



Case Study on Consumer Behavior and Marketing Mix of Newly Launched Probiotic Butter and Probiotic Chocolates in India

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ABSTRACT

Consumer behavior and consumption patterns are influenced by various factors. One important factor is health, the desire for a healthy life has been driving the demand for consumption of nutritious and functional food products. In order to lead a healthy life style consumer's often shift to food products that offer a balance of 'taste and health'. One such healthy range of products especially in the dairy products is the probiotic range. Since the early 1900's the use of probiotics in various products has been a topic of discussion and has led to various innovations. Probiotics, popularly understood and defined as the good bacteria have now been known to have many non-pharmacological therapeutic effects. These products help a great deal in diseases related to the human intestinal tract. These products have also been found to be beneficial in the control of cholesterol and thus serving as a crucial element to avoid heart ailments. The use of probiotics was limited to milk and milk products in the past. It is established that milk is a good delivery channel for the probiotic to reach the human gut. Recent studies have shown that chocolate has similar properties and can help the probiotic to reach the gut without getting harmed in the digestive tract. The introduction of probiotic butter and probiotic chocolate in the Indian market is a revolutionary step. The Nutralite Doodh Shakti Probiotic Butter is promoted as 'tasty way to support your immunity'. The PROCOA Probiotic Chocolates are promoted as 'healthy and guilt-free experience' & 'guilt-free, pure indulgence'. Both butter and chocolate are considered rich and indulging. Both the



products are targeted towards the consumers who need probiotics to stay healthy or as a therapeutic food. At the same time the consumer also needs to experience the taste as 'usual'. This study is an attempt to understand the consumer behavior around probiotics and the rationale behind introducing probiotics in butter and chocolate. It also explores the marketing mix (4 Ps) of these new products.

Keywords: *Consumer Behavior, Marketing Mix, Probiotic Butter, Probiotic Chocolate*

1. INTRODUCTION

In the past decades various factors have influenced the consumer buying behavior. Economic liberalization has opened up the Indian market and has facilitated the availability of global brands to the consumers. The steady economic growth in the last few decades has improved per capita income and consumer spending has improved due to disposable income levels. These factors have created access to a variety of products and service for the consumers. These factors have been holding true for the consumer behavior in all sectors including food consumption. Technology, especially food bio-technology has advanced and has been playing a pivotal role in bringing in various newer and improved variety of food and dairy products. Consumers voice has led to the adaptation of innovative practices in the food industry. The industry recognizes this as an essential mantra for success. Innovation in other form, especially the 'Indianization' of global cuisine has created a new segment of food products. Internet and Mobile phone penetration have paved way for online buying and e-commerce and m-commerce sectors have seen a boom. Online platforms also have created a competitive edge for various brands and players of all size and have also given greater buying power to the consumers. This case study is based on the secondary research and the data is collected through various published and printed sources available in the public domain through the web. The study focuses on Consumer Behavior, Use of Marketing Mix (Product, Price, Place & Promotion) by the companies to promote the probiotic products. There is scope to further expand this into a primary research in the field of consumer behavior; accessing awareness,



attitude, perception etc. of Indian consumers in relation to probiotic products. It can also be expended in to a primary research to understand the acceptance and willingness to promotion in therapeutic use by important stakeholders such as the medical professionals and nutritionist.

2. PURPOSE OF THE STUDY

Just like the global markets the Indian markets are also changing and the demand newer and healthier products in the food segment are on the rise. It is essential to understand the probiotic market in India and how various food products are being used as essential modes of probiotic delivery. It is also important to gain insights into the consumer behavior and attitude. Though there is a visible gap in the studies focused at the Indian consumers and the Indian market, this study is an attempt to bring the available information on two products, ie. Probiotic butter and probiotic chocolates.

