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**Tropical fruits, an unexplored source of beneficial LAB**

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Tropical fruits are part of everyday diet of the citizens of various countries all around the globe. They are consumed raw or after thermal treatment and are appreciated for their gastronomical, health promote or medical benefits. In last decade tropical fruits have been subject of intensive research in isolation and identification of beneficial lactic acid bacteria (LAB) producer of antimicrobial peptides and new probiotic candidates. In addition production of antimicrobial peptides (bacteriocins) and to their important technological properties in food fermentation processes (production of lactic acid, decrease of lactose, improvement of organoleptic and physical characteristics), various species of LAB have been shown to possess therapeutic properties since they are able to prevent the development of some diseases as shown mostly using animal models and have the capacity to promote beneficial effects in human and

animal health. In recent years, the number of functional food products enriched with live probiotic microorganisms, has increased exponentially since it is known that these can confer health benefits on the host. Besides all beneficial properties studied for various LAB, a special attention need to be pay on the safety of LAB: the possible presence of virulence factors, production of biogenic amines and antibiotic resistance. This virulence determinants have been well detected and studied in Enterococci and Streptococci, however, in last few years report on presence of virulence factors in otherwise GRAS Lactobacilli have been showing the potential upcoming problems. Horizontal gene transfer of virulence factors between pathogenic and LAB, including probiotics is a highly possible scenario in case of uncontrolled application of probiotics.

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