

Differences in Sheep's Milk Composition (Whole,  $\alpha_s$ - and  $\beta$ - Casein) and properties due to the breed: Amino Acid Composition, Acid-Base Titration, Water Sorption, and Degradation by Chymosin.

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Whole,  $\alpha_s$ - and  $\beta$ - caseins were isolated from sheep milk of three breeds grown in Bulgaria: Plevan Blackface, East Friesian, and Awassi. Water sorption and  $\alpha\phi\text{pH}$  were estimated from hysteresis curve areas obtained on acid-base titration of the studied proteins. The results were correlated to the amino acid composition of the studied proteins. The corresponding profiles from the time course degradation of the studied caseins by chymosin are shown in the figure below. The enzyme degradation, hysteresis behaviour, and water sorption were discussed in the light of amino acid composition and structure of protein molecules.

