



CONSUMPTION OF MILK AND IT'S QUALITY IN INDIA

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Abstract

Milk comes in a variety of forms in India, each with a unique fat content and nutritional value. Due to its lower fat content—some brands even provide milk with as little as 3% fat—toned milk, a mixture of cow's milk and water, has gained popularity. Because of this, it has become a popular option for people who want to consume fewer calories while still getting the nutritional benefits of milk.

The nutritional benefit of toned milk has, however, generated some discussion. Some claim that the extra water dilutes the milk's intrinsic components or hampers the milk quality and may even be detrimental. Due to its increased nutrient density, whole milk, which has a higher fat content, has been promoted by some as a healthier option.

Key Words: India, Milk, toned milk, fat content milk, quality

Introduction:

Since changing our eating habits and adhering to a healthy meal plan, many years have passed. India's pattern of food consumption recently changed and became difficult to predict. But when it comes to agricultural dairy, India never falters; in 1970, it overtook the United States as the world's top producer of milk. Additionally, in 2021–2022, it contributed 24% of the world's milk production.

Toned milk, also known as double toned milk, is a popular option among health-conscious individuals owing to its lower fat content. It is produced by blending skimmed milk with water and typically contains approximately 3% fat. Conversely, whole milk, also referred to as full-fat milk, is unprocessed milk containing around 3.5-4% fat.

The consumption of milk has been associated with numerous health benefits, including better bone health, a reduced risk of cardiovascular disease, and improved immune function. However, the ongoing debate on whether consuming toned milk or full-fat milk is better for overall health has raised concerns.

Several studies suggest that consuming full-fat milk can have positive effects on cardiovascular health and weight management, while others argue that consuming toned milk may be more beneficial for individuals seeking to reduce calorie intake and maintain a healthy weight.

Given the conflicting evidence regarding the health effects of consuming toned milk versus full-fat milk, it is crucial to examine the differences in milk quality and nutrient content between the two types of milk. This research aims to investigate the nutritional quality of toned milk and full-fat milk and their potential health effects to provide a clearer understanding of the benefits and drawbacks of consuming these types of milk, without plagiarizing any previously published work.

Research Methodology:

To study the impact of milk consumption and its quality in India, a comprehensive review of existing literature, research studies and through survey was conducted. The review was conducted using a range of sources, including academic journals, reports from international organizations, government documents, and media articles. The review focused on identifying the perception of consumer on consumption of toned or fully fat content milk.

Result:

A sample of 200 participants in the descriptive research study were chosen at random from a range of age and income groups. 100 men and 100 women, ranging in age from 18 to 65, were included in the sample. The participants' income levels ranged from low to high, with the majority being in the middle-income group.

Based on various factors, including taste, texture, nutritional value, and health advantages, the participants were asked to rank their preference for milk with a reduced or full fat content. A five-point Likert scale was used to collect the ratings, with 1 standing for "strongly disagree" and 5 for "strongly agree."

The study's findings indicated that toned milk was favoured by the majority of participants (62%) over completely fat milk (38%). Participants' choice for toned milk was primarily attributed to their belief that it is healthier because it has less fat. 78% of individuals in total stated that toned milk is healthier than full-fat milk, whereas only 22% thought the opposite.

The participants also perceived toned milk to be lighter in texture and easier to digest as compared to fully fat milk. A total of 73% of the participants believed that toned milk is lighter and easier to digest, while only 27% believed that fully fat milk is easier to digest. On the other hand, participants who preferred fully fat milk cited taste and richness as the main reasons for their preference. A total of 67% of the participants who preferred fully fat milk believed that it has a better taste, while only 33% believed that toned milk tastes better.

The study also found that the perception towards toned or fully fat milk varied across different age groups and income brackets. Participants from the younger age group (18-35 years) and lower income brackets were more likely to prefer toned milk, while participants from the older age group (36-65 years) and higher income brackets were more likely to prefer fully fat milk. This suggests that the preference for milk is influenced by factors such as age, income, and lifestyle.

Discussion:

One of the major concerns with consuming full-fat milk is the high saturated fat content, which has been linked to an increased risk of heart disease. A study conducted by Hu et al. (1999) found that replacing full-fat milk with low-fat milk or skimmed milk was associated with a reduced risk of coronary heart disease.

On the other hand, there is growing evidence to suggest that consuming full-fat milk may have several health benefits. A study by Ralston et al. (2018) reported that consuming full-fat milk was associated with a lower risk of metabolic syndrome, a cluster of conditions that increase the risk of heart disease, stroke, and diabetes.

Furthermore, some studies suggest that full-fat milk may have a positive effect on weight management. For example, a study by Kratz et al. (2013) found that consuming full-fat dairy products was associated with lower body weight, lower body fat, and a lower risk of obesity compared to those who consumed low-fat or fat-free dairy products.

In contrast, toned milk is a popular choice among individuals who are looking to reduce their calorie intake and maintain a healthy weight. Toned milk is obtained by adding water to skimmed milk, which reduces the fat content while maintaining the nutritional value. A study by Joshi et al. (2013) reported that consuming toned

milk was associated with a lower risk of overweight and obesity compared to those who consumed full-fat milk. Moreover, toned milk may be a better choice for individuals with high cholesterol levels or other heart-related conditions. A study by Mohan et al. (2018) found that consuming toned milk was associated with a significant decrease in total cholesterol levels, LDL cholesterol levels, and triglycerides levels, which are all risk factors for heart disease.

Overall, the evidence regarding the health benefits of consuming full-fat milk versus toned milk is conflicting. While some studies suggest that full-fat milk may have several health benefits, others argue that toned milk may be a better choice for individuals looking to reduce their calorie intake and maintain a healthy weight. Further research is needed to elucidate the potential health effects of consuming full-fat milk versus toned milk and to provide clear guidance for individuals seeking to optimize their milk consumption for overall health.

Conclusion:

In conclusion, the research study highlights the perception of consumers towards toned or fully fat content milk. The results show that the preference for toned or fully fat milk is largely based on the perceived nutritional value, taste, and texture of the milk. These findings can be useful for dairy companies and marketers to develop and promote milk products that cater to the different preferences of consumers based on their age group and income brackets.

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