A DEEP DIVE INTO THE EARLY ADOPTERS OF PLANT-BASED MEAT IN INDIA

Rajyalakshmi G
Market & Consumer Insights Specialist
The Good Food Institute India

Husain Kurawadwala
Research Associate
The Good Food Institute India

Good Food Institute IN

Credit:Shaka Harry

EXECUTIVE SUMMARY

Plant-based meats from the time of their launch have been growing at a steady pace across global markets suggesting a major transformation in the way food is produced and consumed in the world. Plant-based meat was worth USD 1.4 billion in the US in 2021 and has grown at 74% over the previous 3 years.

Though still targeting the early adopters, the Indian market has seen a number of launches in this space in the last 2 years with companies launching products in 19+ Indian cities, an Indian plant-based meat brand running ads on TV, and mainstream celebrities endorsing and investing in the category. To further accelerate the category in India, it is essential to understand the profile of the target audience and their usage and attitudes related to the consumption of conventional meat which can provide cues for the manufactures in terms product development, positioning, and pricing strategies for the sector.

Early adopters for plant-based meat in India are young (25-44 years), well educated with higher incomes, living in urban areas. They are omnivores with a meat eating frequency higher than the rest of the population.

For them, meat eating has moved beyond special occasions and is part of their daily meals now. They consume a variety of animal-based meats and different cuts like leg pieces, wings, breast, ribs, mince, and more. They are also experimenting with different formats in each meat type - from fresh to marinated to frozen-depending on the occasion of the consumption. Poultry and fish are a part of their staple consumption while mutton and shellfish take over the special occasions. Meat is an integral part of dishes cooked at home or ordered in.

Whether it's home cooked or ordered, biryani emerges as the most loved dish among early adopters followed by gravies with meat. Snacking items and sides like fish fry, chicken tikka, lollipops, leg pieces, and kebabs are also popular with these audiences.

Early adopters find the experience of meat eating extremely satisfying, describing it as indulgence, rewarding and nourishing. Therefore, it is extremely important that manufacturers recreate not only the taste, but also the other sensorial aspects of conventional meat such as aroma, juiciness, texture, sizzle and more to be able to get a share of the plate.

1 in 4 early adopters are looking at reducing their consumption of conventional meat in the future. They have a high positive disposition towards plant-based meat with 77% of them willing to try the category. Though early adopters are willing to pay a price premium, it is important to improve affordability and also work on availability for wider diffusion of the category.

TABLE OF CONTENTS

INTRODUCTION

Consumer segmentation is a crucial starting point for both scholarly and market research. By identifying populations that are most interested in a specific product, we can study their attitudinal and sociodemographic profiles in order to:

- Best understand them
- Develop products that meet their needs
- Target marketing messages toward individuals in this segment.[1]

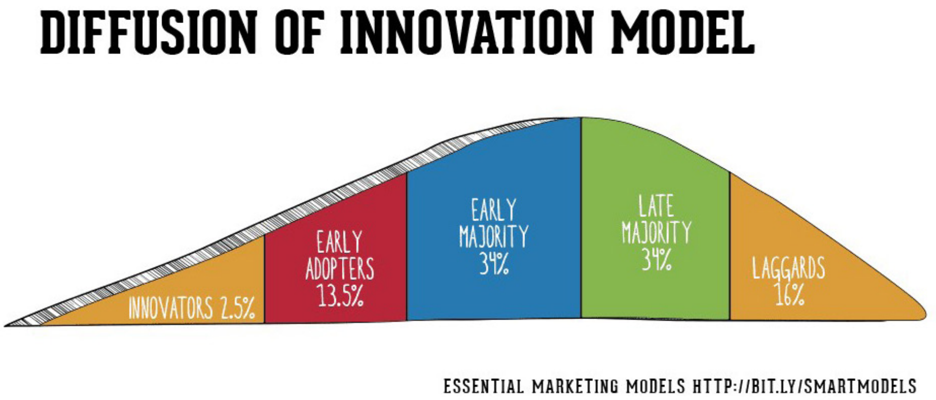
Grounded in the Diffusion of Innovation theory,[2] this report provides an attitudinal and sociodemographic profile of the early adopter segment for plant-based meat (PBM) in India along with their usage and attitudes towards conventional meat.

[1]Szejda, Urbanovich, & Wilks, 2019; Szejda, Asher, & Bushnell, 2019

[2]DOI; Rogers, 2003

DIFFUSION OF INNOVATION

The Diffusion of Innovation theory categorizes people according to their willingness to adopt an innovation:



1. Innovators are the first to try a new behavior, product, or idea (and may even be its creators, as the name implies).
2. Early adopters are people who are comfortable with innovations and are cognizant that change is often inevitable.
3. The early majority need to see evidence of the innovation's worth prior to their adoption of it.
4. Late majority individuals are skeptical and more reluctant to embrace change, only adopting an innovation once it becomes the norm in their society.
5. Laggards are bound by tradition and suspicion, and fervently dislike change.

Due to their likelihood of consuming and purchasing a new category sooner than other consumer segments, appealing to early adopters will be the most strategic point of entry for any new category such as smart protein. Community members often turn to early adopters for approval of an innovation before they themselves try it.

Early adopters of plant-based meat and their usage and attitudes towards conventional meat

Key research objectives

1. Identifying the profile of the early adopters of plant-based meat.
2. Understanding the usage and attitudes of early adopters towards conventional meat and identifying opportunities for plant-based meat.

Research methodology

Research was conducted in 2 phases. Phase 1 was aimed at understanding the profile of the early adopters and phase 2 at understanding the usage and attitudes of early adopters towards conventional meat.

Phase 1 - Identifying the profile of the early adopters of plant-based meat

- Quantitative survey done via online panels of Qualtrics.
- Field work was conducted in Oct-2018 among a sample of 1036 respondents in the age group of 18-65, both male and female.
- Responses were collected through a self-administered questionnaire.
- Questionnaires were administered in English and had a length of about 15-18 mins.

Phase 2 - Understanding the usage and attitudes of early adopters towards conventional meat

- Quantitative survey done via online panels of Ipsos.
- Field work was conducted in Nov-2020 among a sample of 500.
- Questionnaires were administered in English and had a length of about 15-18 mins.
- Target Group: Profile of the early adopters of plant-based meat identified in phase 1, viz: age 25-44, graduates/postgraduates, monthly household income of INR 50,000+, living in urban areas, omnivores.
- Since the field work was conducted during the COVID-19 outbreak, it is reflective of the attitudes and behaviors exhibited by the target audience due to the pandemic.

KEY FINDINGS: SECTION 1

IDENTIFYING THE PROFILE OF THE EARLY ADOPTERS OF PLANT-BASED MEAT

gfi India

Credit:Eat Just

A. Analysis framework for identifying the profile of the early adopter segment

Profile of the early adopter is identified using 2 parameters:

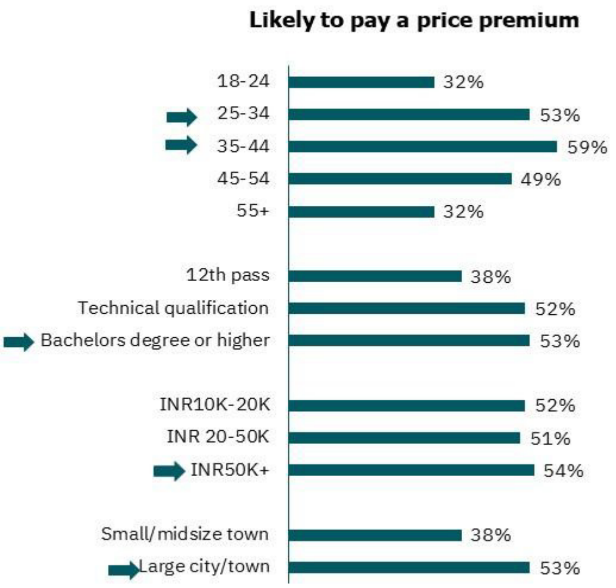
- Respondents who reported being “very or extremely likely” to **pay more** for plant-based meat than they would for conventional meat, and
- Respondents who reported being “very or extremely likely” to **regularly purchase** plant-based meat.

