

Curriculum Vitae (CV)

Homa Baghaei

(Associate Professor, Ranking 20)

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Academic Profiles: ORCID | ResearchGate | Scopus | Google Scholar | LinkedIn | Civilica

Education

- Ph.D. in Food Science and Technology (Food Technology)- Ferdowsi University of Mashhad, Iran
- M.Sc. in Food Science and Technology (Food Technology)- Ferdowsi University of Mashhad, Iran
- B.Sc. in Food Science and Technology- Ferdowsi University of Mashhad, Iran

Academic Experiences

- Faculty Member, Food Additives Research Group, Food Science and Technology Research Institute, ACECR, Mashhad (2006–2008)
- Associate Professor, Islamic Azad University, Damghan Branch, Damghan (2008–2026)
- Visiting Lecturer, Department of Health, Semnan University of Medical Sciences, Damghan (2024)
- Visiting Lecturer, Department of Animal Science, Payame Noor University, Mashhad (2013)

Administrative Experiences

- Head, Office of Industry and Society Relations, Islamic Azad University, Damghan Branch, Damghan (2016–2017)
- Research Director and Head of Office of Science Production Services, Islamic Azad University, Damghan Branch, Damghan (2017–2021)
- Graduate Studies Manager, Department of Food Science and Technology, Islamic Azad University, Damghan Branch, Damghan (2022–2024)
- Head, Young Researchers Club, Islamic Azad University, Damghan Branch, Damghan (2022–2024)

Teaching Areas

- Advanced Food Technologies
- Advanced Meat Industries

- Advanced Extraction and Purification
- Research Methodology and Scientific Writing
- Specialized English in Food Science
- Enzymes in Food Technology
- Non-Thermal Food Processing
- Food Formulation and Product Development
- Food Flavoring
- Chemistry of Spices and Aromatic Compounds

Research Interests

- Food Processing Technologies
- Meat Science and Technology
- Functional Foods and Food Formulation
- Non-Thermal Processing Methods
- Food Quality and Shelf-Life Improvement
- Natural Additives and Antioxidants in Food Systems

Workshops and Professional Training

- Spices and Their Applications in the Food Industry
- Application of Medicinal Plants in Food Formulations
- Scientific Database Searching
- Manuscript Preparation and Submission
- Conference Paper Preparation and Submission

Selected Journal Articles

Shahidi F, Kouchaki A, **Baghaei H**. 2006. Determination of chemical compounds and physical properties of watermelon, pumpkin, cantaloupe and melon seeds native to Iran and evaluation of the chemical characteristics of their oils. *Agricultural Sciences and Industries*.

Baghaei H, Shahidi F, Varidi MJ, Nasiri Mahalati M. 2009. Formulation of an orange beverage based on cantaloupe seed and evaluation of its properties during storage.

