

# MEAT YOUR MATCH

Insights into the comparative experience of plant-based meat and conventional meat products in India.

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# EXECUTIVE SUMMARY

Taste is the primary driver for the consumption of meat in India. Taste includes the entire sensorial experience offered by meat, which includes the aroma during and post cooking, texture, juiciness, moisture, meatiness, and aftertaste. This evaluation of plant-based meat products like kebabs, nuggets, samosa, and keema against their animal-derived counterparts shows that the products have come a long way in terms of the sensorial experience.

The packaging of plant-based meat products was found to be premium, modern, and attractive by consumers and, in most cases, was rated superior to the packaging offered by traditional meat products. In terms of appearance, most plant-based meat products looked similar to animal-derived products in terms of colour, size, texture, and appearance. However, the quantity, provided for plant-based meat was rated low compared to animal-derived meat. Most consumers cooked plant-based meat in a similar fashion to animal-derived products and they found it easy and convenient. Many consumers also used their intuition of cooking animal-derived meat products like nuggets, kebabs, and samosas to plant-based products rather than following the instructions on the pack.

The sensorial experience offered by plant-based meat products came very close to their animal-derived counterparts. However, some of the key attributes where consumers could differentiate plant-based from animal-derived products were taste, texture, and juiciness. The texture of some of the products was more associated with soy than meat, while others were either too soft or too hard. The juiciness of plant-based meat changed depending on the cooking method and amount of time cooked and was rated generally lower compared to animal-derived meat. Some customers also highlighted that the lack of meatiness in the plant-based meat products did not adequately satisfy their meat cravings. The ratio of quantity to price led customers to rate plant-based meat products poorly on affordability and value for money.

Keeping the current taste and price equation in mind, most consumers are looking at plant-based meat options as a substitute for those occasions when they can not consume animal-derived meat rather than an alternative to animal-derived meat. However, in cases where the taste and price equation is closer to animal-derived meat products, consumers are willing to switch to these products, showcasing the potential of the category as it progresses on the journey of achieving taste and price parity with animal-derived meat.

# INTRODUCTION

The alternative protein market in India is brimming with new products and offerings. Currently, consumers can choose from more than 377 products available in 41 formats from 73 brands across plant-based meat, eggs, and dairy. Plant-based meat options in the market range from Western formats like patties, sausages, and nuggets to Indian formats like kebabs, biryani, pulao, parathas, etc., promising to offer similar taste and sensorial experiences as their traditional meat counterparts.

Taste is the primary driver for the consumption of meat in India. Taste includes the multi-sensorial experience offered by meat, including aroma, texture, juiciness, and flavour. Early adopters highlighted needing some convincing on taste to try plant-based alternatives. The top taste barriers reported for plant-based meat in the U.S. are focused on moisture, flavour, and texture.

As the plant-based meat industry in India expands its presence on the shelves, iterating the product to suit consumers' expectations is essential. As part of that journey, **GFI India conducted an in-depth assessment of multiple plant-based meat products available in India, seeking detailed feedback on the consumers' experiences.**

This report details the assessment findings and provides recommendations and cues for product improvement to enhance and accelerate the adoption of plant-based meat products in India.



# RESEARCH METHODOLOGY

## Research objective

To assess the performance of plant-based meat products and benchmark their performance against their meat counterparts to provide insights on areas that need improvement.

## Research design

The research was conducted using a new-age qualitative-led approach by building online micro-communities. It was a three-week-long immersion that involved a combination of mini-group discussions, surveys, and activity-led inquiries in the micro-communities with a total sample size of 64.

A total of eight products were assessed, of which four were plant-based meat products, and four were their traditional animal-meat-derived counterparts. Each participant evaluated one plant-based meat product and its animal-meat-based counterpart, a total of two products.

16 consumers tasted one each of a plant-based and animal-derived meat product. To ensure there was no order bias, eight consumers tested plant-based meat products first, followed by their animal meat-based counterparts, and the rest the rest reversed the order.

In this micro-community-based approach, consumers provided real-time feedback on the product consumption experience—from procuring the pack to storing, cooking, and final consumption—through interactive photos and videos. After the four-day placement period, a detailed quantitative survey was administered to gauge feedback on the fundamental parameters of the product. This was followed by mini-group discussions where consumers shared their experiences with the product in extensive detail.