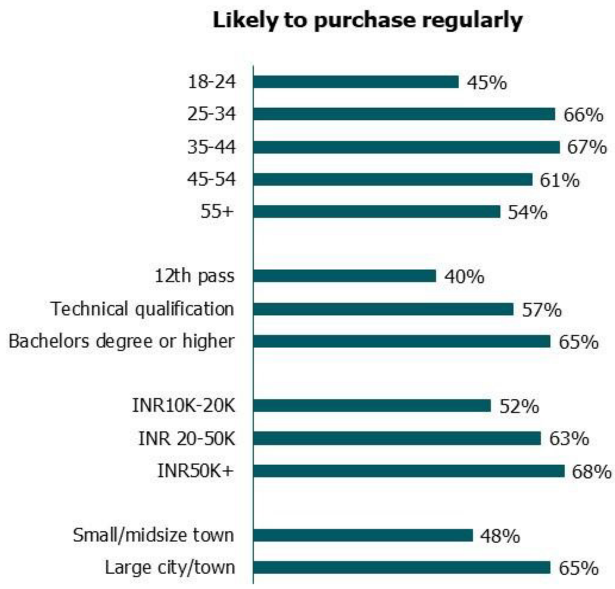
Since initial market prices are generally higher than their conventional meat counterparts, those who are more likely to pay more for plant-based meat and those who are interested in regularly purchasing plant-based meat can truly be labeled as early adopters.

Our analysis is focused on a comparison between the early adopters (as characterized by those willing to pay more or those interested in purchasing regularly) and the full sample. Interpretation of the profile of early adopters should therefore focus on the differences between the early adopter subgroup and the full sample and should not be compared to the country’s census data.

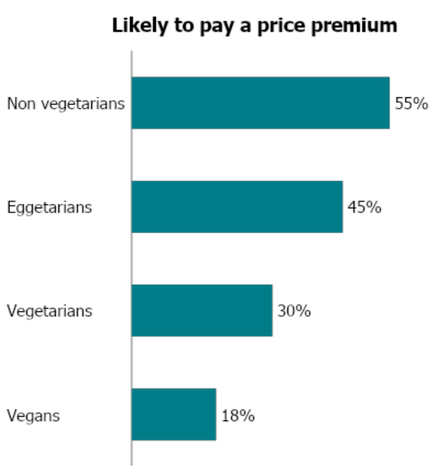
B. Profile of the early adopters of plant-based meat

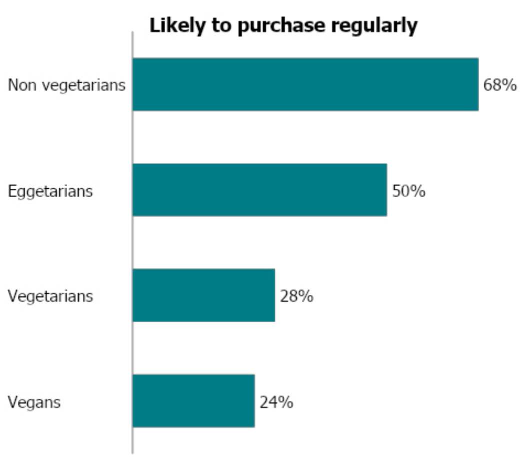
1. **Young (25-44), graduates with higher incomes, living in urban areas** are more likely to pay a price premium and are also likely to purchase them regularly.



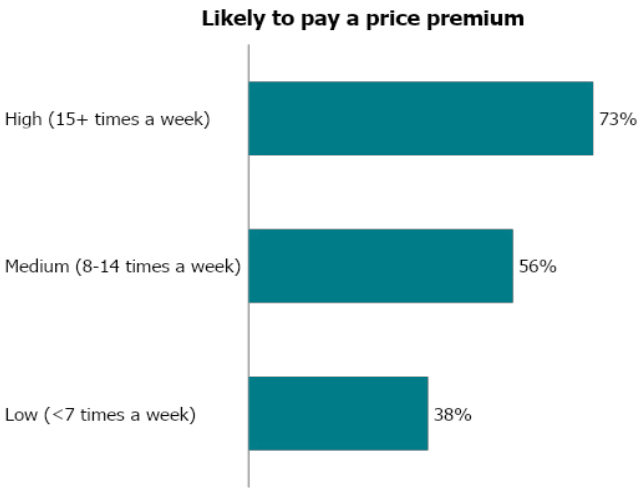


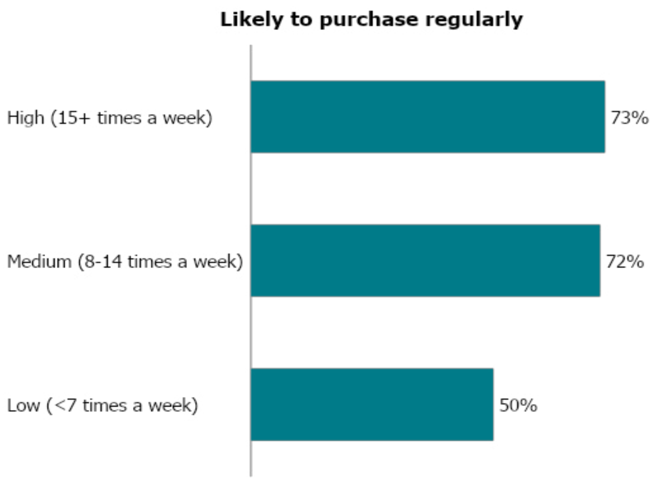
2. **Omnivores (non-vegetarians)** are more likely to pay a price premium for plant-based meat and are also likely to purchase them regularly.



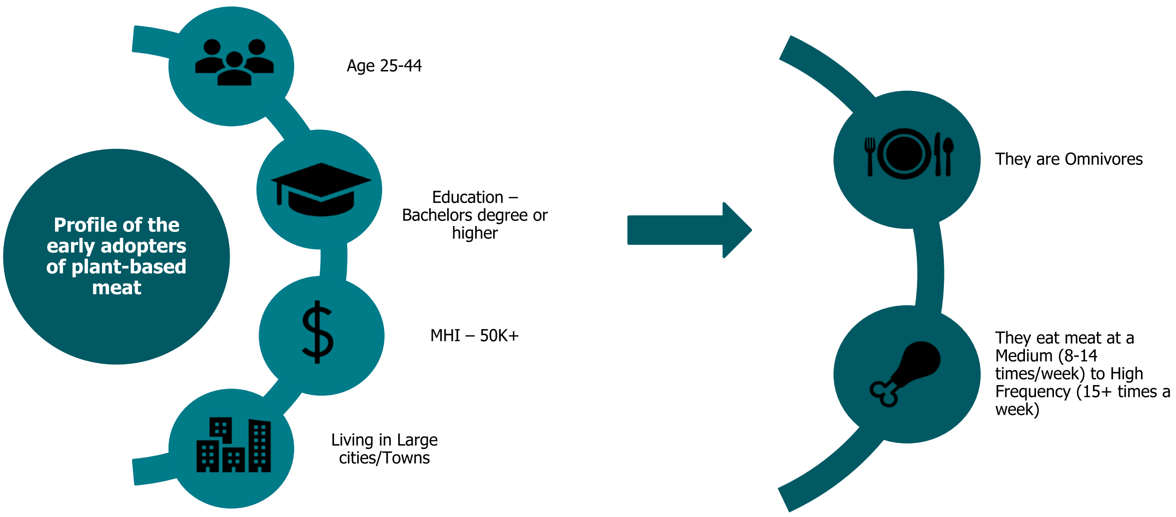


3. **Early adopters consumer conventional meat almost on a daily basis.** Higher likelihood to pay a price premium and regular purchase intent seen among the consumers who eat conventional meat 8+ times in a week.





