

EXECUTIVE SUMMARY

Fruits play a major role in the health of the consumer and consumption of fruits contributes to an increase of his nutrient level. Eating five or more servings of colorful fruits and vegetables a day is part of an important element for healthier living because, fruits and vegetables provide a wide range of vitamins, minerals, and fiber which human body needs to maintain good health and energy levels and to protect against the effects of ageing and to reduce the risk of cancers and heart disease (Ministry of Health, 2006). Low fruit and vegetable consumption is an important risk factor that contributes to the rising global level of chronic diseases. However, Per capita consumption of fruits in Sri Lanka is lower than the quantities recommended by nutritionists. Medical experts have recommended that each person's diet must contain at least 100 grams of fruits per day. But in Sri Lanka per capita consumption of fruits is 40grams per day. In the process of developing the fruit sector, it is very useful to study the needs, preferences and behavior of consumers and the factors affecting the low consumption of fruits. Hence, there is a clear need to understand the factors influencing the consumption and consumer preferences for fresh fruits and the bottlenecks preventing consumers from buying and consuming more fruits.

The major objective of the study is to identify the factors influencing low consumption of fruits. To identify the existing consumption pattern and buying behavior of fruits among the different income group of households in the Western Province of Sri Lanka, and to probe the consumer awareness of the health benefits of fruit consumption are the other objectives of the study. All three districts (Colombo, Gampaha and Kalutara) in the Western province were purposively selected for this study. Six DS Divisions were selected from each district to represent different contexts, such as Least poor (Rich), Average, and Poor according to the Head Count Index of the Department of Census and Statistics in 2002 (Head Count Index is defined as the percentage of population below the poverty line). 450 households were selected randomly for questionnaire survey.

According to the findings, inadequate fruit consumption was common in all the income categories in selected districts. Non availability of fresh and tasty fruits due to using chemicals to ripen them, high price, and seasonality were identified as the major significant factors responsible for low consumption of fresh fruits. The results from the study revealed that monthly consumption of fresh fruits is highly dependent on family income and number of family members. Main occupation and education level of the main householder and age of the main consumers were other significant contributing factors for the consumption of fruits. The rest of the factors like, religion, gender, family type and nationality were not significant with respect to the quantity of fruit consumption.

When considering the expenditure on fruits in all the three districts as a whole, it only occupies a tiny fraction of the monthly total food expenditure and is recorded at nearly 3%.

Banana is the most consumed variety as a single fruit by the respondents in all the three districts. Banana is consumed by 65% of the consumers in Colombo, 72% of the consumers in Gampaha and 51% of the respondents in Kalutara, followed by Papaw. Among the banana varieties, *seeni* and *ambul* are the most popular varieties consumed by the sample respondents.

Age differences in fruit consumption can also be seen in all the areas. Small children are the major fruit consumers; both local and imported fruit varieties in all the three districts, followed by young children.

There are six factors considered by the sample respondents when purchasing fruits; 1) The way of ripening fruits (Quality), 2) Price, 3) Family preferences, 4) Availability, 5) Appearance, 6) Convenience of purchase. Within these factors the way of ripening fruits (Quality) was the first factor considered by the sample respondents in all the three districts and family preferences and price were the next considerations. However when analyzing the income category, higher percentage of consumers in poor category were more concerned about the price than the quality while rich and average category consumers were more concerned about the quality (the way of ripening the fruits) than the price.

A notable proportion (49% in both Colombo and Gampaha, 48% in Kalutara) of the consumers were unaware about the health benefits of fruits and more than 92% of the sample respondents in all the three districts reported that they were not aware of the quantity of minimum daily intake of fruits.

The study revealed that, consumers are more concerned about the way of ripening fruits. They were reluctant to buy fruits due to poor ripening methods and majority of them reported that the fruits which are not naturally ripen, have no real taste. They also thought it was harmful for their health specially their children' health. Level of pesticide used by cultivators and over spraying of some chemicals on fruits to ripen is not monitored in Sri Lanka as well as in most of the developing countries. In consumers' point of view, they expect fruits which are tasty, readily available, affordable, convenient to acquire, safe and healthy. There is a need for policies to promote and support fruit consumption. The general principles to promote fruits such as availability, accessibility and affordability have been already addressed by the government to some extent, but proper attention has not been paid still for the factor of acceptability (quality, taste safety). Majority of consumers required the availability of naturally ripened good quality fruits to improve fruit consumption.

This study recommends that, existing Government policies and rules which support the fruit availability, affordability, and accessibility have to be improved. Imposition of new policies and regulations regarding the acceptability (Quality, taste, safety) are also urgently required. Information on health benefits of sufficient fruit consumption should be widely disseminated to consumers through awareness programs. Policies are needed to empower farmers and traders to ensure supplies of safe and quality fruits. Providing education to farmers, retailers, wholesalers, and supermarkets etc. on

safety fruit production, improving harvesting and selling practices are also needed. The product must be fit for human consumption. Hence, pesticide levels and over sprays of some chemicals on fruits to ripen have to be monitored by the government by using relevant authorities. New regulatory framework for that is also urgently required. It is urgent to educate parents on food and nutrition regarding children's dietary intake of fruits at home. Through Pre-schools, schools, government offices, messages could be passed on to the public and it will help to increase fruit consumption.