

# Azizollaah Zargaraan

Ph.D & M.Sc. in Food Science and Technology, B.Sc. in Nutrition Sciences

**Date of Birth: May 05, 1983**

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## Education

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- 2009-2013**      **Ph.D: Food Science and Technology (Quality control), Shahid Beheshti University of Medical Sciences, Tehran, Iran**
- Thesis title:** Identification and modification of rheological properties of beverages, desserts, and food in patients with esophagus cancer dysphagia and assessment of the rheological modification on improving nutritional indices and quality of life in these patients”
- Supervisor:** Dr. Mohammad Amin Mohammadifar. Who is Head of Research Group in Food production and engineering in DTU (**Grade: 20 out of 20**).
- 2006-2009**      **M.Sc.: Food Science and Technology (Quality control), Shahid Beheshti University of Medical Sciences, Tehran, Iran**
- Thesis title:** Investigation of viscoelastic properties of gum tragacanth exudates from six species of gum Tragacanth.
- Supervisor:** Dr. Mohammad Amin Mohammadifar.
- 2002-2006**      **B.Sc.: Nutritional Sciences, Shahid Beheshti University of Medical Sciences. Tehran, Iran**

## Employment and experiences history

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- 2014-Current**      **Research assistant professor**
- National Nutrition and Food Technology Research Institute. Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran.
- 2015-Current**      **Supervisor professor of food industry pilot plant and rheology lab (Part time)**
- National Nutrition and Food Technology Research Institute. Faculty of Nutrition and Food Science. Shahid Beheshti University of Medical Sciences and Health Services
- 2015-2017**      **Director of industrial liaisons**
- National Nutrition and Food Technology Research Institute (NNFTRI). Faculty of Nutrition and Food Science. Shahid Beheshti University of Medical Sciences and Health Services
- 2018-current**      **Board of directors**
- Iranian Nutrition Society (ATA) Board member
- 2019-Current**      **Associate editor**
- Journal of food sciences and nutrition (<http://nfsr.sbmu.ac.ir/>)

## Skills

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- Health policies related to overcome increasing NCDs
- Food labeling strategies
- Production of healthier products using modeling and rheological techniques.

## Research projects

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### Industrial projects

1. Investigation of physicochemical properties and feasibility study of minarine production with minimum saturated fatty acids contents. Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran. NO:756. Supported by **Association of Minarine producers in Iran**. (NNFTRI, Grant from **association of minarine** Research leader-2017).
2. Feasibility study of formulation of soft biscuit shortening with minimum content of saturated fatty acids and palm oil free (NNFTRI, Grant from **Behshahr Industrial Company**, Research leader-2017).
3. Formulation of vitamin D-fortified cooking oil and evaluation of the efficacy of its consumption in healthy adults: a randomized controlled clinical trial. National Nutrition and Food Technology Research Institute. Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran. NO:757(NNFTRI, Grant from **kourosh oil company**, Research leader-2017).
4. Investigation of nutritional needs of Iranian infants in order to production of a special infant formula (Grant from **VITANA Company**, NNFTRI-Research leader- 2015).

### Academic projects

1. Evaluation of consumers' perception of nutritional value table and nutritional traffic light in food products' labeling: A qualitative study in Tehran. National Nutrition and Food Technology Research Institute. Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran. Project NO: 709 (Research leader-2017).
2. Designing a guideline for determination of unhealthy food products in Iran (Grant from Ministry of health, Iran-2018).
3. Content analysis of advertisements related to food products in radio, television, and billboards of Tehran with emphasis on how to comply with laws passed in the area of health of the Islamic Republic of Iran in 1397 (Grant from Ministry of health, iran-2018).
4. Analysis of fiscal policies aimed at reducing dietary risk factors of NCDs in the Islamic Republic of Iran. WHO Registration 2017/739127-0 (Research leader-2017).
5. Policy Research of Food and Nutrition in Iran based on material six of overall health policies. Academy of Medical Sciences. Tehran, Iran (colleague-2017).
6. Assessment and analysis of food market in the recent decade in Iran (college-NNFTRI-2017)
7. Investigation of the compliance of food products commercials' content in mass media with related health policy issues of ministry of health and medical education (NNFTRI-Research leader- 2016)

