

Original Research Article

**A STUDY ON THE FACTORS AFFECTING PURCHASE DECISION
FOR CHEESE ANALOGUE PREMIX IN B2B SEGMENT**

ABSTRACT

Globalization has changed the trend of food consumption in India drastically. Fast foods and processed foods have attracted youngsters to the extent that the ingredients like cheese, mayonnaise, tomato puree and many others have gained extreme popularity. The purpose of this study was to understand the various types of cheese and their alternatives available in the [Business to Business \(B2B\)](#) market with a focus on the types of cheese accepted by the food vendors and their specific properties that are desirable for certain food preparations. The study unveils the concept of cheese analogue which is new in this segment and is used as an alternative to dairy cheese. The study was carried out by collecting primary data from 130 food vendors and 5 producers. The research follows a descriptive research design, utilizing a non-probability sampling method, specifically purposive sampling. The results of this study will offer important new understandings of cheese substitutes, consumption patterns, buying behavior and problems faced by producers in the study area.

Keywords: Buying Behaviour, Purchase Decision, Cheese, Substitute Product, Food Industry, B2B Market

INTRODUCTION

The demand for cheese as a food ingredient has increased in recent years, which ~~is a reflection of~~ reflects the expansion of the ready meals industry. As convenience foods continue to gain popularity, cheese has been produced in various forms, including diced, shredded, sliced, and even liquid. Now, the average volume of cheese consumed globally is 1.2kg per annum per person which is much higher than the production. This demand is predicted to have a CAGR of 4.6% in 2024. (Statista.com, 2023). Thus, the higher demand for cheese cannot be met by milk-based cheese. Also, another issue with dairy-based products is their shorter shelflife and need for refrigeration. These issues led to the development of cheese analogues that are produced by combining different ingredients, such as non-dairy fats or proteins, to create a cheese-like product to satisfy specific requirements. In comparison to cheese substitutes, dairy-based cheese is more expensive. Customized formulations enable cheese analogues to have a wide range of functionalities such as flow ability, melt resistance, shred ability, etc. Cheese analogues are mostly utilized in prepared foods like pizza, burgers, sandwiches, and other food preparations. The catering industry also uses cheese analogues. Imitation/substitute cheese products arbitrarily are classified into two categories: (a) Filled cheeses and (b) Cheese analogues. Classification may also be based on the ingredients used and the manufacturing procedures followed. Cheese analogues may also be categorized as

synthetic, partial dairy and dairy, depending upon whether the fat and or protein components are from dairy or vegetable sources(Bachmann, 2001).

Global cheese production would maintain its upward trend from the previous ten years, increasing by 24% from 2012 to 2020, or 4.9 million MT of cheese (pmfood.dk). The non-dairy cheese analogue segment dominates the market, accounting for 41.3% of the total cheese analogue market ~~share, and~~ ~~share and~~ is anticipated to grow at a 6.9% CAGR from 2022 to 2032 (foodmarketassociation.com). The greatest market share, which is 25.7%, belongs to the European cheese analogue market. Some of the global prominent players in the cheese analogue market are Groupe Lactalis, Groupe Foods, Miyoko's Kitchen, Lyrical Foods, Ingredion, etc. As per FMA, the cheese analogue market in India is poised to grow at the highest CAGR of 8.7% between 2022 and 2032 (foodmarketassociation.com). Rapid growth in end-use industries like the food and beverage industry and the HoReCa sector, rising demand for nutritious dairy substitutes and an increase in the prevalence of lactose intolerance are the main drivers of market expansion.

Ruteri (2009) reported that the food industry in Tanzania, which has lagged in terms of technology and equipment for many years, continues to face major, ~~diversed~~ ~~diverse~~, and demanding problems that prevent the industry from expanding at a discernible rate to meaningfully contributing to the nation's economic development. Other challenges mentioned by processors in addition to technology and equipment are technical expertise, research and development, money, managerial skills, and physical infrastructure. By utilizing their cutting-edge technologies and substantial cash resources, foreign investors have increased their market share, placing significant pressure on small and medium-sized businesses because they are still unable to produce enough products with value addition. They are less competitive because of their small production scales brought on by low investment capital and irrationally organized businesses.

Bedarkar and D (2020) found that 38% of outlets preferred the Block form of cheese followed by Diced at 28% and ~~Shredded~~ ~~shredded~~ at 19%. Indian Cheese producers should attain cost-effectiveness to increase profitability. The major problem was less awareness of Cheese brands which made the consumers reluctant to accept their Cheese and thus communication should be done under a strategic business to business (B2B) promotional plan specifically for the HoReCa segment.