3. MARKET, CONSUMERS & PROBIOTICS

The global probiotic market is valued at 71.2 billion USD in the year 2024 and is projected to grow at a CAGR of 8.2% to 105.7 billion by the year 2029. Markets and Markets, 2024). Similarly, the India market for feed probiotic products is pegged at 93.20 million USD in 2024 and expected to grow at a CAGR of 5.71% to 123.01 million USD by 2029. (Mordor Intelligence, 2024). There is increase awareness amongst the consumers about health, the importance living a healthy life style, and higher incomes has increased the demand for many innovative food products. (Raquel P. F., 2020). With a steady increase in lifestyle (non-communicable) diseases and with pandemics such as the COVID 19, consumers have started opting for more nutritional, organic and healthy food products. Consumers believe in dietary management of non-communicable lifestyle diseases rather than using medical drugs which often are costly and have side effects. There is a surge in consumption of food products that provide a balance between taste (sensory properties) and health thus creating a huge demand for nutritious or functional foods. (Dias et. al. 2020). With



increasing number of consumers focused on improving their health there is a surge seen in functional food market and probiotic dairy products have become one of the fastest growing products. A lot has to do with the higher degree of knowledge about the benefits of probiotic food that helps the market to grow. (Lutfiye E, et. al., 2020). Packaged and processed foods which have always been at the forefront of criticism have started curating the food products and adding the necessary nutrients and minerals that can make the product healthier. Health conscious consumers have been not only focusing on the source of the product but also the health and nutrition benefits offered by the product in terms of the carbohydrate, protein and fat content and the overall energy consumption per serving. Brands and products that promise to boost immunity and fight disease have gained traction and created a huge market (Tarun A, 2021). Thus, multiple aspects such as preferences, choice, desire, consumption frequency, buying intentions, etc. become important to be studied to understand behavior and attitude towards probiotic food and food products. (Lutfiye E, et. al., 2020).

3.1. Probiotics in Food Products

Some reports suggest a global surge in the consumption of probiotic food. The Consumer Insights Report of FMCG Gurus suggests that nearly 52% global consumers purchased probiotics in the past year. A large number of consumers had purchased it in form of Yogurt drinks followed by a supplement format. Amongst the consumers who did not purchase probiotic products the main reason for doing so was cited as the high price. The most preferred format was the food and drink format of Probiotic products and the same was preferred because it was tastier (FMCG Gurus, 2020).

The word ‘Probiotic’ is derived from the Latin word ‘*pro*’ which means ‘for’ and the Greek word ‘*biotic*’ which means ‘life (bios)’ (Mandal A, 2019). The World Health Organization (WHO), defines probiotics as ‘live microorganisms which, when administered in adequate amounts, confer a health benefit on the host’. (Mack D R, 2005) Essentially probiotics are live bacteria and yeasts that have been proved to be



‘good’ or ‘helpful’ for the human digestive system. (Felson S, 2020). Probiotics are measured in CFU/g – CFU (Colony Forming Unit) (NIH, 2023). It is proven fact that higher the number of CFU, higher is the immunity. With the increasing consumer awareness and demand for healthier and nutritious food products, brands and companies have been striving to offer products with a balance of taste and health. One such health offering is the addition of probiotics in the food products, especially the dairy products. Food products produced commercially may contain either a single probiotic strain or bacterial mixtures of various complexities to enhance the food nutritional and therapeutic properties.

3.2. Probiotic and Health

The concept was introduced and brought to the discussion table by Russian Scientist, Metchnikoff in 1908 (Mackowiak P.A, 2013) where he linked the intake of fermented milk with prolonged life. It was only in the recent years the in-depth research on the benefits of probiotics have been explored in various food products, especially the dairy foods. The most common and preferred probiotics used are Bifidobacterium spp. and Lactobacillus strains. These strains have been used for the fermentation of dairy products such as Yogurt and Cheese and is used in Ice Creams. Studies have found that the Lactobacillus strains in dairy products have both prophylactic and therapeutic effects. Positive effects are seen in diseases such as Irritable Bowel Disease (IBD), Irritable Bowel Syndrome (IBS), Infectious Diarrhea, Gastric Cancer etc. (Emiliane, et. al, 2012). These strains also help in reducing Lactose Intolerance and help the digestive system in conditions where Diarrhea cause by use of Antibiotics. Studies have also shown that the consumption of fermented milk helps in significantly reducing serum cholesterol. Studies also have shown that probiotics can significantly reduce serum cholesterol and works well as the non-pharmacological alternative. Probiotic have been found to reduce the absorption of cholesterol from the food. (Dwyer A, 2020). Probiotic increases production of bile which in-turn reduces the levels of circulating cholesterol. It also reduces the production of cholesterol in the liver. (Lang W, et. al., 2018).



