

IMPACT OF MARKETING MIX ON THE DAIRY PRODUCT IN RAJASTHAN

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ABSTRACT

The heavily controlled Indian dairy industry, which was open to international competition until the 1990s, has undergone a total liberalization. The dairy sector in India has undergone tremendous development over the last ten years, and concerns about the effects these changes have on smallholder farmers are mounting. One of the most crucial parts of the global food chain, the dairy business is currently going through a lot of upheavals. A variety of factors, such as changes in the regulatory surroundings for dairy production and trade, advancements in technology in the production of milk and milk products, rapidly changing consumer trends, and the restructuring of transnational corporate strategies with regard to this industry, are currently moving change. Milk, sometimes known as "white gold," is utilized to create a huge array of premium goods. The expensive cost of milk as a raw material has forced the development of a high-tech processing sector. India has always produced and consumed more milk than any other country in the world, an approximate 400 million liters per day. However, the market remained monotonous partly due to low per capita consumption and the fact that most kinds of milk were eaten in their purest form, as liquid, or at best as ghee and some butter. In this essay, we examine the value of dairy products in daily life and the benefits of a milk-based diet.

Keywords: Dairy Product Development, Market Involvement, Dairy Sector.

Introduction

India produces more than 13% of the world's milk, making it the greatest producer of dairy products by volume. It also has the biggest dairy herd in the world. Prior to the year 2000, India was neither a significant importer nor an exporter of dairy goods due to the fact that the nation eats practically all of its own milk production. However, since the Operation Flood Programme was put into place, the situation has considerably changed and the imports of dairy products have fallen to extremely low levels.

The most recent research from IMARC Group, "Dairy Industry in Rajasthan: Market Size, Growth, Prices, Segments, Cooperatives, Private Dairies, Procurement, and Distribution," provides a detailed examination of the state's dairy industry. The state is currently India's sixth-largest dairy market. Cow and buffalo milk make up the majority of the milk produced in Rajasthan. According to the data in the report, buffalo milk accounts for the bulk of the state's overall milk production and dominates the industry as a whole. The survey states that in 2020, the Rajasthan dairy market will be worth INR 852 billion. In the years 2021-2026, the market is anticipated to expand at a CAGR of 14.7 percent.

Based on the product type, this report has categorized the Rajasthan dairy market into 18 major product segments:

- Liquid milk,
- Ghee,
- Curd,
- Paneer,
- Ice Cream,

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- Table Butter,
- Frozen/Flavored Yogurt,
- Fresh Cream,
- Lassi,
- Flavored Milk,
- UHT Milk,
- Dairy Whitener,
- Sweet Condensed Milk,
- Baby Food and Malt-Based Beverages are just a few examples.
- Cheese, flavor-enhanced milk, ultra-high-temperature milk, dairy whitener, sweetened condensed milk, baby food, and malt-based beverages.

Indian Dairy Key Factors

First in the world for milk production (115 million metric tons) At the current price, the value of livestock's milk production is roughly INR 2400 billion 3/4. The market for dairy products is estimated to be around INR 4000 billion. Around INR 25 billion is spent on the ice cream industry. Since 1951, when milk production in India peaked at 17 MT, it has increased significantly, reaching about 115 MT in 2010. Marginal farmers now produce 70% of the country's milk. The majority of milk—65%—is marketed in "loose" form. Only 35% of milk is distributed through retail chains. "Milk agents" supply 70% of the milk to houses. Milk in cartons or other packaged milk has been increasing at a rate of 24% each year.

The majority of branded FMCG companies are eager to introduce the US\$ 166 million market for flavouring dairy products. Despite being the world's greatest producer of milk, India's dairy industry faces a number of challenges, including low milk production—987 kg/year, compared to the global average of 2200 kg/year—a huge number of unproductive animals, low genetic potential, inadequate nutrition, etc.

Importance of Milk as Food

Although cow's milk is processed, it is not a manufactured or developed food. It has 13 percent solids and 87 percent water. Vitamins that are fat soluble are present in the milk's fat content. Proteins, carbs, water-soluble vitamins, and minerals are among the solids other than fat. Milk is one of nature's most nearly perfect foods thanks to these ingredients. High-quality proteins can be found in milk products. Around 18% of the protein in milk is made up of whey proteins. All of the necessary amino acids are present in casein, a protein that is only present in milk.

