

## Effect of the baking process on artisanal sourdough bread-making: A technological and sensory evaluation

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When used in optimized proportions, sourdough can improve volume, texture, flavor, nutritional value of bread and increase the shelf life by retarding the staling process and protecting bread from mould and bacterial spoilage. In this context, the objective of the paper is twofold: a) to verify the influence of different baking procedures adopted by different artisanal bakeries on the sourdough composition and performance; b) to determine if and how the operating conditions adopted can affect the chemical composition and the sensory characteristics of the bread. The preliminary results obtained indicate that chemical composition of sourdough and bread, as well as sensorial expression of corresponding bread, might be greatly influenced by the operating conditions adopted during baking. In particular, when the activity of hetero lactic bacteria was promoted (Fermentation Ratio FR = 3.0), the bread showed the worst sensorial expression in terms of taste and structural characteristics of the crumb.

### Biography

Francesca Venturi has completed her 1<sup>st</sup> PhD from the Scuola Superiore Sant'Anna, Pisa. She is a Researcher in Food Technology of Pisa University. In 2008, she received a "Special Mention" at "Montana Premium" for Food Science Research (with her colleague Zinnai A). She published more than 90 papers in journals or volumes and serving as a referee for ACS journals. She is the author of two original patents of Pisa University. She was invited speaker and part of the Organizing Committee for several conferences organized by OMICS in past years.

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