

## IDENTIFICATION OF LOW VALUE CUTS OF SHEEP CARCASS FROM RETAIL OUTLETS OF HYDERABAD CITY, TELANGANA, INDIA

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**Abstract:** A survey was made in mutton shops located in various parts of Hyderabad city and a total of 150-200 respondents were chosen for identifying the low value cuts. The specialized questionnaire was prepared to conduct the survey. The overall impression of consumers opined that meat from leg (50.54%), fore shank and breast (16.85%) and loin (14.13%) was tender and tasty and whereas meat from shoulder (9.24%), neck (4.89%) and rack (4.35%) cuts was less tasty and not preferable. Among the respondents, 59 % informed the frequencies of consumption of mutton at 1-2 times per week and 21% consumers at 1-2 times per 2 weeks, 14 % take mutton 1-2 times per month and 6% were occasional buyers. Majority of consumers were eating mutton as a perceptual habit at least once in a week. Based on the consumer survey, muscle of leg, fore shank and breast and loin are grouped as high value cuts and muscles of shoulder, neck, rack, inter coastal muscles and flank muscles are grouped as low value cuts.

**Keywords:** Low value cuts, sheep carcass, economic value, consumer survey.

### Introduction

Meat-related development of major evolutionary importance was the domestication of many animal species that began about 11,000 years ago with sheep and goats and then progressed to cattle, pigs, horses, and camels (Alvard and Kuznar, 2001). In India, many socio-economic factors *viz.*, changed lifestyle, smaller family size, employment opportunities, health consciousness, altered food habits which lead to increased demand for lean and pre-cooked, ready- to-eat, portion-controlled food and meat products (Bhaskar Reddy et al., 2015). Mutton is staple meat and enjoyed by meat consumers in India. Mutton is relished in all religions of the Indian society where there is a tradition for meat consumption from sheep, such as plains of India. Sheep rising is one of the important agricultural enterprises particularly in rural parts. In sheep farming, males are marketed below one year age, fetching remunerative price, but females are released to market as spent animals after end of productive life, their meat is tough and deprived of demand and price. With these reasons,

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there is lot of chances are there to market low value carcass cuts at high cost due to demand of mutton.

Consumers' assessment on the quality of meat items is an important factor while purchasing the mutton (Suresh, 2016). Generally there are no scientific information regarding the quality of the meat available with the vendor. The consumers have to rely on their own expertise to assess the quality including the microbial contamination, and for the desirability of consumption of the product (Suresh, 2016). Keeping in this view, a survey was undertaken to differentiate the high value and low value carcass cuts from sheep based on the consumer preference.

### Materials and Methods

A survey was made in 30-40 retail/wholesale mutton shops in various parts of Hyderabad city and a total of 150-200 respondents were chosen for identifying the low value cuts. The questionnaire for consumers was prepared (Table 1) and they were made aware about the requests before filling the questionnaire. All the respondents were in either of young or middle age and filled questionnaire in personel.

**Table 1. Questionnaire for consumers to identify low value cuts from sheep carcass.**

Sl.No	Name of the Consumer/ Retail shop	Area of retail shop	Portion/Retail cut of preference from sheep carcass	Reasons for preference
			Neck	
			Shoulder	
			Rack	
			Fore Shank and Breast	
			Loin	
			Leg	
<b>Remarks:</b>			Frequency of consumption/month.	

The collected data was processed by employing tabular analysis (ratios, frequencies and percentages) and Garrett's ranking was used to arrive at meaningful conclusions.

### Results and Discussion

An effort was made to collect information from consumers, for describing and accepting of low value cuts. Many consumers who are available at retail shops were not literates and therefore collected the data through interviewing personel and the same results were presented in Table 2. The overall impression of consumers opined that meat from following cuts - leg (50.54%), fore shank and breast (16.85%) and loin (14.13%) was tender and tasty

and whereas meat from shoulder (9.24%), neck (4.89%) and rack (4.35%) cuts was less tasty and not preferable. Among the respondents, 59 % informed the frequencies of consumption of mutton at 1-2 times per week and 21% consumers at 1-2 times per 2 weeks, 14% take mutton 1-2 times per month and 6% were occasional buyers. Majority of consumers were eating mutton as a perceptual habit at least once in a week.

**Table 2. Results showing for identification of low value cuts from sheep carcass by consumer survey**

Total number of retail/wholesale sale shops surveyed	Total number of respondents	Name of Portion/ Retail cut of preference from Carcass	Percentage of preferred portion	Frequency of Consumption	Percentage of frequency of consumption
44	184	Leg	50.54	1-2 times/week	59
		Fore shank and Breast	16.85	1-2 times/15 days	21
		Loin	14.13	1-2 times/month	14
		Shoulder	9.24	Occasional	6
		Neck	4.89		
		Rack	4.35		

The results of the survey inferred that many of the consumers do not have any knowledge regarding the benefits of meat consumption, but their choice for retail cuts of sheep carcasses were noticed. Many consumers were selecting the meat cuts based on their tradition and convenient cooking methods and their adapted eating habits.

In accordance to these results, Suresh (2016) opined that most of the time the consumers purchases whatever is available with the vendor, with a minimal level assessment, usually through visual observation of the meat product. Consumers use a multitude of methods to assess the meat quality. Majority of consumers always rely on their own visual observation. Touch of the meat item is also reported by close to one fifth of the consumers. However, 15% consumers, never touch meat products at the time of purchasing. Smelling is another way of testing the quality, but it has been practiced by only a few. Vendors' opinion regarding the meat is one of the important sources of information on quality; but almost a quarter of consumer never attempts this method. Further, Srinivasa Reddy and Thammi Raju (2010) revealed that about one third of respondents consumed mutton once a week, followed by once in a month. In case of service sector, the respondents consumed mutton once in a week or twice in a fortnight. The business class had mutton once in a week to once in a month. Others

classes of people consumed also mutton at the frequency of once in a week or once in a month. This indicated that mutton was consumed either once in a week or in a month by majority of the urban consumers. In addition to this, urban meat consumers were in favour of fresh meat only (Tzimitra, 1997) and won't compromise on the quality of meat, as they were well aware about the effects of inferior quality meat on health. At the same time majority were able to detect adulteration either by naked eye, smell, touch or other methods, which is due to their experience and quality consciousness.

### **Conclusion**

From the results of this survey, it is concluded that the leg, breast and fore shank and loin portions of the carcasses were considered as high value cuts and shoulder, neck and rack portions were considered as low value cuts. Apart from these, neck trimmings, inter costal and flank muscles are also grouped as low value cuts.

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