It serves as a benchmark for assessing the protein in other foods and makes up 82 percent of the total proteins in milk. Protein is required for body tissue growth and repair as well as the formation of antibodies that circulate in the blood and help fight infection. The nutrients calcium, phosphorus, magnesium, and potassium are also present in milk. The body is able to easily absorb the calcium in milk. The absorption and utilization of calcium are influenced by phosphorus. To make bone, phosphorus and calcium must be present in the right proportions. These two minerals are present in milk in a proportion that is similar to that of bone. In addition to vitamins A and D, milk is a substantial source of riboflavin (vitamin B2), which supports healthy skin and eyes.

In adults, osteoporosis, or the thinning of the bones, can be brought on by a shortage in calcium as well as other reasons. The recommended daily calcium intake for adults is 1,000 milligrams; for teenagers, 1,300 milligrams; for small children, 500–800 milligrams; and for persons over 51, 1,200 milligrams. The amount of calcium in one serving of milk is roughly 250 milligrams. Lack of milk and milk products in the diet makes it difficult to get enough calcium. Milk and milk products are the primary sources of the 73 percent of calcium that is present in the food supply. The government's U.S. Dietary Guidelines recommend consuming the following dairy group foods on a daily basis:

Kids aged 1 to 8, 2 serves 3 servings for kids aged 9 and older. 3 servings for adults. Thanks to industry leaders and visionaries, IDFA's Dairy Innovates campaign vividly illustrates the stories of innovation, sustainability, and smart growth taking place throughout the dairy supply chain. Find out what it takes to succeed and remain competitive in a field that is changing constantly. Hear from executives, analysts, and thought leaders in the dairy industry on what they're doing to meet consumer demand, expand markets, update business processes, provide sustainable products, and give back to their communities.

Today's dairy industry leaders are redefining what it means to operate sustainably by elevating ethical business practices, creating and implementing transportation and logistics solutions, ensuring the highest standards for animal welfare, and pledging to and successfully achieving environmental stewardship throughout their supply chains. All dairy firms must prioritize workplace safety and employee wellbeing, and employers in the food and beverage industry should learn from the innovative practices of IDFA member companies. IDFA member companies implement cutting-edge technology from farm to market to establish a secure and efficient workplace through the use of training and education, data analytics, robots, and other advances.

Additionally, IDFA and IDFA members are aware that how we develop the workforce of the future, nurture the next generation of leaders, and empower and encourage diversity in leadership roles will determine the future of the dairy sector and our capacity to remain globally competitive. The top places to work in the United States are located in some of the dairy industry's most forward-thinking companies today.

Nutritional Benefits of Milk

- **A High Content of Proteins of High Biological Value**

When we refer to a meal or beverage as having high biological value (or good quality) proteins, we are referring to the fact that it contains all of the essential amino acids, which are those that our body cannot produce or synthesis on its own and must be obtained through diet.

In the case of milk specifically, it is a food that precisely offers all of the necessary amino acids. Leucine, lysine, and isoleucine stand out among them as needed for the development of antibodies, the regulation of glucose levels and energy, and the formation of haemoglobin, all of which aid in the mending of skin, bones, and muscle tissue.

- **High Calcium Content**

Milk is considered as the main dietary source of calcium, thanks mainly to the presence of other components naturally present in it (such as proteins, lactose or phosphorus), which offer the possibility of having a high bioavailability; and for its high content of this mineral.

- **Provides Bioactive Peptides**

In addition to being antioxidant, antimicrobial, and immunomodulatory, the bioactive peptides found in milk appear to play a significant role in metabolic regulation and modulation. They may also have some positive effects on our bodies in the form of antihypertensive and hypocholesterolemic effects. In other words, milk's bioactive peptides have intriguing properties that are good for our immune, digestive, and cardiovascular systems.

- **Interesting Contribution of Vitamins**

It becomes a strong source of vitamin A and B vitamins in addition to vitamin D, highlighting the presence of vitamin B12 and riboflavin. The B complex vitamins are essential for the health of our nervous system because they help produce hormones and provide energy.

The immune system, growth, and development, as well as the health of our eyes, all depend on vitamin A.

- **Its Importance in Children and Adolescents**

Milk is a staple diet for children and adolescents as long as they are not consuming breast milk, which the World Health Organization recommends for at least the first six months of life and, if feasible, throughout the first two years or more.

The Spanish Association of Pediatrics' Nutrition Committee collaborated with the Spanish Nutrition Foundation (FEN) and the Ibero-American Nutrition Foundation (FINUT) to publish a decalogue on the importance of milk during the infant stage in 2016. The decalogue scored a total of 10 points on the following criteria:

- Basic foods are part of a healthy, diversified diet.
- It contains highly biologically valuable proteins that support healthy growth and development.
- The primary food source of calcium for healthy bones.
- It makes it possible to get enough of specific vitamins and minerals.
- Gives off fatty acids.

