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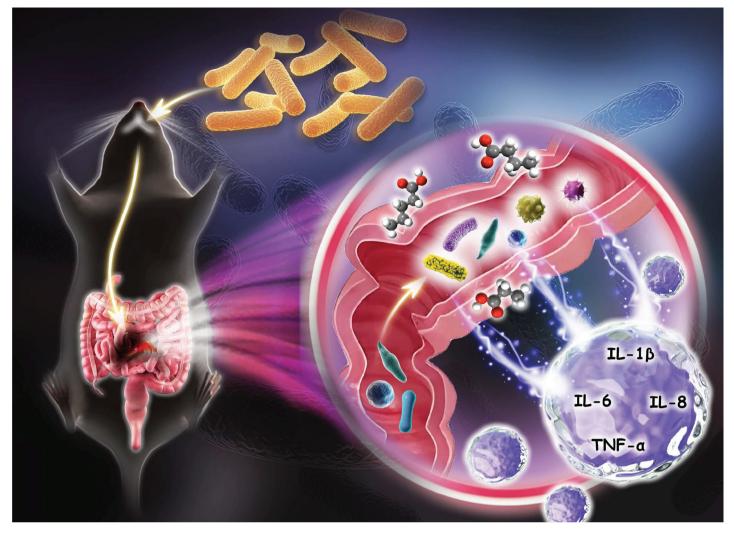
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Showcasing research from Dr Ping Li's laboratory, Key Laboratory for Food Microbial Technology of Zhejiang Province, College of Food Science and Biotechnology, Zhejiang Gongshang University, Hangzhou 310018, PR China.

Lactobacillus plantarum ZJ316 alleviates ulcerative colitis by inhibiting inflammation and regulating short-chain fatty acid levels and the gut microbiota in a mouse model

Ulcerative colitis is related to gut microbiota dysbiosis. *Lactobacillus plantarum* ZJ316 can regulate gut microbiota *in vitro*, but its effects *in vivo* require further evidence. Mice were given ZJ316 for 35 days after colitis induction *via* DSS in drinking water. ZJ316 remarkably alleviated symptoms while altering the gut microbiota by upregulating the percentage of *Firmicutes* and reducing *Bacteroidetes*. The colon had more SCFAs and butyrate-producing genus. Spearman analysis showed a positive association between SCFAs, especially butyric acid, and *Faecalibacterium* and *Agathobacter*. ZJ316 could relieve UC as dietary therapeutics.