3.3. Mode of Probiotic Delivery

The important consideration is that the good bacteria have to reach the intestines through the tough and acidic conditions of the stomach. Use of functional foods, pharmaceuticals and food supplements as modes of delivery for probiotics has been researched and well established. (Jacobs, et.al., 2014). Studies have also shown that dairy products (milk and milk products) have been used as an effective probiotic delivery channel. However recent studies have shown that chocolate and bacteria are a successful combination for probiotic delivery in human body. Milk and Chocolates (both milk and dark variants) offer protection to the bacteria and help them reach the intestine. (Possemiers S, et. al., 2010). Chocolate also possess a wide range of potent antioxidants and other nutrients that can positively affect human health. (Hossaini, et. al., 2020).

4. MARKETING MIX OF NUTRALITE DOODH SHAKTI PROBIOTIC BUTTER AND PROCOA PROBIOTIC CHOCOLATE IN INDIA

Table 1:Nutralite Doodh Shakti Probiotic Butter

Product	In January 2021, Nutralite a brand of Zydus Wellness launched Probiotic Butter Spread under its Doodh Shakti range of products. The company uses Probiotics called Lactobacillus Rhamnosus and Lactobacillus Reuten. The butter provides 632 kcal of energy per 100 gms of servings. Each 100 gms of serving has 70.00 gms of Fat, 157.00 mg of Cholesterol, 0 gms of Carbohydrate and Sugar and 0.50 gms of Protein. Vitamin A, D2 and E are added as per the ICMR-2010 guidelines. The product is available in yellow colored box packaging. The packaging also mentions the active ingredients used in the making of the product.
Price	The Nutralite Doodh Shakti Probiotic Butter is available in a 500 gms pack priced at INR 245/- (Amul 500 gms @ INR 235/-) and 100 gms pack priced at INR 50/- (Amul 100 gms @ INR 48/-). The



	data on pricing suggest that the company is following the Premium Pricing Strategy.
Place	The product is available through retail outlets (big and small) and also on the e-commerce retail and modern trade platforms.
Promotion	Reports suggest that the Indian butter market is dominated by Amul Butter with a market share of around 85%. The other brands in the Indian table butter market are Mother Dairy, Britannia, Gowardhan, Patanjali and regional brands like Nandini (Karnataka), Omfed (Orissa), Milma (Kerala), Aavin (Tamil Nadu), Vijaya (Telangana) etc. Zydus Wellness had introduced the Nutralite Spread in the past with 0% cholesterol, powered with Omega 3 and vitamins A, D & E. Positioning it as a healthy alternative to the table butter. The product is promoted by the famous Indian Chef, Mr. Sanjeev Kapoor. However, the product could not make a dent in the Indian table butter market and Amul still dominates the space. Nutralite Doodh Shakti is promoted as ‘India’s First Probiotic Butter Spread’ the product is positioned as the ‘<i>Tasty Way to Support Immunity</i>’. The brand is using social media platforms such as Youtube, Facebook Instagram and LinkedIn to promote the product. The launch of the product was covered in major newspapers and the product due to its unique Probiotic component has attracted some headlines too.

Table 2: PROCOA Probiotic Chocolate





Product	The Chocolate is manufactured by Choco Dolce and packed and marketed by PROCOA Industries LLP. The company claims that these chocolate shots, made from Belgian Chocolate and African Cocoa promote gut health immunity, prevents intestinal imbalances and helps in better digestion. The company uses a versatile strain of Probiotic called Lactobacillus Rhamnosus GG. The chocolate provides 517 kcal per 100 gms of servings. Each 100 gms of serving has 67.00 gms of Carbohydrate, 5.42 gms of Protein, 25.25 gms of Fat and 39.46 gms of Sugar (approximate values). There are four variants offered by the company, PROCOA Armour (for children), PROCOA Coverture (Belgian Chocolate), PROCOA Classic (Dark Chocolate) and PROCOA KOKO (Vegan and Zero Sugar Chocolate Spread). The company has applied for a patent for their probiotic chocolate products. Special focus is given to the packaging, done in boxes that are environmentally friendly. The company does not use plastic in its packaging. The packaging included the list of active ingredients used in the making of the product.
Price	According to the company website PROCOA Armour (pack of 5) is priced at INR 350/-, PROCOA Coverture and PROCOA Classic (pack of 5) both priced at INR 250/-. The price for PROCOA KOKO could not be extracted from the company website. It appears that the company is following the Premium Pricing Strategy.
Place	The product can be purchased through the company website and is available in some select retail outlets. The company website provides a corporate gifting (bulk ordering) option for the product as well.

