

Ghadeer F. Mehyar, Professor
Food Safety and Food Packaging
Office 157, Department of Nutrition & Food Technology
The University of Jordan
Amman, Jordan
Home: (9626) 5345455
Work: (9626) 5355000 Ext. 22421
Mobile: (9627) 77811821
g.mehyar@ju.edu.jo



Summary of Qualifications

- Over 15 years of professional experience in research and teaching in Food Microbiology and Food Packaging.
- Highly creative and persistent, with a proven ability to develop innovative solutions and perform effectively under pressure.
- Strong interpersonal skills, self-motivation, and excellent organizational abilities.

Academic and research Interests

- Food Microbiology, Food Safety and Food Biotechnology.
- Active, Edible Coatings and Intelligent Food Packaging.
- Food Products and Food Processing Developments.

Education

2006

PhD in Food Science

Major: Food and Nutritional Sciences, Minor: Food Microbiology and Food Packaging.

University of Manitoba, Winnipeg, MB, Canada.

Thesis Title: Development of Antimicrobial Edible Coatings to Reduce Microbial Contamination of Broiler Carcasses

Supervising professor: Dr. Jung (John) Han.

1993

Masters of Food Science

Major: Food Science.

The University of Jordan, Amman, Jordan.

Thesis Title: The use of Sorbate and Benzoate Salts to Inhibit the Growth of Yeast in Labaneh (concentrated yogurt)

Supervising professor: Dr. Mohamed I. Yamani and Dr. Ali K. Alsaed.

1991

Bachelor of Foods and Nutrition

Major: Nutrition and Food Technology.

The University of Jordan, Amman, Jordan.

Professional Experience

August 2017-Present **Professor**

Department of Nutrition and Food Technology, The University of Jordan, Amman, Jordan

Sep 2022-2023

Department Head

Department of Nutrition and Food Technology, The University of Jordan, Amman, Jordan

Sep 2016-May 2017

Project Coordinator, Tempus

Project title: Capacity Building of Personnel in Jordanian Olive Industry.

Sep 2015-Sep 2016

Dean Assistant for Development and Quality Affairs,

Deanship of Academic Research, The University of Jordan

Sep 2014-Sep 2015

Dean Assistant for Community Affairs,

Deanship of Academic Research, The University of Jordan

2013-August 2017

Associate Professor

Department of Nutrition and Food Technology, The University of Jordan, Amman, Jordan

2008- 2013

Assistant Professor

Department of Nutrition and Food Technology, The University of Jordan, Amman, Jordan

Sep. 2006-June 2007

Post-Doctoral

Department of Food Science, University of Manitoba, Winnipeg. MB, Canada.

- Testing physical, mechanical and dissolution properties of pea starch gels.

2002 - 2004

Teaching Assistant, Food Engineering Fundamentals

University of Manitoba, Department of Food Science, Winnipeg, MB, Canada.

- Instructing undergraduate students on subjects including heat and mass balances, thermal conductivity, heat capacity and diffusivity.

Sep. 2001-May 2003

Research Assistant

University of Manitoba, Department of Food Science, Winnipeg. MB, Canada.

- Research for the development of edible food packaging materials from pea and rice starch.
- Testing the physical and mechanical properties of the produced films.

- Incorporating antimicrobials within packaging materials and determine their effect on the product microbial quality.

Summer 1998

Workshop Supervisor

Food Agricultural Organization of the United Nations.

- Instructing for processing of milk and milk products including product testing for small-scale producers conducted throughout Jordan.

Feb 1997 - Jan 2002

Teaching Assistant/Laboratory Supervisor

University of Jordan, Department of Nutrition and Food Technology, Amman, Jordan.

- Instructing undergraduate students for Food Microbiology, Meat Technology and Dairy Processing courses.
- Organizing laboratory experiments.
- Performing chemical and microbial testing of food and water samples for research purposes.

April 1992 - March 1995

Quality Engineer

- Danish Jordanian Dairy Company
- Implementing food quality and safety programs to insure product compliance to national and international standards.