Wahyudi and Asrol (2022) consider the factors like price, quantity, delivery, consistency, ~~quality~~ ~~quality~~, and availability of raw materials of cheese. They found that the availability of materials, consistency and timely delivery are the most important things in the raw material supply process, so it is very important to assess all suppliers, to maintain production quality, final customer satisfaction and the sustainability of a company.

AIM OF THE STUDY

This study aims to ~~identifies~~ ~~identify~~ the specific types of cheese that food vendors use in a specific areato provide insight into the popularity and preferences of cheese products among food vendors in the study area. Through the study, the authors wish to understand the factors

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by analysing variables, it can be accomplished to determine the variables that affect producers' buying behaviour when it comes to cheese analogue premixes and the problems faced by them. The study was carried out with the objectives: (i) To identify the types of cheese used by food vendors in the study area (ii) To study the factors affecting the purchase decision of producers for cheese analogue premixes (iii) To identify the problems faced by producers of cheese [analogueanalogue](#).

RESEARCH METHODOLOGY

The research follows a descriptive research design, utilizing a non-probability sampling method, specifically purposive sampling. The sample unit consists of a food vendor and a producer. The total sample size comprises 130 food vendors and 5 producers. The samples were collected from Anand, Ahmedabad, [VadodaraVadodara](#), and Surat city of Gujarat state. The survey was conducted using a semi-structured research instrument.

RESULTS AND DISCUSSION

The study was conducted with a semi-structured schedule and recorded the responses from the respondents. The detailed result analysis was as follows.

Table: 1 Age of the Food Vendors

Age Group (Year)	Frequency	Percentage
≤ 30	32	24.62
31-40	46	35.38
41-50	34	26.15
>50	18	13.85
Total	130	100

(Source: Field Survey, 2023)

The highest number 46 (35.38%) of food vendors having the age in 31-40 age group, 34 (26.15%) food vendors having the age in 41-50 age group, 32 (24.62%) food vendors having the age less than or equal to 30 [yearyears](#). Only 18 (13.85%) food vendors were observed [having to have the an](#) age of more than 50 years.

As per the study related to [the](#) education profile of food [vendorsvendors](#), it [founded-found](#) the following responses from the respondents.

Table: 2 Education of the Food Vendors

Education	Frequency	Percentage
Illiterate	7	5.38
Primary	14	10.77

Up to SSC	39	30.00
Up to HSC	53	40.77
Graduate Undergraduate	14	10.77
Post Graduate Postgraduate	3	2.31
Total	130	100

(Source: Field Survey, 2023)

The highest number of 53 (40.77%) ~~the~~ food vendors have studied up to ~~the~~ HSC level. 39 (30.00%) food vendors have done up to ~~the~~ SSC level. 14 (10.77%) food vendors have completed graduation and ~~the~~ other 14 (10.77%) food vendors have studied ~~up~~ primary education. 7 (5.38%) food vendors were illiterate. Only 3 (2.31%) food vendors had completed post-graduation education. During the survey, it was observed that, those who have done HSC, ~~gradua~~~~undergraduate~~~~tion~~ or post-graduation level education~~they~~ have good knowledge of cheese types and ~~ingredient~~~~ingredients~~. Good education level of food vendors ~~were~~ ~~was~~ more aware of good cheese ingredients in the study area.

Table: 3Types of Cheese Used by Food Vendors

Types of Cheese	Frequency	Percentage
Unbranded	12	9.23
Milk-based	34	26.15
Analogue	84	64.62
Total	130	100

(Source: Field Survey, 2023)

The highest of 84(64.62%) food vendors used cheese analogues because they are comparatively cheaper than milk-based cheese. Cheese analogues have a diverse array of functions such as flow ability, melt resistance, shred ability, ~~etc.~~, which is made possible by customized formulations. So, ~~a large number of many~~ food vendors used cheese analogues to increase their profit. 34 (26.15%) of food vendors used milk-based cheese because some customers only required milk-based cheese on their plates and for the names of the restaurants or cafes in the study area. Only 12(9.23%) of food vendors used unbranded cheese.

