**CHAPTER: 1**

**INTRODUCTION**

Milk is considered an ideal food by the people of Bangladesh. Sweetmeat is considered an ideal milk product. Sweetmeat means a food rich in sugar with milk. In this world it is too difficult to find a man who does not like sweets. Bangladeshis are also like to eat milk made sweets. Most of the people of our country consume sweetmeat. In Bangalis daily life without milk made sweets no festivals can be celebrated. For that reason sweets shops are found almost everywhere in Bangladesh. A huge number of milk made sweetmeat industries are established to fulfill the demand of mass people in Bangladesh. These sweetmeats industries produce hundreds of items around the year. In Bangladesh sweets are divided in four categories; such as- dry sweet, wet sweet, yogurt and others. Commonly found sweetmeats are likely Rosogolla, Blackjam, Yogurt, Chomchom etc (Perdigon *et al*., 2002). Consumption behavior of sweetmeat consumers differs from each others. Most of the people buy sweets and other products made of milk based on their taste, nutrition and prices (Desai *et al*., 1994). Though reliable and adequate data are not available, there are indications that in recent years production and rural consumption of milk and milk products have decreased while import has substantially increased to meet rapidly increasing urban demand (Mustafa, 1997).

Consumption plays the key role in guiding an economy to the production of goods and services that they demand (Duitschaever, 1978). In developing country like Bangladesh, the consumption pattern of household is expected to undergo a change with the rising of aggregate income. The basic concept of demand theory is primary consumers attempt to maximize utility by minimizing its cost for the product. Consumption behavior of sweetmeat consumer depends upon income, prices and availability of the sweetmeats. The products consumption depends in turn on interaction of among many other factors; on their socio-economic, physical environment, its composition, cultural background, preferences, economic needs and orientation of the products to the consumers (Mukherjee, 1938; Crotty, 1980; Baker, 1959 and Reberte *et al*., 1996). So, obviously, a large number of factors directly affect the consumption expenditure such as income, prices of individual commodities, size and composition of household etc (Shukla *et al*., 1987). The main objective of this study is to analyze the pattern of consumption of sweetmeats in selected urban areas. However this study will help to measure the present level of consumption pattern of sweetmeats of rural and urban people as well as will help the government to formulate policy for the welfare of the people of Bangladesh.

**Objectives of the present study:**

* To know the consumption pattern of different sweetmeats in Bangladesh.
* To know age group influence on sweetmeat consumption pattern.
* To know consumption rate of sweetmeats in people of different sex.

 **CHAPTER: 2**

**MATERIALS AND METHODS**

**2.1. Description of study area:**

Chittagong City Corporation area is located in the south-eastern part of Bangladesh, consists of 41 wards. This is the second largest city of Bangladesh. There are lots of sweetmeat shops throughout the city. The study was based on the consumption pattern of sweetmeat of different categories of peoples and data were collected from different sweetmeat shops at different locations of Chittagong Metropolitan area. Bahaddarhat, Pahartolli, Chawkbazar and Sholosahar areas were selected for data collection. These areas were generally considered the main representative units of whole Bangladesh consumption pattern situation.  **Fig-1: Map of study area.**

**2.2. Study duration:**

The study was conducted during the period of April to October, 2015.

**2.3. Data collection:**

Five sweetmeat shops namely Banoful, Modhuban, Highway, Well Food and Fulkoli were selected for collection of data. The data were randomly collected through personal interviewing by using open-ended questionnaire. 100 questionnaires were filled up for this purpose.

**2.4. Data analysis:**

Data collected from different parameters were subjected to statistical analysis. All statistical analysis was done by using STATA version 11.

