

# THE DAIRY SECTOR AND THE PRODUCTION AND TRANSFORMATION OF A2 MILK

Antonio Muñoz López     June 2023

## Introduction

A2 milk is being studied as an alternative to traditional milk, due to the fact that the change of amino acid 67 from a histidine to a proline causes the release of  $\beta$ -Casomorphin-7 (BCM-7) to be lower, resulting in better digestibility.

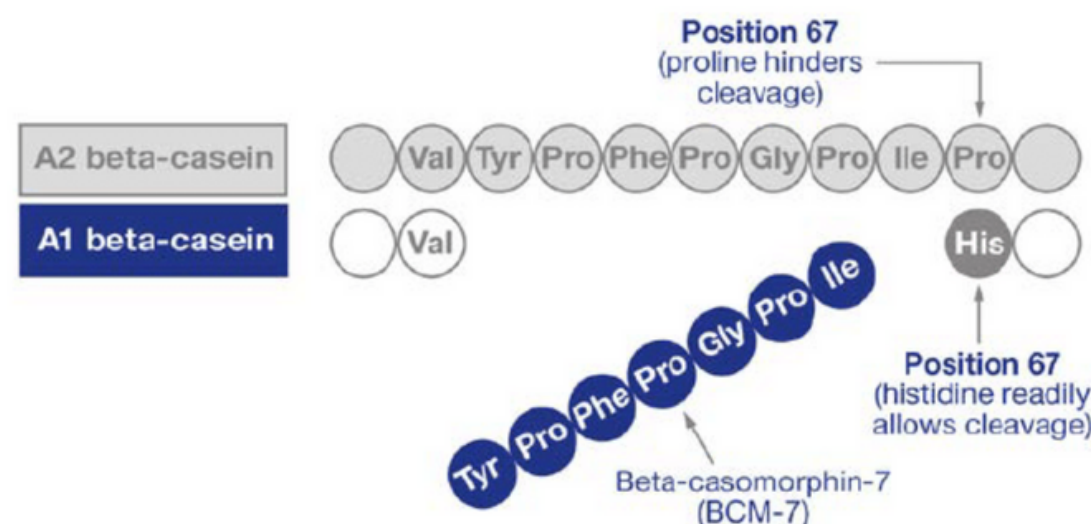


Figure 1. Amino acid structure of  $\beta$ -casein A2 and  $\beta$ -casein A1 (Pal et al., 2015).

## Reference

Pal, S., Woodford, K., Kukuljan, S., & Ho, S. (2015). Milk Intolerance, Beta-Casein and Lactose. *Nutrients*, 7, 7285-7297. <https://doi.org/10.3390/nu7095339>

## Objectives

To determine if, in general, the dairy sector is aware of the existence of this type of milk, if they believe it can be a good alternative to conventional milk or if they can use it in the same way as A1 milk to make dairy products such as cheese or yogurt. In short, to know if they think it is feasible to implement a production system that is focused on the production of A2 milk.

## Methodology

Interviews and surveys of two different groups:

- 5 experts in the dairy sector, who were asked about the technology and properties of conventional milk and A2 milk.
- 11 milk producers and processors, who were asked about the current situation of the sector and A2 milk production.

## Conclusions

- Moving from one production system to another can be a years-long process of genetic selection of A2A2 cows.
- Several producers and processors are in favor of genetic selection, but others have not heard of it.
- Studies are needed to validate and corroborate that this selection towards A2A2 cows does not negatively affect other parameters and quality factors.