

Global Organic A2 Milk Production

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metrix

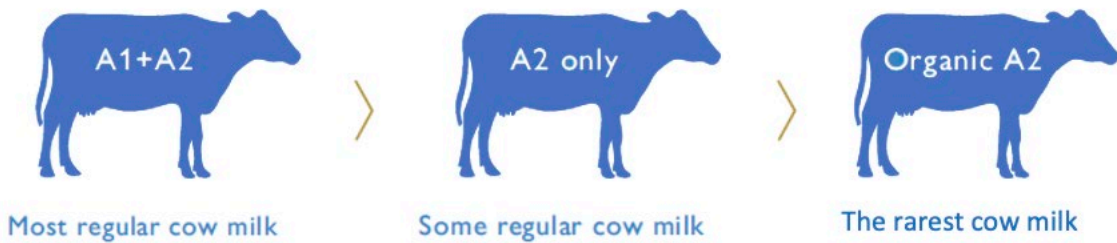
Summary

Nutrition and health, particularly in babies and young children, has received considerable attention over the past decade. The nutritional differences and benefits of dairy products including milk has been a growing area of interest amongst parents.

The differences in milk proteins has become one such area of interest with increased consumer awareness around A1 beta casein protein vs A2 beta casein protein. Most cow milk worldwide contains both the A1 and A2 beta casein, however in recent years, a new sub-segment has emerged; cow milk containing only the A2 beta casein protein. This is achieved by naturally breeding cows that produce only the A2 protein and segregating them from other cows to create an 'A2 only' milk pool. Goat, Buffalo and Camel are also sources of dairy milk that contain far greater levels of the A2 beta casein protein than A1 protein. It is believed that less than 0.01% of the world's A2 goat milk is certified organic.

In this report, we dive deeper to understand the rarity of organic vs. non-organic A2 protein milk using market intelligence gathered from industry organisations, producers and experts across Australia, New Zealand, North America and Europe – the primary markets for A2 milk.

Note: All statistical figures provided were gathered from December 2020 – January 2021 and serve as best estimates.

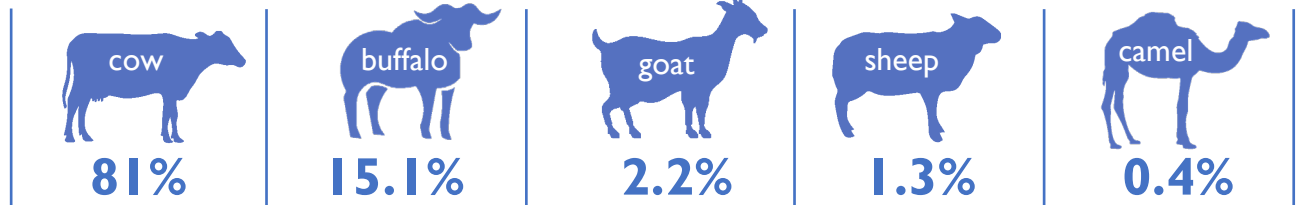


Organic A2 Protein Milk

2019 GLOBAL MILK PRODUCTION

828,794 Total Global Milk Production¹
(Million Litres)

MILK BY SPECIES²



2019 Global Milk Production

116 Million Litres Organic A2 milk produced in 2020.³

A2 VS. A1/A2 MILK

ORGANIC MILK PRODUCTION



0.01%

of the world's dairy milk is certified organic A2.⁶



LESS THAN

0.01%

of the world's goat milk is certified organic.⁶

What is the difference between A1 and A2 Milk?



Historically, most milk worldwide contained only the A2 beta casein protein. A natural mutation in cows over a number of centuries resulted in cattle that also began producing the A1 beta casein protein.

In recent times and through specialised testing methods, cows that only contain the A2 beta casein protein have been segregated and bred to create a pool of A2 protein only cow milk. Some studies have suggested the A2 beta casein protein is more easily digested by some people vs. milk containing both the A1 & A2 proteins, which may trigger inflammation.⁴



What is Organic Milk?

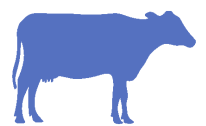
Unlike regular milk, organic milk is produced without synthetic pesticides or chemicals, is non-GMO and contains no artificial colours, flavours or preservatives and is regularly audited by independent organic certifiers.

It is a strictly defined standard that manufacturers must adhere to in order to be certified organic and often commands a higher recommended retail price given its higher production costs. It takes a minimum of 3 years to convert an ordinary farm to a certified organic farm as that is the length of time it takes to flush out the previous use of pesticides and other non-organic farming practices.

0.6% of milk production in Australia is organic vs. 0.9% globally, demonstrating its rarity within the context of global milk production.

A2 milk is a scarce resource with approximately 30% of global dairy cows producing exclusively the A2 beta-casein protein. The combination of certified organic and A2 beta casein milk is considered even more rare and is expected to attract a premium over other milk offerings.³

How rare is certified organic A2 protein milk?



An estimated 828,794 million litres of milk was produced globally in 2019.¹

Of this volume, approximately 116 million litres was certified organic A2 milk, meaning an estimated 0.01% of the world's A2 dairy milk is certified organic.⁶

Given its rarity, A2 certified organic milk demand is expected to be in excess of supply.

Reference List

- 1** 2019 Global Milk Production
<https://www.oecd-ilibrary.org/sites/aa3fa6a0-en/index.html?itemId=/content/component/aa3fa6a0-en>
- 2** Milk Production by Species
https://www.fil-idf.org/wp-content/uploads/2021/01/DDOR_FAO-Global-Facts-1.pdf
- 3** Estimated Organic A2 Milk Production
Communications with suppliers and manufacturers, by Metrix Consulting
- 4** % of A2 Dairy Cow's Milk
<https://www.foodnavigator-usa.com/Article/2018/08/23/a2-Milk-rolls-out-at-Walmart-It-s-a-real-validation-of-our-business-proposition>
- 5** Ease of Digestion
[https://www.consumerreports.org/milk/what-is-a2-milk/#:~:text=A%20small%20study%20\(funded%20by,like%20gas%20and%20abdominal%20pain.](https://www.consumerreports.org/milk/what-is-a2-milk/#:~:text=A%20small%20study%20(funded%20by,like%20gas%20and%20abdominal%20pain.)
<https://www.healthline.com/nutrition/a1-vs-a2-milk#digestion>
<https://www.globenewswire.com/news-release/2020/03/02/1993846/0/en/Global-A2-Milk-Market-Is-Expected-to-Reach-USD-21-39-Billion-by-2026-Fior-Markets.html>
<https://www.mittaldairyfarms.com/blog/2019/08/19/the-top-5-reasons-to-consume-a2-milk/>
<https://www.abc.net.au/news/science/2018-06-19/dr-karl-a1-vs-a2-milk/9879800>
- 6** % of Global Organic Milk Production
KPMG, 2018 report 'Global Organic Milk Production Market Report'

Acknowledgements

The team at Metrix Consulting would like to sincerely thank dairy suppliers and manufacturers, industry bodies and experts for their valuable time and contributions to this 'Global Organic A2 Milk Production' report.

In the course of our work to validate these numbers, there were two producers and/or suppliers we could not obtain volumes from. Their supply volumes were estimated based on desktop research and marketplace interviews.