Professional Memberships

1994 - 2008 Institute of Food Technologists, Chicago, IL.

1991 - Present Jordanian Agriculture Engineering Association, Amman, Jordan.

Awards

1. **First Place**, Muscle Food Division Oral Competition, *Institute of Food Technologists (IFT)*, Orlando, FL, USA, 2006.
2. **Graduate Travel Award**, University of Manitoba, Winnipeg, MB, Canada, 2006.
3. **Graduate Travel Award**, University of Manitoba, Winnipeg, MB, Canada, 2005.
4. **Graduate Fellowship**, Food Packaging Division, *Institute of Food Technologists (IFT)*, Chicago, IL, USA, 2005.
5. **Certificate of Merit**, Food Packaging Division, *Institute of Food Technologists (IFT)*, Chicago, IL, USA, 2004.
6. **Third Place**, Food Packaging Poster Competition, *Institute of Food Technologists (IFT)*, Chicago, IL, USA, 2003.
7. **Manko Award**, University of Jordan, Amman, Jordan, 1995.

8. **Travel Grant**, provided by the *United Nations* to attend the “Thematic Workshop on Food, Agriculture, Fisheries and Biotechnology,” Bari, Italy, July 2009.
9. **Nine Awards**, University of Jordan, for publishing manuscripts in journals indexed in the *ISI Web of Knowledge* database, 2010–present.
10. **Five Awards**, University of Jordan, for serving on graduate students’ examination committees, 2010–present.
11. **Visiting Professor Travel Grant**, funded by the *TEMPUS Joint Project of European Nations*, for delivering seminars at the Department of Biotechnology, University of Verona, Verona, Italy, May 2016.

Serving in campus and off-campus committees

A- In Campus

1. Library committee.
2. Seminars, brushers and community service committee.
3. Training committee.
4. Scientific research committee.
5. Sports and fitness committee.
6. Scientific and graduation day committee.
7. School of Agriculture representative in the UJ council 2020-2021
8. Department of Nutrition and Food Technology representative on the School of Agriculture council 2020-2021.
9. Department of Nutrition and Food Technology representative of the School of Agriculture accreditation committee.
10. Committee for the Study of Student Issues and Violations

B- Off Campus

1. Permanent committee for packaging materials, Jordan Standards and Metrology Organization.
2. Permanent committee for health and safety affairs of foods, Jordan Standards and Metrology Organization.
3. Technical committee for food supervision, Jordan Food and Drug Administration.
4. Sensory evaluation team for table olives, Ministry of Agriculture.

Contribution in workshops

1. Jordan Olive Products and Technology Exhibition and Forum, Al-Hussien Sport City, Amman, Jordan, 25th-26th April 2012.
2. Workshop on “How to Write a Successful Scientific Project”, University of Jordan, Amman, 22nd Feb 2010
3. Thematic Workshop on Food, Agriculture, Fisheries and Biotechnology, Istituto Agronomico Mediterraneo Di, Bari, Italy. 12th to 15th July 2009
4. The Use of Different Starter Cultures and Enzymes and their Practical Applications in the Food Industry – The University of Jordan, Amman, 1st Dec 2010.
5. A Scientific Day for the Dairy products, Agricultural Engineering Association, Amman, 3rd May 2008.

6. The Sixth Jordanian Agricultural Scientific Conference, The University of Jordan, 6th - 7th Feb, 2008.
7. Food poisoning by microorganisms, TV interview, New Day program, 8th May 2013.
8. IPR and Technology Transfer Training, Amman, 17th-18th June 2013.
9. Microbial scales for foods, The University of Jordan, Amman, 1st July 2013.
10. International Conference on Advanced Materials, JUST, Irbid, 27th -28th April 2015
11. Sensory Evaluation of Olive Oil and Table Olives, The University of Jordan, Amman 4th-8th Nov. 2015.
12. Visiting professor to the Department of Biotechnology, University of Verona, Italy, 23-31st May 2016.
13. 2nd Workshop on the Harmonization of IOC-Recognized Panels. Madrid, 15-17 September 2021.
14. Arabic Bread Day. Paper title: Microbial Quality for Flour and Bread Loaf. Joint workshop of the Arab Federation for Food Industries and FAO, Intercontinental Hotel. Jordan, 7-8 October 2024