## Process followed

1. Creation of micro-communities: 4 communities with 16 members each
2. Placement of product 1 and feedback through images, videos, comments, and surveys
3. Placement of product 2 and feedback through images, videos, comments, and surveys
4. Mini-focus group discussions to get an in-depth understanding of the consumer experience

## Target group

- A total sample size of 64
- Male and female (in the ratio of 70:30)
- Age: 25-44 years
- Living in Delhi, Mumbai, and Bangalore
- NCCS A1 with a monthly household income of INR 150,000+
- Omnivores/Non-vegetarians
- Users and non-users of the category (50:50)
  - Users are the respondents who have consumed plant-based meat in the past 12 months
  - Non-users are the respondents who are aware of the category but have not tried it

## Products assessed

1. Kebabs: Plant-based chicken seekh kebab and animal-derived chicken seekh kebab
2. Samosas: Mutton samosas in both plant-based and animal-derived formats
3. Nuggets: Plant-based chicken nuggets and traditional animal-derived chicken nuggets
4. *Keema* (mince): Chicken keema in both plant-based and animal-derived formats

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# PLANT-BASED CHICKEN SEEKH KEBAB





## 1.1. Packaging of the product

- **Most consumers found the packaging of plant-based chicken kebabs to be better than the animal-derived ones. The packaging used for plant-based kebabs cued high quality and premium-ness to the consumers.**
- The packaging was described as ‘neat and clean’, with all the necessary information. Packaging aroused curiosity among the non-users/first-timers.
- Consumers used multiple identifiers on the packs to arrive at the conclusion that the product was plant-based/vegetarian. They noticed the green dot as well as the mention of ‘plant protein’ on the pack. The green colour of the pack further reinforced that the kebabs are vegetarian.
- The image and the name of the product generated some curiosity among consumers with regard to its taste. It set an expectation of the product being meat-like.
- Many consumers also checked the ingredients to understand how the product was made. They also used the ingredients and nutritional information to better understand the taste of the product.
- Claims about the high protein content caught the consumers’ attention. It cued healthiness to them.
- Other hygiene checks on the pack included manufacturing date, shelf life, preservatives used, quantity, method of cooking, etc.
- Some of the suggestions made by consumers included adding ‘tempting product imagery on the packs, like kebabs being barbecued.’



## 1.2. Upon opening the pack

- **Consumers found plant-based meat kebabs to be on par with animal-derived kebabs in quality, looks, size, aroma, colour, texture, etc. The only difference highlighted was the quantity and portion size. Animal-derived kebabs were rated high on value for money compared to plant-based kebabs.**
- Most consumers stored the product anywhere between a few hours and 2-3 days before cooking it.
- By and large, the pack was easy to open. Consumers found the tray-like packaging exciting. It helped retain the shape of the kebab and did not lead to any stickiness or breakage.

- Consistency in size, colour, and texture of the pieces denoted high quality.
- A few consumers mentioned that they could see the spices in the product, which gave them an indication of the taste and flavour. Some consumers also noted the strong smell of the masalas.
- Some of the improvement areas highlighted were:
  - Consumers **expected a smooth texture for kebabs**, as animal-derived seekh kebabs have a smoother surface. A consumer mentioned that grinding the masala and putting in the kebab may be better than adding whole spices.
  - **For the price of the product, many consumers found the quantity of kebabs to be low.**
  - Consumers also mentioned that after opening the product, there should be a **way to reseal the product** for future use. They suggested that a ziplock packaging or a lid could help store the product.
  - A consumer mentioned that the pack size was too big for the quantity provided. Some consumers felt using sustainable packaging might appeal more as consumers tend to correlate plant-based products with sustainability.
  - In one customer's case, possibly due to a delay in delivery, the product received had defrosted, and therefore, on opening, the kebabs were disintegrated.



### 1.3. Cooking of the product

- **According to the consumers, cooking plant-based kebabs was easy and not significantly different from animal-based kebabs. Due to the bigger size of the plant-based kebabs, they took slightly longer to cook.**
- While there were multiple ways to cook kebabs, most respondents pan-fried them with a few spoons of oil. A few consumers deep-fried them, while one consumer grilled them on a grill, and one heated them in the microwave.
- Although the cooking method was mentioned on the pack, **consumers leveraged their own experience of cooking kebabs at home.** A few consumers mentioned that they did check on the quantity of oil required.
- There was no breakage or stickiness while cooking.
- The aroma of the spices and masalas in the kebabs was strong while cooking. For a few consumers, it enhanced the experience.



