An analysis on consumer behaviour towards meat consumption in Jammu

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ABSTRACT

The present study analyses the consumers meat consumption behaviour in Jammu district of Jammu and Kashmir. After preparing the comprehensive list of meat markets operating in Jammu district, three meat markets were selected, and from each selected meat market ten retail meat shops were randomly chosen. From each randomly selected retail meat shop, a list of consumers was prepared. Out of the list four consumers were selected randomly to make a sample size of 120 consumers. Data were collected through a well structured interview schedule. The data were coded, classified, tabulated and analyzed using the software; Statistical Package for the Social Science (SPSS 16.0). The presentation of data was done to give pertinent, valid and reliable answer to the specific objectives. Frequencies, percentage, mean and standard deviation were worked out for meaningful interpretation. It was found that majority of consumers started meat consumption in early childhood and any change in the meat consumption habit was insignificant. Most of the consumers preferred chicken meat twice a week and consumption was enhanced during winter and rainy seasons while due to religious sentiments some consumers avoided consuming meat on specific days. Visual examination and fresh and disease free meat were the most prominentindicators and desired meat quality by 100% respondents. A significant proportion of respondents showed reduction in the consumption of chicken and eggs due to the fear of bird flu outbreak.

Key words: Consumption frequency, Desired meat quality, Household preference, Indicators, Meat consumption.

INTRODUCTION

India is an agriculture based country and livestock sector is one of the important components of agricultural economy. Livestock can be considered as the backbone of rural economy in India in terms of income, employment, social/gender equity, agricultural sustainability, diversification and foreign exchange earnings. India's international trade in livestock and livestock product is mainly because of meat and meat products (82%), live animals (17%), dairy and eggs (1%). The livestock sector contributes around 4.11 per cent to GDP and 25.6 per cent to agriculture GDP. India is a potential meat producer in the world having livestock population of 512.05 million which is about 10.71% of world livestock population. The Contribution to GDP mainly depends on the production and productivity of the animal and consequent utilization of the products by the consumers. Livestock products not only provide high value protein but are also important source of wide range of essential micronutrients, in particular minerals such as iron and zinc and vitamins such as Vitamin A.(Jagadeesh, 2010). Meat and its products are the part of staple diet of many Indian families. Quality, freshness and hygiene were the key determinants for consumer's preference

of meat. Wide geographic and seasonal variations play an important role in meat consumption pattern of the people. Now a day, economic lifestyle and consumer's attitudes to food regarding quality are tending to be more and more consistent in the world. As income rise in relation to the cost of living, consumers generally tend to spend more on protein products of animal origin than before, thus quality of food of animal origin especially meat and meat products is now a days a predominant key for everyone in society (Aumatire 1999).People who are dietary conscious are willing to pay good amount of money for quality meat and meat product. Consumers in both developed and developing countries expect quality meat, a broad diversity of meat cuts, more ease in preparation and enhanced assurances of safety (Slorach, 2006). As very little research has been undertaken to explore meat consumption behaviour in Jammu district. Based on this background this study was conducted with the aim of identifying the meat consumption behaviour of consumers.

MATERIALS AND METHODS

The present study was carried out to analyze the meat consumption behaviour of consumers in Jammu district of Jammu and Kashmir. After preparing the comprehensive

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list of meat markets operating in Jammu district, three meat markets were selected, and from each selected meat market ten retail meat shops were randomly chosen. From each randomly selected retail meat shop, a list of consumers was prepared. Out of the list four consumers were selected randomly to make a sample size of 120 consumers. Data were collected through a well structured interview schedule. The data were coded, classified, tabulated and analyzed using the software; Statistical Package for the Social Science (SPSS 16.0). The presentation of data was done to give pertinent, valid and reliable answer to the specific objectives. Frequencies, percentage, mean and standard deviation were worked out for meaningful interpretation.

RESULTS AND DISCUSSION

Consumers profile and meat consumption behaviour: Respondents were categorized into three groups on the basis of mean and standard deviation *viz.* young (< 30 years), middle aged (30-50 years) and old (> 50 years).

A perusal of (Table 1) reveals that majority (55.00%) of consumers were from middle aged group. Overall, 30%, 55.00% and 15.00% of respondents represented young, middle and old group, respectively.

A perusal of (Table 2) reveals that 80.80%, 13.30% and 5.80% of respondents were Muslims, Hindu and Sikh, respectively.