Courses Taught

A- Undergraduate level

1. Principles of Nutrition (0603100)
2. Principles of Food and Nutrient (0603101)
3. Principles of Food Science (633220)
4. General Microbiology (0603301)
5. Food Microbiology (0603401)
6. Food Packaging (0603342)
7. Food Hygiene (0643453)
8. Training in Food Analysis and Quality Control (0643494)
9. Seminar in Nutrition and Food Processing (0603491)
10. Graduation Project (0663498)
11. Dairy Science and Technology (0603441)
12. Scientific Readings in Food Science and Technology (633499)

B- Graduate level

1. Advanced Food Packaging (0603712)
2. Toxicology in Food and Nutrition (0603942)
3. Biotechnology in Foods and Nutrition (603933)
4. Advanced Microbiology (0643722)
5. Developments in Food Science (0633740)

Supervising graduate students

1. **Bushra Yakoob**, MSc., Control of mold growth and aflatoxins production in peanuts by chitosan coating containing potassium sorbate, 2011-2013.
2. **Mais Al-Hmood**, MSc. Study on Antifungal Activity of Chitosan and Natamycin and Their Combinations in Labaneh, 2014-2016.

3. **Wesal Al-Eaei, Msc.** Department of Nutrition and Food Technology, 2014-2016, co-advised with Prof. Basem Mohammed AL-Sawalha.
4. **Ghadeer Othman**, PhD. The effect of olive oil, corn oil, sheep tallow and fermented olives on serum lipid levels and their impact on gut microbiota in wistar rats fed cholesterol supplemented diets, 2015-2017, co-advised with Prof. Mousa Numan Ahmad.
5. **Alia Amer**, Msc, Antimicrobial Effectiveness of Edible Coatings Containing Zinc Oxide and Titanium Dioxide Against *Salmonella* and *Campylobacter* in Raw Chicken, 2015-2017
6. **Maram Abu Irhayem**, MSc. Effect of the processing and storage conditions on lipid deterioration and organoleptic properties of baklava., 2017-2019, co-advised with Prof. Khalid M. Al-Ismail.
7. **Sajeda Amleh**, MSc. Effect of Electrolyzed Water and Hydrogen Peroxide on Deactivation of Cyanobacteria and its Microcystins in Drinking Water and Characterization of its Mode of Action at the Molecular Level, 2018-2020, co-advised with Prof. Forchhammer Karl
8. **Aseel AlHababbeh**, MSc. Antimicrobial effectiveness of acetic acid, trisodium phosphate, and acidified sodium chlorite against *Salmonella Typhimurium* and *Pseudomonas Aeruginosa* on raw red meat, chicken, fresh lettuce and pepper, 2018-2020.
9. **Hadeel AlKasasbeh**, MSc. Effect of trisodium phosphate stabilized in pea starch coating on microbial content and sensory properties of fresh chilled beef meat, 2018-2020. Co-advised by Prof. Basem Mohammed AL-Sawalha.
10. **Wasan Abu Fara**, MSc. Effect of whey protein isolate coating on the oxidation stability of raw and roasted black cumin, flax and sesame seed oils during storage, 2018-2020. Co-advised by Prof Khalid Mohammad Al-Ismail.
11. **Doaa AlRefaie**, PhD. Effect of addition of microencapsulated Allyl isothiocyanate on oxidative and microbial quality of refrigerated beef burgers, 2021-2023.
12. **Nisreen Awamleh**, PhD. Development of Fortified Biscuits with Acid and Sweet Whey Proteins and Their Effects on Body Weight, Indices of Body Composition and Antioxidant Capacity in Rats, 2021-2023. Co-advised by Prof. Mousa Numan Ahmad.
13. **Salameh Al-Qaraleh**, PhD. Development of phytosomes containing functional ingredients from wild Jordanian plants with potential antioxidant and antimicrobial activities in vacuum packaged soft white cheese, 2021-2023. Co-advised by Prof. Sadam Awaisheh.
14. **Najlaa Ahmad**, MSc. Study on replacing cheesecloth with artificial micro-filter for yoghurt whey separation during processing of traditional Labaneh and its effect on product properties., 2021-2023. Co-advised by Prof. Mohammed Ismael Saleh.
15. **Ahlem Meddah**, PhD. Replacement of cheese whey separation cloth with artificial micro-filter and its effect on the quality of fresh white brined cheese and pasteurized cheese. 2021-2023.
16. **Hadjer Fergusous**, PhD. The use of olive pomace extract as a source of antimicrobial and antioxidant functional compounds and the effect of its addition on the quality of pasteurized white cheese, 2021-2023.
17. **Ahmad Malkawi**, MSc. Development of chitosan/polylactic acid nanofibers loaded with *Moringa Oleifera* essential oil grown in Jordan by the electrospinning technique, 2021-2023. Co-advised by Prof. Mahmoud Al-Hussein.
18. **Juman Alshnikat**, MSc. The effect of using polyamide plastic bags on the physical and chemical properties of pomegranate fruits of local varieties *Khdaree* and *Malesse*. 2022-present. Co-advised Nihad G. Alsmairate.