● Plant-based kebab

- It was easy to identify that the product was cooked when the colour changed to a darker shade of brown.
- Consumers who pan-fried the product mentioned that it did not absorb excess oil.
- Some of the improvement areas highlighted were:
  - Since the pieces were long and did not have the typical gap in the centre, cooking the entire **kebab took longer and was challenging**. A consumer had to turn it vertically on the pan so that she could cook it. One of the consumers cut the kebab into smaller pieces before cooking to make it easier to cook.
  - When microwaved, the product **releases too much oil and water**. Additionally, the kebabs took a long time to cook when cooked in the microwave or grill.
  - While some people preferred the aroma, a few mentioned that it was overwhelming.
  - A few consumers who deep-fried the kebabs mentioned that the oil blackened and the masala disintegrated in the oil, making it unusable. No such issues emerged for those who pan-fried it.
  - A few consumers mentioned that the colour of the kebabs became too dark after cooking, making them look unappetizing.



## 1.4. Serving and consuming the product

- Consumers rated animal-derived chicken kebab better in terms of taste, texture, and juiciness when compared to its plant-based alternative. Meatiness, the balance of flavours, mouthfeel, and aftertaste were highlighted as improvement areas for plant-based kebabs.
- Respondents consumed both the kebabs (plant-based and animal-derived) at different times, but most of them were eaten as evening snacks. A few had it as a morning snack or packed it in the school tiffin, while others had it with their main meal, like lunch or dinner.
- The plant-based kebab had a strong flavour, dominated by spices (garam masala).
- Those who pan-fried them found the product soft and juicy without being too oily.
- Depending on how the kebabs were cooked, most consumers found the saltiness to be balanced. The balance of flavours was higher among those who pan-fried it.
- Juiciness, chewiness, and meatiness were also better for those who pan-fried it. While the product was able to offer the experience of meat, it did not fully meet expectations.



Animal-derived kebab



- Some of the improvement areas highlighted were:
  - Balance of flavours — While some respondents found the flavours balanced, others found the spices (especially garam masala) overwhelming.
  - Consumers felt that because the masalas were not ground, the product's texture was impacted. They prefer for the spices to be roasted, ground, and blended.
  - Consumers who grilled the product found it to be too dry.
  - The microwave/grill cooking did not result in a satisfactory texture of the end product.
  - Those who deep fried the kebabs felt that the product lacked spices as they disintegrated while cooking.
  - A few consumers mentioned that the kebabs were too soft and didn't have the firmness expected from meat-based seekh kebabs.
  - For those who eat chicken regularly (almost daily), the product fell short on meatiness and did not satisfy their meat craving.
  - A few consumers mentioned that the kebabs were too salty, especially for children.
  - Consumers suggested that the colour of the cooked product should be closer to chicken (a little towards red rather than dark brown).
  - A few consumers shared that they faced digestion issues and felt uneasy for a long time after having the product.



