1. Record Nr. UNINA9910254146003321 Autore Ameen Sara M Titolo Lactic Acid in the Food Industry / / by Sara M. Ameen, Giorgia Caruso Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 3-319-58146-5 **ISBN** Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (VI, 44 p. 3 illus., 2 illus. in color.) Collana Chemistry of Foods, , 2199-689X Disciplina 547.437 Soggetti Food—Biotechnology **Nutrition** Microbiology Analytical chemistry Food Science Nutrition Food Microbiology **Analytical Chemistry** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto The Importance of Lactic Acid in the Current Food Industry: An Introduction -- Chemistry of Lactic Acid -- Regulatory Importance of Lactic Acid in the Food and Beverage Sector -- Lactic Acid in the Food Matrix: Analytical Methods -- Lactic Acid and Lactic Acid Bacteria: Current Use and Perspectives in the Food and Beverage Industry. Sommario/riassunto This Brief explores the importance of lactic acid and fermentation in the modern food industry. Although it is usually associated with milk and dairy products, lactic acid can also be found in many other fermented food products, including confectionery products, jams, frozen desserts, and pickled vegetables. In this work, the authors explain how lactic acid is produced from lactose by Lactobacillus and Streptococcus cultures. and they also emphasise its important role as pH regulator and preservative, helping to the inhibition of microbial growth in fermented foods. The Brief discusses a wide range of lactic acid's applications as a natural additive, curing or gelling agent, flavour, food carrier, solvent,

and discoloration inhibitor, among others. Readers will also find a brief

overview of the current analytical methods for the quantitative and qualitative determination of lactic acid in foods.