

1. Record Nr.	UNINA9910437795003321
Titolo	Handbook on sourdough biotechnology / / Marco Gobbetti, Michael Ganzle, editors
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	1-283-93411-6 1-4614-5425-5
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (299 p.)
Altri autori (Persone)	GobbettiMarco GanzleMichael
Disciplina	664.7523
Soggetti	Cooking (Sourdough) Food - Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Historical and Social Aspects of Sourdough -- 2. Chemistry of Cereal Grains -- 3. Technology of Baked Goods -- 4. Technology of Sourdough Fermentation and Sourdough Applications -- 5. Taxonomy and Biodiversity of Sourdough Yeasts and Lactic Acid Bacteria -- 6. Physiology and Biochemistry of Sourdough Yeasts -- 7. Physiology and Biochemistry of Lactic Acid Bacteria -- 8. Sourdough: A Tool to Improve Bread Structure -- 9. Nutritional Aspects of Cereal Fermentation with Lactic Acid Bacteria and Yeasts -- 10. Sourdough and Gluten-Free Products -- 11. Sourdough and Cereal Beverages -- 12. Perspectives.
Sommario/riassunto	Bread and leavened bakery products have been essential to human nourishment for millennia. Traditionally, bread production has relied on the use of sourdough as a leavening agent and to impart a characteristic quality to baked goods. In recent years, improved understanding of the biodiversity and microbial ecology of sourdough microbiota, the discovery of new species, and the commercialization of innovative products have vastly expanded the potential of sourdough fermentation for the production of baked goods. For example, raw materials such as cereals, pseudo-cereals, ancient grains, and gluten-free substrates, as well as a large number of baked good varieties (e.g., typical and industrial breads, sweet baked goods, gluten-free products)

may benefit from advances in sourdough fermentation. In addition, biotechnological tools and culture properties have been discovered to improve both the shelf life and the sensory and textural qualities of baked goods, as well as their nutritional and health-promoting properties. Though sourdough has been and will remain a unique fermentation process, this is the first book dedicated completely to sourdough biotechnology. It reviews the history of sourdough and the potential of sourdough fermentation in the production of bread and baked goods. A thorough discussion of the various processing steps includes the chemical properties of the raw matter, the taxonomy, diversity, and metabolic properties of starter yeasts and lactic acid bacteria, and the effects of sourdough fermentation on the shelf life and the sensory, textural, nutritional, and health-promoting properties of baked goods.

---