Table 1: Distribution of respondents according to their age

| Age | Consumers (n=120) | |
|---------------------|-------------------|----------|
| | Frequency | Per cent |
| Young(< 30 years) | 36 | 30.00 |
| Middle(30-50 years) | 66 | 55.00 |
| Old(> 50 years) | 18 | 15.00 |

An analysis of (Table 3) displays that all the respondents were literate, all having education high school and above.

 Table 2: Distribution of respondents according to their religion

 Religion
 Consumers (n=120)

| Rengion | Consumers (nº 120) | |
|---------|--------------------|----------|
| | Frequency | Per cent |
| Muslim | 97 | 80.80 |
| Hindu | 16 | 13.30 |
| Sikh | 07 | 5.80 |

Duration of consuming meat: The respondents were enquired about their duration of consuming meat and meat

 Table 3: Distribution of respondents according to their education

 Education
 Consumers (n=120)

| | Frequency | Per cent |
|--------|-----------|----------|
| Low | 0 | 0.00 |
| Medium | 0 | 0.00 |
| High | 120 | 100 |

products. Result reveals that majority of respondents (95.80%) were consuming meat from their childhood whereas only, 4.20% of respondents started consuming meat since last 10 years. (Table 4)

 Table 4: Distribution of respondents according to duration of

| consuming me | ai | |
|-----------------------|---------------------|----------|
| Duration of consuming | g Consumers (n=120) | |
| meat | Frequency | Per cent |
| From childhood | 115 | 95.80 |
| Past 10 years | 05 | 4.20 |
| Past 5 years | 0 | 0.00 |

Change in meat consumption habit in last 5 years: As evident from the (Table 5) that majority of respondents (85.00%) remained unaltered with consumption habit whereas only 15.00% of respondents change their meat consumption habit .Further analysis of table 5 indicates that out of 15.00% of respondents 1.70% changed from vegetarian food to non-vegetarian food, 2.50% changed from egg to meat habit and 10.80% of respondents avoided taking any specific type of meat. Similar finding were observed by Kubickova and Serhantova (2005) who reported the changes in meat and meat products consumption by some consumers in the Czech Republic in the past ten years and observed that because of the change in the lifestyle promoted by health education, the structure of the consumption of different kinds of meat and meat products has been changing too, the decreased consumption of beef and tinned meat and a moderately reduced consumption of pork.

 Table 5: Distribution of respondents according to change in meat consumption habit in last 5 years

| Habit Co | nsumers (n=120) | | |
|--|-----------------|----------|--|
| | Frequency | Per cent | |
| Changed | 18 | 15.00 | |
| Not change | 102 | 85.00 | |
| Specific changes in meat consumption habits (n=18) | | | |
| Avoid taking any specific | 13 | 10.80 | |
| animals meat | | | |
| Eggs to meat | 03 | 2.50 | |
| Veg to non-veg | 02 | 1.70 | |

Preference for meat: Consumers were enquired regarding their first preference for meat and it was found that chicken meat was preferred by majority of respondents (43.30%), while chevon meat was least preferred by 1.70% of respondents. Whereas mutton and chicken combination, chicken, mutton and fish combination and mutton only was preferred by 30.00%, 16.70% and 8.30% of respondents, respectively (Table 6). These finding are in agreements with result of Babu *et al.* (2010), Rajasekhar and Reddy (2005), Raju and Suryanarayana (2005) and Reddy and Raju (2010) who reported that most of consumers prefer chicken twice in a week.

 Table 6: Distribution of respondents according to the type of meat

 preferred

| Type of meat preferred | Consumers (n=120) | |
|-------------------------|-------------------|----------|
| | Frequency | Per cent |
| Mutton only | 10 | 8.30 |
| Chevon (goat meat) only | 02 | 1.70 |
| Chicken only | 52 | 43.30 |
| Mutton & chicken | 36 | 30.00 |
| Mutton, chicken & fish | 20 | 16.70 |

Consuming offal's: An analysis of (Table 7) displays that a significant proportion (51.70%) of respondents were consuming offal's and 35.00% of respondents felt that consuming offal's is healthy.

 Table 7: Distribution of respondents according to the consuming offal's

| Consume offal's | Consumers (n=120) | |
|------------------------|-------------------|----------|
| | Frequency | Per cent |
| Consuming | 62 | 51.70 |
| Not consuming | 58 | 48.30 |
| Consuming offal's is (| n=62) | |
| Healthy | 42 | 35.00 |
| Not healthy | 07 | 5.80 |
| Do not know | 13 | 10.80 |

Preference for offal's: A perusal of (Table 8) reveals that majority (51.66%) of respondent's preferred red offal's, while grey offal's and dark offal's were preferred by 16.12% and 32.25% of respondents, respectively.