- Motamedi A, Vahdani M, **Baghaei H**, Borghei M. 2015. Physicochemical and sensory properties of momtaze hamburgers containing lentil and chickpea seed flour. *Nutrition and Food Sciences Research*.
- Milani E, **Baghaei H**, Mortezaei MA. 2011. Effect of replacing honey, date syrup and guar gum on physicochemical properties, texture and viscosity of low-fat orange frozen yogurt dessert.
- Baghaei H**, Varidi MJ, Varidi M, Eshaghi Z. 2012. Effect of gender and slaughter conditions on pH decline and postmortem proteolysis during ostrich meat tenderization using SDS-PAGE.
- Baghaei H**, Aghaei F, Sedaghat N, Mohebi M. 2012. Effect of garlic essential oil on mechanical, physicochemical, microbial and sensory properties of edible film prepared from soy protein isolate.
- Baghaei H**, Varidi MJ, Varidi M. 2014. Effect of gender and slaughter conditions on carcass yield, weight composition and economic evaluation of ostrich meat production.
- Mazrouei Arani N, **Baghaei H**, Khorrami Rad A, et al. 2013. Effect of synbiotic gaz consumption on insulin resistance, inflammatory factors and oxidative stress parameters in patients with type 2 diabetes.
- Borghaei M, **Baghaei H**, Motamedi A. 2015. Replacement of chickpea and lentil flour in chicken cocktail formulation and evaluation of physicochemical and sensory properties.
- Gerayeli Z, Sharifi A, **Baghaei H**. 2017. Extraction of phenolic and antioxidant compounds of parsnip under ultrasound pretreatment and combined solvent conditions.
- Nejati Sarban A, **Baghaei H**. 2017. Improving textural and sensory properties of fish burger by addition of soy flour and microbial transglutaminase enzyme.
- Farrokh A, **Baghaei H**. 2016. Effect of microbial transglutaminase enzyme on physicochemical, textural and sensory characteristics of chicken steak.
- Shahsavari H, Bolandi M, **Baghaei H**. 2019. Antimicrobial effects of hydroalcoholic extracts of sage, basil and cinnamon against *Saccharomyces cerevisiae* in dough.
- Mazaheri M, **Baghaei H**, Emadzadeh B, Bolandi M. 2019. Fruits and vegetables used as natural meat tenderizers: A review.
- Mirhaj F, **Baghaei H**, Emadzadeh B, Jebelli Javan A. 2021. Effect of marinating beef steak with soy sauce and broccoli juice on physicochemical and quality properties during tenderization.
- Mazaheri M, **Baghaei H**, Emadzadeh B, Bolandi M. 2020. Tenderization effect of asparagus juice and balsamic vinegar on physicochemical and structural attributes of beefsteak. *Journal of Food Science and Technology*.
- Moradi M, Bolandi M, **Baghaei H**, Nahidi F, Karimi M. 2021. Effect of microbial transglutaminase, guar gum and sodium caseinate on gluten-free taftoon bread.
- Moradi M, Bolandi M, Arabameri M, Karimi M, **Baghaei H**, et al. 2020. Improvement of gluten-free taftoon bread properties during storage. *Journal of Food Measurement and Characterization*.

Mazaheri M, **Baghaei H**, Emadzadeh B, Bolandi M. 2021. Degradation of myofibrillar and sarcoplasmic proteins as a function of marinating time and marinade type. *Journal of Food Processing and Preservation*.

Rostamani MR, **Baghaei H**, Bolandi M. 2021. Prediction of top round beef meat tenderness as a function of marinating time based on commonly evaluated parameters and regression equations. *Food Science and Nutrition*.

Selected Conference Papers

Baghaei H, Varidi MJ, Varidi M, Eshaghi Z. 2013. Effects of gender on quality characteristics of ostrich meat during aging. *First International Electronic Conference on Novel Food Processing*.

Baghaei H, Shahidi F, Varidi MJ, Nasiri Mahalati M. 2008. Utilization of cantaloupe seed waste to produce a novel beverage and evaluation of its nutritional value. *First European Food Congress, Slovenia*.

Baghaei H, Shahidi F, Varidi MJ, Nasiri Mahalati M. 2008. Production of orange beverage from cantaloupe seed and evaluation of its shelf life during storage. *First European Food Congress, Slovenia*.

Milani E, **Baghaei H**, Mortezaei MA. 2009. Application of barberry concentrates in low-fat yog-ice cream formulation and evaluation of rheological characteristics. *Second European Food Congress, Hungary*.

Milani E, **Baghaei H**, Mortezaei MA. 2009. Effect of date syrup and guar gum on rheological properties of low-fat yog-ice cream. *International Food Rheology and Structure Symposium, Zurich*.

Baghaei H, Habibi Najafi MB. 2005. Anti-nutritional compounds of legumes and comparison of heating methods for their removal. *National Legumes Conference, Mashhad*.