**CHAPTER: 3**

**RESULTS AND DISCUSSION**

**Table-1: Consumption pattern of sweetmeats at different age group at present investigation:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Age (years)** | **P – value** |
| **01 – 25** | 1. **– 50**
 | **> 50** |
| Taking Presently (%) | Kalo Jaum | 15.79 | 29.31 | 26.09 | 0.549 |
| Sadha Misti | 10.53 | 12.07 | 21.74 |
| Lal Misti | 21.05 | 20.69 | 8.70 |
| Kacha Sandesh | 36.84 | 29.31 | 21.74 |
| Moti Laddu | 15.79 | 8.62 | 21.74 |
| Type (%) | Normal | 21.05 | 24.14 | 47.83 | 0.104 |
| Special | 47.37 | 46.55 | 17.39 |
| Dry | 31.58 | 29.31 | 34.78 |
| Color (%) | Black | 26.32 | 29.31 | 30.43 | 0.647 |
| White | 63.16 | 46.55 | 43.48 |
| Red | 10.53 | 24.14 | 26.09 |

Table-1 shows that among the categories of sweetmeat young age group prefer Kacha sandesh mostly whereas the old age group chooses kalojaum. The middle age people prefer to take both kalo jaum and kacha sandesh with equal choice level. The young age group prefers special type mostly whereas the old age group chooses normal type. The middle age people prefer to take special type mostly. All the age groups prefer white color mostly.

 **Table-2: Consumption pattern of sweetmeats at different sex at present investigation:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Sex** | **P – value** |
| **Male** | **Female** |
| Taking Presently(%) | Kalo Jaum | 29.21 | 0.00 | 0.069 |
| Sadha Misti | 13.48 | 18.18 |
| Lal Misti | 14.61 | 45.45 |
| Kacha Sandesh | 29.21 | 27.27 |
| Moti Laddu | 13.48 | 9.09 |
| Type(%) | Normal  | 31.46 | 9.09 | 0.139 |
| Special | 40.45 | 36.36 |
| Dry  | 28.09 | 54.55 |
| Color(%) | Black | 29.21 | 27.27 | 0.475 |
| White  | 47.19 | 63.64 |
| Red  | 23.60 | 9.09 |

Table-2 shows that among the categories of sweetmeat male prefer to take both kalo jaum and Kacha sandesh with equal choice level whereas female choose lal misti mostly. Male prefer special type mostly whereas female choose dry type. Both male and female prefer white color mostly.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Age (years)** | **P – value** |
| **01 – 25** | 1. **– 50**
 | **> 50** |
| Prefer Regularly(%) | Kalo Jaum | 15.79 | 24.14 | 21.74 | 0.764 |
| Sadha Misti | 10.53 | 12.07 | 17.39 |
| Lal Misti | 15.79 | 20.69 | 26.09 |
| Kacha Sandesh | 47.37 | 31.03 | 17.39 |
| Moti Laddu | 10.53 | 12.07 | 17.39 |
| Type(%) | Normal | 15.79 | 25.86 | 43.48 | 0.317 |
| Special | 52.63 | 48.28 | 30.43 |
| Dry | 31.58 | 25.86 | 26.09 |
| Color(%)  | Black | 15.79 | 25.86 | 21.74 | 0.766 |
| White | 68.42 | 53.45 | 52.17 |
| Red | 15.79 | 20.69 | 26.09 |

**Table-3: Percentage of sweetmeats consumption preferring regularly based on age group:**

Table-3 shows that among the categories of sweetmeat young age group prefer Kacha sandesh mostly whereas the old age group chooses lal misti. The middle age people prefer to take kacha sandesh mostly. The young age group prefers special type mostly whereas the old age group chooses normal type. The middle age people prefer to take special type mostly. All the age groups prefer white color mostly.

**Table-4: Percentage of sweetmeats consumption preferring regularly at different sex:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Sex** | **P – value** |
| **Male** | **Female** |
| Prefer Regularly(%)  | Kalo Jaum | 23.60 | 9.09 | 0.239 |
| Sadha Misti | 12.36 | 18.18 |
| Lal Misti | 17.98 | 45.45 |
| Kacha Sandesh | 32.58 | 18.18 |
| Moti Laddu | 13.48 | 9.09 |
| Type(%) | Normal  | 30.34 | 9.09 | 0.072 |
| Special | 46.07 | 36.36 |
| Dry  | 23.60 | 54.55 |
| Color(%) | Black | 23.60 | 18.18 | 0.455 |
| White  | 53.93 | 72.73 |
| Red  | 22.47 | 9.09 |

Table-4 shows that among the categories of sweetmeat male prefer to take Kacha sandesh mostly whereas female choose lal misti. Male prefer special type mostly whereas female choose dry type. Both male and female prefer white color mostly.

