

## A Study of Consumer Attitudes towards Meat Consumption Patterns in Kerala

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### Abstract

This study aimed to evaluate the consumption pattern of meat and meat products in major cities of Kerala. A total of 309 respondents, including 155 males and 154 females from Kerala, participated in this online survey through Google Forms. In this study, 76.4% of respondents were between the ages of 20 and 30 and 95.1% were above graduation level. The most preferred meat was chicken (55.3%), followed by beef (28.2%), chevon (10.7%) and pork (5.8%) and concerns regarding consumption of meat include mostly quality (71.8%) and food safety issues (56%). Meat alternatives were favoured by 20.7%. Factors affecting the consumption of processed meat include price (56.6%), fear of lifestyle diseases (35.9%), apprehensions about the side effects of red meat (12%) etc. However, 62.1% of respondents consumed meat weekly and homely meat dishes were preferred by 71.2% of the respondents. 85.1% of the respondents knew about meat-borne diseases, 11.7% suffered from diseases after eating meat and 19.4% were unsure. The present study provides an overview of consumer preferences and factors influencing meat consumption behaviour in major cities of Kerala. It points out the need for tailor-made solutions to address the felt needs of consumers in this state.

**Key words:** - Consumer attitude, meat consumption, meat borne zoonoses, red meat

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Traditionally meat consumption has been an integral part of the human diet. Humans, at least over the past several hundred thousand years, have eaten an omnivorous diet based on hunting and gathering, with much higher amounts of meat than other primates (Kaplan *et al.*, 2000). As per the National dairy development board output value, the meat group contributed Rs. 3,34,789 crores in the year 2020-21 (NDDDB output value, 2023). Food habits and dietary preferences are of considerable interest to various scholars. Market analysts want to know about the new eating habits of the middle class. Economists think of food as a measure of well-being. Despite such widespread interest, there have been very few attempts to study the food habits of the Indian population, including Kerala. Kerala has a non-vegetarian population of 97% (India today, 2021) and similarly, because of social and religious acceptance, meat consumption is relatively higher in the north-east region also (Kumar *et al.*, 2007).

Vegetarian people were least prevalent in coastal states such as Bengal (3%), Andhra Pradesh (4%), Orissa (8%), and Tamil Nadu (8%). In contrast, they were more in landlocked states such as Rajasthan (63%), Haryana (62%), Uttar Pradesh (33%), Madhya Pradesh (35%), Gujarat (45%) and Punjab (48%) (Yadav *et al.*, 2006). There were limited organized studies on consumer attitudes towards meat consumption in Kerala. Knowledge about the attitude of consumers towards meat consumption is essential to establish tailor-made meat marketing systems. Thus, the objective of the study was to assess consumer attitudes towards meat consumption and the factors that affect the meat consumption pattern in major cities of Kerala.

The findings obtained in this survey will guide the entrepreneurs engaged in the meat sector to develop products in line with consumer preferences and expectations and to carry out research and development targeting consumer demands and preferences.

### Materials and Methods

A well-structured pre-tested questionnaire prepared in Google Forms was circulated through Personal Emails and Public platforms like WhatsApp to analyze the consumer attitudes towards meat consumption patterns in major cities of Kerala, and the questionnaire was prepared in such a manner that all

questions were made mandatory so that respondents attempted all the questions (Table I).

### Results and Discussion

Consumer food choices vary from person to person. This study aimed to evaluate the consumption pattern of meat and meat products in Kerala. A total of 309 respondents, including 155 males and 154 females from Kerala, participated in this online survey through Google Forms. In this study, most respondents (76.4%) were between the ages of 20 and 30, which positively impacts the study and helps in designing future marketing strategies; 95.1% of respondents were above graduation level,