4. Looking at all the data points, early adopters for plant-based meat can be summarized as **young, well-educated with higher incomes, living in urban areas.** They are also **omnivores who consume conventional meat almost on a daily basis.**

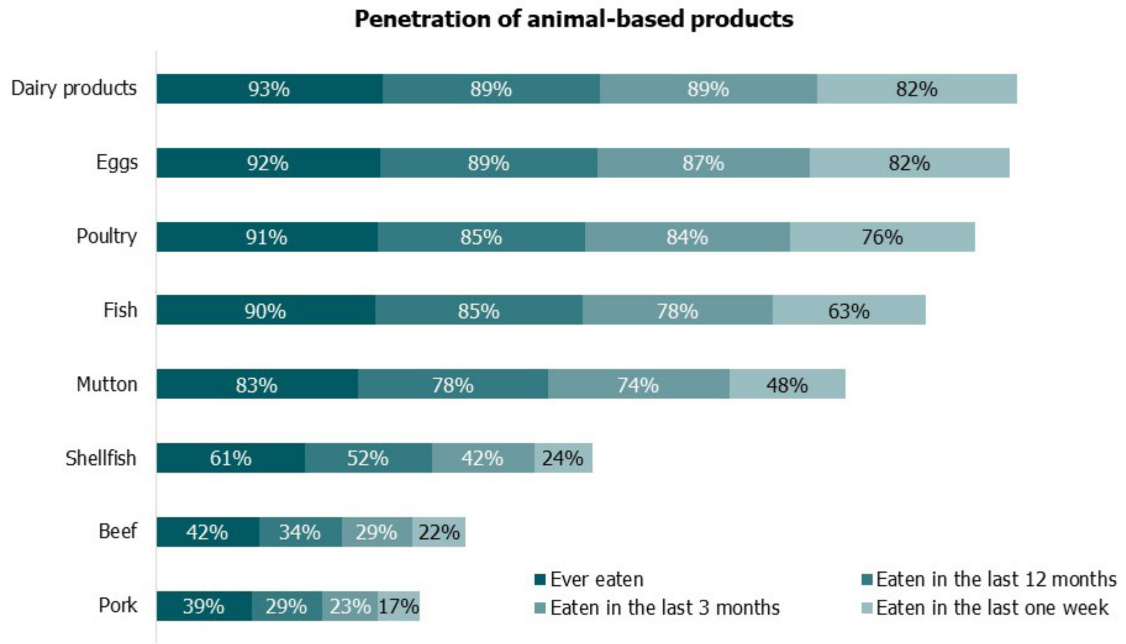


SECTION 2

UNDERSTANDING USAGE AND ATTITUDES OF CONVENTIONAL MEAT BY EARLY ADOPTERS OF PLANT-BASED MEAT

Credit:Good Food Conference

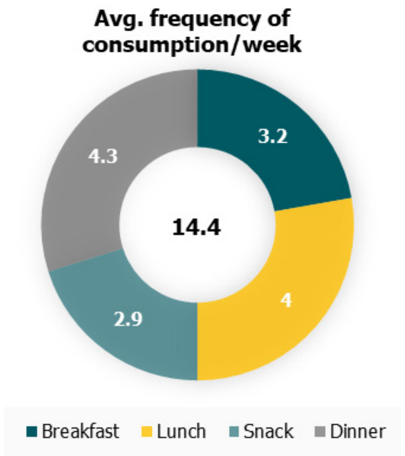
A. Penetration of animal-based products

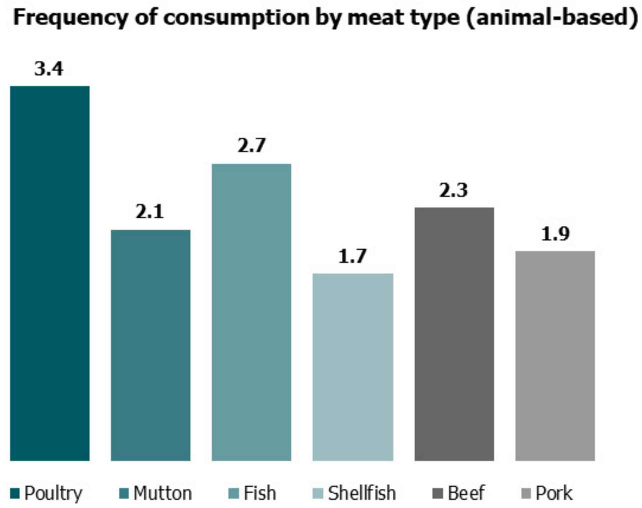


- **Dairy products, eggs, poultry, and fish** have the **highest penetration** among the early adopters, followed by mutton and shellfish. Pork and beef have the lowest penetration.
- Penetration of meat increases with the increase in affluence. Higher penetration seen in the MHI[1] of INR 100,000+ as compared to the respondents in the MHI of INR 50,000-100,000.

[1]MHI (Monthly Household Income)

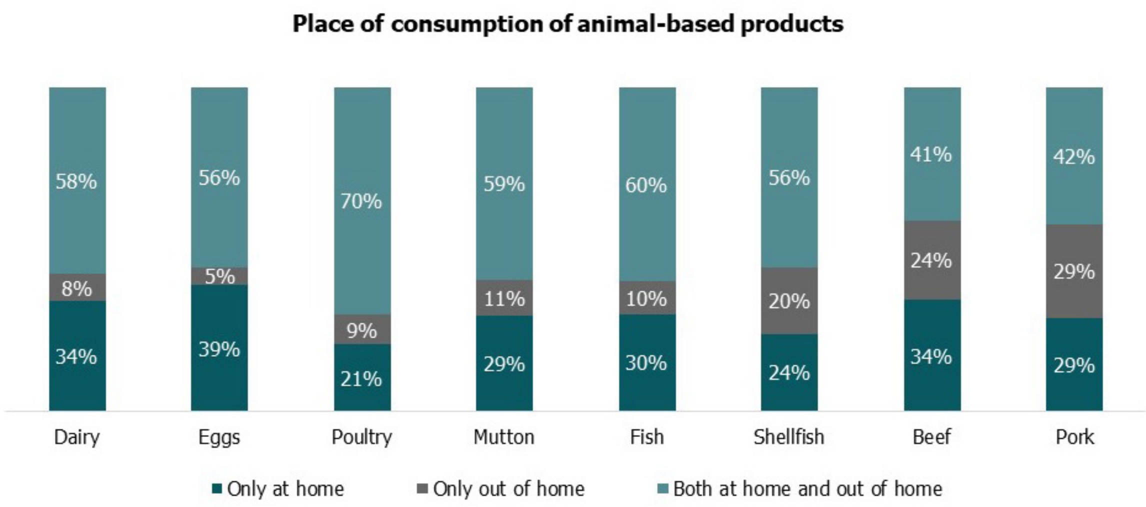
B. Frequency of consumption of animal-based products