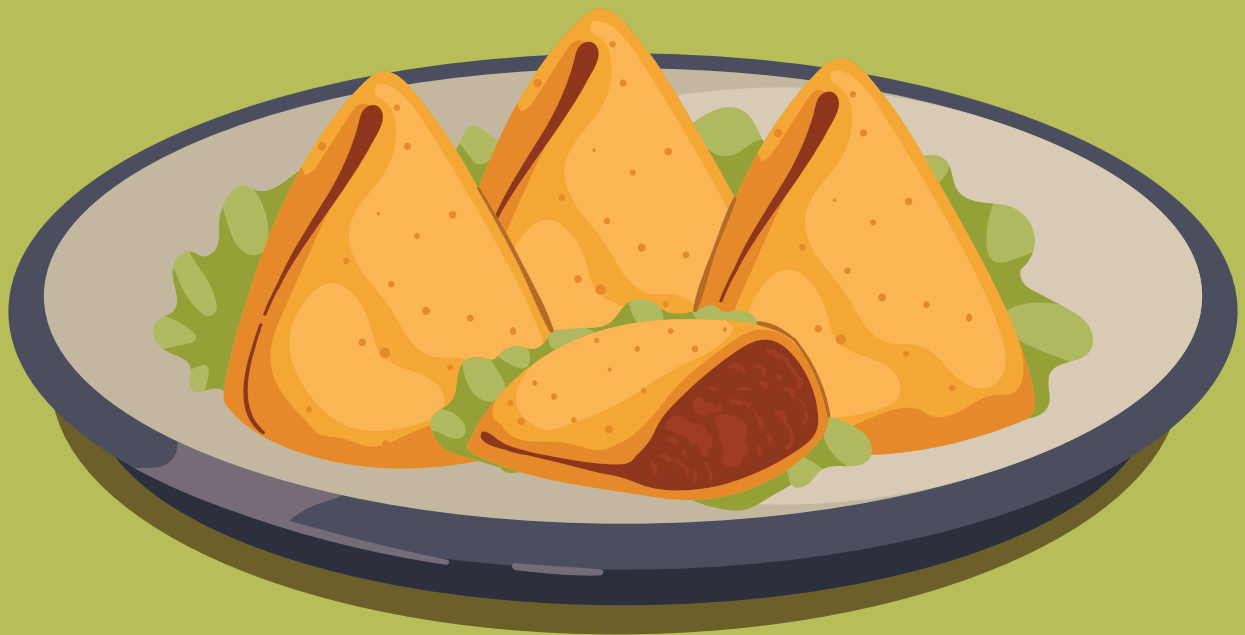
## 1.5. Future purchase intent

- **In general, animal-derived chicken seekh kebabs offered a better experience to the consumer in terms of taste, texture, and juiciness.**
- Regarding value for money and affordability, the plant-based kebabs fared poorly, driven by the lower quantity and portion size.
- Most consumers were willing to have plant-based kebabs as an alternative to meat only on occasions where they could not consume animal-derived meat rather than as a replacement for meat.

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# PLANT-BASED MUTTON SAMOSA





## 2.1. Packaging of the product

- **For the most part, consumers found the packaging of plant-based samosas better than their animal-derived counterparts, primarily due to the eye-catching colour of the pack.**
- The colour of the packaging caught the consumers' attention.
- Consumers found the quality of the packaging to be good—determined by the pack's thickness and its sturdiness.
- The pack also surprised some consumers, as they were unaware that such a product (specifically samosa) existed in the market.
- Consumers used cues like 'plant-based, 0% meat,' and the green dot to identify the pack as plant-based. Few consumers noticed other claims such as 'high fibre, 100% fun, and no preservatives.'
- Other things that consumers checked on the pack included the list of ingredients, manufacturing date, shelf life, and nutritional value.



## 2.2. Upon opening the pack

- **Consumers liked the mutton samosa better than the plant-based samosa in terms of the integrity of the product. The outer layer of the animal-derived samosa was thick, the pieces didn't stick together, and the size was considered appropriate.**
- The consumers liked the shape of the plant-based samosas. A few said that the size was perfect and made the samosas feel light.
- Most consumers were **satisfied with the quantity** of the samosas (for the price charged).
- Most consumers **liked the ziplock** on the pack as it made it easy for them to store the pack post-use and retain the freshness of the product.
- The quantity of the filling was considered appropriate.
- Some of the improvement areas highlighted were:
  - The image on the pack got consumers to expect a patti samosa (commonly consumed in Mumbai and Bangalore), but they found the plant-based samosa size too small.
  - A common issue faced by many consumers post-opening the pack was that the **samosas stuck to each other, the outer layer had peeled off,**



● Plant-based samosa



● Animal-derived samosa

and that **some of them were broken from the corner, exposing the stuffing inside**. When consumers tried to pull the samosas apart, the outer layer tended to peel off.

- Consumers noticed oiliness in the pack when the samosas were broken.
- Consumers recommended that the outer **layer of the samosas be thickened** and layered with some grease so that they don't stick together. The packing can also be in a tray-like pack or a box to avoid sticking.
- A few consumers mentioned that, given the size of the samosas (too small), the quantity could have been more.
- The image of the dipping sauce on the pack gave some consumers the impression that the pack contained a dip.



### 2.3. Cooking the product

- **The experience of frying the mutton samosa was better for most consumers, primarily due to the robustness of the pieces.**
- Most consumers deep-fried plant-based samosa and served it as an evening snack. A consumer decided to pan-fry the samosas on a flat pan to mitigate the challenge of the broken samosas.

- The plant-based samosas that were intact at the time of opening the pack and during the thawing process cooked easily and quickly.
- The oil absorption was lower for intact pieces, and there was no breakage or spilling of masala during frying.
- A few consumers mentioned a pleasant aroma while cooking and that the pieces looked crispy and crunchy post-cooking.
- Some of the improvement areas highlighted were:
  - Since most of the samosas were either broken or had the outer layer missing, consumers had to be extra cautious while frying them. Despite being careful, consumers claimed that **the masala spilled out and the oil turned black, making it unusable**. The absorption of oil was also high.
  - Samosas that were intact **cooked too fast, and the outer layer turned brown very quickly**. It gave some of the consumers the impression that the pieces were burning.
  - As a result of the browning, consumers could not tell whether the samosas were cooked from the inside or not.
  - Consumers recommended that the time taken to fry the samosas on the pack should be a maximum of 2-3 minutes.



