Reduction of acrylamide levels in cooked food by using asparaginase extracted from thermophilic fungi

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Abstract

It is presently more than a long time about ten years since the Swedish Food Authority and the University of Stockholm affirmed the presence of the suspected cancer causing agent acrylamide in a variety of heated foods. Especially foods containing amino acid and sugar. It has adverse effects on human health and is proven to be neurotoxic, genotoxic, carcinogenic, and toxic to reproductive system. Acrylamide is formed from the reaction between asparagine and reducing sugars this process called Maillard reaction. The use of asparaginase extracted from thermophilic fungi to convert asparagine to aspartic acid may provide a means to reduce acrylamide formation, while keeping up sensory quality and Physical properties as texture, flavor and color. Asparaginase has become a powerful tool for acrylamide mitigation in the food industry. With the success of commercial products, it is likely that asparaginase will be used more and more..

Biography:

Mohamed soud researcher at enzymology and fungal biotechnology lab. Official Spokesman for the international scientific conference at Zagazig University. Member of the American society of microbiology. Master study at faculty of Science at Zagazig University creative writer for (elm3ml) on social media.

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