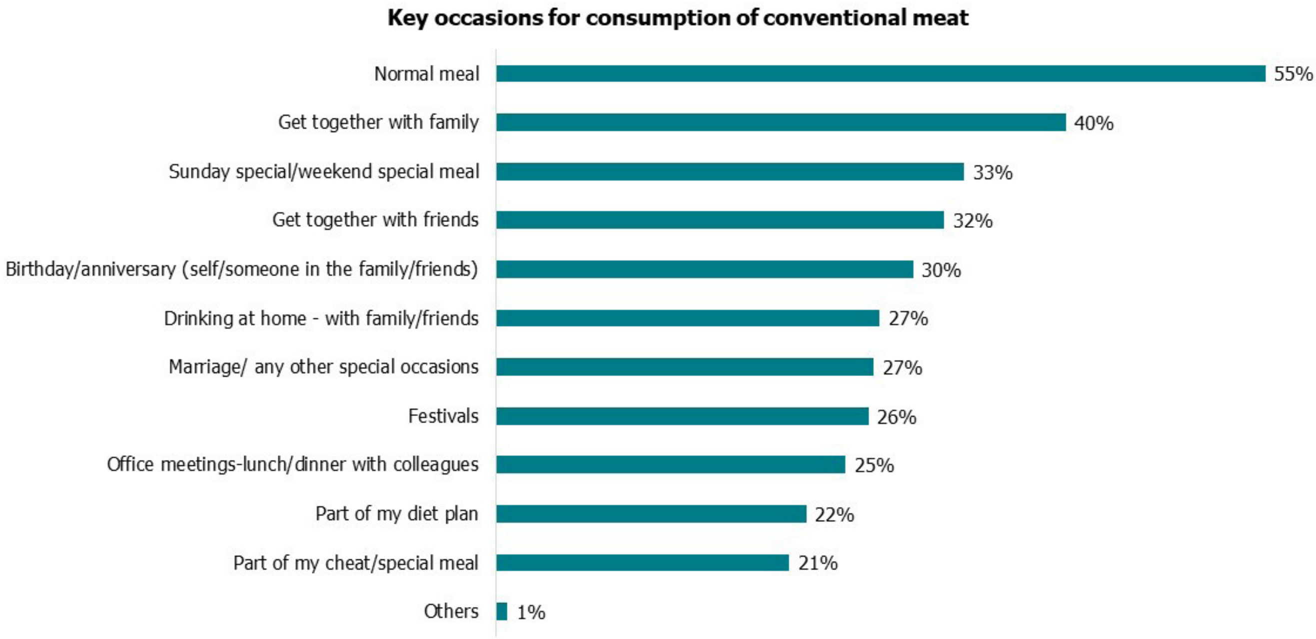
- On an average, **early adopters consume conventional meat for half of their meals in a week** (doesn't include dairy and eggs). Out of the **28 meal** occasions in a week (breakfast, lunch, snack, and dinner), around **14 meals** have meat in them.
- Similar to penetration, poultry and fish take the highest share in frequency as well.
- Dairy and eggs are typically consumed **4-5 times a week** (dairy **5.4** times and eggs **4.7** times a week).

C. Place of consumption of animal-based products



- Early adopters consume conventional meat **both at home and out of home.** 8-11% of the early adopters consume dairy products, poultry, mutton, and fish only out of home. The "Only out of home" category of consumption increases significantly for shellfish (20%), beef (24%), and pork (29%).
- Acceptance at home or the difficulty in availability, cleaning, and cooking efforts could be some of the reasons for out of home consumption.

D. Key occasions for consumption of animal-based meat

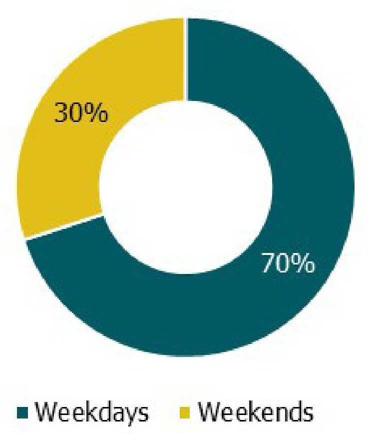


- **Conventional meat has moved beyond special occasions and entered weekday menus for the early adopters.** Some of the key occasions for consumption of conventional meat include "regular weekday meals, get-togethers with friends/family, Sunday/weekend special meals, birthdays, anniversaries, parties at home, marriages, festivals etc".
- Around **20%** of occasions revolve around eating meat as part of a diet plan or as a cheat/special meal showcasing the likeability and versatility of meat.

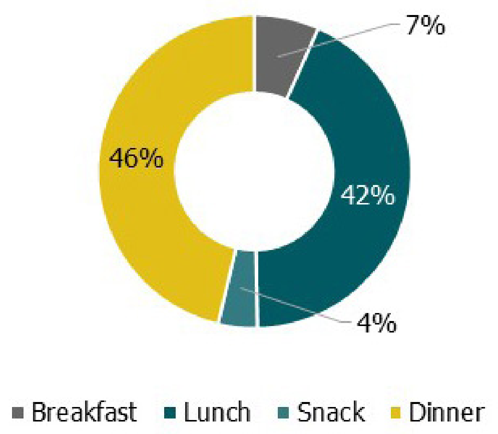
- Higher income groups consume meat as part of their normal weekday meals and also for special occasions, reiterating the fact that meat consumption increases with affluence. Meat consumption as **weekday meals is higher among the 35-44 age group compared to the 25-34.**
- This leads to opportunities for plant-based meats to develop and position products across occasions from weekday menus to special occasions.

E. Key parts of the day for the consumption of conventional meat

Consumed conventional meat on

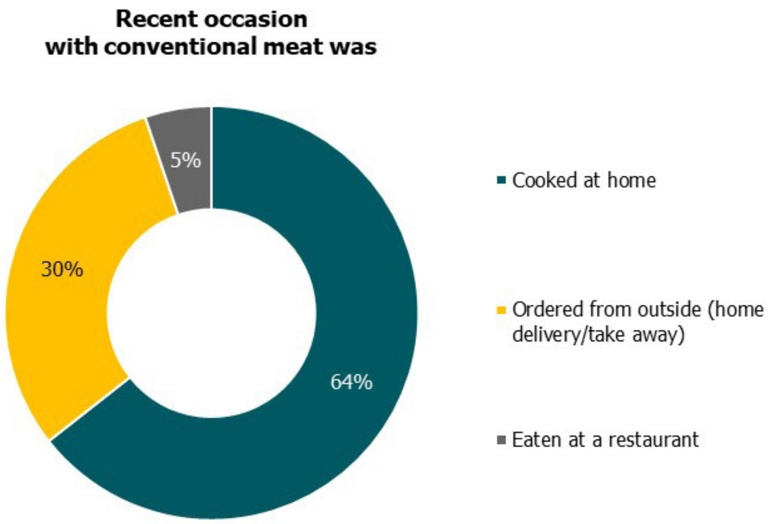


Consumed conventional meat for



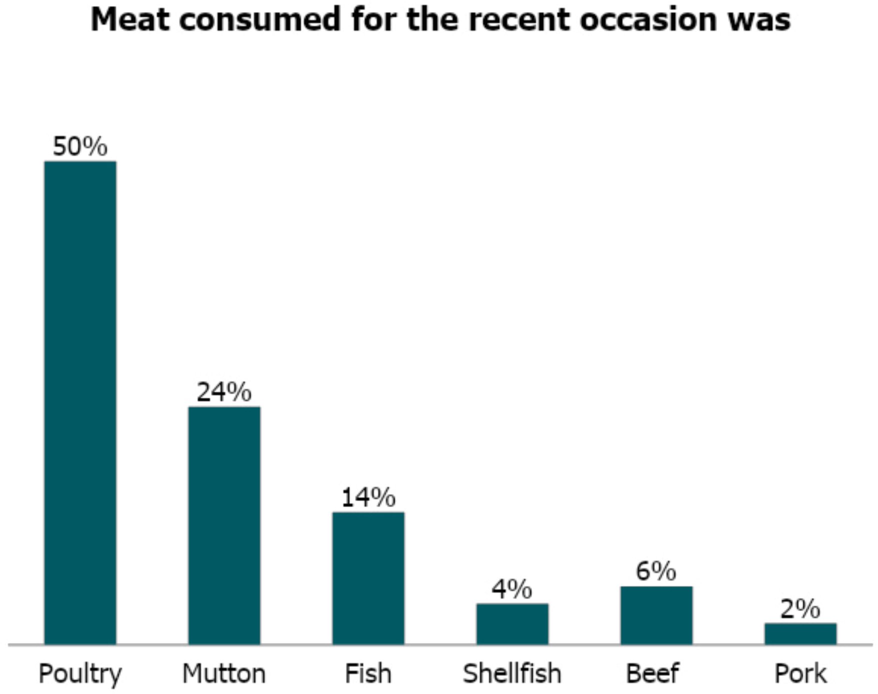
- Lunch and dinner are the key day parts. However, there is an opportunity for breakfast and snacks as well. Weekend meals, birthday/anniversary specials, festivals, marriages, and office meetings have good potential for snacking opportunities.
- With consumers being more open to experimentation in the snacks category, plant-based meats can explore this space with indulgent and 'easy to make' snack options.

