Identification of food habit of urban and rural people in the Southern District of Bangladesh

Suprakash Chakma, Md. Sazedul Hoque, A.K.M. Nowsad Alam

Abstract
Food habit as well as the frequency of taking major food items of both the urban and rural areas and a total of 200 households were selected for data collection from January to May, 2014. Collected data were summarized and scrutinized by using Excel 2007 format. Among the major food items, carbohydrate was the highest (260.9 g/capita/day) in rural areas whereas sugared beverage was the highest (235.46 g/capita/day) in urban areas. Fish products more consumed in rural area (158.67 g/capita/day) than in urban area (118.03 g/capita/day). Another, consumption of meat consumed more in rural area (133.47 g/capita/day) than in urban area (104.25 g/capita/day). The present study amplifies a good lesson for the other rural people of the country to increase cheaper food production like fish, poultry, ponds and gardens in order to increase family nutrition.

Keywords: Food habit, fish products, meat products.

1. Introduction
Bangladesh is one of the most densely populated developing country, where more than 50 percent of population lives below the poverty level. Food habits of the people reflects the geographic and climatic conditions of the land as well as effect of social and religious customs. Food consumption in Bangladesh is dominated by cereal of which rice is the dominant item followed by wheat. Rice and wheat account for 62% and 54 % of total intake of all foods per capita per day for rural and urban people respectively (Humaywn, 1995) [11]. In terms of nutritionally intake rice and wheat constitute about 84% of total calorie consumption and more than 65% of protein intake per capita per day (BBS, 1986) [2]. The deltaic plains of the country are drained by a large number of rivers and soaked by abundant rainfall round the year. Fish is a major food staff of the world and in contrast of Bangladesh fishes are being considered as one of the main national food item than other food products. Although Fish (including shrimp and prawn) is the second most valuable agricultural crop in Bangladesh. Being a riverine country, different species of fish are captured and also significant amount of fishes are produced through aquaculture systems to meet the food and nutritional demand of growing population every year. Fish consumption in Bangladesh is lower than international requirements of 49 g, whereas meat consumption is 3.1 kg/capita/month (FAO, 2004) [3]. According to DoF (2012-2013) [6], fish consumption in Bangladesh is about 52.88 g/capita/day whereas the national demand of fish protein is 60 g/capita/day (21.9kg/capita/year). Besides these food products, there are various majors’ food items in both the urban and rural areas are being identified. Food consumption patterns are affected by socio-cultural factors, determining food availability, access and utilization. These factors have through the ages made cultivation of rice and fishing the chief occupations of the people. It is beyond the scope of this study to attempt the consumption and demand of food products as well as fish are being met in the coming years then agriculture will play a major role. Therefore, the objective of the present study is to identify of different food products and their frequency of consumption of food items in urban and rural areas.

2. Material and methods
2.1 Selection of the study area
The objectives of the study was selected of urban and rural areas in Southern six (6) districts viz., Barisal, Bhola, Borguna, Jhalakathi, Patuakhali and Pirojpur of Bangladesh.
2.2 Sampling
Two hundred (200) households and general peoples were selected randomly and surveyed with a selected questionnaire in a silent place. The questionnaire were developed, genuinely conducted and pre-tested in field situation and necessary modifications were made prior to final data collection.

2.3 Methods of data collection
The whole survey was conducted after the preparation of the final schedules. The study was based on households and general people level; Primary data were collected from the area basis respondents by direct interview with a set of questionnaire as designed for this study. During interview, questions were asked systematically and explained the questions whenever it was necessary. After completion of each set of questionnaire, the schedule was checked to verify that the answers were obtained adequately, if not they were again interviewed for relevant answers. In order to minimize errors, data were collected in local units. These were subsequently converted into appropriate standard units.

2.4 Data analyses
After collecting, data were sorted and encoded. All the collected data were summarized and scrutinized tabulated and carefully subjected to the descriptive analyses using the computer software MS Word and Microsoft Office Excel 2007 to understand the differences of the variables.

3. Results and discussion
To identify the food habit and food consumption pattern as a result the quantity of food products were analyzed both of urban and rural people and clarifies how much they took in their daily traditional dishes. The preferred foods consumption pattern of different foods viz., rice, fish, meat, milk and vegetables in both the urban and rural areas have been analyzed. Consumption of food products was more diversified in the rural areas. Generally households and general peoples took their foods which originated at home. Both in urban and rural areas, among the major food products, carbohydrates, vegetables and milk were more consumed than other food viz., fish and fishery products, meat, milk, prepared and processed food, snacks or candies. In the urban areas, quantity of major foods taken was more fluctuated in both the urban area and rural areas. The elite peoples choose the food items like, fruits and vegetables, fish and fishery products, meat, milk, prepared and cooked fish and ready to cook fish etc. but the quantity of these food items was slightly less than the rural areas. Carbohydrate based food items were highly consumed by the rural people than urban people. On the other hand, sugared beverages (235.46 g/capita/day) were highly consumed by the urban peoples followed by fruits and vegetables (216.60 g/capita/day) (Table-1). According to table-1, on the basis of quantity, carbohydrate was the 3rd position (189.85 g/capita/day) for urban area which was the top most value (260.09 g/capita/day) for rural area. The result confirmed that in both urban and rural areas carbohydrate based food item was the major food items. Among the food items prepared and processed food and snacks and candies were lower in consumption in both urban and rural areas. However, between the areas, rural area has the higher consumption for these two food items than urban area.