 **Table-5: Percentage of sweetmeats consumption prefer in home based on age group:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Age (years)** | **P – value** |
| **01 – 25** | 1. **– 50**
 | **> 50** |
| Prefer in Home(%) | Kalo Jaum | 5.26 | 18.97 | 8.70 | 0.768 |
| Sadha Misti | 15.79 | 6.90 | 13.04 |
| Lal Misti | 42.11 | 29.31 | 34.78 |
| Kacha Sandesh | 21.05 | 25.86 | 26.09 |
| Moti Laddu | 15.79 | 18.97 | 17.39 |
| Type(%) | Normal | 5.26 | 15.52 | 8.70 | 0.520 |
| Special | 36.84 | 46.55 | 43.48 |
| Dry | 57.89 | 37.93 | 47.83 |
| Color(%)  | Black | 10.53 | 20.69 | 17.39 | 0.817 |
| White | 42.11 | 31.03 | 39.13 |
| Red | 47.37 | 48.28 | 43.48 |
| Why Prefer(%) | Tasty | 15.79 | 12.07 | 26.09 | 0.253 |
| Consumer Like | 73.68 | 84.48 | 73.91 |
| Very Sweet | 10.53 | 3.45 | 0.00 |

Table-5 shows that among the categories of sweetmeat all age groups prefer lal misti mostly. Both young and old age groups prefer dry type mostly whereas the middle age group chooses special type. All the age groups prefer red color mostly. All age groups choose sweetmeat according to their like.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Sex** | **P – value** |
| **Male** | **Female** |
| Prefer in Home(%) | Kalo Jaum | 15.73 | 0.00 | 0.534 |
| Sadha Misti | 10.11 | 9.09 |
| Lal Misti | 31.46 | 45.45 |
| Kacha Sandesh | 25.84 | 18.18 |
| Moti Laddu | 16.85 | 27.27 |
| Type(%) | Normal  | 13.48 | 0.00 | 0.255 |
| Special | 44.94 | 36.36 |
| Dry  | 41.57 | 63.64 |
| Color(%) | Black | 20.22 | 0.00 | 0.228 |
| White  | 34.83 | 36.36 |
| Red  | 44.94 | 63.64 |

 **Table-6: Percentage of sweetmeats consumption prefer in home at different sex:**

Table-6 shows that among the categories of sweetmeat both male and female prefer to take lal misti mostly. Male prefer special type mostly whereas female choose dry type. Both male and female prefer red color mostly.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Age (years)** | **P – value** |
| **01 – 25** | 1. **– 50**
 | **> 50** |
| Prefer to Visit Relative(%) | Sweetmeat | 94.74 | 93.10 | 69.57 | 0.008 |
| Fruit | 5.26 | 6.90 | 30.43 |
| Which Item(%) | Kalo Jaum | 36.84 | 31.03 | 30.43 | 0.428 |
| Sadha Misti | 26.32 | 27.59 | 13.04 |
| Lal Misti | 15.79 | 15.52 | 13.04 |
| Kacha Sandesh | 15.79 | 18.97 | 17.39 |
| Fruit | 5.26 | 6.90 | 26.09 |
| Why Prefer(%) | Cheap | 73.68 | 56.90 | 43.48 | 0.211 |
| Tasty | 15.79 | 24.14 | 43.48 |
| Nice to Look | 10.53 | 18.97 | 13.04 |

 **Table-7: Percentage of sweetmeats consumption prefer to visit relative based on age group:**

Table-7 shows that among fruit and sweetmeat all age groups prefer sweetmeat mostly. Among the categories of sweetmeat all age groups prefer to take kalo jaum mostly. The young and middle age groups choose sweetmeat according to cheap price mostly. The old age group choose sweetmeat according to cheap price and tasty with equal choice level.

