



School of Nutrition Sciences and Food Technology
Kermanshah University of Medical Sciences

First Name: Behrouz

Surname: Tajdar-oranj

Academic Rank: Assistant professor of food science and technology department.

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Personal Information

Place of birth: Ardabil

Date of birth: 1991/Feb/09

Marital Status: Married

Tertiary Education

- 2018-2022
 - Shahid Beheshti University of Medical Sciences, Faculty of Food science and technology
Supervisor: Dr. Mohammadi
Thesis title: Probabilistic dietary exposure and carcinogenic risk of heterocyclic aromatic amines formed in the main groups of fast foods
- 2015-2018
 - Tehran University of Medical Sciences, Faculty of Public Health
Supervisor: Dr. Jahed
Thesis title: The concentration of heavy metals in noodle samples from Iran's market
- 2011-2015
 - Zanjan University of Medical Sciences, Faculty of Public Health

Academic Responsibilities

- 2024
 - Head of laboratories in faculty of Food science and technology

Key Areas of Research Expertise

- Food Safety
- Evaluating the health risks of chemical contaminants in our food supply
- Study the intricate connections between our food systems and ecological health

Skills

- | | |
|-------------|------------------------------------|
| • Language | • English– Farsi |
| • Technical | • HPLC |
| | • ICP |
| | • Novel extraction technique |
| • Software | • Endnote, SPSS, Crystal ball, ... |

Articles

1. Farahmandkia Z, Tajdar-oranj B, Zare L, Peyda M, Feizolahi R, Alizadeh AM. Health risk assessment of lead and cadmium in milk-based products of Iran. *Journal of Agriculture and Food Research*. 2025 Mar 1;19:101558.
2. Shavali Gilani P, Moradian MH, Tajdar-oranj B, Basaran B, Peivasteh-roudsari L, Javanmardi F, Khodaei SM, Mirza Alizadeh A. Microplastics comprehensive review: Impact on honey bee, occurrence in honey and health risk evaluation. *Journal of Applied Ecology*. 2025.
3. Hadian Z, Kamalabadi M, Tajdar-oranj B, Khaneghah AM. Changes in concentrations of potentially toxic and essential elements of Iranian rice using various cooking methods: A probabilistic health risk-assessment study. *Journal of Food Composition and Analysis*. 2024 Nov 1;135:106610.
4. Duan H, Zhao Y, Hu X, Liang M, Yang X, Yu L, Oranj BT, Romanovski V, Li P, Zhang Z. Rolling Circle Amplification-Enabled Ultrasensitive Point-of-Care Test Method for Aflatoxin B1 in the Environment and Food. *Foods*. 2024 Oct 7;13(19):3188.
5. Mahdavi A, Mirza Alizadeh A, Azimzadeh N, Moradpey S, Abolhassani M, Aminzare M, Tajdar-oranj B, Barani-bonab H. Technical Characteristics and Nutritional Values of Einkorn Wheat: A Literature Review. *Journal of Human Environment and Health Promotion*. 2024 Jul 10;10(3):118-25.
6. Sadighara P, Mofid V, Mahmudiono T, Rahmani A, Tajdar-Oranj B, Peivasteh-Roudsari L, Farhangfar A, Moradi M, Fakhri Y. Concentration of heavy metals in canned tuna fish and probabilistic health risk assessment in Iran. *International Journal of Environmental Analytical Chemistry*. 2024 Jun 20;104(8):1719-29.
7. Mofid V, Peivasteh-roudsari L, Karami H, Tajdar-oranj B, Mirza Alizadeh A, Karami M, Rahmani A. Probabilistic Health Risk Assessment of Aflatoxin M1 in Pasteurized Milk from Different Cities of Iran. *Journal of Human Environment and Health Promotion*. 2024 Feb 10;10(1):18-23.
8. Tajdar-Oranj B, Javanmardi F, Parastouei K, Taghdir M, Fathi M, Abbaszadeh S. Health Risk assessment of lead, cadmium, and arsenic in leafy vegetables in Tehran, Iran: The concentration data study. *Biological Trace Element Research*. 2024 Feb;202(2):800-10.