8. Policy analysis related to the list of unhealthy food products in Iran (Leader, 2018, Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran)

## Publications

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1. Naeli MH, Milani JM, Farmani J, **Zargaraan A**. Developing and optimizing low-saturated oleogel shortening based on ethyl cellulose and hydroxypropyl methyl cellulose biopolymers. *Food Chemistry*. 2022 Feb 1;369:130963.
2. Babashahi M, Omidvar N, Yazdizadeh B, Heidari-Beni M, Joulaei H, Narmcheshm S, **Zargaraan A**, Kelishadi R. Systematic review and meta-analysis of the most common processed foods consumed by Iranian children. *Eastern Mediterranean Health Journal= La Revue de Sante de la Mediterranee Orientale= Al-majallah Al-sihhiyah Li-sharq Al-mutawassit*. 2021 Sep 21;27(9):918-30.
3. Babashahi M, Omidvar N, Joulaei H, **Zargaraan A**, Zayeri F, Veisi E, Doustmohammadian A, Kelishadi R. Scrutinize of healthy school canteen policy in Iran's primary schools: a mixed method study. *BMC public health*. 2021 Dec;21(1):1-6.
4. **Azizollah Zargaraan**, Azade Rashidimehr, Fatemeh Mohammadi-Nasrabadi, Soheyl Eskandari, Yeganeh Salmani, Fatemeh Esfarjani A mixed-method study of chicken meat safety in Iran during the COVID-19 pandemic: SWOT analysis, *Poultry Science*, Article in Press. 2021
5. Mohammadi- Nasrabadi F, **Zargaraan A**, Salmani Y, Abedi A, Shoaie E, Esfarjani F. Analysis of fat, fatty acid profile, and salt content of Iranian restaurant foods during the COVID- 19 pandemic: Strengths, weaknesses, opportunities, and threats analysis. *Food Science & Nutrition*. 2021 Sep 14.
6. Milanibonab A, Kalantari N, **Azizollaah Zargaraan**, Haghghian Roodsari A, Pourmoradian S. Can food reformulation policy reduce calorie intake and tackle childhood obesity? A systematic review. Accepted Article, *Iranian Journal of Pediatrics*, November 2020.
7. **Zargaraan A**, Mohammadi-Nasrabadi F, Hosseini H, Salmani Y, Bahmaei M, Esfarjani F. Challenges of edible oils from farm to industry: Views of stakeholders. *Food and nutrition bulletin*. 2019 Mar;40(1):99-110.
8. Edalati S, Omidvar N, Roudsari AH, Ghodsi D, **Zargaraan A**. Development and implementation of nutrition labelling in Iran: A retrospective policy analysis. *The International journal of health planning and management*. 2019 Nov 10.
9. Naeli MH, Milani JM, Farmani J, **Zargaraan A**. Development of innovative ethyl cellulose-hydroxypropyl methylcellulose biopolymer oleogels as low saturation fat replacers: Physical, rheological and microstructural characteristics. *International Journal of Biological Macromolecules*. 2020;156: 792-804.
10. Nikooyeh B, **Zargaraan A**, Kalayi A, Shariatzadeh N, Zahedirad M, Jamali A, Khazraie M, Hollis B, Neyestani TR. Vitamin D-fortified cooking oil is an effective way to improve vitamin D status: an institutional efficacy trial. *European Journal of Nutrition*. 2019:1-9