 Table 8: Distribution of respondents according to the type of offal's preferred

| Type of offal's preferred (| Consumers (n=62) | |
|----------------------------------|------------------|----------|
| | Frequency | Per cent |
| Grey offal's (Stomach, | 10 | 16.12 |
| intestine, lungs & spleen) | | |
| Dark offal's (Head & feet) | 20 | 32.25 |
| Red offal's (liver, kidney & hea | rt 32 | 51.61 |

Frequency of offal's consumption: An examination of (Table 9) indicates that majority (35.48%) of respondents consumed offal's once in a week, while 6.45%, 30.64% and 27.41% of respondents consumed it daily, twice in week and once in two week ,respectively.

 Table 9: Distribution of respondents according to frequency of offal's consumption

| Frequency | Consumers (n=62) | |
|-------------------|------------------|----------|
| | Frequency | Per cent |
| Daily | 04 | 6.45 |
| Alternate days | 0 | 0.00 |
| Twice in week | 19 | 30.64 |
| Once in a week | 22 | 35.48 |
| Once in two weeks | 17 | 27.41 |

Reason for meat consumption: The consumers were investigated for reasons behind consumption of meat. An overview of the (Table 10) reveals that taste+ habituated + nutritious were the reason for consumption of meat by majority of respondents (45%), while nutritional qualities, taste and habituation towards meat consumption were reason for 7.50%, 10.80% and 6.70% of respondents, respectively.

 Table 10: Distribution of respondents according to their reason for meat consumption

| Reason for meat | Consumers (n=120) | |
|----------------------------|-------------------|----------|
| consumption | Frequency | Per cent |
| Habituated only | 08 | 6.70 |
| Taste only | 13 | 10.80 |
| Nutritious only | 09 | 7.50 |
| Taste+ Habituated | 12 | 10.00 |
| Habituated + nutritious | 24 | 20.00 |
| Taste+ Habituated + Nutrit | tious 54 | 45.00 |

Frequency of meat consumption: An analysis of (Table 11) reveals that majority (57.50%) of respondents consumed meat twice a week, while 7.50%, 30.80% and 4.20% of respondents consumed meat daily, once in a fortnight and once in a month, respectively. These finding were in agreements with result of Babu *et al.* (2010), Rajasekhar and Reddy (2005), Raju and Suryanarayana (2005) and Reddy and Raju (2010) who reported that most of consumers prefer chicken twice in a week.

 Table 11: Distribution of respondents according to the frequency of meat consumption

| Frequency of meat | Consumers (n=120) | |
|---------------------|-------------------|----------|
| consumption | Frequency | Per cent |
| Daily | 09 | 7.50 |
| Twice in week | 69 | 57.50 |
| Once in a fortnight | 37 | 30.80 |
| Once in a month | 50 | 4.20 |

Preferred season for meat consumption: An analysis of (Table 12) displays that majority of consumers (48.30%) preferred meat in all seasons, while 45.80% of consumers preferred meat in winter season. Rainy and summer season were preferred choice for meat consumption by 4.20% and 1.70% of consumers, respectively. These finding were in agreements with result of Babu *et al.* (2010), Rajasekhar and Reddy (2005), Raju and Suryanarayana (2005) and Reddy and Raju (2010) who reported that most of consumers prefer chicken twice a week and consumption enhanced during winter and rainy season.

 Table 12: Distribution of respondents according to the preferred season for meat consumption

| Season | on Consumers (n=120) | |
|------------|----------------------|----------|
| | Frequency | Per cent |
| All season | 58 | 48.30 |
| Summer | 02 | 1.70 |
| Winter | 55 | 45.80 |
| Rainy | 05 | 4.20 |

Preference of weekdays for meat consumption: As evident from the (Table 13) that majority of respondents (72.50%) preferred meat on all seven days of week, while 27.50% of respondents did not prefer meat on all seven days of week. An analysis of Table 13 display that among those who did not prefer meat on all week days, majority (14.20%) of them did not prefer meat on Tuesday, while 5.00%, 2.50%, 4.20% and 1.70% did not prefer meat on Monday, Friday, Saturday and Sunday, respectively.

