Resume of Wu QIAN

School :	School of Life Sciences and Health Engineering
Gender：	Female
Date of Birth：	198804
Title：	Professor
Education：	Ph.D of food science and engineering
Tutor：	Master/Doctor degree
Interest of research:	Anti-glycation, Polyphenol function, Nutrition and health

Academic Background

From September 2010 to July 2015, Huazhong Agricultural University, China, MD-PhD;
From September 2006 to July 2010, Huazhong Agricultural University, China, Bachelor.

Oversea visiting

2013-2015, Visiting scholar, University of Massachusetts, Amherst, USA.
2015-2016, Postdoctor, Hong Kong Baptist University, Hong Kong, CHN.
2021-2022, Visiting scholar, University of British Columbia, Vancouver, CA

Enrollment Information

1. Enrollment Discipline: Master of food science and engineering, Doctor of light industry technology and engineering.
2. Research direction: Food science and engineering, light industry technology and engineering, food nutrition and health
3. Enrollment Year: 2023-2024

Representative Projects

1. National Natural Science Foundation of China Youth Project "Molecular mechanism of lotus pod proanthocyanidins inhibiting the absorption of oligopeptide-AGEs ".
2. Hubei Provincial Natural Science Foundation Youth Project "Analysis of the Inhibition Mechanism of Proanthocyanidins on the Formation of Advanced Saccharification End Products in the Aging Process of Beer Based on Mass Spectrometry".
3. Open Project of Key Laboratory of Fermentation Engineering, Ministry of Education "Research on the Inhibition Mechanism of Proanthocyanidins on the Formation of Advanced Saccharification End Products in Food Processing".
4. International Cooperation Fund of "111" Intelligence Introduction Base for Cell

Regulation and Molecular Drugs "Effect of catechin on AGEs absorption andcytotoxicity in Caco-2 cells".
5. Open Fund of State Key Laboratory of Tea Biology and Resource Utilization " The mechanism of catechins' restriction on the absorption of exogenous dietary protein-AGEs and their metabolic intervention".

Representative Articles

1. Zhou M Z, Zhang Y Y, Shi L, Li L C, Zhang D, Gong Z H, **Wu Q***. Activation and modulation of the AGEs-RAGE axis: Implications for inffammatory pathologies and therapeutic interventions – A review. Pharmacological Research. 2024, 206: 107282.
2. Feng N J, Zhao X D, Hu J X, Tang F, Liang S, **Wu Q***, Zhang C Q*. Recent advance in preparation of lignin nanoparticles and their medical applications: A review. Phytomedicine. 2024, 130: 155711.
3. Ye X R, Zhang M Y, Gong Z H, Jiao W T*, Li L C, Dong M Y, Xiang T Y, Feng N J*, **Wu Q***. Inhibition of polyphenols on Maillard reaction products and their induction of related diseases: A comprehensive review. Phytomedicine. 2024, 128: 155589.
4. Feng N J, Hu J X, Liang S, Yang X, Zhu X T, Feng Y J, Zhao X D, Tang F, Yang J C*, **Wu Q***. Physical and oxidative stability of flaxseed oil-in-water emulsions prepared by natural lignin-carbohydrate complex. International Journal of Biological Macromolecules. 2024, 270: 132154.
5. Wang J Y, Yu Z W, Zhang X, Yang J, Luo Y F, Wu M C, **Wu Q***, Wang C*. Effect of feruloylated arabinoxylan on the retrogradation and digestibility properties of pea starch during short-term refrigeration: Dependence of polysaccharide structure and bound ferulic acid content. International Journal of Biological Macromolecules. 2024, 257: 128524.
6. Li W J, Guan Y X, Shi L, Chen Y, Huang H, Zhen H Y, Wu P, Wang C, **Wu Q***, Li W*. Identification of angiotensin-converting enzyme inhibitory peptides from peanut meal (Arachis hypogaea Linn) fermented by Lactobacillus pentosus using MALDI-TOF–MS and LC–MS/MS. Food Frontiers, 2024, 22(1): 594–604.
7. **Wu Q***, Niu M Y, Zhou C, Wang Y X, Xu J H, Shi L, Xiong H, Feng N J*. Formation and detection of biocoronas in the food industry and their fate in the human body. Food Research International, 2023, 174: 113566.
8. **Wu Q***, Zhang F, Niu M Y, Yan J, Shi L, Liang Y G, Tan J Y, Xu Y, Xu J H, Wang J Y*, Feng N J*. Extraction methods, properties, functions, and interactions with other nutrients of lotus procyanidins: A review. Journal of Agricultural and Food Chemistry. 2023, 71(40): 14413-14431.
9. **Wu Q**, Zhang F, Wang Y X, Yan J, Zhou C, Xu Y, Shi L, Xiong H, Feng N J*. Inhibitory mechanism of carboxymethyl chitosan-lotus seedpod oligomeric procyanidin nanoparticles on dietary advanced glycation end products released from glycated casein during digestion. Food Research International, 2023, 173: 113412.
10. Ouyang Y, Liang Y G, Niu M Y, Yan J, Chu Q M, Zhou M Z, Li W, Feng N J*, **Wu Q***. Structure relationship of non-covalent interactions between lotus seedpod oligomeric procyanidins and glycated casein hydrolysate during digestion. Food & Function, 2023, 14(17): 7992-8007.