- Milk consumption and physical stature in kids and teenagers have a definite association.
- Vegetable drinks cannot replace its nutritional value.
- Milk is the subject of numerous unfounded myths.
- An adequate diet enables the correction of nutritional consumption deficiencies.
- To ensure that children receive the appropriate amounts of key nutrients, growth milk can be a helpful additional alternative in the diet.

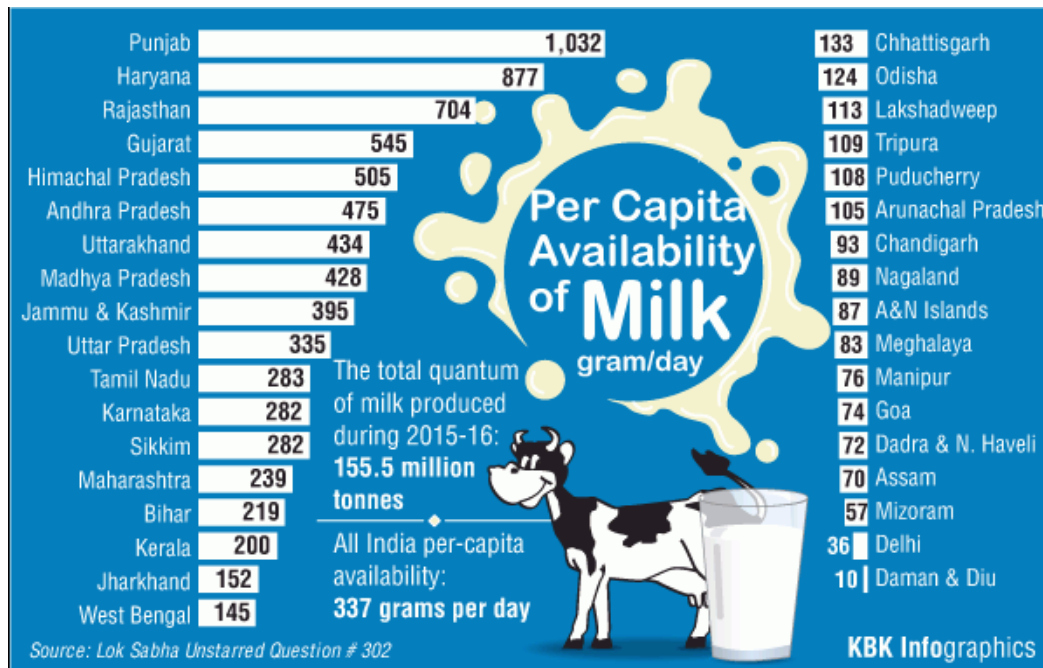
Recent and thorough scientific studies, such as the case of drinking flavored or plain milk is positively associated with nutrient intake and is not associated with adverse effects on weight status in US children and adolescents, highlight the necessity and importance of including milk in children's and adolescents' diets because failing to do so would result in them receiving insufficient amounts of vitamins and minerals. Additionally, milk has significant advantages when it comes to newborn nutrition because of its high calcium and vitamin D content, which also protects against rickets, osteoporosis, and other conditions directly linked to bone demineralization.

It has been established that an appropriate intake of calcium is necessary for the healthy formation and growth of bones during childhood. In actuality, 2 to 4 servings of dairy products per day are advised by the World Health Organization (WHO). Between two and four servings of dairy products should be consumed daily, according to the World Health Organization. However, each person's consumption should be higher or lower according on their age and physiological condition.

For instance, the recommended daily intake of milk for kids or teenagers differs from that for women during pregnancy and breastfeeding or those over 60. In reality, the dietary requirements for calcium are obviously much higher.

Indian Dairy Key Factors

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THE MARKETING MIX



<p>Product</p> <ul style="list-style-type: none"> • Dairy Products • Cooking Products 	<p>Price</p> <ul style="list-style-type: none"> • Low Pricing Strategy
<p>Place</p> <ul style="list-style-type: none"> • Rural & Urban Market • International Market 	<p>Promotion</p> <ul style="list-style-type: none"> • Advertisements

Product in the Marketing Mix of Dairy Milk

The most popular and well-known chocolate brand in the world is Dairy Milk. Every age group and socioeconomic background is served.