 Table 13: Distribution of respondents according to preference of weekdays for meat consumption

| Preference | Consumers (n=120) | | | | |
|---------------------------------------|-------------------|----------|--|--|--|
| | Frequency | Per cent | | | |
| All seven days | 87 | 72.50 | | | |
| Not all seven days | 33 | 27.50 | | | |
| Weekdays which are not preferred n=33 | | | | | |
| Monday | 06 | 5.00 | | | |
| Tuesday | 17 | 14.20 | | | |
| Friday | 03 | 2.50 | | | |
| Saturday | 05 | 4.20 | | | |
| Sunday | 02 | 1.70 | | | |

Reason for not consuming meat on any everyday of a week: An examination of (Table 14) indicates that majority of respondents (45.45%) did not consume meat on everyday of week due to religious sentiments, whereas 18.18% of respondents avoided meat consumption due to tradition in family and 21.21% did not have any specific reason. These finding are in agreements with result of Babu *et al.* (2010), Rajasekhar and Reddy (2005), Raju and Suryanarayana (2005) and Reddy and Raju (2010) who reported that most of consumers prefer chicken twice a week and consumption enhanced during winter and rainy season while due to religious sentiments some consumers avoid consuming meats on specific days.

 Table 14: Distribution of respondents according to the reason for not consuming meat everyday

| Reason | Consumers (N=33) | |
|----------------------|------------------|----------|
| | Frequency | Per cent |
| Religious sentiments | 15 | 45.45 |
| Tradition in family | 06 | 18.18 |
| No specific reason | 07 | 21.21 |
| Any other reason | 05 | 15.15 |

Affordability of meat: Meat is a good source of protein and vitamins but it is costly too, if compared with other food commodities. Thus, the consumers were enquired regarding affordability of meat. (Table 15) exposes that 65.00% of respondents were able to afford the meat while 35.00% of respondents were unable to afford it regularly. Similar finding were observed by Devi and Madhavi (2014) and Das *et al.* (2014).

 Table 15: Distribution of respondents according to their opinion about affordability of meat

| Affordability | Consumers (n=120) | |
|----------------|-------------------|----------|
| | Frequency | Per cent |
| Affordable | 78 | 65.00 |
| Not affordable | 42 | 35.00 |

Place of purchase of meat: The preference of respondents for type of shop and its location was enquired. (Table 16) explicit that majority of respondents (55%) preferred purchase of meat from clean retail meat shop, while 30.80%, 2.50% and 3.30% of respondents preferred meat from clean nearest shop and retail meat shop selling only one type of meat respectively.

 Table 16: Distribution of respondents according to the place of purchase of meat

| Place of purchase Co | onsumers (n=120) | |
|-------------------------------|------------------|----------|
| | Frequency | Per cent |
| Cheap retail meat shop | 03 | 2.50 |
| Nearest retail meat shop | 04 | 3.30 |
| Retail meat shop selling only | 03 | 2.50 |
| one type of meat | | |
| Clean retail meat shop | 66 | 55.00 |
| Clean+nearest | 37 | 30.80 |

Meat consumption behaviour during 'Bird flu' outbreak: Consumers were asked during the course of study towards their response to meat consumption behaviour during bird flu outbreak. As evident from the (Table 17) that majority of respondents (58.30%) reported that they avoided consuming poultry meat, while 20.80% of respondents do not change their consumption behaviour during bird flu outbreak. Further Table indicates that 17.50% and 3.30% of respondents avoided meat of all species and egg only, respectively. These findings were in agreement with the finding of Huang et al. (2014) and Ramdurg et al. (2007) who stated that there was a reduction in the consumption of chicken and eggs by the individual and bulk consumer due to the fear of bird flu while in contrast to the finding of Rathod et al. (2011) who observed that 52.6% of consumers felt no hesitation in meat consumption during bird flu outbreak.

 Table 17: Distribution of respondents according to their response to meat consumption pattern during bird flu incidence

| Meat consumption pattern Consumers (n=120) | | | | | |
|--|---|--|--|--|--|
| Consumers (n=120) | | | | | |
| Frequency | Per cent | | | | |
| 25 | 20.80 | | | | |
| | | | | | |
| 0 | 0.00 | | | | |
| | | | | | |
| 21 | 17.50 | | | | |
| 04 | 3.30 | | | | |
| 70 | 58.30 | | | | |
| | Consumers (n=120) Frequency 25 0 21 04 | | | | |

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CONCLUSION

Majority of the consumers were from middle aged group and most of them were Muslims followed by Hindu and Sikh. Most of respondents were literate, all having education high school and above. Consumers started meat consumption in early childhood and any change in the meat consumption habit was insignificant. Consumers preferred chicken twice a week and consumption was enhanced during winter and rainy seasons while due to religious sentiments some consumers avoided consuming meat on specific days. A significant proportion of respondents showed reduction in the consumption of chicken and eggs due to the fear of bird flu outbreak.

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