effect on the consumption of either raw or processed meat. As indicated by the results, only religion has a significant effect on the consumption of raw or processed meat among the undergraduates of Wayamba University of Sri Lanka. Out of the meat consumers, non-consumers of processed meat cited health concerns specifically the high amount of sodium and saturated fats, as the reason for their choice.

### CONCLUSIONS/ RECOMMENDATIONS

Out of all the tested socio-cultural parameters on meat consumption of undergraduates of Wayamba University of Sri Lanka, religion is the socio-cultural parameter having a significant effect on the consumption of meat or meat products. Therefore, in the process of purchasing and preparing meat and meat products, certifications such as *Halal* should be implemented to overcome religious barriers of undergraduates in meat and meat product consumption. Given that the financial status of undergraduates does not significantly impact their consumption of meat and meat products, canteens must provide appropriate portions of these items at reasonable and fair prices to accommodate student needs. Results obtained in this study are based on a small sample size and cannot be used to make judgements about a larger population such as society. Hence, this study should be extended with a larger sample size.

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