



The Popularity of A2 Milk in the Global Dairy Market

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Global A2 Milk Market size & share revenue was assessed at roughly USD 2.2 billion in 2021, is predicted to reach USD 2.48 billion in 2022, and is expected to reach around USD 4.80 billion by 2030, at a CAGR of 12.2% between 2022 and 2030.

A2 milk is becoming more popular as a healthier substitute for conventional cow's milk. It has a larger concentration of A2 beta-casein protein than conventional cow's milk and lacks A1 beta-casein protein. This milk comes mostly from Jersey, Asian herds, Guernsey, and other breeds recognized for their A2 beta-casein content.

"A2 milk is similar to mother's milk and is an excellent source of calcium." It is more nutritious and easier to digest. Unlike A1 milk, which is frequently genetically engineered, this milk provides the greatest quality milk to individuals from desi cows."

A2 milk

A2 milk is only generated by cows who have two copies of the A2 gene for beta casein. Cow's milk is roughly 87 percent water and the remaining 13 percent is a mix of lactose, fat, protein, and minerals that make up the solids in milk. Casein is the primary component of milk protein. Beta casein accounts for around 30% of the casein found in milk. Because the beta casein gene has two most frequent variations, A1 and A2, every particular bovine will be A1A1, A1A2, or A2A2 for beta casein.

Nutrition A2 Milk

A2 milk is dairy milk, hence it is high in vitamins, minerals, and macronutrients. According to the A2 Milk website, consuming 1 cup (240 mL) of 2% reduced-fat A2 milk will provide the following benefits:

- Calories: 120
- Protein: 8 g
- Total fat: 5 g
- Saturated fat: 3 g
- Carbohydrates: 12 g
- Dietary fiber: 0 g
- Total sugars: 12 g
- Added sugars: 0 g
- Vitamin D: 15% DV
- Calcium: 25% DV
- Potassium: 8% DV
- Vitamin A: 15% DV



A2 milk has various advantages over conventional cow's milk. It includes 12% more protein, 25% more vitamin A, 33% more vitamin D, 15% more calcium, and 30% thicker cream. Some studies demonstrate that persons who consume milk only from cows that produce A2 milk are less prone to bloating and indigestion, leading some to believe that A2 milk is a healthier alternative than ordinary milk. As a result, A1 and A2 milk are metabolized differently in the body.

1. A2 milk is produced by cows with a natural genetic variant that results in milk with a slightly altered protein ratio than regular milk.

All milk contains proteins, including whey and casein, and caseins account for around 80% of the proteins in cow's milk. Caseins are classified into four categories (s1, s2, and), each with its own genetic variant. The α -casein protein contains two major genetic variants: A1 α -casein and A2 α -casein, which vary structurally by a single amino acid. Conventional milk has a mix of both genetic variations, whereas A2 milk is produced by cows who have been genetically chosen to generate solely A2 α -casein.

2. While all cows generate some A2 α -casein, some breeds have a higher concentration of A2 in their milk.

The Guernsey, Jersey, Charolais, and Limousin breeds are included in this. Other animals that also produce milk that mostly includes A2 α -casein include sheep, goats, buffalo, camels, donkeys, and yaks. British Shorthorn, Holstein, Friesian, and Ayrshire cows all provide milk with nearly similar levels of A1 and A2 α -casein.

3. The amino acid sequence known as β -casomorphin-7 (BCM-7) is present in all milk and has been linked to a range of detrimental health effects.

The A2 α -casein protein is more difficult for small intestine digesting enzymes to convert into BCM-7. To put it another way, those who drink regular cow's milk will be exposed to more BCM-7 than those who consume A2 milk. Some A2 milk firms assert that BCM-7 can impair gastrointestinal motility, absorption, secretion, and immunological function in humans in an effort to portray their product as a healthier alternative.

4. The many health claims offered for A2 milk are not often supported by conclusive human experiments.

People who feel uncomfortable drinking regular cow's milk may be able to consume A2 milk "without the downsides," according to suppliers of A2 milk products. But there is now conflicting scientific data. Researchers are still looking into the impacts of A2 milk.

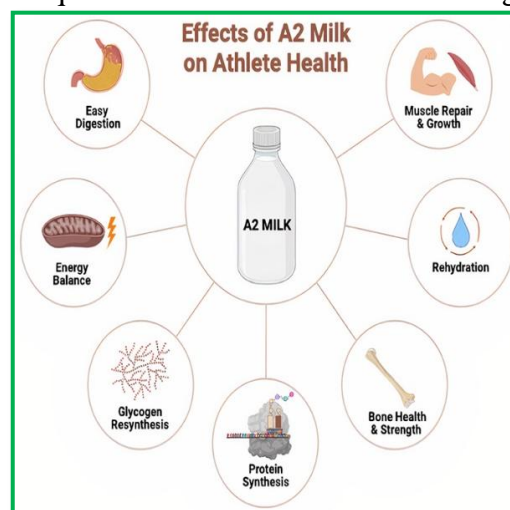
5. "Designer milks" like A2 milk may mark the start of a significant development for the dairy sector.