Its wonderful flavor has allowed it to establish itself as a sweet that is essential for everyone. The first bar of the Dairy Milk Product line was made using milk chocolate that had a higher consistency. Fruit & Nut, the first product in the series, was introduced in the year 1926. Whole Nut followed in the year 1933. At the moment, variations of dairy milk include

- Dairy Milk, Dairy Milk Turkish, Dairy Milk Big Taste Oreo Crunch, Dairy Milk Triple Choc Sensation, Dairy Milk Big Taste Toffee Whole Nut, and Dairy Milk Bubbly.
- Dairy Milk Crackle, Dairy Milk Roast Almond, Dairy Milk Freddo, and Dairy Milk with Crunchie Bits.
- Dairy Milk products include Fruit and Nut, prepared with almonds and raisins; Caramel; Puddles Mint; Little Bear; and Whole Nut, created with hazelnuts.

Cadburys



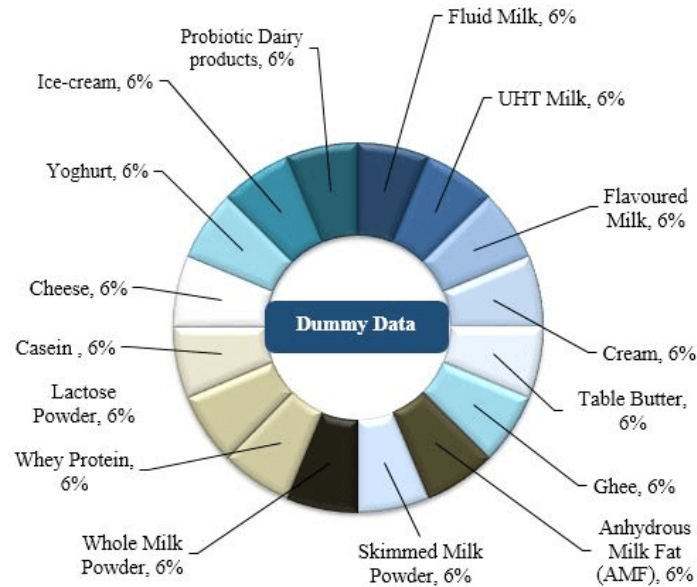
Cadburys has a range of chocolate products that are in different stages in the product life cycle. Three of their products are Dairy Milk, Dairy Milk Caramel and Dairy Milk Oreo.

Cadburys first product was the Dairy Milk chocolate bar which is just a plain bar of chocolate, since then they have brought out a range of products in bags, boxes, tins and drink. They now have a lot of different takes on the original bar, for example the Dairy Milk Caramel, this is an extension strategy to prolong the life of the Dairy Milk. The latest product they have released is the Dairy Milk Oreo.



Milk Market Dynamics

Figure 1: Global: Dairy Market: Breakup by Product type (in %), 2016



Source: IMARC Analysis, 2016

India has always produced and consumed more milk than any other country in the world, an estimated 400 million liters per day. However, the market remained monotonous partly due to low per capita consumption and the fact that most milks were eaten in their purest form, as liquid, or at best as ghee and some butter.

160 million liters per day (48%) of the 400 million liters of milk that India produces each day are kept by the producers for their own use.

Only 70 million liters per day are used by the organized sector, which includes co-operatives like Amul, Mother Dairy, and Nandini (a brand owned by the Karnataka Cooperative Milk Producers Federation (KMF), as well as players from the private sector like Nestle and Danone. The surplus milk that is available for sale is estimated to be around 240 million liters per day. The unorganized sector, which includes the traditional home, continues to hold more than 170 million liters of surplus milk. The organized milk industry in India has a value of Rs 80,000 crore and a CAGR of 15–16 percent, totaling a value of Rs 5 lakh crore.

Conclusion

According to the study's findings, the dairy industry has experienced remarkable development and structural changes, including a sharp increase in milk output, a rise in the amount of milk available per person, and modifications to the composition of milk production from different species. Traditionally green revolutionary states like Punjab and Haryana, along with Karnataka, Maharashtra, Tamil Nadu, Madhya Pradesh, and West Bengal have registered a decline in milk contribution. In contrast, states like Andhra Pradesh, Gujarat, and Rajasthan have contributed milk at a rapid rate of growth to national milk production.

Throughout the whole study period, the contribution of indigenous/local cows, buffaloes, and goats has decreased while that of crossbred cows has steadily increased. The relative contribution of the increase in livestock population was greater in the case of the growth in milk production of crossbred cattle and buffaloes, whereas the relative contribution of the yield effect was greater in the case of local cattle and goats. The cooperative sector has increased its capacity for procurement and processing, demonstrating the fundamental shift in milk marketing practices.

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