● Plant-based samosa (being cooked)



## 2.4. Serving and consuming the product

- **Consumers rated plant-based mutton samosa on par with animal-derived samosa in terms of taste.**
- Consumers served the product with ketchup or homemade chutney as a pre-dinner or evening snack with tea. A few pieces of plant-based samosa were broken, and consumers found it difficult to serve them to the family.
- Most consumers **enjoyed the taste** of the plant-based samosa and found it **flavourful and balanced**.
- The crispiness and crunchiness of the plant-based samosas met their expectations of a samosa.
- The spiciness and taste of the samosas were deemed appropriate for all members of the family.
- The samosa, from a texture perspective, came quite close to the experience that mutton offers. Consumers mentioned that the filling was juicy and appropriately chewy.
- A few consumers mentioned that it may be difficult for a person to figure out whether the product is animal-derived mutton or plant-based.
- The aftertaste was pleasant, and no one mentioned any issues with digestion.
- A few of the improvement areas highlighted were:
  - Consumers who prefer spicy food mentioned that it could use a little more flavour and seasoning. However, the taste was appropriately enhanced when served with a spicy condiment.
  - A few consumers also recommended that the samosas be sold with a pack of chutney that compliments the samosas.
  - A few consumers mentioned that the aroma needs to be a little bit stronger (when compared to mutton).
  - Some heaviness was felt among a few consumers after consuming plant-based mutton samosa, perhaps due to the absorption of oil in the broken pieces.



## 2.5. Future purchase intent

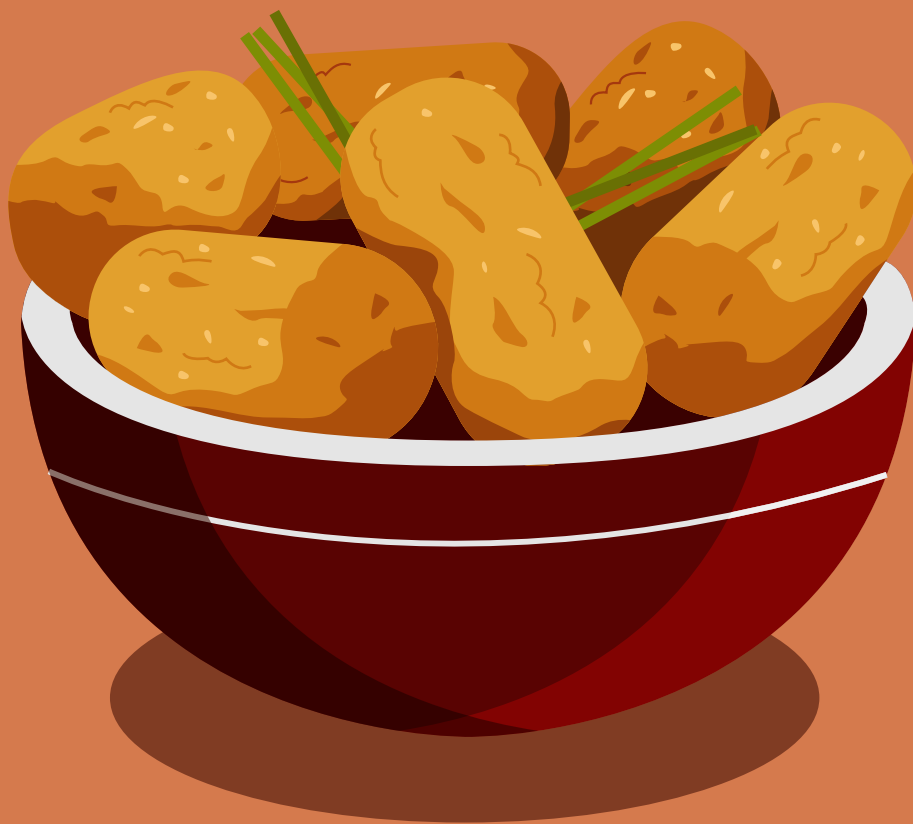
- The overall experience for both plant-based and animal-derived mutton samosas was pleasant.
- The plant-based mutton samosa was able to satisfy meat cravings to a large extent, though the animal-derived mutton samosas rated higher.
- Given the pleasant experience with plant-based mutton samosas, consumers claimed it **would be easy to switch** to them.
- Consumers also rated plant-based samosas **on par with mutton samosas in terms of affordability**.
- The **animal-derived samosas scored better on value for money**. Plant-based samosas were rated low on the size of the pieces, and consumers highlighted issues with the integrity of the frozen product and the challenges during cooking.
- Consumers who liked the plant-based samosas over mutton samosas were willing to consume the product at any time. On the other hand, those who preferred mutton samosas found the plant-based samosas a suitable option for days when eating mutton was not possible.