F. Where was it prepared?



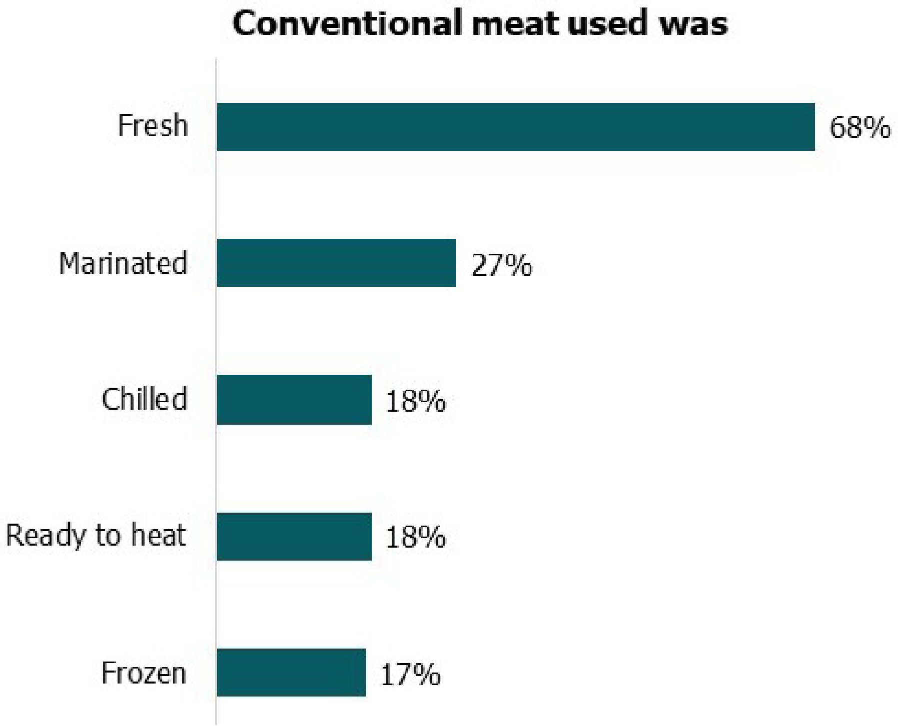
- **1 in 3 meals with meat is ordered from outside.** Weekday meals with meat are generally home cooked. Special occasions like parties, drinking at home, festivals, office meetings and cheat meals which have meat, have a relatively higher incidence of ordering from outside.
- Only 5% of these occasions were outside, at a restaurant. This is on account of restaurants not being fully operational and change in behaviors due to COVID-19 during the fieldwork period (Nov’2020).
- **Food service could be a great starting point for plant-based meats to create awareness and make an entry into the households.** Occasions like drinking at home, festivals, office meetings, get-togethers could be the low hanging fruit.

G. What was the protein used?



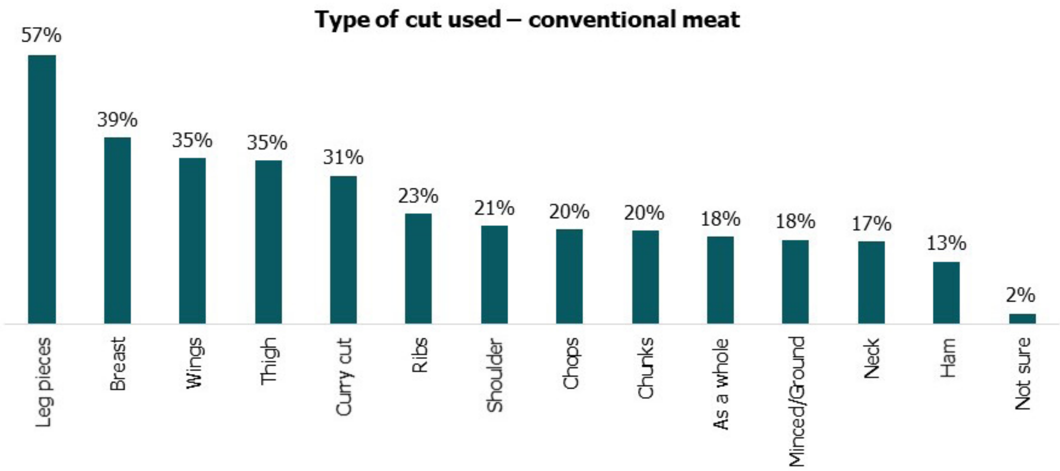
- **Poultry dominates the share of occasions, followed by mutton and fish.** Weekday lunch and dinner have the highest proportion of chicken and fish consuming occasions. Mutton and shellfish take a higher share when it comes to special occasions.
- **Mutton is mostly consumed for Sunday/weekend specials, get-togethers with friends, marriages and other special occasions** and lunch/dinner with colleagues.
- Shellfish is preferred for Sunday/weekend specials, birthdays/anniversaries, drinking with friends, marriages, and other special occasions and cheat meals.
- Beef has a higher share in diet plans and lunch, dinner with colleagues.

H. Type of meat purchased



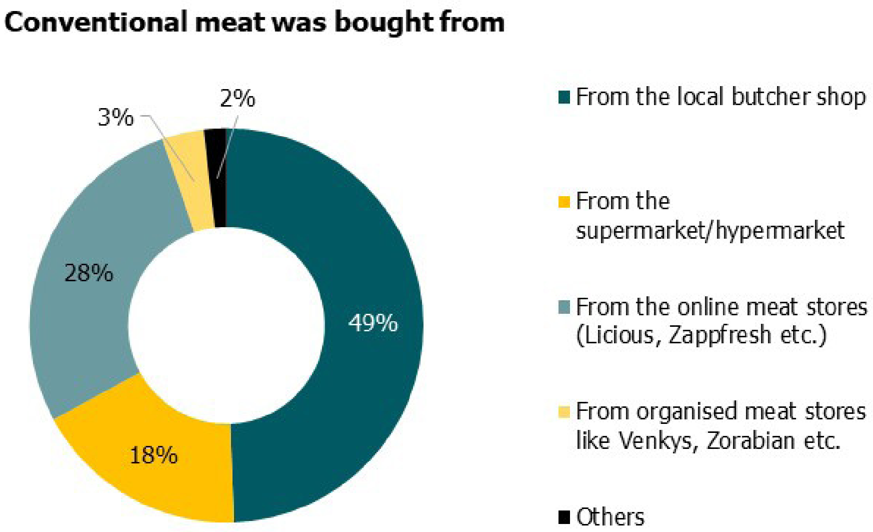
- **Fresh meat dominates across occasions.** However, formats like marinated/chilled/frozen/ready to heat are making inroads for 'special meal' occasions, signaling a need for convenience and easy cooking.
- With modern trade being a key channel, plant-based meats can explore the formats like **marinated/chilled/frozen** etc and can explore both main meals and the easy to make, indulgent snacks segments.