9. Peivasteh-Roudsari L, Karami M, Barzegar-Bafrouei R, Samiee S, Karami H, Tajdar-Oranj B, Mahdavi V, Alizadeh AM, Sadighara P, Oliveri Conti G, Mousavi Khaneghah A. Toxicity, metabolism, and mitigation strategies of acrylamide: a comprehensive review. *International journal of environmental health research*. 2024 Jan 2;34(1):1-29.
10. Tajdar-oranj B, Sadighara P, Barzegar-bafrouei R, Pezeshgi P, Vakili Saatloo N, Oskoei V, Akbari N, Mohamadi S, Zeinali T. Food Safety and Toxicity during Covid-19 Crisis. *Journal of Human Environment and Health Promotion*. 2023 Nov 10;9(4):180-7.
11. Zeng J, Xu R, El-Kady AA, Oranj BT, Ahmed R, Valentin R, Hu X, Wu W, Wang D, Mao J, Wu H. Nanomaterials enabled photoelectrocatalysis for removing pollutants in the environment and food. *TrAC Trends in Analytical Chemistry*. 2023 Sep 1;166:117187.
12. Peivasteh-Roudsari L, Barzegar-Bafrouei R, Sharifi KA, Azimisalim S, Karami M, Abedinzadeh S, Asadinezhad S, Tajdar-Oranj B, Mahdavi V, Alizadeh AM, Sadighara P. Origin, dietary exposure, and toxicity of endocrine-disrupting food chemical contaminants: A comprehensive review. *Heliyon*. 2023 Jul 1;9(7).
13. Mohammadi A, Tajdar-Oranj B, Hosseini H, Kamankesh M, Shariatifar N, Jazaeri S, Hosseini-Esfahani F. Probabilistic dietary exposure and carcinogenic risk of heterocyclic aromatic amines formed in the main groups of fast foods: Investigation of different ages and genders. *Journal of Food Composition and Analysis*. 2023 Jul 1;120:105344.
14. Gharavi-nakhjavani MS, Niazi A, Hosseini H, Aminzare M, Dizaji R, Tajdar-oranj B, Alizadeh AM. Correction to: Malachite green and leucomalachite green in fish: a global systematic review and meta-analysis. *Environmental Science and Pollution Research*. 2023 Apr 1;30(17):48928-.
15. Hashempour-Baltork F, Jannat B, Tajdar-Oranj B, Aminzare M, Sahebi H, Alizadeh AM, Hosseini H. A comprehensive systematic review and health risk assessment of potentially toxic element intakes via fish consumption in Iran. *Ecotoxicology and Environmental Safety*. 2023 Jan 1;249:114349.
16. Gharavi-Nakhjavani MS, Niazi A, Hosseini H, Aminzare M, Dizaji R, Tajdar-Oranj B, Mirza Alizadeh A. Malachite green and leucomalachite green in fish: a global systematic review and meta-analysis. *Environmental Science and Pollution Research*. 2023 Apr;30(17):48911-27.
17. Pirhadi M, Alikord M, Tajdar-Oranj B, Khaniki GJ, Nazmara S, Fathabad AE, Ghalhari MR, Sadighara P. Potential toxic elements (PTEs) concentration in wheat and flour products in Iran: A probabilistic risk assessment. *Heliyon*. 2022 Nov 1;8(11).
18. Mousavi Khaneghah A, Mahmudiono T, Javanmardi F, Tajdar-Oranj B, Nematollahi A, Pirhadi M, Fakhri Y. The concentration of potentially toxic elements (PTEs) in the coffee products: a systematic review and meta-analysis. *Environmental Science and Pollution Research*. 2022 Nov;29(52):78152-64.
19. Mohammadi A, Tajdar-oranj B, Abedi AS, Kamankesh M, Ghanati K. Study of meat content and frying process on the formation of polar heterocyclic aromatic amines in heated sausage samples: Optimization and method validation of three-phase EME coupled with RP-HPLC. *Journal of Food Processing and Preservation*. 2022 Nov;46(11):e17014.
20. Peivasteh-Roudsari L, Pirhadi M, Shahbazi R, Eghbaljoo-Gharehgheshlaghi H, Sepahi M, Mirza Alizadeh A, Tajdar-Oranj B, Jazaeri S. Mycotoxins: Impact on health and strategies for prevention and detoxification in the food chain. *Food reviews international*. 2022 Nov 1;38(sup1):193-224.
21. Abedini A, Alizadeh AM, Mahdavi A, Golzan SA, Salimi M, Tajdar-Oranj B, Hosseini H. Oilseed cakes in the food industry; a review on applications, challenges, and future perspectives. *Current Nutrition & Food Science*. 2022 May 1;18(4):345-62.