11. Zahra Saghafi, Bahareh Nikooyeh, Ali Jamali, Mercedeh Mahdizadeh , **Zargaraan A** . Influence of time and temperature on stability of added vitamin D3 during cooking procedure of fortified vegetable oils. *Nutrition and Food Sciences Research*.2018.09.04
12. Saghafi Z, Naeli MH, Tabibiazar M, **Zargaraan A**. Zero-Trans Cake Shortening: Formulation and Characterization of Physicochemical, Rheological, and Textural Properties. *Journal of the American Oil Chemists' Society*. 2018;95(2):171-83.
13. Saghafi Z, Naeli MH, Bahmaei M, Tabibiazar M, **Zargaraan A**. Zero-trans cake shortening: effects on batter, texture and sensory characteristics of high ratio cake. *Journal of Food Measurement and Characterization*.:1-9.
14. Saghafi Z, Naeli MH, Tabibiazar M, **Zargaraan A**. Modeling the Rheological Behavior of Chemically Interesterified Blends of Palm Stearin/Canola Oil as a Function of Physicochemical Properties. *Journal of the American Oil Chemists' Society*. 2019 Nov 1
15. Mohammadi-Nasrabadi F, Salmani Y, Banihashemi SM, Haghghian Roudsari **A, Zargaraan A**, Esfarjani F. Policy challenges of food advertisements from the viewpoints of Stakeholders: A qualitative study. *Food Sci Nutr*. 2020;00:1–8. <https://doi.org/10.1002/fsn3.148>
16. Esfarjani F, Khoshtinat K, **Zargaraan A**, Mohammadi-Nasrabadi F, Salmani Y, Saghafi Z, Hosseini H, Bahmaei M. Evaluating the rancidity and quality of discarded oils in fast food restaurants. *Food Science & Nutrition*. 2019.
17. Mohammadi-Nasrabadi F, **Zargaraan A**, Salmani Y, Esfarjani F. Challenges of Cooking Oils in Fast-Food Restaurants of Iran: Views of Consumers. *International quarterly of community health education*. 2019 Jul 25:0272684X19862473.
18. MH Naeli, J Farmani, **Zargaraan A**. Prediction of solid fat content curve of chemically interstrified blends of palm stearin and soybean oil. *Journal of Oil Palm Research*, 2018.07.11
19. Saghafi Z, **Zargaraan A**, Tabibiazar M, Hosseini H. Is Trans Fatty Acid Still an Issue for Policy Makers in Iran? A Technical Report. *Nutrition and Food Sciences Research*. 2018 Mar 15;5(2):47-51.
20. PolicyAssessmentofFoodandNutritioninIranBasedonArticleNumberSixoftheGeneralHealthPolicyDocument.SamiraPourmoradianFatemehMohammadiNasrabadi,NasrinOmidvar,MassomehGoshtaei,FarzanehEbadi,**AzizollahZargaran**,DelaramGhodsi,ArezooHaghghian,FatemehEsfarjani,MarjanAjami,MohammadRezaKhoshfetrat,GhasemFadavi,AliMilaniBonab,MonaPourghaderiIranianJournalofCultureandHealthPromotion, 2019.2(2).
21. **Zargaraan A**, Dinarvand R, Hosseini H. Nutritional Traffic Light Labeling and Taxation on Unhealthy Food Products in Iran: Health Policies to Prevent Non-Communicable Diseases. *Iranian Red Crescent Medical Journal*. 2017;19(8)
22. Fadavi G, Ghiasi M, **Zargarran A**, Mohammadifar MA. Some physicochemical and rheological properties of Zedo (Farsi) gum exudates from *Amygdalus scoparia*. *Nutrition and Food Sciences Research*. 2017 Feb 15;4(1):33-40.