**Table I :** Questionnaire to analyze the consumer attitudes towards meat consumption in Kerala

Sl.No.	Questions	Options
1	Your district	Thiruvananthapuram / Ernakulam / Kozhikode / Others
2	Your age group	Below 13/ 13-19/ 20-30 /31- 45/ 46- 60 / Above 60
3	Sex	Male/ female/ others (Specify)
4	Educational background	Below 10 <sup>th</sup> level/ below 12 <sup>th</sup> / Degree/ Postgraduation/ Doctorate
5	Most preferred meat type	Chevon / Beef / Pork / Chicken
6	Reason for the preference	Religious/ Taste and Flavour/ Cost/ others
7	Concerns on selection of meat	Quality concerns/ Food safety concerns / Reliability of shops or companies / Others (Specify)
8	How will assess the freshness of meat	Colour/ flavour/ texture/ belief in the seller
9	Frequency of meat consumption	Daily/ weekly/ monthly/ specify
10	Eating place of meat	Home/roadside shops/restaurants/party/special functions like marriages/ All the above
11	How meat is cooked in home	cooker/open vessel/microwave/other
12	Are aware of meat-borne diseases	YES / NO
13	Are aware of inspection of meat animals by veterinarians before slaughter	YES / NO
14	Are you aware of licensing of meat shops/slaughterhouse	YES / NO
15	Whether the shop from which meat is purchased is licensed	YES/ NO/ Not aware of
16	Have ever suffered from diseases after consuming meat	Yes /NO/ Not sure
17	Interested in meat alternative	YES / NO
18	Reason for interest in meat alternative-	Animal welfare concern / Religious beliefs / others

and 4.8% had educational levels below the 12<sup>th</sup> standard. According to this study, 62.1% of respondents had a habit of consuming meat weekly, 20.1% monthly, and 12.9% daily. The most preferred meat was chicken (55.3%), followed by beef (28.2%), chevon (10.7%) and pork (5.8%) (Fig.I). The taste and flavour (86.7%), price (3.6%) and religious beliefs (1%) were the reasons for preference of the meat (Fig. II) and concerns regarding consumption of meat include quality concerns (71.8%), food safety issues (56%), reliability of meat shops/companies (21.7%) (Fig. III). Factors affecting the consumption of processed meat include price (56.6%), food habit (52.4%), nutritional quality (48.9%), fear of lifestyle diseases (35.9%), concern about zoonotic disease transmission (14.6%) and apprehensions about the side effects of red meat (12%) (Fig.IV).

The freshness of the meat was assessed by the consumers based on the colour (61.8%), flavour (50.5%) and texture (64.1%) of the meat (Fig.V). The study revealed that 40.8% of consumers chose sellers based on their trustworthiness. Meat dishes prepared at their own homes were preferred by 71.2% of the respondents, while 57.6% equally preferred

restaurant and homemade meat dishes. Around 40% of respondents consumed meat only during public gatherings like marriage receptions and birthday parties (Fig.VI). Meat alternatives (Vegetable sources) were favoured by 20.7% of the participants due to animal welfare reasons (18.1%) and religious beliefs (2.6%) (Fig.VII). Regarding the cooking habits of the consumers, 63.8% used pressure cookers for Cooking, and 32.4% used open vessels. Only 1% used microwave ovens for cooking meat, and 2.9 % had no habit of cooking meat at home (Fig. VIII). Among the respondents, 73.5% of people were aware that meat animals must be inspected before slaughter by veterinarians, 16.5 % were not aware of the licensing of meat shops, 14.2% of respondents bought meat from unlicensed stores, and 38.8% were unsure whether the store they bought from was licensed or not (Fig. IX). In this study, 85.1% of the respondents knew about meat-borne diseases and 11.7% suffered from diarrhoeal diseases after eating meat, and 19.4% were unsure about it (Fig. X).

Culture and religious practices significantly shape dietary habits in developing countries (Lahsaeizadeh, 2001) like India. The influence of traditions, customs, and taboos

