

# Resume of Sini Kang

## **Basic Information**



School:	School of Food Science and Engineering
Gender:	Female
Date of Birth:	198901
Title:	Lecturer
Education:	Ph. D of Food Nutrition
Tutor:	Master's degree
Interest of research:	Probiotics, Prebiotics, Gut microbiota

## **Academic Background**

Aug 2020, graduated from Seoul National University, Ph.D of Food Nutrition.

## **Representative Projects**

1. National Natural Science Foundation of China, “Study on the regulation of intestinal goblet-specific MUC2 secretion by butyl-fructooligosaccharides based on microbial interaction and differentiation of intestinal stem cells”, 2024.01-2026.12, Project leader.
2. Natural Science Foundation of Hubei Province, “Study on the modulation of glycometabolism by butyl-fructooligosaccharides via gut microbiota”, 2023.07-2025.06, Project leader.

## **Representative Articles**

1. Kang, S., Xu, Y., Kang, Y., Rao, J., Xiang, F., Ku, S., ... & Zhou, M. (2024). Metabolomic insights into the effect of chickpea protein hydrolysate on the freeze-thaw tolerance of industrial yeasts. *Food Chemistry*, 138143.
2. Kang, S., Long, J., Park, M. S., Ji, G. E., Ju, Y., & Ku, S. (2024). Investigating human-derived lactic acid bacteria for alcohol resistance. *Microbial Cell Factories*, 23(1), 118.
3. Kang, S., Xu, Y., Zhang, Y., Gao, P., Guan, Y., Ku, S., ... & Li, H. (2023). Modulation of gut microbiota by chickpea-derived proteins and peptides with antioxidant capabilities. *LWT*, 187, 115341.
4. Kang, S., You, H. J., Ju, Y., Kim, H. J., Jeong, Y. J., Johnston, T. V., ... & Park, M. S. (2022). Butyl-fructooligosaccharides modulate gut microbiota in healthy mice and ameliorate ulcerative colitis in a DSS-induced model. *Food & function*, 13(4), 1834-1845.
5. Kang, S., Lin, Z., Xu, Y., Park, M., Ji, G. E., Johnston, T. V., ... & Park, M. S. (2022). A recombinant *Bifidobacterium bifidum* BGN4 strain expressing the streptococcal superoxide dismutase gene ameliorates inflammatory bowel disease. *Microbial Cell Factories*, 21(1), 1-11.

6. Kang, S., Guo, Y., Rao, J., Jin, H., You, H. J., & Ji, G. E. (2021). In vitro and in vivo inhibition of *Helicobacter pylori* by *Lactobacillus plantarum* pH3A, monolaurin, and grapefruit seed extract. *Food & Function*, 12(21), 11024-11032.
7. Kang, S., Li, R., Jin, H., You, H. J., & Ji, G. E. (2020). Effects of selenium-and zinc-enriched *Lactobacillus plantarum* SeZi on antioxidant capacities and gut microbiome in an ICR mouse model. *Antioxidants*, 9(10), 1028.
8. Kang, S., You, H. J., Lee, Y. G., Jeong, Y., Johnston, T. V., Baek, N. I., ... & Ji, G. E. (2020). Production, structural characterization, and in vitro assessment of the prebiotic potential of butyl-fructooligosaccharides. *International Journal of Molecular Sciences*, 21(2), 445.
9. Kang, S., Johnston, T. V., Ku, S., & Ji, G. E. (2020). Acute and sub-chronic (28-day) oral toxicity profiles of newly synthesized prebiotic butyl-fructooligosaccharide in ICR mouse and Wistar rat models. *Toxicology Research*, 9(4), 484-492.