



## PERSONAL INFORMATION:

**Full Name:** Mohammad Ghorbani

**Nationality:** Iranian

**Academic Level:** Professor (Food Biochemistry, Specialization in Food Analysis)

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## EDUCATION:

**B.Sc.:** Food Science and Technology - Ferdowsi University of Mashhad - 1967-1971

**M.Sc.:** Food Science and Technology - Shiraz University - 1971-1975

*Thesis Title: "Investigation of the methods to Eliminate Fava Bean (Vicia faba L.) Anti-nutritional Factors."*

**Ph.D.:** Food Biochemistry (Specialization in Food Analysis) - University of Leeds, UK, 2003-2007

*Thesis Title: "Extraction, Purification, and Immunological Analysis of Tree Nuts' Proteins."*

## RESEARCH INTEREST:

Food Analysis, Study of food shelf-life, Food fortification, Food proteins

## PUBLICATION:

### Publications:

Some published scientific articles

1. Jamalian, J. and M. Ghorbani.2004. Extraction of favism-inducing agents from whole seeds of faba bean (*Vicia faba L var major*). *Journal of the Science of Food and Agriculture*. 85(6): 1055-1060.

2. Raisi M., M. Ghorbani\* , A. S. Mahoonak, M. Kashaninejad and H. Hosseini. 2015. Effect of storage atmosphere and temperature on the oxidative stability of almond kernels during long term storage, *Journal of Stored Products Research* 62: 16-21
3. Ghorbani M., H Hosseini. 2017. Determination of water activity corresponding to the proper quality of peanut kernels. *Journal of Food Processing and Preservation* 41 (6): 1-8
4. Oliyaei N., M Ghorbani, M Moosavi-Nasab, AR Sadeghimahoonak. 2017. Effect of temperature and alkaline pH on the physicochemical properties of the protein isolates extracted from the whole ungutted Lanternfish (*Benthosema pterotum*), *Journal of Aquatic Food Product Technology* 26 (10),1134-1143
5. Rajabi H., M. Ghorbani, S. M. Jafari, A. Sadeghi, Gh. Rajabzadeh. Retention of saffron bioactive components by spray drying encapsulation using maltodextrin, gum Arabic and gelatin as wall materials, *Food Hydrocolloids*, 51, 327-337
6. Mahdavee Khazaei, K., Jafari, S.M., Ghorbani, M., and Hemmati Kakhki, Application of maltodextrin and gum Arabic in croencapsulation of saffron petal's anthocyanins and evaluating their storage stability and color, *Carbohydrate Polymers*.105(2014) 57-62.
7. Hosseini H., M. Ghorbani, N. Meshginfar, A. Sadeghi Mahoonak. Review on Frying: Procedure, Fat, Deterioration Progress and Health Hazardsm. *J Am Oil Chem Soc* DOI 10.1007/s11746-016-2791-z published online 01 Feb 2016.
8. Dehghan A Sekachaei, A Sadeghi Mahoonak, M Ghorbani. 2017. Optimization of Ultrasoundassisted Extraction of Quince Seed Gum through Response urface Methodology, *Journal of Agricultural Science and Technology* 19 (2), 323-333
9. Mahdavi SA, SM Jafari, E Assadpour, M Ghorbani. 2016. Storage stability of encapsulated barberry's anthocyanin and its application in jelly formulation. *Journal of Food Engineering* 181, 59-66
10. Mokhtari S., SM Jafari, M Khomeiri, Y Maghsoudlou, M Ghorbani. 2017. The cell wall compound of *Saccharomyces cerevisiae* as a novel wall material for encapsulation of probiotics. *Food Research International* 96, 19-26
11. Naderi, Y Maghsoudlou, M Aminifar, M Ghorbani, L Rashidi. 2016. Comparison of Microwave with Conventional Heating on Phytochemical Compounds of Cornelian Cherry (*Cornus mas* L.) Concentrate B *Journal of Agricultural Science and Technology* 18 (5), 1197-1208
12. Mohammad Ali , Ebrahimzadeh, Mehdi Gharekhani, Mohammad Ghorbani and Pegah Dargany, Effect of Extract of Aerial Parts of *Urtica dioica*(Urticaceae) on the

Stability of Soybean Oil. *Tropical Journal of Pharmaceutical Research* January 2015; 14(1): 1319-1326

13. Ranjbar Nedamani E1, Sadeghi Mahoonak A1, Ghorbani M, Kashaninejad M1. Evaluation of antioxidant interactions in combined extracts of green tea (*Camellia sinensis*), rosemary (*Rosmarinus officinalis*) and oak fruit (*Quercus branti*). *J Food Sci Technol.* 2015 Jul;52(7):4565-71

14. Sahar Akhavan Mahdavia\*, Seid Mahdi Jafaria, Mohammad Ghorbania & Elham Assadpoor. Spray Drying Microencapsulation of Anthocyanins by Natural Biopolymers: A Review. *Drying Technology: An International Journal* Volume 32, Issue 5, 2014, pp 509-518

15. Salmanian S., A. R. Sadeghi Mahoonak, M. Alami, and M. Ghorbani. Phenolic Content, Antiradical, Antioxidant, and Antibacterial Properties of Hawthorn (*Crataegus elbursensis*) Seed and Pulp Extract. *J. Agr. Sci. Tech.* (2014) Vol. 16: 343-354

16. Ranjbar Nedamani E1, Sadeghi Mahoonak A1, Ghorbani M, Kashaninejad M. Antioxidant Properties of Individual vs. Combined Extracts of Rosemary Leaves and Oak Fruit. *J. J Agri Sci Tech* Volume 16,

17. Hashemi Shahraki M.\*, A.M. Ziaififar, S.M. Kashaninejad and M. Ghorbani. Optimization of PreFry Microwave Drying of French Fries Using Response Surface Methodology and Genetic Algorithms.