Farmers might make milks with express qualities, such as fewer allergens and certain nutritional profiles, using sophisticated breeding techniques and other innovative technology. With the increase in milk from cows who are fed just grass, we can already witness this trend.

Benefits of A2 Milk for Health

The amount of calcium in milk, which aids in bone development and repair, is its most well-known nutritional quality. Osteoporosis, or the thinning of the bones, is also treated and prevented using it. Many efficient acid reflux therapies also include calcium in their formulations.

A2 milk has the following extra health advantages:



- **It could aid in preserving appropriate blood pressure:** A rise in triglyceride and cholesterol levels is a common cause of high blood pressure. One may be able to reduce cholesterol levels by increasing their intake of omega-3 fatty acids, which are found in A2 milk. Additionally beneficial for blood pressure is the potassium included in A2 milk.
- **The mood could improve:** In cases of mood disorders like seasonal affective disorder (SAD), vitamin D is crucial. People with SAD may see a decrease in symptoms by ingesting foods high in vitamin D, such as A2 milk.
- **It could boost the immune system:** Animal products like A2 milk are the most common sources of vitamin A, which is crucial for maintaining robust defences. Vitamin A consumption enhances immune system cell responsiveness and control.
- **It could promote eye health:** The retina and cornea are maintained by vitamin A. A2 milk contains vitamin A, which may assist maintain healthy vision. Regular milk consumption as part of a healthy diet may aid in preventing cataracts and maintaining clear eyesight.

Main producers of A2 milk in India

1. Gujarat Co-operative Milk Marketing Federation Ltd. (GCMMF) (India)
2. Godrej Jersey (India)
3. PROVILAC Dairy Farms Pvt. Ltd. (India)
4. Freedom Foods Group (Australia)
5. Vinamilk (Vietnam)
6. Erden Creamery Private Limited (India)
7. Nestle S.A. (Switzerland)
8. Vedaaz Organics Pvt. Ltd. (India)
9. Urban Farms Milk (India)
10. Amul (India)

A2 Milk Market Segmentation Analysis

The liquid segment leads the market growth of A2 Milk since it is more convenient than any other form. The liquid form allows users to obtain the highest amount of nutrients such as proteins, vitamins, minerals, and calcium. These vitamins help to keep the neurological system healthy.

1. By Form

- Powder
- Liquid

2. **Packaging:** The carton sector dominates the A2 milk market in terms of packaging. Cartons are effective in extending the shelf life of the product, incurring relatively low transportation costs, and are user-friendly. As a result of rising consumer demand and consumption, the carton category is expected to maintain its dominance in the future years. Carton packaging is significantly safer and more convenient for keeping food since it preserves and extends the life of the product content contained within it.

3. Using Packaging

- Cartons
- Bottles

4. **Distribution:** Supermarkets and hypermarkets have the largest proportion of the A2 Milk market by Distribution Channel. The availability of a wide selection of items in shops, as well as the expanding number of supermarkets and hypermarkets, is the key driver driving this massive expansion. Supermarkets and hypermarkets feature temperature-controlled shelves for dairy-based items to prevent spoiling. Customers find

it highly easy to purchase their daily necessities at substantially reduced rates in such outlets, which is expected to boost category expansion throughout the projection period.

5. By Channel of Distribution

- Supermarkets/Hypermarkets
- Convenience Stores
- Online Retail

6. **Application:** Milk-based drinks are predicted to dominate the market growth of A2 Milk, and this dominance may be ascribed to rising demand for high-protein milkshakes, fortified milk products, and a variety of other goods. High-protein milkshakes, powders, milk drinks, smoothies, and fortified milk products are the most popular commercialised milk-based beverages with extra health advantages in the world. Protein-based goods are in great demand across the world, particularly among health-conscious consumers.

7. By way of Example

- Dairy Products
- Milk-based Drinks
- Infant Formula
- Bakery & Confectionery

8. **Opportunities:** In order to continually measure, monitor, and respond to increase farm productivity and profitability, farmers are now able to rely on technological breakthroughs to provide them with quantifiable information. The dairy industry may benefit from the use of these technologies, which might also provide attractive expansion potential. Satellite systems, drones, micro-sensor technology, robots (including automated milking parlours), and enhanced smartphone data applications are some of the emerging technologies that can significantly aid in the growth of the A2 milk industry.

Conclusion

A2 milk is costly, and its scarcity will provide a substantial impediment to the market's expansion in the next years. Farmers, breeders, groups, and the media have been debating whether A2-milk is indeed healthier than A1-milk for some years. The sole variation between the two milk varieties is a single amino acid change in beta casein. As more and cheaper alternatives become available on the market, the development of the A2 milk market will be influenced.