19. **Marah Al-Mherate**, MSc. Knowledge, attitude and practice (KAP) analysis of food waste for Jordanian households: A cross-sectional study, 2023-2024.
20. **Ro'a Fayad**. Study the Antimicrobial Efficiency of Zinc Oxide and Titanium Dioxide Nanoparticles Contained in Chitosan Coating on Fresh Beef Meat, 2023-2024.
21. **Rama Al-Hawawsheh**, Effect of chitosan coating with lysozyme or natamycin on the shelf-life, microbial safety, and sensory properties of processed cheese, 2023-2024.
22. **Alaa Al-Mughrabi**. Chemical, Physical, and Microbial Properties of Wastewater in Dairy Industries and Their Environmental Impacts. 2024-present.
23. **Somaya Sharaya**. Impact of nanocapsulated oregano essential oil on the fungal content, sensory properties and fatty acids composition of labneh. 2025-present.
24. **Bayan Sultan**. Development of Orange Peel Aerogel Coating and Determining Its Effect on Shelf Life, Microbial Stability, and Sensory Quality of Chicken Meat. 2025-present
25. **Amani Al-Asmar**. Study the Survival and Control of *Bacillus cereus* in Spices: Prevalence, Storage Conditions, and Antimicrobial Effectiveness. 2025-present
- 26.

Member of graduate student thesis examining committees

1. Rana Qasem, MSc., Department of Nutrition and Food Technology, JU, awarded 2011.
2. Malak Angor, Ph.D. Department of Nutrition and Food Technology, JU, awarded 2010.
3. Malak Al Awamleh, M. Sc., Department of Nutrition and Food Technology, JU, awarded 2010.
4. Firas Mustafa, MSc., Department of Nutrition and Food Technology, JU, awarded 2012
5. Shad Abu Odeh, MSc., Department of Nutrition and Food Technology, JU, awarded 2012
6. Amneh Tayeh, MSc., Department of Nutrition and Food Technology, JU, awarded 2012
7. Bayan AlTarifi, MSc., Department of Nutrition and Food Technology, JUST, awarded 2013
8. Khalid Almarazeeq, PhD, Department of Nutrition and Food Technology, JU, awarded 2014
9. Dema Nazal, MSc. Department of Nutrition and Food Technology, JUST, awarded 2016
10. Amani Sawalha, MSc. Department of Nutrition and Food Technology, JUST, awarded 2018
11. Aola Da'na, MSc. Department of Nutrition and Food Technology, JU, awarded 2020.
12. Hiba Musbah Mohammad, MSc, Department of Nutrition and Food Technology, JU, awarded 2020.
13. Enas Safi, MSc. Department of Nutrition and Food Technology, BAU, awarded 2021.