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# PLANT-BASED CHICKEN NUGGETS





### 3.1. Packaging of the product

- **For the most part, consumers found the packaging for plant-based nuggets more attractive than traditional animal-derived chicken nuggets.**
- Consumers found the pack sturdy. They appreciated the combination of colours and the quality of the packaging.
- The plant-based meat category is new and niche, and consumers are not very familiar with the products. A transparent window on the pack gave them a sneak peek into the product, familiarised them with the look and feel of the product, and subsequently convinced them that this product is of good quality and similar to animal-derived nuggets.
- The term plant-based, and the green dot on the pack were clearly noticed by the consumers.
- A few consumers also noticed nutritional information about protein content and cholesterol.
- Overall, most consumers found the information on the packaging intuitive, as it provided all the information they required.
- Some of the suggestions highlighted were:
  - Consumers recommended adding more green-coloured elements to the pack to convey its plant-based nature.
  - Consumers highlighted that although the product's weight was mentioned, additional information, like the total number of pieces on the pack, would have been helpful.
  - As crispiness is an expectation from nuggets, consumers suggested adding that as a claim to the pack.
  - A few consumers mentioned that since plant-based is a new category, it would have been interesting to know the process of making plant-based chicken.



### 3.2. Upon opening the pack

- **Most consumers found the plant-based nuggets similar in appearance, colour, and texture to chicken nuggets.**
- Most consumers mentioned that all the pieces were intact and separate. The pieces were dry and firm.

- A few consumers mentioned that the nuggets were in different shapes, which could be exciting for kids.
- The aroma of the product cued freshness to the consumers.
- The size, shape, and consistency of the pieces were good.
- Some of the suggestions highlighted were:
  - Consumers recommended a ziplock bag to keep the product fresh for future use.
  - A few consumers felt the pieces looked a little thick compared to the animal-derived chicken nuggets they consume.
  - The feedback on the quantity of plant-based nuggets was mixed, with more consumers finding it low in comparison to the amount of animal-derived chicken nuggets.



### 3.3. Cooking the product

- **The overall experience of cooking both plant-based and animal-derived nuggets was similar.**
- Most consumers deep-fried both plant-based and animal-derived chicken nuggets. They did not need to refer to the pack for cooking instructions.
- The pieces of plant-based nuggets remained intact, and the outer coating and crumb did not separate when they were put in the hot oil.
- After frying, the oil remained clear, and there were no leftover crumbs. The nuggets also did not absorb a lot of oil.
- Consumers could identify that the nuggets were fully cooked when the colour changed to golden.
- The cooked product looked crispy and appetising.
- A few consumers mentioned that the plant-based chicken nuggets took slightly longer to cook compared to traditional chicken nuggets.
- The traditional chicken nuggets had a stronger, more potent aroma than the plant-based ones.



### 3.4. Serving and consuming the product

- Consumers liked the overall experience offered by plant-based chicken nuggets. However, they felt the nuggets fell short on taste, texture, and meatiness compared to animal-derived chicken nuggets.
- Most consumers served the product with condiments like mayonnaise, ketchup, or schezwan chutney. It was primarily consumed as an evening snack, except in a few instances where it was consumed as an accompaniment with a main meal or as a late-night snack.
- The look of the cooked product was attractive and similar to traditional chicken nuggets.
- Consumers who prefer mildly spiced food liked the taste of the plant-based chicken nuggets. They found the masala, salt, and all flavours to be balanced.
- The consumers appreciated the crispness of plant-based nuggets (as an essential expectation from nuggets).
- Consumers found the inside of the nuggets to be soft and liked the texture. Some consumers mentioned that the product had a fibrous texture similar to traditional chicken nuggets.
- Consumers felt that vegetarians would not be able to differentiate between plant-based chicken nuggets and animal-based chicken nuggets.
- For many consumers, plant-based chicken nuggets offered a similar experience to traditional animal-derived nuggets. However, **in terms of taste, plant-based nuggets tasted of soy rather than chicken.**