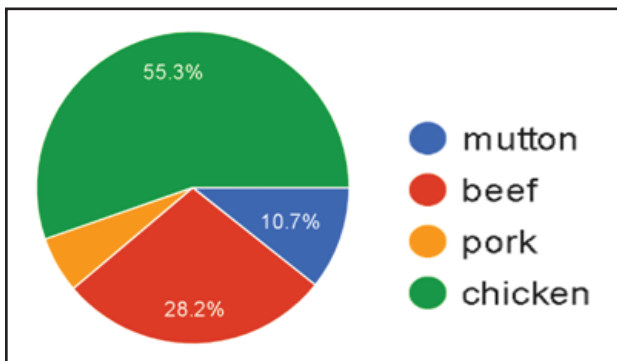


Fig. I Most preferred meat

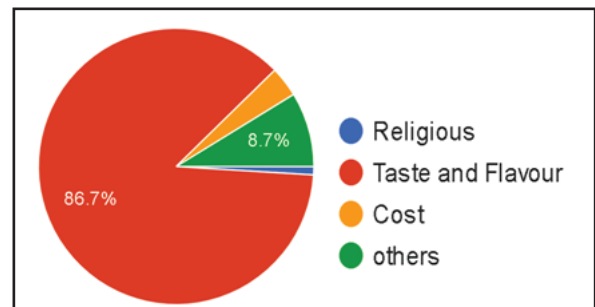


Fig.II Reason for preference of meat

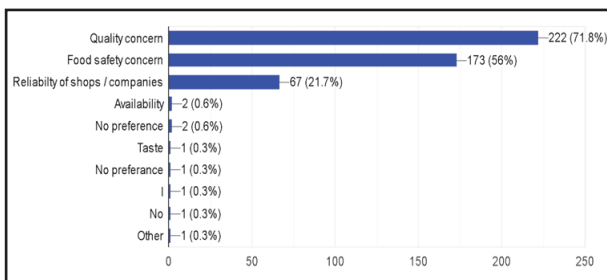


Fig. III Concerns regarding the consumption of meat

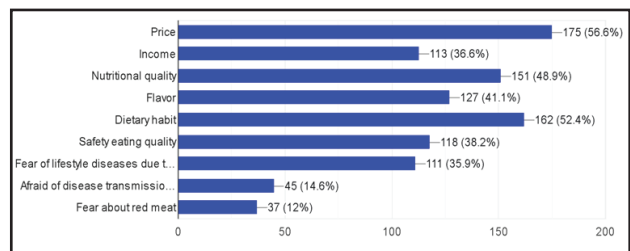
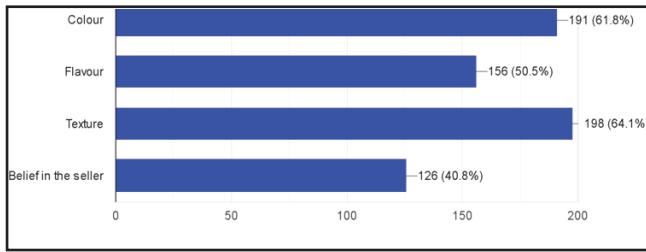


Fig. IV Factors affecting meat consumption

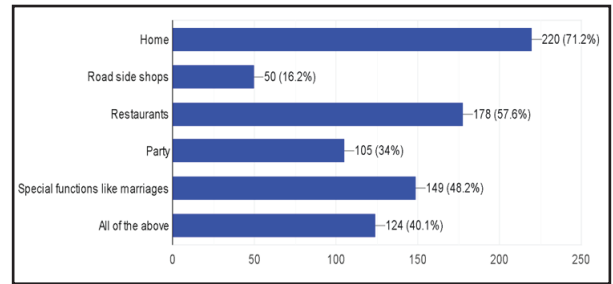
is particularly prominent, impacting meat consumption, especially in rural communities, and studies indicate that urbanization has increased the demand for meat products as individuals adapt to city life (Devi *et al.*, 2014). The differences in meat consumption and production methods closely relate to a country's economy (Tepper, 2012). Cultural differences also contribute to variations in meat consumption patterns within India. For instance, the Hindu tradition of nonviolence plays a major role in limiting meat consumption in the country (Hindu Ethic of Nonviolence, 1996). Furthermore, there are regional and state-level differences in food consumption, with the northern and western regions primarily consuming wheat, while the southern regions

favour rice (Gandhi and Koshy, 2006). Per capita consumption of livestock products also exhibits significant variations across states and regions (Gandhi and Zhou, 2010).

