

## **Patterns of fresh fruit consumption of households in Kurunegala**

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### **Introduction**

Agriculture is the most common vocation of the Sri Lankan. Different varieties of fruits are cultivated in Sri Lanka's varied agro-climatic regions. Fruits play a major role in the well-being of consumers. Consumption of fruits contributes to an increase in the nutritional level of people. The food pyramid developed by the United States Department of Agriculture (USDA) recommends, 2-4 servings of fruits per day (Life clinic international, 2010). According to MRI the daily per capita requirement of fruits for a balanced diet should be 30-40 g (edible portion), which is approximately equivalent to 25-40 kg fresh fruit per head per year. However, Sri Lanka's per capita consumption of fruits and vegetables remains far below the required average daily intake (Ceylon Chamber of Commerce, 2010). In the process of enhancing fruit consumption, it is very useful to consider the needs, preferences and behavior of consumers. The main objective of this study is to find demand for different fruit types and the factors that influence households consuming of different fruit types.

### **Methodology**

A deductive research approach was followed. Survey strategy was used as a research strategy. Primary Data were collected through an interviewer administered questionnaires and most research questions had descriptive purposes. Before collecting data pilot test was used to identify the problems while responding to the questionnaires. Kurunegala District in North Western Province, was selected as the research area. It consists of 30 Divisional Secretariats, 1610 Grama Niladari Divisions and 4476 total Villages (Department of Census and Statistics, 2009). Kurunegala district has 412,897 households (District Statistical Branch, Kurunegala). The sample size was about 153 households which are from Kurunegala District. The stratified random sampling technique was used as sampling method to select households Types of fresh fruit consumption among different households and consumption frequency of different fruit types were analyzed by descriptive analysis. Chi-square Test was the statistical analytical tool applied in identification of consumption pattern of across various household groups. Microsoft Excel and Minitab 14.0 Software programs were used to analyze the data.

### **Results and Discussion**

Results reveal that there is no significant difference between three types of locality groups (urban, semi urban and rural) when they are consuming fruits. But rural residents had low expenditure on fruits compared to the urban and semi-urban resident, due to varieties of local fruit available in their home garden. Banana, papaw, mangoes and pineapple are the major fruits consumed in the Kurunegala District. The majority of the respondent did not intake fruit as daily consuming food. In Household fruit consumption, those who do not consume fruits daily, consume fruits around 3-4 days per week. In the study household banana consumption was 3 days per week while papaya, mango, and pineapple are consumed 2-3 days in a week. According

to the food pyramid developed by USDA, Kurunegala district household's fruit consumption is lower.

### Relationship between Social, Economic Characteristics and Fruit consumption

Studies prove that age, gender, household size, income, occupation, education level, marital status significantly affects household fruit consumption (Whichelow and Prevost, 1996; Mirmiran *et al.*, 2009; Billson, 1999). The data were in line with previous findings from the USDA, that the major factors affecting fruits consumptions were income, age and education of consumers (Biing, 2004). Table 01, shows there are significant relationships between marital status, occupation, education level, income with household fruit consumption at the 0.05 significance level. At the same time, there were no significant relationship between gender, household size and age towards household fruit consumption at the 0.05 significance level. Therefore, in this study, household income, occupation, marital status, and education level have a significant relationship with household fruit consumption and age, household size and gender did not significantly affect the household fruit consumption.

Table 1: The Association between Socio Economic Characteristics and Fruit consumption

Factor	Chi Square value	D F	P value
Marital Status	99.000	9	0.000*
Occupation	10.763	4	0.029*
Education level	148.665	4	0.000*
Income	18.416	4	0.001*
Gender	7.307	4	0.121
Household size	7.169	4	0.127
Age	8.939	6	0.177

\* Significant at 0.05 significance Level

Considering the preference to consume fruits, according to the gender, males consume same amounts of fruit as females. Age also seem to be indifferent in fruit consumption in households. Children, young, middle age, and adult group have the same preference to consume the fruits.

The study proves income has a significant effect on household fruit consumption. Besides the financial aspect just indicated – higher education generally means higher income. This could be correlated with greater knowledge and awareness of healthy eating habits in those households with higher education levels. The study also shows the marital status to have a significant effect on household fruit consumption at the 0.05 significance level. Being married positively impacts on the amounts of fruit consumed due to the Women seem to have a positive influence on their family intake, frequency, amounts and variety of the fruit eaten.

### Social environment and Personal factors affecting to fruit consumption.

Availability of and access to fruit in the home garden is important for consumption of fruit. Similarly, the availability of and access to fruit and vegetables in the home is important for consumers in both children and adults. Also, concerning of fruit has high nutritional value, fruit can be taken as fast fruit and taste of different type of fruit, household member encourage them to eat fruit had an impact on their fruit consumption.

## Conclusion

Banana, papaw, mangoes and pineapple are the major fruits consumed in the Kurunegala District. In Kurunegala district, Household fresh fruit consumption is averagely five to six fruit species per 3-4 days a week. Results showed that fruit servings per week have a significant relationship with education, monthly income, marital status, and occupation. Gender, Household size and age do not significantly affect the consumption of fruit. Marital status seems to play a significant role in the consumption of fruit. Being married is associated with increased fruit intake while being single/ divorced/ separated is associated with lower levels of fruit consumption. Low-income households spend less than higher income households on fruits. Therefore, understanding the consumption difference between income groups is important for targeting interventions for healthy eating. However, high costs may negatively impact on fruit intake levels. This does not only concern low income groups. Also, people with higher incomes perceive price as a barrier to consumption of these foods. Individual preferences, parental intake and home availability/accessibility towards fruit have an impact on consumption levels. The study proved Home gardens are a rich source of fruits, and have the potential of improving both intake and diversity of fruits in the diet.

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