

PERSONAL INFORMATION

- Born: 12/26/1978, Shiraz
- Nationality: Iranian
- Married
- Three Children



EDUCATIONAL RECORDS

B. Sc.: Food Science and Technology (1997-200. Shiraz University, Shiraz, Iran)

M. Sc.: Food Science and Technology (2001-2004. Shiraz University, Shiraz, Iran)

Ph.D.: Food Science and Technology (2009-2013. Tarbiat Modarres University, Tehran, Iran)

Employment (Since 2004):

Faculty member

Department : Food Science and Technology

Agricultural Sciences and Natural Resources University of Khuzestan

Specialization: Food Technology

Academic Status: Associate Professor

Google Scholar Situation:

Citations > 1341

H-Index: 17

i10- Index: 28

Research Interests:

- Active Food Packaging
- Edible Films and Coatings
- Extraction and application of plant extracts in foods

Some International Published Articles

1. Barzegar, H., Azizi, M. H., Barzegar, M & Hamidi, Z. 2014. Effect of potassium sorbate on antimicrobial and physical properties of starch_ clay nanocomposite films. *Carbohydrate Polymers*. 110: 26-31.
2. Ghani, Sh., Barzegar, H., Noshad, M. & Hojjati, M. 2018. The preparation, characterization and in vitro application evaluation of soluble soybean polysaccharide films incorporated with cinnamon essential oil nanoemulsions. *International Journal of Biological Macromolecules*. 112: 197-202.
3. Alizadeh, V., Barzegar, H., Nasehi, B. & Samavati, V. 2018. Development of a chitosan-montmorillonite nanocomposite film containing *Satureja hortensis* essential oil. *Iranian Food Science and Technology Research Journal*. 13 (6): 131-143.
4. Barzegar, H., Mehrnia, M. A., Nasehi, B. & Alipour, M. 2018. Fabrication of Peppermint essential oil nanoemulsions by spontaneous method: effect of preparing conditions on droplet size. *Flavour and Fragrance Journal*. 33 (4): 351-356.
5. Hojjati, M. & Barzegar, H. 2017. Chemical Composition and Biological Activities of lemon (Citrus limon) Leaf Essential Oil. *Nutrition and Food Sciences Research*. 4 (4): 15-24.
6. Anvar, A., Nasehi, B., Noshad, M. & Barzegar, H. 2016. Drying kinetics and optimization of microwave- assisted drying of quince pomace. *Iranian Food Science and Technology Research Journal*. 12 (6): 750-757.
7. Kouravand, F., Jooyande, H., Barzegar, H. & Hojjati, M. 2017. Characterization of cross-linked whey protein isolate-based films containing *Satureja khuzestanica* Jamzad essential oil. *Journal of Food Processing and Preservation*. 42: 1-10.
8. Jaldani, Sh., Nasehi, B., Barzegar, H. & Sepahvand, N. A. 2018. Optimization of Physical and Imaging Properties of Flat Bread Enriched with Quinoa Flour. *Nutrition and Food Sciences Research*. 5 (3): 25-34.
9. Nazari, M. Mehrnia, M. A., Jooyandeh, H. and Barzegar, H. 2019. Preparation and characterization of water in sesame oil microemulsion by spontaneous method. *Journal of Food Process Engineering*. 42 (4): 1-8.
10. Nazari, M. Mehrnia, M. A., Jooyandeh, H. and Barzegar, H. 2019. Effect of vitamin C load on preparing water in oil microemulsions using spontaneous method. *Iranian Food Science and Technology Research Journal*. 15 (3): 61-68.
11. Anvar, A., Nasehi, B., Noshad, M. and Barzegar, H. 2019. Improvement of Physicochemical and Nutritional quality of sponge cake fortified with microwave- air dried quince pomace. *Iranian Food Science and Technology Research Journal*. 15(3): 69-79.