Supported Projects

1. European Commission and Deanship of Academic Research at the University of Jordan
Project title: Novelty Packaging Materials for Nuts and Intermediate Moisture Foods.
Value: 21000 JD.
2. Deanship of Academic Research at the University of Jordan.
Project title: Development of Antimycotic Edible Coating to Extend the Shelf-life of Tomato, Cucumber and Apples During Refrigerated Storage.
Value: 11900 JD.
3. Deanship of Academic Research at the University of Jordan.

Project title: The Efficacy of Coating in Shelf-life Elongation and Quality Preservation of Date at the 'Khalal' Stage of Maturity

Value: 21000 JD.

4. The Higher Council for Science and Technology, Amman, Jordan.

Project title: Effect of Harvesting Time and Storage Temperature on the 'Khalal' Stage Duration in Fresh Dates

Value: 4000 JD.

5. Deanship of Academic Research at the University of Jordan.

Project title: Effect of Microencapsulation of Cardomom's (*Elettaria cardamomum*) Essential Oils in Biopolymers on its Stability When Packaged alone or within Medium Roasted Turkish Coffee

Value: 11000 JD

6. Deanship of Academic Research at the University of Jordan.

Project title: Sequential disruption of chickpea and lentil flour proteins and their use in macaroni production.

Value: 13700 JD

7. عمادة البحث العلمي في الجامعة الأردنية

عنوان البحث: إعادة هيكلة العمليات المتعلقة بمهام عمادة البحث العلمي لزيادة فاعليتها وكفائتها.

القيمة 25000 د.أ

8. Deanship of Academic Research at the University of Jordan.

Project title: Effect of partial replacement of salt in brine solution of Halloumi cheese with chitosan coatings coatins lysozyme, or natamycin on microbial quality of the cheese.

Value: 10000 JD

9. عمادة البحث العلمي في الجامعة الأردنية

عنوان البحث: مقارنة ما بين التجفيف الشمسي المقتوح وأنظمة التجفيف الشمسي المغلفة على نوعية ثمار نخيل البلح صنف مجمول.

القيمة 12585 د.أ

10. عمادة البحث العلمي في الجامعة الأردنية

أثر اضافة انزيم البيتا مانيز على العلاقة المبنية على الذرة والصويا على الأداء الانتاجي لدجاج البيض ودجاج اللحم.

القيمة 45000 د.أ

10. The Education, Audiovisual and Culture Executive Agency (EACEA), EU

Project title: “Capacity Building of Personnel in Jordanian Olive Industry”
This project includes ten partners: six Jordanian and four European

Value: 799 000 EUR

11. Deanship of Academic Research at the University of Jordan and National Center for Research and Development, Amman-Jordan.

Project title: Replacement of Cheesecloth with Artificial Micro-filter for Yoghurt Whey Separation in Traditional Labaneh and Jameed Production.

Value: 29900 JD

12. Deanship of Academic Research at the University of Jordan.

Project title: The use of modified Acorn starch from unexploited Oak as the base for starch hydrolysis in relation to syrup production and sustained release monolithic tablets

Value: 33100 JD

13. Deanship of Academic Research at the University of Jordan.

Project title: Development and improvement of the performance of vertically constructed wetlands: An approach for the biological and physical treatment of olive mill wastewater (zebar).

Value: 20000 JD

10/2/2025-9/2/2027

14. Deanship of Academic Research at the University of Jordan.

Project title: Application of edible coatings enriched with bioactive compounds to control the adhesion of *Salmonella spp.* and *Listeria monocytogenes* on fresh produce surfaces

Value: 23800 JD

10/1/2026-10/1/2027

Publications

a. Refereed Journals

1. **Mihyar (Mehyar), G. F.**, Yamani, M. I., and Al- Sa'ed, A. K. (1997). Resistance of yeast flora of labaneh to potassium sorbate and sodium benzoate. *Journal of Dairy Science*. 80(10): 2304 - 2309.

