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## Consumption and Cooking Patterns of Chicken Meat in Hyderabad District

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**Abstract:** In order to ascertain the consumption and cooking patterns of chicken meat in Hyderabad district, a survey based study was carried out during, 2006-2007. The sample size of 200 was comprised of 180 male and 20 female respondents having education from primary level to graduation, mostly married and all the respondents employed in public (40%) or private sector (60%) along with low monthly income in the range of 1000-10000 rupees (68%). The 85% respondents liked to purchase broiler meat, while only 15% respondents showed their liking in meat of desi hen (indigenous poultry breed). 38% respondents consumed once a week, while 36% consumed monthly. 73% respondents purchased upto 1 kilogram, while 15% purchased 1-1.5kg. 68% respondents were having current knowledge of nutritive value and 32% respondents did not showed their knowledge over the nutritive value of commercial poultry meat. It was noted that at 74% told that their wives were responsible for cooking, 11% their daughters and 8% their mother/sister. 47% liked to cooked and consumed fried chicken, while 33.00% preferred to cook chicken curry, 20.% liked to prepare broast, 72% liked whole chicken, 18% showed their liking for breast meat and only 10% respondents expressed their liking towards leg meat. While enquiring the respondents whether they consumed meat during out break of diseases especially in bird flu disease, 58% respondents responded positively and told that they feel no hesitation in consuming meat during outbreak of diseases. 72% respondents enhanced their consumption in winter season and remaining 36% respondents commented that they did not enhance their consumption. 86% respondents responded optimistically and perceived that the meat is consumed normally at their homes in summer season. The respondents were asked to express consumption of meat in case of increased prices and 61% respondents had positive response and 37% showed negative response to this aspect. 70% respondents preferred first to eat chicken meat, 15% had choice of fish and 10% showed preference for beef/mutton, while only 5% expressed their preference for vegetables.

**Key word:** Chicken meat, consumption pattern, cooking pattern

### INTRODUCTION

Poultry sector has great potential to bridge up the gap between existing energy level and minimum energy level required for human diet in the country. The poultry and poultry products in Pakistan during the year, 2006-07 increased considerably over previous year, 2005-06. The production of day-old chicks increased from 386.5-401.0 million, farming layers 23.2-23.8 million, farming broilers 303.9-315.8 million, farming breeding and stock 6.9- 7.1 million, poultry meat 463,000-480,000 tonnes and farm eggs 5107-5222 million. The rural poultry estimates showed that there has been an increase in day-old chicks from 36.5-38.0 million, cocks and cockribs 12.1-13.1 million and layers 36.5-37.8 million (Anonymous, 2007).

In the last decade, the Pakistan poultry industry developed manifolds. With the tremendous development of poultry sector, the marketing of the poultry products was simultaneously increased. In, 1983, Pakistan

produced 3,150 million eggs and 97,710 metric tons of poultry meat of which 1,450 million or 46 percent eggs, and 53,345mt or 54.6 percent of meat came from the rural areas which kept on increasing. In, 2004, egg production increased to 8,247 million and poultry meat to 402000 tons (Khan, 2005). After commencement of three foreign fast food companies, their chain of outlets faced problems of obtaining 30,000-60,000 chicks per consignment per day due to the provision of 20-30 per cent substandard chicks which suffer from infection. They took permission to import commercial broilers or processed chickens. Due to increasing population, the poultry production has great potential. The industry now is developing on scientific lines and providing the masses low-priced protein food.

Poultry meat is the part of staple diet of humans and economic source of protein (Qureshi, 1990). Poultry meat is an economical, quick, easy to use and has a number of desirable nutritional and organoliptic

properties. (Saeed, 2006). The consumption behavior of poultry products is the deciding factor for the development of livestock sector in general and a specific enterprise in particular. In general, consumer's behavior indicates the process, activities that people engage in when searching for, selecting, purchasing, using, evaluating and disposing of products and services, so as to satisfy their needs and decisions. The consumer behavior theory postulates that consumers look at completeness, monotonicity, reflexivity and transitivity, continuity and convexity, which influences their behavior. The study of consumer helps firms and organizations improve their marketing strategies by understanding the issues such as a) how consumers think, feel, reason and select between different alternatives and b) how consumer is influenced by his environment. Various external factors such as culture, sub culture, social class, reference groups, family decisions and certain situational determinants also influence the consumer's purchase decisions. The consumption patterns fall within these lines and vary with the societal setup in which the consumers are operating. The culture, traditions, customs, taboos are influencing the consumption of poultry products including meat and eggs, both in the rural and urban societies (USDA, 2002; Khan, 2005). Very limited information is available on the consumption patterns of poultry products of Pakistan urban and rural families. The specific consumption pattern for chicken meat and eggs will be of much use in planning the location specific and species based poultry farming. With this background, the present study was formulated with the objective to identify the consumption patterns of chicken meat in Hyderabad, Sindh province and this study will be beneficial policy makers also.

