GOAT'S MILK PROTEINS – HYPOALLERGENIC AND THERAPEUTIC SIGNIFICANCE

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Abstract

Goat milk is recognized for its hypoallergenic and therapeutic properties in human nutrition and health, suggesting that goat's milk may have certain bioactive and metabolically active components that may be unique to the milk of this species. Goat milk is regarded as a high-quality milk protein source. The protein fractions of goat and bovine milk are qualitatively very similar, and the major difference among these milks is related to the proportions and classes of caseins. The hypoallergenicity of goat milk compared to bovine milk relates to the low levels of \alphas1-casein in goat milk. Also, the unique composition of goat milk, combined with its nutritional value, is related to the release of peptides, fragments resulting from protein digestion or technological processing, which are able to perform specific biological activities. Thirty-eight individual peptides were identified from goat milk with ACE-inhibitory, antimicrobial, antioxidant, immunomodulatory, opioid, or dipeptidyl peptidase-IV inhibitory bioactivity. The purpose of this review is to evaluate the scientific literature concerning the therapeutic value of goat milk protein.

Key words: goat milk, protein, biopeptide