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## IMPACT OF A2 MILK ON HUMAN HEALTH AND THE DAIRY INDUSTRY - A REVIEW

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**Abstract:** In recent years, a new type of cow's milk, called "A2 milk," has been introduced to the market. This type of milk was first marketed in New Zealand and has since gained a presence in the markets of several countries. It mainly contains two types of  $\beta$ -casein: the A1 and A2 variants. In recent years, researchers have studied the possible implications of the composition of the  $\beta$ -casein protein fraction for the manifestation of a new intolerance: milk protein intolerance. Casein is the main component of milk proteins, of which approximately 30-35% is beta-casein. A2 beta-casein has proline at position 67 of the protein amino acid chain, while A1 beta-casein has histidine at that position; this is associated with a possibility of gastrointestinal discomfort due to  $\beta$ -casomorphin-7 (BCM-7) released during gastrointestinal digestion. The purpose of this review is to provide an update on the impact of A2 milk on human health as well as on its many technological qualities for the production of dairy products with improved health benefits for consumers.

**Key words:** bovine, A1 and A2 milk, human health, dairy products.