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### The role of non-conventional yeasts in preservation and organoleptic properties of fermented products

Fermentation has been an effective tool to achieve food and beverage preservation for millenia, extending shelf-life of the products. During alcoholic fermentation, sugars are converted into ethanol and carbon dioxide. The low pH generated in addition to the toxicity of ethanol, prevents the growth of undesirable pathogenic microorganisms. Yeasts are responsible for alcoholic fermentations and participate in the development of a wide range of fermented foods of animal and vegetal origin. Yeasts have not only a role in the preservation of these fermented products but also, as a consequence of their secondary metabolism, they synthesize several compounds affecting sensory attributes, such as aroma, taste or texture. Traditionally, fermentations occurred spontaneously, however, with the development of modern large scale productions, previously selected microorganisms are frequently added to carry out the fermentation to assure process control and homogeneity of the product. Selected *Saccharomyces cerevisiae* strains are currently used for the production of bread and alcoholic beverages such as wine, cider and beer. Nevertheless, yeasts are one of the most frequent microorganisms on earth and the biodiversity in this group is immense. The yeast domain contains around 1700 other species, some of them participate in the so-called traditional or spontaneous fermentations in which no starter is added. Most of these non-conventional yeasts are poorly studied but present a huge potential to be used in industrial fermentations.

### Biography

Amparo Gamero Lluna is a Associate Professor in Nutrition & Bromatology area at the University of Valencia (Spain) and completed her European PhD in Food Science Technology and Management. Her main research topic is the study of Yeast Fermentations. She has a wide range of publications and contributions to international conferences. She has worked and carried out short stays at different universities, research centers and companies of different countries: Spain (Spanish National Research Council, CSIC; University of Valencia; University of Zaragoza), The Netherlands (NIZO Food Research; Fungal Biodiversity Center, CBS-KNAW), Denmark (University of Copenhagen; Carlsberg Research Center; Christian Hansen) and Belgium (University of Leuven).

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