<table>
<thead>
<tr>
<th>Major Food Items</th>
<th>Average intake of foods (g)</th>
<th>Urban area</th>
<th>Rural area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish products</td>
<td>118.03</td>
<td>158.67</td>
<td></td>
</tr>
<tr>
<td>Cooked fish</td>
<td>99.25</td>
<td>153.75</td>
<td></td>
</tr>
<tr>
<td>Meat product</td>
<td>104.62</td>
<td>133.47</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>152.01</td>
<td>192.01</td>
<td></td>
</tr>
<tr>
<td>Dairy products</td>
<td>99.95</td>
<td>104.26</td>
<td></td>
</tr>
<tr>
<td>Fruits and vegetables</td>
<td>216.60</td>
<td>192.41</td>
<td></td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>189.86</td>
<td></td>
<td>260.9</td>
</tr>
<tr>
<td>Beverages</td>
<td>235.46</td>
<td></td>
<td>153.85</td>
</tr>
<tr>
<td>Processed food</td>
<td>44.83</td>
<td></td>
<td>72.84</td>
</tr>
<tr>
<td>Snacks/candies</td>
<td>61.80</td>
<td></td>
<td>125.19</td>
</tr>
</tbody>
</table>

In case of fish products, rural people (158.67 g/capita/day) have higher consumption than that of urban people (118.03 g/capita/day) (Table-1). Diversified fisheries resources and direct involvement of rural people in fisheries sector made available supply of fishery products in rural area than urban area, resulting higher consumption of fish and fishery products by the rural people.

The major groups of fishes were equally consumed in both urban and rural areas. Fish is the most important animal source food in Bangladesh, accounting for approximately 66% of total intake (BBS, 2007). The dietary contribution of fish is more significant in terms of animal protein, since 150 g of fish can provide about 50-60% of the daily protein requirement for an adult (FAO, 2012) [3]. Dey et al. (2010) [3] report that an average consumer in the poorest quartile consumes just 39% of the fish consumed by an average consumer in the richest quartile, and poorer consumers pay a lower average price per kilogram for fish than better-off consumers. The fish and...
fishery products consumption in surveyed rural area was quite higher (158.64 g) than FAO prescribed limit (150 g) but lower in urban area (118.03 g) which should be increased by increased fish consumption. According to FAO (1990), Japan’s per capita seafood consumption is well over 60 kg/year, while Switzerland’s is under 15 kg/year. Consumption of dried fish (mainly small, low value marine and freshwater capture fishery species) is fairly even across all income groups in terms of quantity, meaning that it makes a more important relative contribution to the diets of poorer consumers. There are substantial differences in the ratio of fish consumed between rural and urban areas, as well as across fish products groups within these areas, with the result that average per capita consumption on fish products (marine fish, freshwater fish, crustacean and molluscs etc.) in major cities is nearly similar that in rural areas. The quantity of carbohydrate consumption in urban area was 189.86 g/capita/day and in rural areas was 260.9 g/capita/day, while 100% population took carbohydrate “many times a day”. However, the carbohydrate consumption pattern was quite lower in the present study compared to that of Household Income and Expenditure Survey conducted in 2010 (HIES, 2010). The average consumption of fruits and vegetables in urban and rural area was found to be 216.60 g per day and 192.41 g per day respectively. According to HIES (2010), the consumption of vegetables in urban and rural area was reported to be 155 g and 170 g in 2010. During data collection in the winter season, it was observed seasonal fruits and vegetables were available both in urban and rural area.

4. Conclusion
The association of the result obtained in the present study were concerning major food products and consuming of these major food items in urban and rural area. But the interesting results come out from the present study that, rural people are taking food than urban people. Fish and fish products and meat and meat products are consumed more by the rural people. This results generate a great controversy in a poor country like Bangladesh, although have greater access to premium quality fresh fish. Rural people are getting more fresh vegetable than the urban counter parts. Southern part of the country is rich in crops, meat and fish production. This consumption scenario may be different in other rural areas of the country. In such considerations, the food habit of the rural people in other areas should be changed and moved towards cheaper protein-rich plant based food, in order to supplement protein-nutrition. On the other hand, people should also increase low-cost involved protein based food production like fish and poultry in their household garden and households involving members of their family. Both urban and rural people in the Southern Bangladesh are taking more or less similar foods in terms of variety and quantity, although the scenario may be different in other parts of the country. Generally, rural people have less access to quality food due to high price. Southern district of Bangladesh are the major grower of fish, meat and crops. So, the primary producers have access to food. But they don’t have good practices and skill to store food. Through such collective efforts the rural people of the country will be able to mitigate nutrition deficiency in their diets and can site the examples of rural southern people to improve nutrition in both the urban and rural area as well as the whole country of Bangladesh.

5. Acknowledgements
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6. References
3. BIDS. Shows that the mean total food intake for all ages and sex of average Bangladeshi population, 2008.