12. Mehrnia, M. A., Barzegar, H. & Haghjoo, L. 2020. Optimization of polysaccharide extraction from olive leaves and evaluation of its antioxidant and rheological properties. *Iranian Food Science and Technology Research Journal*. 15 (6): 133-144.
13. Ghani, Sh., Barzegar, H., Noshad, M. & Hojjati, M. 2019. Development of nanoemulsion-based antimicrobial activity of cinnamon prepared with soy protein isolate-lecithin. *Journal of Food and Bioprocess Engineering*, 2 (2): 147-154.
14. Barzegar, H., Alizadeh Behbahani, B. & Mehrnia, M. A. 2020. Quality retention and shelf-life extension of fresh beef using *Lepidium sativum* seed mucilage-based edible coating containing *Heracleum lasiopetalum* essential oil: an experimental and modeling study. *Food Science and Biotechnology*. 29: 717-728.
15. Hatamian, M., Noshad, M., Abdanan, S. & Barzegar, H. 2020. Effect of roasting treatment on functional and antioxidant properties of chia seed flours. *NFS Journal*. 21: 1-8.
16. Kouravand, F., Jooyandeh, H., Barzegar, H. & Hojjati, M. 2020. Mechanical, barrier and structural properties of whey protein isolate-based films treated by microbial transglutaminase. *Journal of Microbiology, Biotechnology and Food Sciences*. 9 (5): 960-964.
17. Alinejad, M., Hojjati, M., Barzegar, H., Shahbazi, S. & Askari, H. 2020. Effect of gamma irradiation on the physicochemical properties of pistachio (*Pistacia vera* L.) nuts. *Journal of Food Measurement and Characterization*. 15 (1): 199-209.
18. Afsharnia, F., Ghaseminejad, M., Barzegar, H. & Ghasemi, P. 2021. Texture estimation model for mulberry fruit from linear measurements. *Journal of Horticulture and Postharvest Research*. 4(3): 11-24.
19. Barzegar, H., Alizadeh Behbahani, B. & Fallah, F. 2021. Safety, probiotic properties, antimicrobial activity, and technological performance of *Lactobacillus* strains isolated from Iranian raw milk cheeses. *Food Science and Nutrition*. 9(8): 4094-4107.
20. Tanavar, H., Barzegar, H., Alizadeh Behbahani, B. & Mehrnia, M. A. 2021. Investigation of the chemical properties of *Mentha pulegium* essential oil and its application in *Ocimum basilicum* seed mucilage edible coating for extending the quality and shelf life of veal stored in refrigerator (4°C). *Food Science and Nutrition*. 9 (10): 5600-5615.
21. Jokar, A., Barzegar, H., Maftoon Azad, N. & Shahamirian, M. 2021. Effects of cinnamon essential oil and Persian gum on preservation of pomegranate arils. *Food Science and Nutrition*. 9(5): 2585-2596.
22. Khodaman, E., Barzegar, H., Jokar, H. and Jooyandeh, H. 2022. Production and evaluation of Physicochemical, Mechanical and Antimicrobial Properties of Chia (*Salvia hispanica* L.) mucilage-gelatin based Edible Films Incorporated with Chitosan Nanoparticles. *Journal of Food Measurement and Characterization*. 16: 3547- 3556.