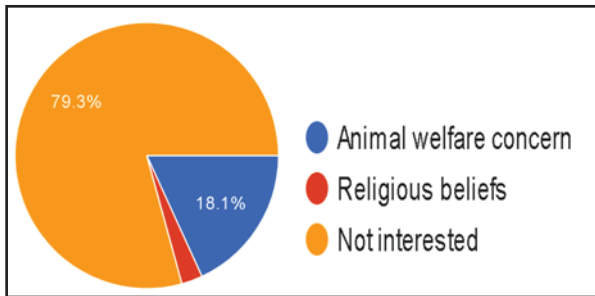
In this survey, 55.3% of consumers preferred chicken meat due to its taste, nutritional quality, low-fat percentage, and ease of preparation. A similar observation was also made by Devi *et al.*, 2014, and no wonder production of poultry meat, of which chicken accounts for 90 % in India, is rising at a faster rate than other meats like mutton, beef, and pork (Kiran *et al.*, 2014). The awareness about licensing of meat shops is comparatively more in Kerala compared to other states. The preference towards beef was found to be 28.2 %, however,



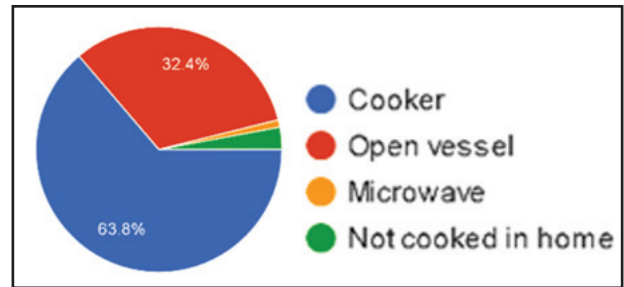
**Fig.V** Assessment of freshness of meat



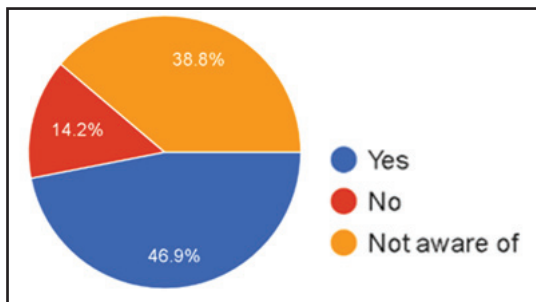
**Fig .VI** Meat consumption places and occasion



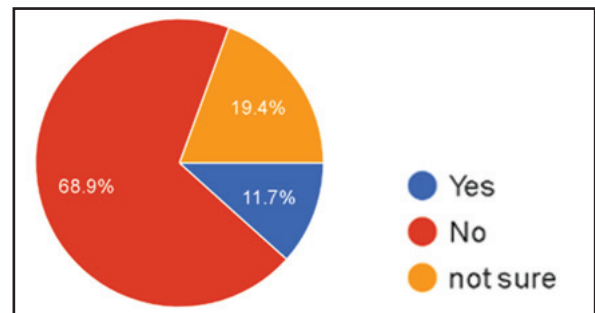
**Fig. VII** Reason for interest in meat alternatives



**Fig. VIII** Cooking of meat at home



**Fig.IX** Purchasing of meat from licensed shops



**Fig. X** Suffered from diseases after consuming meat.

a similar study conducted in Bengaluru has shown that beef was the least (7.3%) preferred meat (Kiran *et al.*, 2018). In a study conducted in India, the rural meat consumers' preference to have a meat dish in the daily menu was only 27.5%. and the remaining 72.5% of respondents were not preferring meat daily due to the traditions (42.5%) and sentiments (25.0%) (Raju *et al.*, 2005)

### Summary

The present study provides an overview of consumer preferences and factors influencing meat consumption behaviour in major cities of Kerala. There are numerous factors that influence the patterns of meat consumption. Regional differences, socioeconomic and demographic factors, seasons, food safety and quality awareness, personal preferences and habits, product prices and human health opinions were the main factors affecting the demand for meat. In summary, manufacturing companies can increase their market shares by selling customized meat products, targeted advertisements, promotions and other marketing tools. The outcome of the current study provides insight into the future strategies that meat scientists must employ to understand consumers' perceived needs and identify ways to solve food safety issues in India.

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