Special Issue

The Application of Thermal and Non-thermal Technologies in Food Processing and Preservation

Message from the Guest Editors

The use of heat in industrial food processing is an inevitable step towards food stabilization and preservation. In order to ensure the microbiological safety of food products, traditional heating methods such as pasteurization, sterilization, drying, and evaporation are still commonly used in the food industry. Nowadays, food can also be processed without heat, i.e., via non-thermal processing. The most frequently used non-thermal processing techniques are high-pressure processing, pulsed electric field, ultrasound, pulsed light, ultraviolet light, irradiation, and oscillating magnetic field. The goal of all these techniques is the same: to destroy pathogens. Non-thermal techniques, such as irradiation and high hydrostatic pressure, can destroy these organisms with minimal damage to the food. A special emphasis will be placed on the use of methods for thermal analysis. These monitor and characterize the changes that take place at different stages of food processing, with the aim of improving and/or maintaining both technological and nutritional properties.

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About the Journal

Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, Foods has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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