● Plant-based nuggets



● Animal-derived nuggets

- Some of the improvements highlighted were:
  - Consumers who prefer spicy food found the product to be bland or mild. The saltiness in the product was balanced, but the other masalas/ flavours were not up to the mark. As per consumers, adding a sauce to the pack could help.
  - When compared to animal-derived chicken nuggets, few consumers felt the product was **less juicy**.
  - Consumers found plant-based chicken nuggets **softer than traditional chicken nuggets**.
  - The consumers shared that the nuggets did not taste like chicken and that non-vegetarians would easily be able to identify that the product is not made from animal-derived meat.



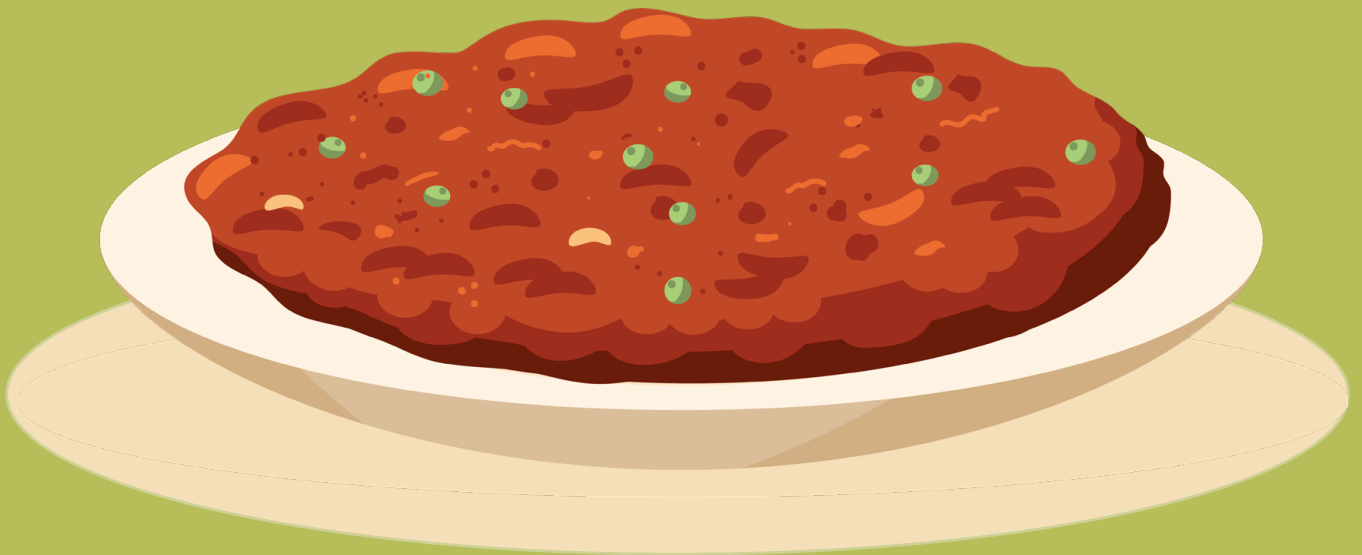
### 3.5. Future purchase intent

- The overall experience of trying both plant-based and traditional chicken nuggets was pleasant. Traditional **chicken nuggets offered more meatiness and satisfied the cravings better than the plant-based ones**.
- For most consumers, plant-based chicken nuggets fit better in the vegetarian snack category and **did not serve as an alternative to chicken nuggets**.
- Animal-derived chicken nuggets also scored better in **affordability**, primarily due to the quantity-to-price ratio.

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# PLANT-BASED KEEMA





## 4.1. Packaging of the product

- **Consumers liked the packaging of both plant-based and animal-derived keema. They found the animal-derived keema pack more attractive and the plant-based keema pack more sturdy** (it had multiple layers of packaging including a tray and a cardboard box).
- Consumers found the colour combination of the plant-based keema pack attractive. The green colour helped make an intuitive connection that the product is plant-based or vegetarian. In addition to the colour, the green dot and the clear plant-based claim on the pack made it easier for consumers to identify the product.
- The image of the cooked product on the plant-based keema pack created excitement among the consumers, and they were curious to try it. Images on the pack gave them the feeling that the product would be similar to the keema they prepared with animal-derived meat.
- Information about protein attracted a few consumers and cued healthiness to them.
- Other information areas consumers noticed were the ingredients, shelf life, and manufacturing date.
- Overall, consumers could find most of the information they sought available on the pack, including the cooking and serving instructions.
- A few consumers suggested adding various recipes that can be made using the product to the plant-based keema pack. They recommended options like curry, rolls, and keema pav, along with serving suggestions like — served best with rice or *roti*.
- One consumer who received a damaged pack shared that the oil leakage from the product spoiled the entire packaging.