Promotion	The company is based in Maharashtra and in the Indian context the competitors are brands such as Cadbury, Nestle, Amul, Campco and global brands like Ferrero, Hershey's, Mars etc. in the chocolate segment. In chocolate spreads the product competes with brands like Hershey's, Nutella, Nutralite, Funfoods, Cadbury etc. PROCOA Probiotic Chocolates are promoted as 'India's First Coverture Probiotic Chocolate' the product is positioned as 'Healthy and Guilt-Free Experience' & 'Guilt- Free Pure Indulgence'. The product tagline 'Healthy High' also carries similar sentiment. The company positions its PROCOA KOKO chocolate spread as a Vegan product which is gluten free. It is also positioned as a product with no sugar, no-palm oil and no hydrogenated fat for those who are conscious about their diet and about the consumption of rich products like chocolates. The company is currently using social media platform such as Instagram to promote the products.
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5. MANAGERIAL IMPLICATIONS

The study is a secondary research and does not give much direction in terms of the managerial implications, however it does point out at a few areas that can be important to consider as part of new product development and marketing of probiotic products. Both the products reviewed under the study, i.e. Nutralite Doodh Shakti Probiotic Butter and PROCOA Probiotic Chocolate are innovative products and focused on providing a healthy and tasty alternative in their respective segments. Though there is a traction in the market, but the Indian consumer has been slow to adapt to these new products. There could be variety of reasons for the same, which might be behavioral adaptation, low awareness on the benefits of the product, availability and accessibility, etc. The same needs to be addressed by the companies and better appealing promotion, pricing and marketing strategies can be evolved.



6. CONCLUSION

By adding Probiotic to the products, both brands have positioned the usually tasty, rich and indulging products as tasty, gut friendly and immunity boosting (help in fighting disease) products. PROCOA promotes its environment friendly and sustainable packaging of the products appealing to the consumer conscious of the impact of human consumption on the environment. The Premium Pricing Strategy adopted by both the companies holds the product in distinction to their competitors. The Indian consumer is price sensitive and premium pricing might automatically tend to eliminate such group of consumers. Both butter and chocolates are consumed by all segments of the population. However, the use of social media platforms such as Youtube, Facebook and Instagram to promote the products is an indicative of both the brands are targeting the Generation Zers and the Millennials. PROCOA Armour is targeted towards children who would normally be averse to taking Probiotic in the fermented form of dairy products. Chocolate on the other hand would be a very lucrative proposition for children.

PROCOA KOKO is aiming to cater to the growing Vegan consumers and this way establishes itself quite distinctly from its competitors. Similarly, by positioning the chocolate spread as a zero-sugar, and with no palm oil and no hydrogenated fat it is reaching out to health-conscious consumers or consumers with diabetes and hypertension. Zydus Wellness is primarily a Pharmaceutical Company and has expanded into the dairy product segment. It will definitely take time for the consumer perception to change about the food product offerings by a Pharma company. PROCOA has applied for patent for their Probiotic Chocolate, however it also puts a disclaimer on its product packaging stating that the effects of probiotic are not clinically proven. Distribution channel of the products will need to be developed over the coming months and years to compete with biggies like Amul (butter) and Cadbury (chocolates). Consumer beliefs, awareness and preferences are crucial determinants for the probiotic products such as the butter and chocolate and there is a need to study the same, especially in the Indian market. Understanding the preferred mode of



delivery of probiotics amongst the consumer will help medical practitioners, public health policy makers, marketers and the manufacturers of such products.

