Special Issue

Application of NMR in Food Metabolomics

Message from the Guest Editors

Food metabolomics constitutes an efficient approach to monitoring fluctuations in metabolites in food items in order to delineate molecular and biochemical mechanisms that underline acute metabolic changes in environmental stimuli. Nuclear magnetic resonance (NMR) spectroscopy is an analytical, high-throughput, high-resolution technique that is rapidly improving in speed, quality, and cost and has proven to be an invaluable tool for the quality assurance of food items. The implementation of such a "holistic" method enables unbiased exploration and examination of a sample's molecular biochemistry and, through suitable interpretation, it can be used to study metabolites' responses to environmental changes. These advances in NMR metabolomics may facilitate the identification of key characteristics of food items and enable comprehensive profiling, thereby addressing geographical origin, authenticity, quality, and integrity issues. Therefore, for this Special Issue, we invite research results and/or quality reviews on new challenges and new technological approaches related to the application of NMR in food metabolomics.

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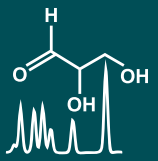

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About the Journal

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Editor-in-Chief

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