## 4.2. Upon opening the pack

- **Consumers found the animal-derived chicken keema to be better in quantity, quality, and freshness. Consumers judged the quality of the animal-derived chicken keema based on the colour of the meat. The animal-derived keema scored higher on freshness as the plant-based chicken keema was pre-cooked.**



- Most consumers found the plant-based keema intact. There was no leakage, and it was easy to unpack.
- The transparent pack inside the cardboard box allowed consumers to see the product.
- For plant-based keema, consumers found a mismatch in the colour of the product image shown on the pack and the colour of the actual product after opening.
- The plant-based keema was a bit oily even before cooking. However, consumers were unsurprised, as oiliness is expected in a pre-cooked keema.
- The aroma of the frozen product was mild but suggested that it was a pre-cooked product.
- A few suggestions highlighted were:
  - The image on the box showed peas, and a few consumers expected peas to be in the product.
  - It was not convenient to store leftover plant-based keema.
  - A few consumers recommended improving the quality of the tray inside the cardboard box.
  - **The quantity of the keema was found to be low for the price.**



### 4.3. Cooking the product

- **As the plant-based keema was ready to eat, the cooking experience fared better than animal-derived keema as the time spent on cooking was short. However, the animal-derived keema allowed consumers to make the recipe according to their taste and preference for spices and oil.**
- Consumers cooked the plant-based keema in different ways. A few consumers heated it in a kadhai, while others put it in the microwave per the suggestions on the pack. Some consumers added additional ingredients like onions and tomato.
- Consumers who prepared the plant-based keema in the microwave found it very convenient to place the tray directly without using utensils. However, some consumers were unsure if the tray was microwave-friendly.
- Plant-based keema lived up to the ready-to-eat claim, as most consumers found it easy and quick to cook.

- It was easy for the consumers to identify that the plant-based keema was cooked through multiple identifiers, such as oil separating, the masalas' strong aroma, and the plant-based keema's changing colour.
- Most consumers found the oil content appropriate, as required for pre-cooked frozen food.
- The smell of the cooked plant-based keema was overwhelming for a few consumers. They thought the smell of garam masala was too strong.



● Plant-based keema



#### 4.4. Serving and consuming the product

- **As the texture of the plant-based keema was predominantly like soya, consumers found animal-derived chicken keema meatier and juicier. However, they did not dislike the texture of plant-based keema.**
- Most consumers served both plant-based and animal-derived keema as a main meal, along with bread or rice.
- Consumers found the salt in the plant-based keema balanced. Those who prepared the plant-based keema by adding other ingredients, such as onions and tomatoes, found the keema flavours more balanced.

- The product did not mention ‘chicken’ or ‘meat’ on the pack, so consumers did not expect the texture or taste to be like chicken or meat.
- **The texture was juicy and soft, as is expected from soy-based products.**
- Some of the improvement areas highlighted were:
  - Many consumers, particularly those who ate the plant-based keema without adding additional ingredients, found the product was spicier than expected.
  - A few consumers mentioned that spices were more balanced if they had the keema with roti or rice.
  - Due to the high spice level, consumers did not find the keema appropriate for children.
  - Even consumers who appreciate spicy food found the plant-based keema difficult to eat after a few bites.



#### 4.5. Future purchase intent

- Plant-based keema was not able to satisfy the craving one seeks from meat.
- Some consumers experienced difficulty with digestion and had acidity post-consumption.
- Most consumers were not very fond of chicken keema, whether plant-based or animal-derived. However, when given a choice, they preferred the animal-derived chicken keema.
- The plant-based keema met consumer expectations of convenience in cooking but not taste, texture, or juiciness.

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With unique insight across the scientific, policy, industry, and investment landscapes, we are using the power of food innovation and markets to accelerate the transition of the world's food system toward smart 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. The Good Food Institute India is part of an international network of nonprofits with partners in Brazil, Israel, U.S., Europe, and the Asia Pacific, on a mission to build a healthy, sustainable, and just global food system.