22. Alizadeh AM, Hosseini H, Meybodi NM, Hashempour-Baltork F, Alizadeh-Sani M, Tajdar-Oranj B, Pirhadi M, Khaneghah AM. Mitigation of potentially toxic elements in food products by probiotic bacteria: a comprehensive review. *Food Research International*. 2022 Feb 1;152:110324.
23. Mirza Alizadeh A, Peivasteh Roudsari L, Tajdar Oranj B, Beikzadeh S, Barani Bonab H, Jazaeri S. Effect of flour particle size on chemical and rheological properties of wheat flour dough. *Iranian Journal of Chemistry and Chemical Engineering*. 2022 Feb 1;41(2):682-94.
24. Peivasteh-Roudsari L, Tajdar-Oranj B, Sadighara P. COVID-19 Infection and Vitamin D: Current Scenario and Future Prospects. *Current Drug Discovery Technologies*. 2021 Nov 1;18(6):1-3.
25. Tajdar-oranj B, Kamankesh M, Mohammadi A. Application of novel and efficient hollow fiber electro-membrane extraction assisted by microwave extraction and high-performance liquid chromatography for the determination of polar heterocyclic aromatic amines in hamburger. *Microchemical Journal*. 2021 Nov 1;170:106651.
26. Tajdar-oranj B, Peivasteh-roudsari L, Mahdavi V, Behbahan AK, Khaneghah AM. Simultaneous multi-determination of pesticide residues in pistachio from Iran's market: a probabilistic health risk assessment study. *Journal of Food Composition and Analysis*. 2021 Oct 1;103:104085.
27. Nematollahi A, Abdi L, Abdi-Moghadam Z, Fakhri Y, Borzoei M, Tajdar-Oranj B, Thai VN, Linh NT, Mousavi Khaneghah A. The concentration of potentially toxic elements (PTEs) in sausages: a systematic review and meta-analysis study. *Environmental Science and Pollution Research*. 2021 Oct;28:55186-201.
28. Eslami Z, Mahdavi V, Tajdar-Oranj B. Probabilistic health risk assessment based on Monte Carlo simulation for pesticide residues in date fruits of Iran. *Environmental Science and Pollution Research*. 2021 Aug;28:42037-50.
29. Mahdavi V, Eslami Z, Golmohammadi G, Tajdar-oranj B, Behbahan AK, Khaneghah AM. Simultaneous determination of multiple pesticide residues in Iranian saffron: A probabilistic health risk assessment. *Journal of Food Composition and Analysis*. 2021 Jul 1;100:103915.
30. Mohammadi F, Marti A, Nayeibzadeh K, Hosseini SM, Tajdar-Oranj B, Jazaeri S. Effect of washing, soaking and pH in combination with ultrasound on enzymatic rancidity, phytic acid, heavy metals and coliforms of rice bran. *Food chemistry*. 2021 Jan 1;334:127583.
31. Peivasteh-Roudsari L, Abedini A, Samiee S, Sadighara P, Mirza Alizadeh A, Tajdar-Oranj B. Seafood histamine intervention to alcohol intake: regulation, metabolism and control. *Human, Health and Halal Metrics*. 2020 May 1;1(1):74-88.
32. Sadighara P, Araghi A, Tajdar-Oranj B, Peivasteh-roudsari L, Mohajer A, Behzadi R. The effect of borage (*Echium amoenum*) on the mouse heart and hematology parameters. *Cardiovascular & Haematological Disorders-Drug Targets (Formerly Current Drug Targets-Cardiovascular & Hematological Disorders)*. 2019 Aug 1;19(2):154-9.
33. Peivasteh-Roudsari L, Rahmani A, Shariatifar N, Tajdar-Oranj B, Mazaheri M, Sadighara P, Khaneghah AM. Occurrence of histamine in canned fish samples (Tuna, Sardine, Kilka, and Mackerel) from markets in Tehran. *Journal of food protection*. 2020 Jan 1;83(1):136-41.
34. Peivasteh-Roudsari L, Pirhadi M, Karami H, Tajdar-Oranj B, Molaee-Aghaee E, Sadighara P. Probiotics and food safety: an evidence-based review. *Journal of Food Safety and Hygiene*. 2019 Dec 31;5(1):1-9.

Research Projects

1. Risk assessment of heavy metal intake through fish consumption in Iran
2. Assessment of the risk of heavy metal intake through leafy vegetables consumption using Monte Carlo simulation in Tehran.

3. Assessment of the risk of polycyclic aromatic amines intake through hamburger and sausage consumption in Tehran
4. Application of Hurdle Technology in the Production of Rice Bran with High and Safe Biochemical Stability: Combined Use of Wet Ultrasonics and pH on Enzyme Inactivation, Reduction of Heavy Metals and Phytic Acid
5. Investigating the amount of essential metals iron and zinc in instant noodles with ICP
6. Investigating the amount of heavy metals in instant noodle brands sold in Tehran

Books

- 2018
- 2022
- 2022
- Food borne disease
- Encyclopedia of food additives Vol. 1
- Encyclopedia of food additives Vol. 2

Inventions & Innovations

Conferences

- 2018 Azimi, Sara and Mohammadi, Fatemeh and Roudsari, Leila and Tajdar-oranj, Behrouz, 2019, A review on the reduction of polycyclic aromatic amines as mutagenic and carcinogenic agents in food, 12th National Conference on Health Sciences, Tehran, <https://civilica.com/doc/935907>
- 2018 Tajdar Oranj, Behrouz and Meskhet Roudsari, Leila and Sedigh Ara, Parisa and Pirhadi, Mohaddeseh and Karami, Hadith, 2018, Probiotics from the perspective of food safety, 11th Student Conference on Health Sciences, Tehran, <https://civilica.com/doc/801545>

Presentations & Published Abstracts

- 2018 Tajdar-oranj B, Ghorbanzadeh A, Karami H, Rezaee A. Mycotoxins in food and feed and their impact on human and animal health: a review. Current Medical Mycology. 2018 Dec 2;4.

Workshops

- 2023 Health Risk Assessment
- 2024 Job opportunities in the food science major
- 2025 Risk Analysis

Editorial Board and Reviewing Activities

- Reviewer Title of Journal:
 - water

- agronomy
- processes
- agriculture
- foods
- sustainability
- International Journal of Environmental Research and Public Health
- Applied Sciences
- Biological Trace Element Research
- Scientific Reports
- Discover Food
- Food Analytical Methods

Professional Memberships

- Member of Iranian Food safety and hygiene Association
- Member of the Iran's National Elites Foundation.