



Editorial

The 7th International Symposium on Sourdough – “Sourdough for health”



The 7th International Symposium on Sourdough (ISS) was held in Cork, Ireland, 6th – 8th of June 2018. It was organized by University College Cork. The 2018 symposium in Cork, follows a successful series of ISS held in Verona (1996), Bari (2003), Brussels (2006), Freising (2009), Helsinki (2012) and Nantes (2015). As for the previous Sourdough Symposia the aim was to promote and assist the dissemination of the latest developments in the oriented basic and applied research in the areas of sourdough technology, functionalities and the health aspects of cereal fermentations. More than 170 people attended this Symposium, coming from more than 20 countries, mainly from Europe. This symposium was financially supported by Böcker, Lesaffre, Puratos, Philibert Savours, Dr. Suwelack, Buhler and Fazer as official sponsors and also by Elsevier.

The symposium was organized into 5 sessions:

Session 1: Nutritional properties of sourdough bakery products.

Session 2: Gluten-free and FODMAP-free sourdough for celiac and IBS patients.

Session 3: Sourdough ecology and sourd-omic.

Session 4: Industrial production of sourdough – competitiveness and functionality.

Session 5: Improvement of cereal quality through sourdough LAB/yeast fermentation properties.

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Scope

Sourdough fermentation has been part of human history and still represents an important food resource in many parts of the world. Such

fermentation can significantly improve the healthiness of cereals, legumes, and ancient grains. Yet this worldwide technology still poses a challenge for scientists - how best to understand the contribution of sourdough fermentation to human health and how to boost the value of its associated functionalities. In addition, sourdough may contribute to the maintenance of the biodiversity and eubiosis condition of the GI microbiota, strengthening the Symposium's motto “Sourdough for Health”. These subjects are of interest for artisanal and industrially baked products, and cereal beverages. Sourdough is becoming increasingly popular in the bakery industry in Western Europe, due to its versatility and ability to enhance flavour and texture and lengthen the shelf life of baked goods. The Western European sourdough market is estimated to represent absolute opportunity of more than €56 Mn in 2017 and incremental opportunity of more than €900 Mn between 2016 and 2026. The International Symposium on Sourdough is an expected triennial event to bring together scientists, R&D and product managers from academia, industry, and SMEs from all over the world. It is the only scientific event dedicated to sourdough worldwide and aims to act as a robust research platform where scientific evidence can be presented and that is critical to underpinning the techno-functional and nutritional properties including potential health claims, at the EU level.

In the present special issue hosted by International Journal of Food Microbiology, we were courteously given the opportunity to publish the majority of the lectures/presentations (twelve contributions) that were presented during the Symposium. Many contributions highlighted the importance of autochthonous sourdough microbiota as a strategic tool to understand sourdough fermentation processes. This, in turn would enhance the functionality, stability and sensory quality of both wheat-based traditional sourdough products and innovative sourdough bakery products, such as those fortified with legumes and alternative grains such as quinoa. The potential benefit of sourdough technology for controlling the FODMAP content in wheat products has also been presented as an efficient tool for developing cereal products suitable for the management of irritable bowel syndrome. A unique EU definition of the term sourdough is still lacking and such a gap leads to different regulations at a national level, compromising the free trade of (sourdough) products among the EU countries. An effort within the scientific sourdough community is encouraged in order to reach a common definition of sourdough, able to embrace the divergent description enrolled in different EU countries.

Finally, two dedicated sensory sections were led by Lesaffre and Puratos where the symposium's delegates had the opportunity to taste the latest sourdough products developed. These events enabled a fruitful knowledge exchange between the industry and scientific/academic worlds.

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We hope that the final result, originating from the efforts of all invited contributors and the reviewers work, will be regarded as a reliable and updated reference for future research. Special thanks go to the members of the Committees for all their recommendations, which proved precious and helpful for the successful organization of the 7th International Symposium on Sourdough. We also wish to thank the sponsors and the Cereal Science group at UCC for their outstanding and valuable commitment in managing this Symposium.

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