## MATERIALS AND METHODS

The data on consumption and cooking patterns of chicken meat in Hyderabad district were gathered during, 2006-07. In selecting the respondents, the techniques of purposive selection were adopted. The data were collected through pre-tested questionnaire. 200 respondents were selected for the interview. The following questions about demographic status of respondents, consumption patterns and cooking methods of chicken meat were asked from the respondents.

### a. Demographic data:-

1. Age
2. Sex
3. Education
4. Occupation
5. Monthly Income

### b. Consumption and cooking patterns:-

1. Which type of birds do you like for consumption?
2. When do you consume chicken meat?
3. How much quantity do you purchase?

4. Do you know the nutritive value of chicken meat?
5. Who cook/prepare chicken meat at your home?
6. Which cooking method you adopt at your home?
7. Which part of chicken do you like?
8. Do you consume chicken meat in disease out break (especially in bird flu disease)?
9. In which season, do you increase consumption of chicken meat?
10. Do you consume chicken meat in summer season?
11. Do you consume chicken meat in increased prices?
12. Which food item do you prefer first to eat on the dining table?

Thus the collected data was analyzed statistically according to the formula of MS-Excel by the methods of Snedcor and Cochran (1980).

## RESULTS

### Demographic status of the chicken meat consumers:

In the present study, a survey was carried out from 200 respondents of district Hyderabad. In all the 180 male and 20 female were interviewed. Although, this male: female ratio in the study showed no equilibrium, but feeling the significance of stratum this representation was found enough. The results on age, education, occupation and monthly income are presented in Table 1.

Table 1 depicts that 6% respondents were between the ages of 18-25 years, 26% were 26-31 years, 23% were 32-37 years and 45% were 38-55 years respectively. Out of total respondents interviewed, 24% completed only primary level, 18% studied up to matriculation, 21% accomplished intermediate, 34% completed their graduation in various disciplines and only 3% respondents were illiterate. The respondents were also studied in relation to their occupation and it was noted that majority of them (60%) were engaged in private sector, 40% respondents were government employees and none of them were found engaged with any non-governmental organization (NGO) or jobless. The respondents were also arranged into four income groups, i.e. income from Rs. 1000-10000, Rs. 11000-20000, Rs. 21-000-30000 and above Rs.30000. Most of the respondents (68%) had monthly income of Rs. 1000-10000, 23% respondents had Rs. 11000-20000, 2% respondents had Rs. 21000-30000 and 7% respondents had more than Rs. 30000, respectively.

### Consumption and cooking patterns of chicken meat:

The result on the consumption and cooking patterns are presented in Table 2-12.

The respondents were subjected to enquire for their preference / liking in type of birds, the responses to this effect are presented in Table 2. It was noted that 85% respondents liked to purchase broiler, while only 15% respondents showed their liking desi hen (indigenous poultry breed). The enquiry regarding the frequency of

Table 1: Demographic information of the Consumers

Age (Years)	Frequency / Percent	Sex	Frequency/Percent
18-25	6	Male	90
26-31	26	Female	10
32-37	23		
38-45	45		
Education	Frequency/Percent	Occupation	Frequency/Percent
Primary	24	Government servant	40
Matriculation	18	Private	60
Intermediate	21	NGOs	0
Graduate	34	Nil	0
Illiterate	3		
Income	Frequency/Percent		
1000-10000	68		
11000-20000	23		
21000-30000	2		
Above 30000	7		

Table 2: Type of bird liked by consumers

Type of meat	# of respondents	Percentage
Broiler	170	85.0
Layer	00	0
Desi	30	15.0
Others	00	0