23. Naeli MH, Farmani J, **Zargaraan A**. Rheological and Physicochemical Modification of trans-Free Blends of Palm Stearin and Soybean Oil by Chemical Interesterification. *Journal of Food Process Engineering*. 2017 Apr;40(2):e12409.
24. **Zargaraan A**, Saghafi Z, Hasandokht Firouz M, Fadavi G, Ghorbani Gorji S, Mohammadifar MA. Effect of rheological properties on sensory acceptance of two-model dysphagia-oriented food products. *Journal of Texture Studies*. 2015;46(3):219-26.
25. **Zargaraan A**, Omarae Y, Rastmanesh R, Taheri NE, Fadavi G, Zaeri FA, Mohammadifar MA. Rheological and clustering approach to classify Iranian soft/liquid food products to meet dysphagia diet requirements. *Italian Journal of Food Science*. 2014 Jul 1;26(3):243.
26. **Zargaraan A**, Rastmanesh R, Fadavi G, Zayeri F, Mohammadifar MA. Rheological aspects of dysphagia-oriented food products: A mini review. *Food Science and Human Wellness*. 2013 Sep 1;2(3-4):173-8.
27. **Zargaraan A**, Kamaliroosta L, Yaghoubi AS, Mirmoghtadaie L. Effect of Substitution of Sugar by High Fructose Corn Syrup on the Physicochemical Properties of Bakery and Dairy Products: A Review. *Nutrition and Food Sciences Research*. 2016 Oct 15;3(4):3-11
28. **Zargaraan A**, editor Production of Low Fat, Salt and Sugar Food Products: A New Challenge for Iranian Food Industries. The 2nd International and 14th Iranian Nutrition Congress; 2016.
29. Naeli MH, Farmani J, **Zargaraan A**. Modeling the slip melting point of chemically interesterified fats as a function of fatty acid composition. *Iranian Journal of Nutrition Sciences & Food Technology*. 2016;11(1):75-86.
30. Gorji SG, Gorji EG, Mohammadifar MA, **Zargaraan A**. Complexation of sodium caseinate with gum tragacanth: Effect of various species and rheology of coacervates. *International journal of biological macromolecules*. 2014 Jun 1;67:503-11.
31. Fadavi G, Mohammadifar MA, **Zargarran A**, Mortazavian AM, Komeili R. Composition and physicochemical properties of Zedo gum exudates from *Amygdalus scoparia*. *Carbohydrate Polymers*. 2014 Jan 30;101:1074-80.
32. **Zargaraan A**, Omarae Y, Rastmanesh R, Fadavi G, Fadaei M, Mohammadifar MA. Rheological Characterization and Cluster Classification of Ira-nian Commercial Foods, Drinks and Desserts to Recommend for Esophageal Dysphagia Diets. *Iranian Journal of Public Health*. 2013;42(12):1455-456.
33. Fadavi G, Mohammadifar MA, **Zargaran A**, Azadnia E. The study of composition, molecular weight and rheological characteristics of Zedo gum exudates from *Amygdalus scoparia*. *Iranian Journal of Nutrition Sciences & Food Technology*. 2013;7(5).

34. Balaghi S, Mohammadifar MA, **Zargaraan A**, Gavlighi HA, Mohammadi M. Compositional analysis and rheological characterization of gum tragacanth exudates from six species of Iranian Astragalus. *Food Hydrocolloids*. 2011 Oct 1;25(7):1775-84.
35. Balaghi S, Mohammadifar MA, **Zargaraan A**. Physicochemical and rheological characterization of gum tragacanth exudates from six species of Iranian Astragalus. *Food Biophysics*. 2010 Mar 1;5(1):59-71.
36. **Zargaraan A**, Mohammadifar MA, Balaaghi S. Comparison of some chemical and rheological properties of Iranian gum tragacanth exudate from two Astragalus species (*A. floccosus* and *A. rahensis*). *Iranian Journal of Nutrition Sciences & Food Technology*. 2009 Feb 15;3(4):9-17.

## Conference presentation

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### Oral presentations

1. Mona Farno, Zahra Saghaei, **Azizollaah Zargaraan**. The effect of batters containing Tragacanth and Zedu gum on chicken nugget properties. The International Symposium on Food Rheology and Texture – Istanbul, October 2018.
2. Rosita Asgari, Zahra Saghaei, **Azizollaah Zargaraan**. Investigation of the effect of carboxymethylcellulose and xanthan and their interaction on physicochemical, rheological, and sensory properties of orange nectar. 3rd. International Conference on Agricultural Engineering and Natural Resources. Tehran, Iran. 2017/12/7
3. Zahra Saghaei, Mehdi Farhoodi, **Azizollaah Zargaraan**. Analyzing the safety of nanocomposite packaging. 3rd. International Conference on Agricultural Engineering and Natural Resources. Tehran, Iran. 2017/12/7

