

Lactic Acid Bacteria: First Steps in the Post-Genomic Area

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Lactic acid bacteria is a group of bacteria initially defined on the basis of a physiological property, the production of lactic acid in the medium. This property is largely used by human to produce fermented food preserved from further microbial contamination. The acquisition of genomic data shows that LAB defined by classical microbiology are closely related to environmental and sometimes pathogenic bacteria, in term of genome similitude and thus taxonomy. In the light of available genomic data, including comparative genomics and regulatory network scheme, we will discuss what really could differentiate food LAB from related environmental strains. Further understanding of possible particular features of food bacteria will have an impact for the selection and acceptance of new starter strains, including new LAB species and GMO.