

Value Added Dairy Products: A Pathway to Increased Income of Farmers

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Abstract

One of the most effective ways for farmers to increase their income is by making value-added dairy products. By processing milk into products such as cheese, yogurt, and butter, farmers can significantly increase the value of their raw milk. Value-added dairy products not only fetch a higher price in the market but also have a longer shelf life, which allows farmers to sell their products over a longer period of time.

Introduction

The dairy industry plays a crucial role in the global food market, providing a wide range of high-quality products to consumers. One of the key aspects of the dairy industry is the production of value-added dairy products. Value-added dairy products are those that have undergone processing or been modified in some way to enhance their taste, texture, shelf life, nutritional value, or consumer appeal. These products offer added convenience, variety, and functionality compared to basic dairy commodities. Some examples of value-added dairy products include flavoured yoghurts, lactose-free milk, fortified milk with added vitamins and minerals, artisan cheeses, and protein-enriched ice cream. These value-added dairy products not only cater to consumers' changing tastes and preferences but also tap into the growing demand for healthier and more nutritious food options. They provide consumers with an array of choices that fit their specific dietary and lifestyle needs. Value-added dairy products are not only appealing to a wider consumer group but also provide enhanced nutrition and functionality. For example, flavoured yoghurts not only offer a delicious taste but also provide probiotic bacteria that promote gut health. Similarly, lactose-free milk addresses the needs of individuals with lactose intolerance, allowing them to enjoy dairy products without discomfort.

Value Added Dairy Products

Dairy products have been a vital part of our diet for centuries, providing essential nutrients such as calcium, protein, and vitamins. However, advancements in food technology and innovation have enabled the transformation of traditional dairy products into value-added items with increased nutritional benefits and versatility. This has led to the creation of a wide range of dairy products that offer improved functionality and appeal to a broader consumer base. Some examples of value-added dairy products include fortified milk with added vitamins and minerals, lactose-free dairy products for those with lactose intolerance, probiotic yogurt with added beneficial bacteria, and whey protein powders with enhanced bioactive properties (Kechagia *et al.*, 2013). These value-added dairy products not only provide the essential nutrients found in traditional dairy, but they also offer additional health benefits and functionality. From improved digestion to enhanced immune support, these value-added dairy products cater to the diverse needs and preferences of consumers.

In addition to their nutritional benefits, value-added dairy products also offer convenience and versatility. They can be easily incorporated into various recipes and meal plans, making it easier for individuals to meet their dietary goals. Creation of value-added dairy products involves a combination of scientific knowledge, food technology, and a deep understanding of consumer needs. For example, the process of fortifying milk with added vitamins and minerals requires careful consideration of the stability and bioavailability of the nutrients, ensuring that they remain potent and beneficial for consumers. Similarly, the development of lactose-free dairy products involves innovative techniques to break down lactose while maintaining the taste and texture of the products, providing an option for individuals with lactose intolerance to still enjoy dairy (Buttriss *et al.*,

1997). Probiotic yogurt with added beneficial bacteria is another fascinating example of value-added dairy. The introduction of probiotics involves precise selection of strains that offer health benefits, as well as ensuring their viability throughout the shelf life of the product. Moreover, the creation of whey protein powders with enhanced bioactive properties involves advanced extraction and purification processes to isolate bioactive compounds from whey, elevating its nutritional value and potential health benefits.

In addition, exploring the potential for export to international markets, especially regions where there is a burgeoning interest in functional foods and dietary supplements, can expand the reach of your value-added dairy products and contribute to revenue growth. By strategically positioning and promoting the nutritional benefits and versatility of value-added dairy products, you can generate income through various channels while meeting the evolving needs of consumers in the health and wellness sector.

Income Generation by Value Addition

When it comes to income generation from value-added dairy products, there are several avenues to explore. One option is to focus on creating a direct-to-consumer sales channel, where you can market these specialized dairy products to health-conscious consumers through online platforms or specialty food stores. Highlighting the added nutritional benefits and functionality of these products can help attract a premium price point and increase consumer interest. Another potential income stream is through partnerships with food service establishments such as cafes, smoothie bars, and restaurants. By showcasing the versatility of value-added dairy products in creating unique menu items and promoting their health benefits, you can establish profitable partnerships within the food service industry. In addition to the financial benefits, value-added dairy products offer farmers an opportunity to significantly increase their income. By processing raw milk into products such as cheese, yogurt, butter, and ice cream, farmers can add value to their original product and fetch higher prices in the market (Minj *et al.*, 2020). This diversification allows farmers to tap into a wider consumer base and cater to varying preferences. Furthermore, value-added dairy products have a

longer shelf life, enabling farmers to store their goods until market conditions are favourable. Additionally, by participating in the production of value-added dairy products, farmers can engage in direct marketing to consumers, which often yields higher profits compared to selling raw milk to processors.

Some value-added dairy product

Malai burfi

It is an indigenous, the most popular traditional Indian milk sweet prepared from khoa. Malai burfi is a khoa-based sweet delicacy. Milk was heated to 95-98 °C for 15 min., during boiling sugar and alum were added for the granulation texture of malai burfi. The boiling should be stopped at 40 percent moisture level and rose flavour should be added (some drops). Left for 1-2 hours and finally cut in desired shape. This dairy product has a lot of market potential with retort packaging due to increased shelf life.

Pearl millet-based kheer

Kheer is a heat-desiccated cereal-based sweetened and concentrated milk confection. In addition to milk, kheer also contains a substantial amount of non-dairy ingredient such as rice, sugar, and sabudana (sago) etc. as well as cashew nut, makhana, kismis, coconut (cuts and powders), flavoring agents such as saffron and cardamom, and dry fruit as almonds, pistachio etc. Coarse cereals including jowar, and ragi. pearl millet, sawa, harka, and other small millets provide a technological base for diversification, export promotion, and as a value-added product to make the modern dairy industry economically strong and enable the milk producer to benefit from it. Pearl millet has been known for their rich nutrient contents. It is comparable to and even better than wheat and rice in their calorie and other nutrient contents.

Paneer mix kheer

Instead of traditional kheer paneer mixed kheer is a more value-added dairy product. It has about 58 percent more profit than traditional kheer. From a nutrient point of view, it has a protein of 7.72 percent as compared to traditional kheer 5.9 percent. Total solid content is 47.93 percent whereas in traditional kheer is 32.98 percent. So it has a big scope

in dairy industry and it will help the farmers in generating additional income.

Conclusions

Incorporating value-added dairy products into their operations can also provide farmers with the opportunity to create their own unique brand and develop a loyal customer base. This, in turn, can lead to increased demand and potentially higher prices for their products. Overall, the production of value-added dairy products presents a promising avenue for farmers to enhance their income and strengthen their position in the market.

References

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