# Resume of Yuying Hu

## **Basic Information**



School : Gender: Date of Birth: Title: Education: Tutor: Interest of research:

School of Life and Health Sciences Female 199307 Associate Professor Ph.D in Food Science Master degree Gastrointestinal fate of emulsion-based delivery system

### Academic Background

From September 2022 to July 2015, Hubei University of Technology, Bachelor's Degree in Food Science and Engineering;

From September 2015 to July 2017, Huazhong Agricultural University, Master's Degree in Food Science;

From September 2017 to July 2022, Huazhong Agricultural University, Ph.D in Food Science.

### **Oversea visiting**

From October 2017 to June 2021, Joint-training Ph.D, University of Massachusetts at Amherst, USA.

### **Enrollment Information**

- 1. Enrollment Discipline: Master of Food Science
- 2. Research direction: Food structure and nutrition; Food digestion system;
- 3. Enrollment Year: 2024-2025

### **Representative Projects**

1. National Natural Science Foundation of China: Modulation and Mechanisms of Two-step Lipase Diffusion Regulating Lipid Digestion by Manipulating the Spatial "Chamber" Structure of Emulsion Droplets, China, Project leader.

2. Research Project of Hubei University of Technology: Laws and Regulatory Mechanisms of Starch-based Emulsion Gel Structure Characteristics and Oral Processing Environment on Lipid Digestion, Hubei Province, Project leader.

3. Open Project of Hubei Key Laboratory: Regulating Mechanism of High-pressure Microjet on the Interfacial Assembly Behavior of Canola Protein-Chitosan Composite Particle, Hubei Province, Project leader.

#### **Representative Articles**

1. Hu Yuying, Wang Lufeng, David Julian McClements. Design, characterization and digestibility of  $\beta$ -carotene-loaded emulsion system stabilized by whey protein with chitosan and potato starch addition. *Food Chemistry*, 2024, 440, 138131.

2. Hu Yuying, Yu Ben, Wang Lufeng, David Julian McClements, Li Chunmei. Study of dextrin addition on the formation and physicochemical properties of whey protein-stabilized emulsion: Effect of dextrin molecular dimension. *Food Hydrocolloids*, 2022, 128, 107569.

3. Hu Yuying, Tan Yunbing, David Julian McClements, Wang Lufeng. Fabrication, characterization and *in vitro* digestive behavior of Pickering emulsion incorporated with dextrin. *Food Chemistry*, 2022, 384, 132528.

4. Hu Yuying, Li Chunmei, Tan Yunbing, David Julian McClements, Wang Lufeng. Insight of rheology, water distribution and *in vitro* behavior of starch based-emulsion gel: Impact of potato starch concentration. *Food Hydrocolloids*, 2022, 132, 107859.

5. Hu Yuying, David Julian McClements, Wang Lufeng, Li Chunmei. Formation and characterization of starch-based spherulite: Effect of molecular weight of potato amylose starch. *Food Chemistry*, 2021, 371, 131060.

6. Hu Yuying, Li Chunmei, Regenstein Joe M, Wang Lufeng. Preparation and properties of potato amylose-based fat replacer using super-heated quenching. *Carbohydrate Polymers*, 2019, 223, 115020.

7. Hu Yuying, Wang Guanghong, Pan Siyi, Wang Lufeng. Influence of ethylene and ethephon treatments on the peel color and carotenoids of Gannan Newhall navel orange during postharvest storage. *Journal of Food Biochemistry*, 2018, 42(5). (Cover paper, pp.e12534).

8. Zhou Hualu, Hu Yuying, Tan Yunbing, Zhang Zhiyun, David Julian McClements. Digestibility and gastrointestinal fate of meat versus plant-based meat analogs: An *in vitro* comparison. *Food Chemistry*, 2021, 364, 130439.

9. Guo Qing, Shu Xin, Hu Yuying, Su Jiaqi, Chen Shuai, Eric A. Decker, Gao Yanxiang. Formulated protein-polysaccharide-surfactant ternary complexes for co-encapsulation of curcumin and resveratrol: Characterization, stability and *in vitro* digestibility. *Food Hydrocolloids*, 2021, 111, 106265.

10. Liu Chengling, Hu Yuying, Wang Lixuan, Wang Lufeng. Study on enzymatic treatment of sweet potato starch by Pullulanase and its properties. *Chinese Journal of Cereals and Oils*, 2018, 33(2), 6-11.