 **Table-8: Percentage of sweetmeats consumption prefer to visit relative at different sex:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Sex** | **P – value** |
| **Male** | **Female** |
| Prefer to Visit Relative(%) | Sweetmeat | 87.64 | 90.91 | 0.753 |
| Fruit | 12.36 | 9.09 |
| Which Item(%) | Kalo Jaum | 31.46 | 36.36 | 0.748 |
| Sadha Misti | 25.84 | 9.09 |
| Lal Misti | 14.61 | 18.18 |
| Kacha Sandesh | 16.85 | 27.27 |
| Fruit | 11.24 | 9.09 |
| Why Prefer(%) | Cheap | 55.06 | 72.73 | 0.532 |
| Tasty | 28.09 | 18.18 |
| Nice to Look | 16.85 | 9.09 |

Table-8 shows that among fruit and sweetmeat both male and female prefer sweetmeat mostly. Among the categories of sweetmeat both male and female prefer to take kalo jaum mostly. Male and female choose sweetmeat according to cheap price mostly.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Age (years)** | **P - value** |
| 1. **– 25**
 | **26 - 50** | **>50** |
| Prefer When Fruit Price Lower(%) | Fruit | 57.89 | 53.45 | 69.57 | 0.299 |
| Sweetmeat | 0.00 | 3.45 | 8.70 |
| Fruit/Sweetmeat | 42.11 | 43.10 | 21.74 |

**Table-9: Percentage of sweetmeats consumption prefer when fruit price lower based on age group:**

Table-9 shows that during fruit price lower from sweetmeat all age groups prefer to take fruit mostly.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Category** | **Sex** | **P - value** |
| **Male** | **Female** |
| Prefer When Fruit Price Lower(%) | Fruit | 59.55 | 45.45 | 0.423 |
| Sweetmeat | 4.49 | 0.00 |
| Fruit/Sweetmeat | 35.96 | 54.55 |

**Table-10: Percentage of sweetmeats consumption prefer when fruit price lower at different sex:**

Table-10 shows that during fruit price lower from sweetmeat male prefer to take fruit mostly. Female prefer to take fruit/sweetmeat mostly.

**CHAPTER: 4**

**CONCLUSION**

Milk and milk products are preferred food items for the people of Bangladesh. Among the milk products sweetmeat is very much favorite item. Though it is believed that the sweetmeat items are liked by people of almost all age and sex but this study has shown that consumption pattern of sweetmeat differed among various age groups and sex. So it can be said that types of sweetmeat, price, age and sex of consumer, price of other substitute products etc play in complex way to determine the consumption pattern of sweetmeats.

**CHAPTER: 5**

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**APPENDIX**

**Chittagong Veterinary & Animal Sciences University**

**Department of Dairy and Poultry Science**

**Consumption pattern of sweet meats**

**Questionnaire**

1. Name of the consumer:

2. Age: 1-25/ 26-50/ Above 50

3. Sex: M/F

4. What does he/she taking now? …………………………………………………………………………..

Type: …………………color:………………………size: ………………… flavor:………………others:…………………….

5. What do you prefer to take regularly?.........................................

Type: ………………… color:………………………size:……………………flavor:………………others:…………………….

6. Why do you prefer this item?..............................................................

7. What type of sweetmeat do you prefer to take in your home?.....................................

Type: ………………… color:………………………size:……………………flavor:………………others:…………………….

8. Why do you prefer to take this item to your resident?

…………………………………………………………………………………………………………………………………………………....

9. Name of sweatmeat shop:……………………………………………

10. Items available in sweatmeat shop:

……………………………………………………………………………………… ……………………………………………………………………………………….

11. During visiting relatives which item do you prefer to take? Sweatmeat/ Fruit

12. Which item and why?................................................................................................................

13. Which item do you prefer when the price of fruit is lower?......................................................

Signature of Consumer Signature of Interviewer

………………………………… …………………………. ………………………………… ………………………….

**BIOGRAPHY**

Md. Shahadat Hosen is a student of Doctor of Veterinary Medicine (DVM) at Chittagong Veterinary and Animal Sciences University (CVASU). He passed the SSC examination in 2006. He passed the HSC examination in 2008. He has a great interest in dairy science.