

BIOLOGICAL ROLE OF D- α -AMINO ACIDS AND THEIR OCCURENCE IN FOODSTUFFS

— review —

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Abstract: in this paper we review the current understanding of biological and physiological role of D- α -amino acids and the significance of their presence in foodstuffs. The importance of the 19 L- α -amino acids used as building blocks of proteins it is well-known, but the biological role of their D-enantiomers in the body has to be further adequately clarified. Today it is well established the presence of D- α -amino acids in microorganisms, plants, lower animals, mammalian and humans. In food products, D- α -amino acids are generated from L- α -amino acids *via* racemization depending on the processing procedures or the use/presence of microorganisms when fermentation occurs.

Keywords: D- α -amino acids, D- α -amino acid oxidase, racemization, food processing

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