Baghaei H, Ziabakhsh Deilami M, Habibi Najafi MB. 2006. Effect of food processing methods on elimination of anti-nutritional factors of legumes. *National Food Industry Conference, Isfahan*.

Baghaei H, Ziabakhsh Deilami M, Pourazarang H. 2006. Honey and its new applications in the food industry. *National Conference on Bee Products, Isfahan*.

Baghaei H, Haddad Khodaparast MH, Milani E, Bolourian S. 2007. Application of ozone gas in the pistachio industry as a method to control aflatoxin contamination.

Hosseini F, Bolourian S, **Baghaei H**. 2008. Low-sodium or sodium-free dietary salts as a novel food additive for improving public health.

Bolourian S, Hosseini F, **Baghaei H**. 2008. Double and multiple fortification of salt using micronutrient encapsulation techniques.

Milani E, **Baghaei H**, Mortezaei M.A. 2008. Application of barberry concentrate in low-fat frozen yogurt formulation and evaluation of sensory and rheological properties.

- Reviewer of the knowledge-based project “Increasing the Shelf Life of Pistachios Using Designed Packaging”, Office of the Presidency, 2017.
- Reviewer of the project “New Formulation of Disposable Containers ...”, Islamic Azad University, Damghan Branch, 2018.
- Reviewer of the project “Industrial Plan for Pistachio Oil Extraction ...”, Islamic Azad University, Damghan Branch, 2018.
- Reviewer of the project “Investigation of the Effect of Nanoparticle Morphology ...”, Islamic Azad University, Damghan Branch, 2018.
- Reviewer of the book “Food Additives”, Islamic Azad University, Damghan Branch, 2018.
- Reviewer of the patent proposal “Halocathodic Nanosensors ...”, Khorasan Science and Technology Park, 2017.
- Reviewer of the patent proposal “Electrospun Halochromic Nanosensors ...”, Khorasan Science and Technology Park, 2017.
- Reviewer of the patent proposal “Extraction and Concentration of Bovine Bone Extract ...”, Khorasan Science and Technology Park, 2017.
- Reviewer of the patent proposal “Formulation and Production Process of Egg-Based Sausage”, Khorasan Science and Technology Park, 2017.
- Reviewer of the patent proposal “Formulation for the Production of Sausage and Bologna from Rainbow Trout Fish”, Khorasan Science and Technology Park, 2017.
- Member of the Scientific Committee and Jury Board, 3rd Conference on Biological Sciences, Islamic Azad University, Damghan, 2018.
- Member of the Reviewer Board, Iranian Journal of Food Science and Technology, Tarbiat Modares University, Tehran, since 2015.
- Member of the Reviewer Board, Research and Innovation in Food Science and Technology, Food Science and Technology Research Institute, Khorasan Science and Technology Park, since 2014.
- Member of the Reviewer Board, Innovation in Food Science and Technology, Islamic Azad University, Sabzevar Branch, since 2014.
- Member of the Reviewer Board, Food Industry Research, University of Tabriz, since 2016.
- Member of the Reviewer Board, Nuts Journal, Islamic Azad University, Damghan Branch, since 2016.
- Member of the Reviewer Board, Journal of Chemical Health, Islamic Azad University, Damghan Branch, since 2016.
- Member of the Reviewer Committee, National Conference on Development in Agriculture, Animal Sciences, and Food Industries with a Focus on Improving Food Quality, Health, and Security, Islamic Azad University, Khorasgan Branch, June 2025.
- Member of the Reviewer Committee, National Conference on Medicinal and Strategic Plants and Processing Industries with a Production Growth Approach, Islamic Azad University, Damghan Branch, October 2025.

- Member of the Reviewer Committee, National Conference on Biological Sciences, Islamic Azad University, Damghan Branch, October 2025.
- Mentor, First National Pharmaceutical Startup Weekend, Faculty of Pharmacy, Islamic Azad University, Damghan Branch, March 2019.