2. **Mihyar (Mehyar), G. F.**, Yousif, A. K., and Yamani, M. I. (1999). Determination of benzoic and sorbic acids in labaneh by high-performance liquid chromatography. *Journal of Food Composition and Analysis*. 12: 53-61.

3. **Mehyar, G. F.**, and Han, J. H. (2004). Physical and mechanical properties of high-amylose rice and pea starch films as affected by relative humidity and plasticizer. *Journal of Food Science*. 69: E449-E454.

4. **Mehyar, G. F.**, Delaimy, K. S., and Ibrahim, S. A. (2005). Citric acid production by *Aspergillus niger* using date base medium fortified with whey and additives. *Food Biotechnology*. 19: 137-144.

5. **Mehyar, G. F.**, Blank, G., Han, J. H., Hydamaka, A., and Holley, R. A. (2005). Effectiveness of trisodium phosphate, lactic acid and commercial antimicrobials against pathogenic bacteria on chicken skin. *Food Protection Trends*. 25(5): 351-362.

6. **Mehyar, G. F.**, Blank, G., Han, J. H., Hydamaka, A. and Holley, R. A. (2007). Suitability of antimicrobial pea starch and alginate coatings on chicken. *Poultry Science*. 86: 386-393.

7. **Mehyar, G. F.**, Liu, Z., and Han, J. H. (2008). Dynamics of antimicrobial hydrogels in physiological saline. *Carbohydrate polymers*. 74:92-98. doi:10.1016/j.carbpol.2008.01.023

8. **Mehyar, G. F.**, and Han, J. H. (2011). Active Packaging for Fresh-Cut Fruits and Vegetables. In Brody, A., L, Zhuang, H and Han, J. H, editors. *Modified Atmosphere Packaging for Fresh-Cut Fruits and Vegetables*. First Edition, Wiley-Blackwell, West Sussex, UK. Pp. 267-282.

9. Yamani, M. I. and **Mehyar G. F.** (2011). Effect of chemical preservatives on the shelf life of hummus during different storage temperatures. *Jordan Journal of Agricultural Sciences*. 7(1):19-31.

10. **Mehyar, G. F.**, Al-Qadiri, H. M., Abu-Blan, H. A. and Swanson, B. G. (2011). Antifungal effectiveness of potassium sorbate incorporated in edible coatings against spoilage molds of apples, cucumbers, and tomatoes during refrigerated storage. *Journal of Food Science*. 76(3): M210-M217. doi: 10.1111/j.1750-3841.2011.02059.x

11. **Mehyar G. F.**, Al-Ismail, K, Han, J. H. and Chee, G. W. (2012). Characterization of edible coatings consisting of pea starch, whey protein isolate and carnauba wax and their effect on oil rancidity and sensory properties of walnuts and pine nuts. *Journal of Food Science*. 77(2): E52-E59. doi: 10.1111/j.1750-3841.2011.02559.x

12. **Mehyar G. F.** Hamzah Al-Qadiri and Barry Swanson. (2012). Edible coatings and retention of potassium sorbate on apples, tomatoes and cucumbers to improve antifungal activity during refrigerated storage. *Journal of Food Processing and Preservation*. 1:1-8. doi:10.1111/j.1745-4549.2012.00762.x

13 Alsaed, A. K., **Mehyar, G. F.** and Arar, A. (2013). Effect of harvesting time and storage temperature on the duration of Balah stage of 'Barhi' dates. *Italian Journal of Food Science*. 25(3):345-353.