7. REFERENCES

- Amal Bakr Shori, F., Aboufazli, F., & Baba, A. S. (2018). Viability of probiotics in dairy products: A review focusing on yogurt, ice cream, and cheese. *Advances on Biotechnology*. Retrieved from ResearchGate.
- Dias, S., & Rathnayaka, S. (2020). Consumer perception and sensory profile of probiotic yogurt with added sugar and reduced milk fat. *Cell Press*.
- Dwyer, A. (2020). Best probiotics for cholesterol and heart health. *Probiotics Learning Lab*. OptiBac. Retrieved from <https://www.optibacprobiotics.com/learning-lab/in-depth/general-health/probiotics-cholesterol-heart-health>
- Emiliane Andrade Araújo, Pires, A. C. dos S., Pinto, M. S., Jan, G., & Fernandes de Carvalho, A. (2012). Probiotics in dairy fermented products. In E. C. Rigobelo (Ed.), *Probiotics*. IntechOpen. <https://doi.org/10.5772/51939>
- Felson, S. (2020). What are probiotics? *WebMD*. Retrieved from <https://www.webmd.com/digestive-disorders/what-are-probiotics>
- FMCG Gurus. (2020). Are consumers turning to probiotics? *Probiotics Global 2020 Report*. Retrieved from <https://fmcggurus.com/blog/are-consumers-turning-to-probiotics/>
- Hossaini, Ranadheera, F., & Fangi, G. (2020). Healthy chocolate enriched with probiotics: A review. *Food Science and Technology*.
- Jacobs, V., Verbeke, W., & Sas, B. (2014). Mode of delivery of probiotics consumers: Preference and its determinants. *Agro Food Industry Hi Tech*.
- Lang, W., Guo, M. J., Gao, Q., Yang, J. F., Yang, L., Pang, X. L., Jiang, X. J. (2018). The effects of probiotics on total cholesterol: A meta-analysis of randomized controlled trials. *Medicine*. Wolters Kluwer Health, Inc.
- Ersan, L., Ozcan, T., & Akpinar-Bayazit, A. (2020). Assessment of socio-demographic factors, health status, and knowledge on probiotic dairy products. *Food Science and Human Wellness, Keai Publishing*.
- Mack, D. R. (2005). Probiotics—Mixed messages. *Canadian Family Physician*, 51(11), 1455–1464. PMID: 16353824; PMCID: PMC1479485.
- Mackowiak, P. A. (2013). Recycling Metchnikoff: Probiotics, the intestinal microbiome, and the quest for long life. *Frontiers in Public Health*. <https://doi.org/10.3389/fpubh.2013.00052>



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- Mandal, A. (2019). What are probiotics? *NewsMedical.Net*. Retrieved from <https://www.news-medical.net/health/What-are-Probiotics.aspx>
- Markets and Markets. (2024). Probiotics market by product type (functional food & beverages, dietary supplements, and feed), ingredient (bacteria and yeast), end user (human and animal), distribution channel and region - Global forecast to 2029. Retrieved from <https://www.marketsandmarkets.com/Market-Reports/probiotics-market-69.html>
- Mordor Intelligence. (2024). Indian feed probiotic market size. Retrieved from <https://www.mordorintelligence.com/industry-reports/india-feed-probiotics-market>
- National Institutes of Health (NIH). (2023). Probiotics: Fact sheet for health professionals. Retrieved from <https://ods.od.nih.gov/factsheets/Probiotics-HealthProfessional/>
- Nutralite. (2021). Nutralite Doodh Shakti—Introducing Nutralite Doodh Shakti Probiotic Butter. Retrieved from <https://www.nutralite.com/doodhshakti>
- Possemiers, S., Marzorati, M., Verstraete, W., & Van de Wiele, T. (2010). Bacteria and chocolate: A successful combination for probiotic delivery. *International Journal of Food Microbiology*. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/20452073/>
- PROCOA. (2021). Retrieved from <https://www.procoa.in>
- Raquel, P. F. G., Florença, S. G., Barroca, M. J., & Anjos, O. (2020). The link between the consumer and the innovations in food product development. *MDPI Journal, Foods*.
- Tarun, A. (2021). Consumers are more than ever pivoting on brands that focus on health & well-being. *Exchange4Media*. Keynote address at Pitch CMO Summit 2021.