23. Jooyandeh, H., Momenzade, S., Alizadeh Behbahani, B. and Barzegar, H. 2023. Effect of *Malva neglecta* and lactulose on survival of *Lactobacillus fermentum* and textural properties of synbiotic stirred yogurt. *Journal of Food Science and Technology*. 60(3):1136-1143.
24. Mousanejadi, N., Barzegar, H., Alizadeh Behbahani, B. and Jooyandeh, H. 2023. Production and evaluation of a functional fruit beverage consisting of mango juice and probiotic bacteria. *Journal of Food Measurement and Characterization*. <https://doi.org/10.1007/s11694-023-01862-3>.
25. Barzegar, H., Alizadeh Behbahani, B., Mirzaei, A. and Ghodsi Sheikhjan, M. 2023. Assessing the protection mechanisms against *Enterobacter aerogenes* by analyzing aggregation, adherence, antagonistic activity, and safety properties of potentially probiotic strain *Lactobacillus brevis* G145. *Microbial Pathogenesis*. 181: 106175.
26. Barzegar, H., Alizadeh Behbahani, B., Mirzaei, A. and Ghodsi Sheikhjan, M. 2023. Evaluation of the physicochemical and microbial properties of lamb meat coated with Shirazi balangu seed mucilage-based edible coating containing cell-free supernatant of *Levilactobacillus brevis* G145. *Food Chemistry Advances*. 3: 100456.
27. Alizadeh Behbahani, B., Barzegar, H., Mehrnia, M. A. & Ghodsi Sheikhjan, M. 2023. Probiotic Characterization of *Limosilactobacillus fermentum* Isolated from Local Yogurt: Interaction with Pathogenic Bacteria and Caco-2 Enteric Cell Line . *Nutrition and Food Science Research*. 10 (1): 37-45.
28. Barzegar, H., Alizadeh Behbahani, B., Mirzaei, A. and Ghodsi Sheikhjan, M. 2023. Prediction of physicochemical and sensory parameters of coated lamb meat based on a novel edible coating. *Journal of Food Measurement and Characterization*. 18:1664–1678.
29. Zamani Faradonbeh, M., Barzegar, H., Hojjati, M., Alizadeh Behbahani, B. and Taki, M. 2024. Active packaging coating based on *Ocimum basilicum* seed mucilage and *Hypericum perforatum* extract: Preparation, characterization, application and modeling the preservation of ostrich meat. *Applied Food Research*. 4: 100524.
30. Majdi, F., Alizadeh Behbahani, B., Barzegar, H., Mehrnia, M. A. and Taki, M. 2024. Active packaging coating based on *Lepidium sativum* seed mucilage and propolis extract: Preparation, characterization, application and modeling the preservation of buffalo meat. *PLoS ONE* 19(10): e0311802.
31. Abbasi Sadi, M., Sekhavatizadeh, S. S., Barzegar, H., Alizadeh Behbahani, B. and Mehrnia, M. A. 2024. Date yogurt supplemented with *Lactobacillus rhamnosus* (ATCC 53103) encapsulated in wild sage (*Salvia macrosiphon*) mucilage and sodium alginate by extrusion: The survival and viability against the gastrointestinal condition, cold storage, heat, and salt with low pH. *Food Science and Nutrition*. 12: 7630-7643.
32. Sabetsolat, A., Jooyande, H., Hojjati, M. and Barzegar, H. 2024. Effect of Calf and Goat Lipases on Color Parameters and Some Physicochemical Properties of UF-White Cheese During Storage Period. *Journal of Food Science and Technology (Iran)*. 151 (21): 209-225.

33. Sharifat, N., Mehrnia, M. A., Barzegar, H. and Alizadeh Behbahani, B. 2025. Evaluation of antioxidant properties and antimicrobial potential of Aloe vera extract on a number of Gram-positive and Gram-negative bacteria: an in vitro study. *Journal of Food Science and Technology (Iran)*. 158 (22): 172-184.
110. Sharifat, N., Mehrnia, M. A., Barzegar, H. and Alizadeh Behbahani, B. 2025. Coriander seed (*Coriandrum sativum*) essential oil: determination of chemical composition, antioxidant capacity and antimicrobial activity. *Journal of Food Science and Technology (Iran)*. 158 (22): 130-141.
34. Sharifat, N., Mehrnia, M. A., Barzegar, H. and Alizadeh Behbahani, B. 2025. Antioxidant and antibacterial activity of coriander essential oil nanoemulsion in Aloe vera extract. *Journal of Food Science and Technology (Iran)*. 158 (22): 119-128.
35. Sharifat, N., Mehrnia, M. A., Barzegar, H. and Alizadeh Behbahani, B. 2025. Assessment of rheological properties and stability of coriander nanoemulsions in *Aloe vera* Gel. *Applied Food research*. 5: 100749.