I. Type of cut used



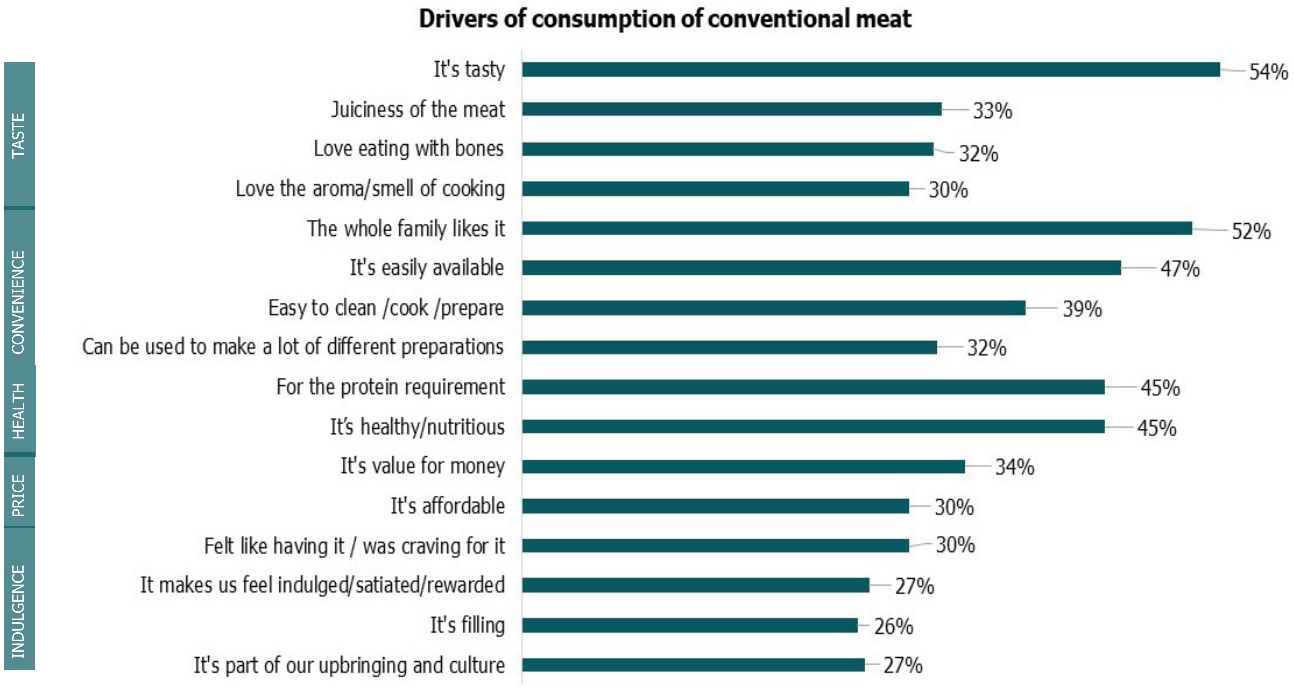
- **Leg pieces (57%) are the most bought cut across occasions** showcasing the love for eating meat with bone. Their share goes up further for special occasions like get-togethers with friends/ drinking and cheat meals.
- **Usage of ribs, chops goes up for special occasions like weekend meals, birthdays, anniversaries, get-togethers and festivals.** This also corroborates with the increase in mutton consumption for special occasions.
- **Eating with bone is an important component of eating conventional meat,** be it leg pieces, ribs or chops. It would be **critical for plant-based meats to work on these formats** to increase the consumer appeal.

J. Key outlets for purchase of animal-based meat



- Conventional meat was **bought from modern trade outlets** (grocery and meat, online and offline) for close to **50%** of the occasions.
- **Regular meals and Sunday special meals** have more occasions with meat ordered from a **local butcher shop**. Birthdays & anniversaries, drinking at home, office meetings, cheat meals have a higher proportion of orders from online meat stores.
- With **modern retail** accounting for half of the shopping occasions, there could be great synergies that can be explored for the plant-based meats category in terms of **storage and distribution.**

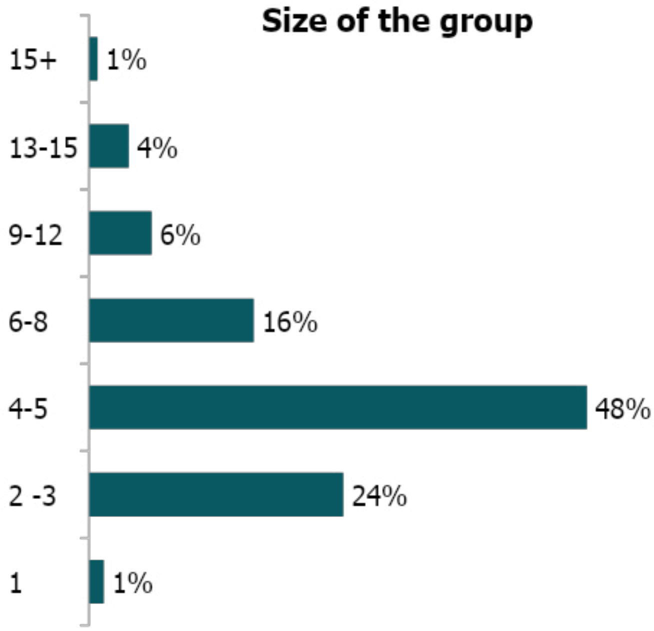
K. Drivers of consumption for animal-based meat



- **Taste is the primary driver for consumption of meat, followed by convenience.** Along with the taste, the **entire gastronomical experience** of juiciness, aroma and bones is also important.
- Unlike the majority demographic, meat consumption among early adopters is also **driven by health** and their **daily protein requirement.**
- While price might not be appearing in the top stated drivers, it is **critical in driving the wider diffusion of the category.**

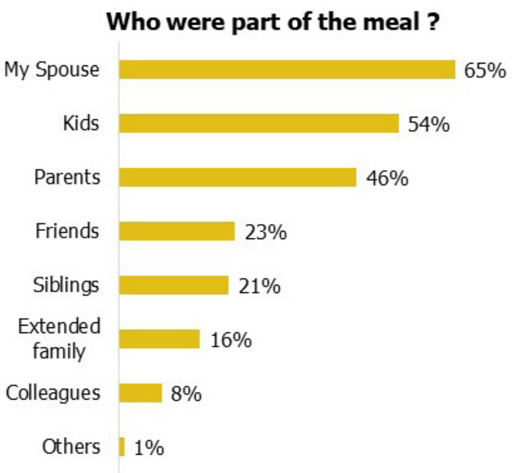
- **Versatility** (can be used to make a lot of preparations) is an important driver for weekday menus and for occasions like marriages. Cravings are a key driver for cheat meals.
- **Easy to cook and clean** is an important driver for special occasions like get-togethers, festivals, birthdays/anniversaries. This is definitely an opportunity area that the plant-based category can explore by offering **better convenience and similar indulgence as conventional meat.**

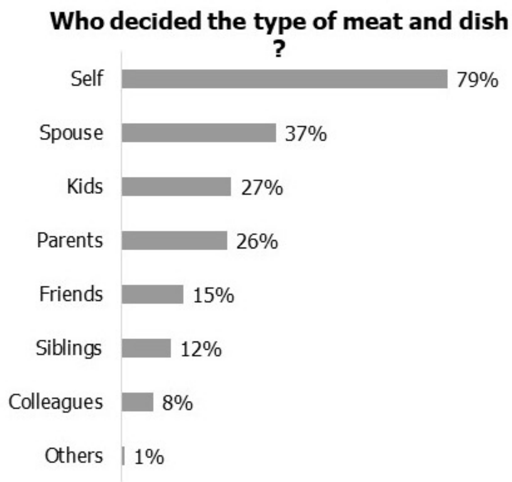
L. Who else alongside early adopters, takes part in the consumption of conventional meat?