*Journal of Food Processing and Preservation* Volume 38, Issue 1, pages 535–550, February 2014 18. Mahdavee Khazaei, K., Jafari, S.M., Ghorbani, M., and Hemmati Kakhki, Optimization of anthocyanins extraction from saffron petals with Response Surface Methodology. *Food Analytical Methods* published online 21 December 2015

19. Mahdi Ghajari Shamooshaki, Alireza Sadeghi Mahounak, Mohammad Ghorbani, Yaya Maghsouldloo, Aman Mohammad Ziaefifar Effect of Milk and Xanthan as Egg Replacement on the Physical Properties of Mayonnaise. *International Letters of Natural Sciences*, Vol. 49, pp. 24-34, 2015

20. Ghorbani, M., and M. R. A. Morgan (2010). " Protein characterisation and immunochemical measurements of residual macadamia nut proteins in foodstuffs. *Food and Agricultural Immunology*, 21(4): 347-360.

21. Oliaee N. Ghorbani, M., Sadeghi Mahoonak A. and Maghsoudlou Y., 2013. Effect of temperature and alkaline pH on the physicochemical properties of the protein isolates extracted from the whole ungutted Lanternfish (*Benthoosema pterotum*). *Journal of Aquatic Food Product Technology*. DOI

22. Hashemi Shahraki, R. Ziiaifar A., Kashaninejad, M. and M Ghorbani. 2012. OPTIMIZATION OF PRE-FRY MICROWAVE DRYING OF FRENCH FRIES USING RESPONSE SURFACE METHODOLOGY AND GENETIC ALGORITHMS. *Journal of Food Processing and Preservation*. DOI: 10.1111/jfpp.12001
23. Ghasemi; A. Ghasemnezhad; S. Atashi; K. Mashayekhi; M. Ghorbani. 2011. Variations in antioxidant capacity of nectarine fruits (*Prunus persica* cv. red-gold) affected by harvest date. *international journal of plant production*. 5 (3) :311-318
24. Nourmohammadi E, A Sadeghi Mahoonak, M Alami, and M Ghorbani. 2017. Amino acid composition and antioxidative properties of hydrolysed pumpkin (*Cucurbita pepo* L.) oil cake protein. *International Journal of Food Properties* 20 (12), 3244-3255
25. M Ghorbani, SM Jafari, A Sadeghi Mahoonak, Y Maghsoudlou, 2022. Effect of chitosan nanocoating loaded with pomegranate peel extract on physicochemical and microbial characteristics of pomegranate arils during storage *Journal of food science and technology (Iran)* 19 (126), 71-85
26. Kaveh, S AS Mahoonak, M Ghorbani, SM Jafari. 2022. Fenugreek seed (*Trigonella foenum graecum*) protein hydrolysate loaded in nanosized liposomes: Characteristic, storage stability, controlled release and retention of antioxidant. *Industrial Crops and Products* 182, 114908, 72022
- 27- Shahiri Tabarestani P, M Kashiri, Y Maghsoudlou, H Shahiri Tabarestani, M. Ghorbani 2022. Effect of *Opuntia* pulp as a clean label ingredient on techno-functional properties of meat-free burger. *International Journal of Food Science & Technology* 57 (7), 3982-3989.
28. Rahimipannah, M. A Sadeghi Mahoonak, M Ghorbani. 2022. Expeller-Pressed Pomegranate Seed (*Punica granatum* L.) as a Protein Source for the Production of Antioxidant Peptides. *International Journal of Peptide Research and Therapeutics* 28 (4), 122-132
29. Ghorbani, M, A Mohammadi, M Ranjbar. 2022. Evaluation of Physicochemical and Organoleptic Properties of Dried Apple Slices with Whey Protein Isolate-Inulin Conjugates and Apple pulp Extract *Innovative Food Technologies* 9 (4), 345-364.
30. Karami, F. M Ghorbani, A Sadeghi Mahoonak, D Shackebaei. 2022. Green technology for production of potent antioxidants and alkyl glucosides by *Aspergillus niger*  $\beta$ -glucosidase: prospects for broad application in the food industry. *Journal of Food Measurement and Characterization* 16 (3), 1834-1846

**ACADEMIC TEACHING EXPERIENCE:**

Food chemistry (B.Sc., M.Sc. and Ph.D. courses), Food Analysis (B.Sc. and M.Sc. courses), Food Toxicology (M.Sc. and Ph.D. courses), Food Protein Chemistry (M.Sc. course), Extraction and purification in Food Technology (Ph.D. course)

**LANGUAGES:** Persian, English



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