14. Nihad G. Alsmairate, Najib M. Al Assi, Ayed Al Abdallat and **Ghadeer F. Mehyar**. (2013). Enhancement of edibility of "Barhi" and "Madjool" date palm cultivars at khalal mature stage. *International Journal of Botany*. 9(3): 123-132. DOI: 10.3923/11b.2013.123.132

15. **Mehyar G. F.**, Najib M. El Assi, Nihad G. Alsmairat and Richard A. Holley. (2014). Effect of edible coatings on fruit maturity and fungal growth on Berhi dates. International Journal of Food Science and Technology. 49(11):2409-2417. doi:10.1111/ijfs.12562

16. **Mehyar G. F.**, Khalid M. Al-Ismail, Hana'a M. Al-Ghizzawi, Richard A. Holley. (2014). Stability of cardamom (*Elettaria cardamomum*) essential oil in microcapsules made of whey protein isolate, guar gum and carrageenan. Journal of Food Science. 79(10): C1939-C1949. doi: 10.1111/1750-3841.12652

17. Khalid M. Al-Ismail. **Ghadeer F. Mehyar**, Hatim S. Al-Katib, M Al-Dabbas. (2015). Effect of microencapsulation of cardamom's essential oil in gum Arabic and whey protein isolate using spray drying on its stability during storage. Quality Assurance and Safety of Crops and Foods. 7 (5): 613-620. DOI 10.3920/QAS2014.0422

18. Alsaed, A. K. and **Mehyar, G. F. (2014)**. Effect of harvesting time and storage duration on properties of palm fruits of Barhi variety at the khalal stage of maturity (in Arabic). Jordan Journal of Agricultural Sciences. 11(4): 1147-1159.

19. Mohammed Saleh, **Ghadeer F. Mehyar**, Ayed Amr, George Ondier. (2015). Sequential acid-, alkaline-, and enzymatic modifications of chickpea and lentil flours impacted batter Physical properties. Cereal Chemistry. 92 (2): 161-170. <https://doi.org/10.1094/CCHEM-07-14-0168-R>

20. **Mehyar, G. F.** and Al Bawab A. (2015). Resistance to moist conditions of whey protein isolate and pea starch biodegradable films and low-density polyethylene nondegradable films: a comparative study. IOP Conference Series: Materials Science and Engineering 92(1):1-7.

21. Mohammed Saleh, Ayed Amr, **Ghadeer F. Mehyar** and George Ondier (2016). Predicting farinograph parameters by rapid visco-analyzer pasting profile using Partial Least Squares (PLS) regression. Quality Assurance and Safety of Crops & Foods. 8 (1): 41-49.
DOI:10.3920/QAS2014.0462

22. Amin N. Olaimat, Anas A. Al-Nabulsi, Tareq M. Osaili, Murad Al-Holy, Mutamed M. Ayyash, Mahmoud Abu Ghoush, **Ghadeer F. Mehyar**, Richard A. Holley. (2017). Survival and Inhibition of *Staphylococcus aureus* in Commercial and Hydrated Tahini Using Acetic and Citric Acids. Food Control. Food Control. 77 (17): 179-186. <http://dx.doi.org/10.1016/j.foodcont.2017.02.022>

23. Mousa Numan Ahmad, **Ghadeer Fawzi Mehyar**, and Ghadeer A Othman. (2017). Diet and Cardiometabolic Risks: A Connection Through Gut Microbiota. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 8(2): 2397-2409.

24. **Mehyar, Ghadeer F.**, Al-Nabulsi A., Saleh, Muhammed, Olaimat, Amin, Holley, Rick. (2018). Effect of chitosan coating containing lysozyme or natamycin on shelf-life, microbial quality and sensory properties of Halloumi cheese brined in normal and reduced salt solutions. Journal of Food Processing and Preservation. 2018;42: e13324. DOI: 10.1111/jfpp.13324

25. **Mehyar, G. F.** and Richard Holley (2018). Active Packaging and non-Thermal processing. In Packaging for Nonthermal Processing of Food, 2nd Edition, John Wiley & Sons Ltd, West Sussex, UK. P 15-41.

