Industrial Chemistr

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Abstract

The increasing presence of chemical contaminants in food products poses a signifcant challenge to food

chemical contaminants, ofering a more sustainable approach. LAB, known for their probiotic benefts and metabolic versatility, can degrade various chemical pollutants through direct metabolic pathways, a l' a ʁ ʊ ᵐ ɴ, and

Ke/ d: Lactic Acid Bacteria; Biodegradation; Chemical

capabilities into fermentation processes can help in reducing chemical residues in nal products. is approach ensures that the food not only bene ts from enhanced avor and preservation but also from reduced chemical contamination.

B e ed a c . a a ed e e . LAB can be applied to contaminated agricultural soils or water sources. By introducing LAB strains capable of degrading pollutants, it is possible to detoxify contaminated environments, thereby reducing the risk of contamination in crops and water sources.

F d ce : In food processing facilities, LAB can be