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Table: 4Types of Cheese AnalogueUsed by Food Vendors

Types of Cheese Analogue	Frequency	Percentage
Processed block type	46	54.76
Pizza types	25	29.76
Both	13	15.48
Total	84	100

(Source: Field Survey, 2023)

Out of 84 respondents, 46(54.76%) of food vendors used processed block-type cheese because it has different properties like melt resistance, shred ability, fine texture, etc. Around 25 (29.76%) of food vendors used pizza-type cheese because it has the more stretching ability, flow ability, melting properties, etc. Only 13 (15.48%) of food vendors used both processed block-type and pizza-type cheese analogues according to their requirements.

Table: 5 Reason-Reasons for Purchase of Cheese Analogue by Food Vendor

Factor No.	Factors	GarrettScore	Rank
F1	Lower price	66.77	1
F2	Product <u>Characteristic</u> Characteristics(shredding/ melting/ stretching)	60.41	2
F3	Good supply	48.51	3
F4	No refrigeration required	36.84	4
F5	Longer Shelf-life	36.07	5

(Source: Field Survey, 2023)

The above table was analyzed using the Henry Garrett ranking method. The table indicates that for the purchase of cheese analogues for food vendors, the lower price of the product is the most important factor because the cheese analogue price at Rs.320-350/kg, whereas milk-based cheese price is Rs.400-450/kg, followed by product quality in terms of shredding, melting or stretching, good supply or availability of the product, no refrigeration required and shelf life. The shelf-life of analogue cheese is 4 to 6 months, while dairy or milk-based cheese is 1 to 2 weeks.

Table: 6 Factors for Purchasing Premix for Producer

Factor No.	Factors	Weighted Mean	Rank	Likert Scale
F1	Price	5	1	Most Important
F2	Quality	4.75	2	Important
F3	Supplier flexibility	3.5	3	Neutral
F4	Ingredient	3.5	3	Neutral
F5	Brand name	3.5	3	Neutral
F6	<u>Past</u> <u>Experience</u> Experience	3	4	Less Important
F7	Pack size	2.5	5	Not Important

(Source: Field Survey, 2023)

The table was analysedanalyzed by the weighted average mean method. The table shows that for purchasing premix, different factors were analysedanalyzed like price, quality, supplier flexibility in terms of availability of premix and payment, ingredients, brand name, past experienceexperience and pack size. Among all the producers, price is the most important

factor to consider when purchasing premix followed by quality as an important factor, supplier flexibility, ingredient and brand name as neutral factors and experience as a less important factor and pack size as a not important factor.

Table: 7 Problems Faced by the Producer

Factor No.	Factors	Garrett Score	Rank
F1	High production cost	71.25	1
F2	Raw material supply	61.25	2
F3	Price fluctuation of raw material	47.5	3
F4	Wastage during production	41.25	4
F5	Storage facility for raw material	28.75	5

(Source: Field Survey, 2023)

The table above shows that producers generally faced problems like high production costs as the additive used ~~are is~~ sometimes imported, followed by irregular raw material supply as the imports take time ~~in to clearance clear~~. They also face problems like price fluctuation of raw materials as it is dependent on exchange rates, which directly impacts ~~on~~ the cost of raw materials. The other issues highlighted were wastage during production because sometimes due to technical issues like electricity supply that impact ~~on~~ high or low cooking so it may deteriorate the quality of ~~the~~ whole cheese batch and storage facility for raw material because cold storage requires ~~for~~ raw cheese.

CONCLUSIONS

From the study, it was concluded that 35.38% of food vendors having the age in 31-40 age group and those who have completed HSC, ~~graduation graduated~~, or post-graduate have good knowledge about cheese and its types with ingredients. 64.62% of food vendors used cheese analogue because it was cheaper than milk-based cheeses. Among them, 54.76% of food vendors used processed block-type cheese because it has different functions like melt resistance, shred ability, fine texture, ~~etc~~. In the purchase of cheese analogues for food vendors, the lower price of the product is the most important factor because the cheese analogue price at Rs.320-350/kg, whereas milk-based cheese price is Rs.400-450/kg, followed by product quality in terms of shredding, melting, or stretching, good supply or availability of the product, no refrigeration required and shelf life. Among all the producers, the price was the most important factor to consider when purchasing premix, followed by supplier flexibility, ingredient and brand image as important factors and experience as a neutral factor and pack size as a less important factor. Producers generally faced high production costs, followed by raw material supply because some ingredients are imported, so due to the economic situation it was not timely available, price fluctuation of raw materials because of fluctuation in the value of foreign currencies, which directly impacts the cost of raw materials and production costs.

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