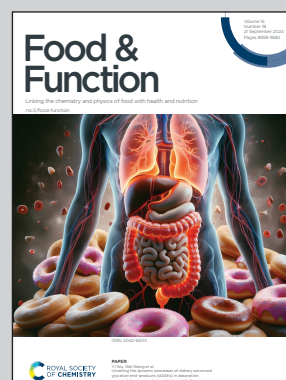


Showcasing research from Professor Guohua Zhang's laboratory, School of life science, University of Shanxi university, Taiyuan, China.

Comparison of the effects of three sourdough postbiotics on high-fat diet-induced intestinal damage

Authors found that postbiotics derived from different sourdough strains (*Lactiplantibacillus plantarum* LP1, LP25, and *Pediococcus pentosaceus* PP18) significantly reduced in *FASN*, *Leptin*, and *SREBF1* mRNA expression, mitigated gut barrier damage by promoting colonic *Occludin*, *ZO-1*, and *Claudin-1* levels. Additionally, postbiotics supplementation markedly downregulated the pro-inflammatory cytokines *TNF- α* , *IL-6*, and *IL-1 β* , reducing intestinal inflammation. Supplementation with increased the abundance of gut *Cetobacterium* and *Plesiomonas*. Collectively, these findings suggest that inactivated strains confer protective effects against high-fat diet-induced intestinal damage in zebrafish, with variation observed across different species.

As featured in:



See Guohua Zhang *et al.*, *Food Funct.*, 2024, 15, 9053.