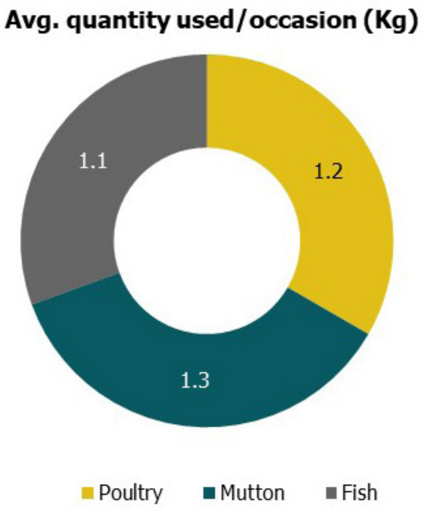
- On an average, the group size of the recent consumption occasion was **5.2.**
- Normal meals have the lowest group size with 5 people.
- Birthdays/anniversaries, festivals, marriages and special meals have a higher group size of ~6.
- **Respondents along with the spouse** are the key decision makers in terms of which type of meat to be brought and what dish to be prepared.
- Friends are part of occasions like get-togethers, drinking and cheat meals. Extended family is part of occasions like birthdays, anniversaries, drinking at home and marriages.

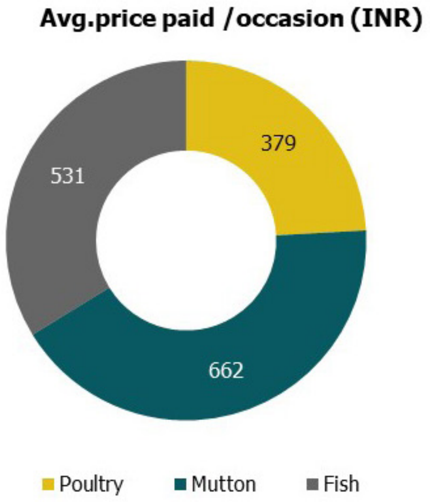
- Kids influence the choices during festivals, marriages and cheat/ special meals. Friends also have a say during the get-togethers.





M. Average quantity consumed and price paid for animal-based meats





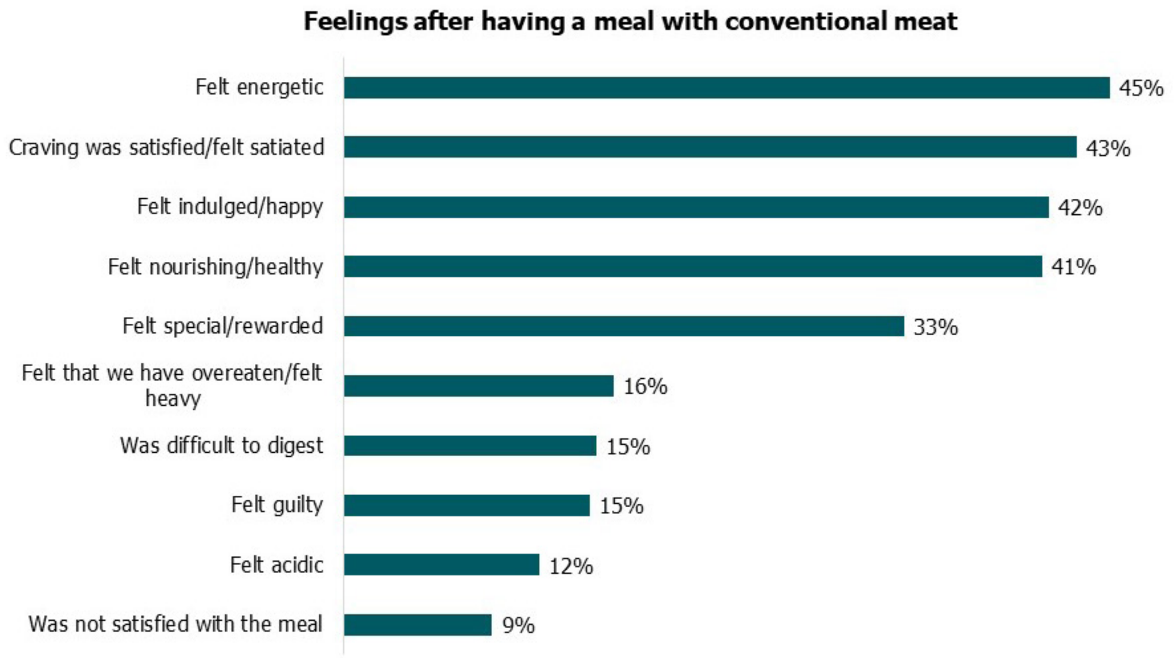
- Average quantity of conventional meat used per occasion was **1.1-1.2 kilos** for early adopters. Price varied from meat to meat with chicken being the lowest @ **INR 379 for 1.2 kg**, fish @ **INR 531 for 1.2 kg** and mutton **@ INR 662 for 1.3 kg.**
- With meat being a part of day to day meals, the per capita consumption for early adopters comes to around approximately **77-84 kg/annum**. This is closer to the per capita consumption of developed countries like the US (100 kg/annum) and the UK (60 kg/annum) compared to India (3.5 kg/annum).
- Though the early adopters are willing to pay a price premium for plant-based meats, it remains a challenge for long term usage. Looking at the case studies from the developed countries, one has to **achieve price parity with the conventional meat at the earliest to convert the trials into regular consumption.**

N. Most popular animal-based meat dishes consumed

Consumption at home	Consumption out of home
Chicken curry	Chicken biryani
Chicken biryani	Butter chicken
Mutton curry	Mutton biryani
Mutton biryani	Chicken curry
Butter chicken	Mutton curry
Fish curry	Fish fry
Biryani	Biryani
Fish fry	Chicken lollipop
Chicken fry	Chicken tikka
Chicken 65	Roast chicken

- Whether it is home cooked or ordered in, **biryani emerges as the most popular dish with the early adopters.** Butter chicken and different types of curry preparations using conventional meat are the other most popular dishes both at home and ordered from outside.
- When it comes to ordering meat dishes from outside, fish fry, chicken lollipop, chicken tikka and roast chicken are popular. Along with them there are mentions of chicken pakoras, leg pieces, kebabs, momos, pizzas etc.
- The wide range of snacks ordered from outside once again confirms the hypothesis on the **snacks category being low hanging fruit for plant-based meat.**

O. Sentiments/feelings after eating animal-based meat



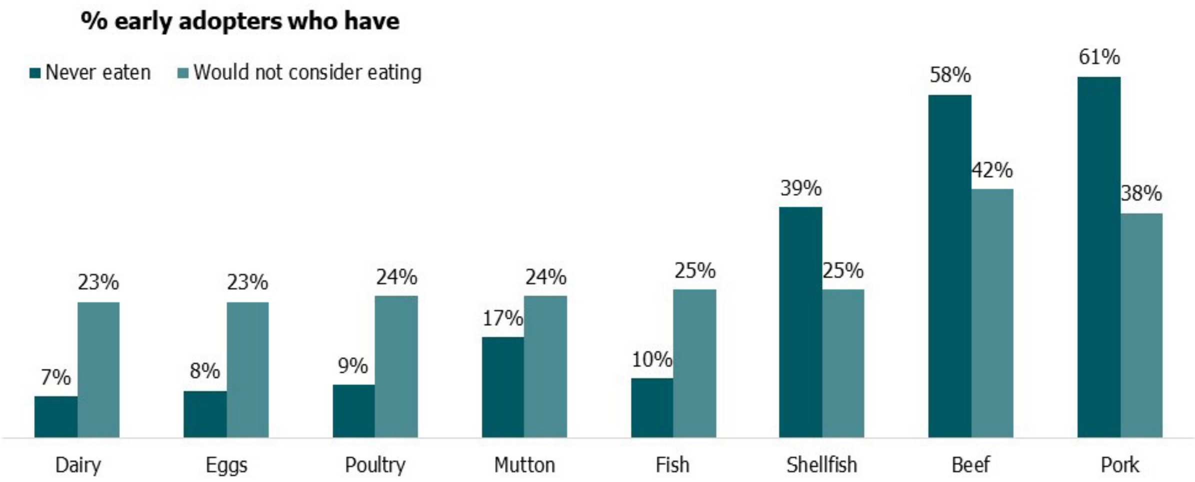
- **Feeling energized, satiated, indulged, rewarded, nourished** are the most common emotions felt after having a meal with conventional meat.
- Around **15%** of early adopters felt that the meal with meat was **heavy, difficult to digest, felt acidic or felt guilty after eating.** These feelings increased for meals during drinking, festivals, and cheat meals.
- This is a great positioning area for plant-based meats, **offering similar indulgence of conventional meat without the heaviness or guilt associated with the same.** Occasions like cheat meals, drinking, and festivals could be low hanging fruit for plant-based meat.