Table 3: Routine consumption of chicken meat

Consumption	# of respondents	Percentage
Daily	4	2.0
Weekly	76	38.0
Monthly	72	36.0
Rare	48	24.0

routine consumption of chicken meat (Table 3) illustrated that 38% respondents consumed once a week, 36% consumed monthly, 24% respondents consumed rarely and only 2% respondents consumed meat daily. The quantity of meat may vary with a number of reasons; however, the respondents were asked to inform the quantity they purchased at a time. The response (Table 4) indicated that 73% respondents purchased up to 1 kilogram, 15% purchased 1-1.5kg and 10% respondents purchased 1.6-2.Kg and only 2% purchase more than 2kg. Table 5 indicated that 68% respondents were having current knowledge about nutritive value and 32% respondents did not showed their knowledge over the nutritive value of commercial poultry meat. The above situation indicated that mostly people are partially aware of the nutritive value. The respondents were also instigated to inform who cook/prepare meat for consumption and the responses are presented in Table 6. It was noted that 74% told that their wives are responsible for cooking, 11% their daughters and 8% their mother/sister. Moreover, 7% (female respondents) informed that they personally involve in cooking at their homes. The respondents were asked to show their preference on type of dish they used to prepare chicken meat, 47% liked to cook and consumed fried chicken, while 33.00% preferred to cook

Table 4: Quantity of chicken meat purchased

Quantity purchased (kg)	# of respondents	Percentage
0-1	146	73.0
1-1.5	30	15.0
1.6-2.0	20	10.0
2.0 to more	04	02.0

Table 5: Knowledge about nutritive value of chicken meat

Knowledge about nutritive value	# of respondents	Percentage
Yes	136	68.0
No	64	32.0

chicken curry, 20% liked to prepare broast (Table 7). The chicken has different quality of meat in its various body parts and the respondents were asked to express their liking for various body parts. It was noted that 72% respondents like whole chicken, 18% showed their liking for breast meat and only 10% respondents expressed their liking towards legs meat (Table 8). While enquiring the respondents whether they consume meat during out break of diseases especially in bird flu disease, 58% respondents responded positively (Table 9) and told that they feel no hesitation in consuming meat during outbreak of diseases, while 36% respondents showed negative response and perceived that they do not use meat. However, only 6% respondents expressed that they use chicken during bird flu outbreak rarely. Table 10 shows that 72 respondents enhanced their consumption in winter remaining 36% consumers told with the comments that they did not enhance their consumption in winter season. The liking in consumption in summer season was questioned from the respondents and 86% respondents responded optimistically and perceived that the meat is consumed normally at their homes in summer season. However, 14% respondents told with the comments that the meat is not consumed in summer season (Table 11). The respondents were

Table 6: Cooking of chicken meat by family members

Cooking personnel	# of respondents	Percentage
Self	14	07.0
Son	0	0
Daughter	22	11.0
Wife	148	74.0
Mother/Sister	16	08.0

Table 7: Cooking method of chicken meat

Cooking method	# of respondents	Percentage
Curry	66	33.0
Fry	94	47.0
Broast	40	20.0
Others	0	0

Table 8: Liking in meat parts

Meat parts	# of respondents	Percentage
Whole	144	72.0
Legs	20	10.0
Breast	36	18.0

Table 9: Consumption of chicken meat during bird flu outbreak

Consumption in Disease outbreak	# of respondents	Percentage
Yes	116	58.0
No	72	36.0
Rare	12	06.0

Table 10: Enhancement in consumption of chicken meat

Season	# of respondents	Percentage
Summer	00	0
Spring	30	15
Autumn	30	15
Winter	140	70

Table 11: Consumption of chicken meat during summer season

Consumption in Summer season	# of respondents	Percentage
Yes	172	86
No	28	14

Table 12: Consumption of chicken meat during increased price

Consumption in increased price	# of respondents	Percentage
Yes	122	61.0
No	74	37.0
With held	04	02.0

Table 13: Preference in consumption of meat as first item on the table

First preference	Frequency	Percentage
Chicken meat	140	70
Beef	20	10
Vegetable	10	05
Fish	30	15

asked to express consumption of meat in case of increased prices due to certain reasons and 61% respondents had positive response (Table 12) and 37%

showed negative response to this aspect. However, 2% respondents with hold consumption. A number of cooked food items are available on the table on various occasions at their home and the respondents were enquired for their categorical choice on food items. It was noted that 70% respondents preferred first to eat chicken meat, 15% had choice of fish and 10% showed preference for beef/mutton, while only 5% expressed their preference for vegetables (Table 13).