### Posters Presentations

1. Minoos Hajian, **Azizollaah Zargaraan**, Nader Karimian Khosroshahi, Hedayat Hosseini. Optimization of natural tenderizer and investigation of their effects on sensory and textural properties of beef, using mixture design. The International Symposium on Food Rheology and Texture – Istanbul, October 2018.
2. Narjes Velayatmadar, Jalaleddin Mirzay Razaz, Zahra Saghaei, **Azizollaah Zargaraan**. Viscoelastic properties of low calorie saffron desserts formulated with three types of Iranian Tragacanth gum. The International Symposium on Food Rheology and Texture – Istanbul, October 2018.
3. **Azizollaah Zargaraan**, Zahra Saghaei, Mahtab Hasandokht Firouz, Mohammad Amin Mohammadifar. Effect of rheological properties on sensory acceptance of two model dysphagia oriented-food products (Abstract number: 19562). Third International Conference on Food Oral Processing (FOP2014). Food structure and food design for specific consumer groups. Poster presentation
4. **Azizollaah Zargaraan**, Mahtab Hasandokht Firouz, Mohammad Amin Mohammadifar. Texture-modified foods developed for dysphagic patients: Rheological challenges and opportunities (Abstract number: 19501). Third International Conference on Food Oral Processing (FOP2014). Food structure and food design for specific consumer groups. Poster presentation
5. Mohammad Amin Mohammadifar, Ghasem Fadavi, **Azizollaah Zargaraan**. Rheological and compositional study of zedo gum exudates from *Amygdalus scoparia* (Poster number: 63)

## Teaching background

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2019-current	Analytical chemistry of foods, Faculty of Nutrition and Food Science. Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran
(2011-2013)	Soft drinks and confectionary products, Faculty of Nutrition and Food Science. Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran
(2009-2010)	Food packaging, Faculty of Nutrition and Food Science. Shahid Beheshti University of Medical Sciences and Health Services
(2009-2010)	Packaging and marketing of medicinal herbs, Imam khomeyni University

## Supervised Theses

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### Ph.D.

1. Mohammad hossein naeli. Oleogelization of vegetable oils using bio-polimers, designing of oleogel shortening and assessment of its application in high ratio cake. Department of Food Science and Technology, Faculty of Agricultural Engineering, Sari Agricultural Sciences and Natural Resources University, Sari, Iran. (Advisor)
2. Mahnaz Ameli, Multi-Stage, Multi-Objective Optimization of Output Function of Confectionary Shortening Inter-esterification and Crystallization Processes regarding the necessary Health and Functional Properties. Islamic azad university of Tabriz, 1399

### Master of Science

1. Zahra Saghafi. Zero-trans cake shortening formulation: Effects of physicochemical, textural and sensory properties of high ratio cake. Department of Food Science and Technology, Faculty of Nutrition and Food Science, Tabriz University of Medical Sciences, Attar Nishabouri St. Ghol-Ghasht Ave, Tabriz, Iran (Supervisor).
2. Mohammad hossein naeli. Chemical interesterification of palm stearin and soybean oil blends: modeling of physicochemical properties. Department of Food Science and Technology, Faculty of Agricultural Engineering, Sari Agricultural Sciences and Natural Resources University, Sari, Iran. (Advisor)
3. Rosita asgari. Investigation of the effect of carboxymethylcellulose and xanthan and their interaction on physicochemical, rheological, and sensory properties of orange nectar. Department of Agriculture, Islamic Azad University, Shahr - e- Qods Branch-Tehran, Iran. (Supervisor)
4. Minoos Hajian. Optimization of natural tenderizers and investigation of their effects on sensory and textural properties of beef, using mixture design approach. Islamic Azad University of Pharmaceutical Science. Department of Food Science and Technology, Tehran, Iran. (Advisor)
5. Narjes Velayatmadar. Viscoelastic properties of low calorie saffron desserts formulated with three types of Iranian Tragacanth gum. (Supervisor)
6. Melika Soltanshahi, The feasibility study of production of the structured fats using extracted sunflower wax, soybean and sunflower oil and investigation of their rheological and physicochemical properties. Islamic Azad University, Science and research branch. Department of Food Science and Technology, Tehran, Iran. (Advisor)
7. Investigating the effect of methylcellulose and carrageenan on textural, physico-chemical and sensorial properties of chicken nuggets. Islamic Azad University, Science and research branch. Department of Food Science and Technology, Tehran, Iran. (Advisor)

8. Multi-Stage, Multi-Objective Optimization of Output Function of Confectionary Shortening Inter-esterification and Crystallization Processes based on sunflower and palm family oils regarding the necessary Health and Functional Properties. Islamic Azad University, Science and research branch, Tabriz, Iran. Department of Food Science and Technology, (Supervisor)