SECTION 3

ATTITUDE TOWARDS CONSUMPTION OF CONVENTIONAL MEAT IN THE FUTURE

Credit: Good Food Conference

- **1 in 4 early adopters** claim that they would not consider consuming animal-based products like chicken, fish, mutton, and dairy/eggs in the future. Approximately 40% of the early adopters wouldn't consider eating beef and pork in the future.



- **Product related barriers (hygiene of the meat procured, smell, ease of cooking, and heaviness on the stomach post consumption) along with the increasing consciousness about animal cruelty, impact on planet are some of the reasons why early adopters are looking at reducing their conventional meat consumtpion.**

- COVID-19 also had an impact on the consumption of conventional meat. **22% of the early adopters have reduced the amount of meat consumed and 6% of them have either totally stopped consumption or stopped consuming some types of meat.** 19% reduced consumption during the initial days of the pandemic, but returned to the same levels of consumption now. Higher age groups, women, and income groups of INR 50K-100K have a higher proportion of users who reduced consumption during the initial days of COVID, but recently returned to pre-pandemic consumption patterns.
- Plant-based products have a great opportunity to make in-roads among these audiences by handling the product related barriers and communicating the impact on planet and animal cruelty.

SECTION 4

AWARENESS, TRIAL, AND ATTITUDE TOWARDS PLANT-BASED MEAT

Credit:Eat Just

High positive disposition towards plant-based meats observed among the early adopters in both phases of research viz. phase 1, identifying the profile of the early adopters of plant-based meat in India (conducted in 2018) and phase 2, usage and attitudes of early adopters of plant-based meat towards animal-based meat (conducted in 2020). **54% of the early adopters have high awareness about plant-based meats in 2020** and this is an increase over 2018. **53% of the aware consumers are also willing to pay a price premium** over conventional meat.

Awareness and attitude parameters	2018	2022
Are aware of plant-based meat	39%	54%
Are likely to try plant-based meat	74%	77%
Are likely to purchase them regularly if they find the taste and texture similar to conventional meat	71%	73%
Claim to eat plant-based meat as a replacement for conventional meat	71%	62%
Are willing to pay a price premium	53%	53%

In terms of the nomenclature, **the majority of early adopters (51% of them) think "plant-based meat" is the right term to describe this category**, closely followed by "vegetarian meat" (48%) and "vegan meat" (41%).

Early adopters rate plant-based meats higher than conventional meat on ethical and health parameters.

- Plant-based meat scores better than animal-based products on sustainability, impact on the environment and animal cruelty.
- They also find plant-based products exciting and appealing. Early adopters rate them higher on health and nutrition compared to animal-derived products.

Early adopters do not rate plant-based products highly superior on taste, affordability, and convenience compared to animal-based counterparts at this stage. Among the meat types, **poultry and mutton have the highest appeal if produced using alternate methods.** Although proteins like dairy, eggs, and fish have higher penetration in conventional form, they have relatively lower appeal if produced using alternate methods.

While the **health and ethical reasons can be the starting points in generating interest in the category through trials, it is crucial for entrepreneurs to achieve competitive taste profiles, prices, and convenience for sustained interest and repeat purchases.** Bridging these gaps can help in the wider diffusion of the category at a faster pace.

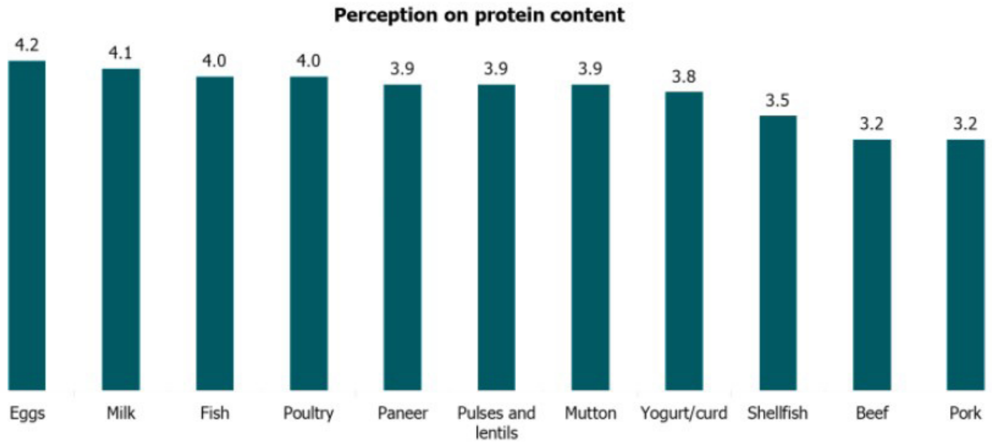
SECTION 5

PERCEPTION OF THE PROTEIN CONTENT OF VARIOUS ANIMAL/ PLANT-BASED PRODUCTS

gfi / India

Credit:Eat Just

- **Eggs and milk are perceived to be high in protein content** compared to the other animal based and plant-based sources.
- Fish and poultry are perceived to have the highest protein content among conventional meat items, while beef and pork are rated the lowest by consumers.
- Health and protein requirement being one of the key drivers for the consumption of animal-derived products, it is **essential to educate the consumers on the protein content of various plant-based products** and also to match up to the protein content of animal-based products.



THANK YOU

To learn more, vist: www.gfi-india.org

Good Food Institute IN

ABOUT THE AUTHORS

Rajyalakshmi G

Market & Consumer Insights Specialist, The Good Food Institute India

rajig@gfi.org   Rajyalakshmi G | LinkedIn

Rajyalakshmi focuses on helping GFI India size the opportunity for smart protein in the Indian market, execute its extensive consumer research agenda, and meaningfully drive the market forward in the alternative protein space. Raji has over 15 years of experience working in strategy, business insights, and analytics for stalwart consumer brands including Unilever, AC Nielsen, Aditya Birla Retail, and McDonald’s. She loves working on big datasets to identify growth opportunities and create strategies across various P’s of marketing.

Husain Kurawadwala

Research Associate, The Good Food Institute India

husaink@gfi.org   Husain Kurawadwala | LinkedIn

Husain holds a Master’s degree in Agricultural and Applied Economics from the University of Illinois at Urbana Champaign. Through his experiences with organizations like the World Wildlife Fund and Soybean Innovation Lab, Husain has worked on international research projects to understand the impact of food production and consumption from a holistic perspective (environmental, economic, and health).

ACKNOWLEDGEMENT

Thanks to Bella Fong for providing detailed review, proofreading, and editing support for this study.

ABOUT GFI INDIA

Since our establishment in 2017, GFI India has served as the central expert organization, thought leader, and convening body in the Indian 'alternative protein' or 'smart protein' sector. As part of an international network of nonprofits with partners in the U.S., Brazil, Israel, and Asia Pacific, GFI India is on a mission to build a secure, sustainable, and just global food system. With unique insight across science, business, and policy, we are using the power of food innovation and markets to accelerate the transition of our food system toward alternative proteins. In building the sector from the ground up in India, we're aiming to establish a model for its growth all across the developing world.

To learn more about our work and the smart protein ecosystem in India, visit us at www.gfi-india.org or on

- Twitter: @GoodFoodIndia
- Instagram: @goodfoodinstituteindia
- LinkedIn: The Good Food Institute India
- YouTube: GFI India