## DISCUSSION

To know the consumption and cooking pattern of chicken meat in Hyderabad District, a study through survey was carried out from 200 respondents. 180 male and 20 female were interviewed. The Data on age, sex, education, occupation and monthly income of the respondents were gathered as demographic status of the respondents. The age of respondents in range of 18-45 years was observed; 97% were having education from primary level up to graduation whereas only 3% respondents were illiterate; all the respondents were in salaried jobs in public or private sectors and high frequency in lower monthly income was observed in the study area. This demographic study showed that mostly respondents were mature, educated and having low salaries jobs. The majority of the respondents of Hyderabad liked to purchase broiler meat up to 1kg weekly than other varieties of meat due to low purchasing power. In a similar study, Stock (2004), who reported that the consumers preferred and wants 2lbs or less chicken meat Majority of respondents having knowledge about nutritive value of broiler meat and showed their liking in meat of desi hen (indigenous poultry breed) because of old myth that desi chicken is in good taste. In a similar study in Nigeria, Adejoro (2001) argued that the decline in consumption was occurred due to a decrease in the income and purchasing power of consumers. The above results are confirmed by findings of Raju and Suryanarayana (2005) reported that only 27.5% respondents preferred meat on all days. Above results are in some agreement with the findings of Queshi (1990) who reported that consumers eat chicken meat occasionally due to the dearth of sources and low income and he also further reported that 86% consumers preferred broiler meat. Above findings are in agreement with the findings of Yildirim and Ceylan (2008) they reported that the income was effective on both the consumption level and behavior of households. The urban households attached more attention to habit and nutrition value variables, while the cheapness was the major factor affecting the rural households' preference of chicken meat. Mostly wives of the respondents were responsible for cooking and they adopted frequently fried and curry method and rarely used broast method at their home. The chicken has different quality of meat in its various body parts and the

majority of the respondents of Hyderabad liked whole chicken and remaining showed their liking for breast meat and legs meat. Similarly, Tolu *et al.* (2005) reported that most often buy chicken meat (86%), and the rest of them prefer turkey meat (14%). Almost all respondents prefer to buy poultry meat in its main parts, mostly because of reasonable prices. Even 92% of them decide to buy the most valuable carcass parts (breasts, drumsticks and thighs). In another investigation, Miriam *et al.* (2002) experienced the factors changing consumption patterns of poultry meat, particularly in the case of total poultry consumption as in the case of specific parts of the carcass. Though the disinformation can play a key negative role in consumption of food items but in Hyderabad, no any considerable decreasing consumption was noted in the area. The majority of the consumers responded positively and told that they feel no unwillingness in consuming meat. Every food item has an own identity in season, e.g. ice cream and juices are consumed more in summer season and dry fruits in winter. In case of chicken meat, during study period the respondents showed positive response and viewed that they enhance their consumption in winter season due to satisfaction that chicken meat gives warmth and energy in form of calories in the body. On the other hand, the respondents cooked chicken meat normally in summer season. Price is the major factor in purchasing any product and reflects in consumption, the respondents of Hyderabad consumed meat in case of increased prices due to certain reasons. A number of cooked food items are available on the table on various occasions/at their home and the respondents were enquired for their categorical choice on food items. It was noted that most of respondents prefer first to eat chicken meat even fish, beef and vegetable available on the table. The results of the present study are also in concurrence to those of Marsha (2003), who stated that the consumption of poultry meat is considerably higher than either beef or pork. Similarly, Tolu *et al.* (2005) reported that most often buy chicken meat (86%) and the rest of them prefer turkey meat.

**Conclusion:** It was concluded from the present investigation that consumption and cooking patterns of chicken meat showed positive trend and mostly respondents preferred and consumed whole broiler meat as a curry and fried item up to 1kg weekly alike over beef and vegetable at their home after cooked by their wives, but the low purchase power resulted weaker purchasing frequency. The consumers increases their consumption in winter season and no considerable effect of disease outbreak, summer season and in increased prices was found on the consumption of chicken meat in Hyderabad.

#### Recommendations and suggestions

1. Consumers' education through festivals, seminars and workshops may be conducted at union council's level.

2. Prices of poultry products should be reduced.
3. Marketing system of poultry products be improved.
4. Importance of poultry products may be included in the syllabus of lower classes (from Primary to intermediate level).
5. Government organizations should take serious efforts for enhance the production, disease control, meat hygiene at poultry meat shops, marketing legislation and farmers perception.

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