26. Nihad Alsmairat, Tamara Al-Qudah, Najib El-Assi, **Ghadeer Mehyar**, Issa Gammoh, Yahia A Othman, Salah-Eddin Araj, Tawfiq M Al-Antary. (2019). Effect of drying process on physical and chemical properties of 'Medjool' date palm fruit. *Fresenius Environmental Bulletin*. 28(2A): 1552-1559.

27. Anas Al-Nabulsi, Tareq Osaili, Amani Sawalha, Amin N. Olaimat, Burhan Aldeen Al-Biss, **Ghadeer Mehyar**, Richard Holley. (2020) Antimicrobial activity of chitosan coating containing ZnO nanoparticles against E. Coli O157:H7 on the surface of white brined cheese. *International Journal of Food Microbiology*. 334(2):2-8. <https://doi.org/10.1016/j.ijfoodmicro.2020.108838>

28. Khalid M. Al-Ismail, **Ghadeer F. Mehyar**, and Maram M. Abu Irhayem, Richard Holley. (2020). Effect of the processing and storage conditions on lipid deterioration and organoleptic properties of baklava. *Journal of Food Processing and Preservation*. 44(10): 1-10 <https://doi.org/10.1111/jfpp.14749>

29. Mousa Numan Ahmad, **Ghadeer F. Mehyar**, and Ghadeer Othman. (2021). Nutritional, functional and microbiological characteristics of Jordanian fermented green Nabali Baladi olives. *Grasas y Aceites*. 72(1): e396. <https://doi.org/10.3989/gya.1258192>

30. Al-Refaie, D., **Mehyar, G. F.**, Shahein, M. (2023). Functional role of essential oils as antimicrobial and antioxidation agents in food industry: A review. *Jordan Journal of Agricultural Sciences*. 19(1). DOI :<https://doi.org/10.35516/jjas.v19i1.1237>.

31. M. A. R. Jalal, H. A. H. Zakariaa, F. M. Hayajneha , **G. F. Mehyar**. (2023). Performance, Carcass Characteristics, and Meat Quality of Broiler Chickens Fed β -Mannanase and Two Levels of Energy. *Tropical Animal Science Journal*. 46(2):190-208. <https://doi.org/10.5398/tasj.2023.46.2.190>

32. Nisreen A. Awamleh, Mousa Numan Ahmad, **Ghadeer F. Mehyar**. (2023). Development of Fortified Biscuit with Acid and Sweet Whey Proteins and Its Effects on Body Weight, Indices of Body Composition and Antioxidant Capacity in Rats. *Jordan Journal of Agricultural Sciences*. 19:(4), 365-380. <https://doi.org/10.35516/jjas.v19i4.760>

33. Hadjer Mohamed Fergous, **Ghadeer Fawzi Mehyar**, and SA Ibrahim (2023). The antimicrobial and antioxidation activity of olive pomace extract in the pasteurized white cheese. *Jordan Journal of Agricultural Sciences*. 19(4), 345-364. <https://doi.org/10.35516/jjas.v19i4.432>

34. Ahlem Meddah, **Ghadeer F. Mehyar**, SA Ibrahim (2023). Replacement of the Cheesecloth with Polyamide Plastic Micro-filters in the Manufacturing of Fresh White Boiled Cheese and Pasteurized White Brined Cheese. *Jordan Journal of Agricultural Sciences*. 19(4), 329-344. <https://doi.org/10.35516/jjas.v19i4.431>

35. Salameh Alqaraleh, **Ghadeer F. Mehyar**, Moath Alqaraleh, Sadam Awaisheh and Razan J. Rahahleh. (2023). Antibacterial and Antioxidant Activities of Extracts from Selected Plant Species found in Jordan. Tropical Journal of Natural Product Research. 7(3): 2520-2524.
<http://www.doi.org/10.26538/tjnpr/v7i3.8>

36. Salameh Alqaraleh; Laila Al-Omari; **Ghadeer Mehyar**; Moath Alqaraleh; Walhan Alshaer; Hiba Abdelnabi; Sarah Jaradat. (2024). Innovative liposomal coumarin: A promising solution for enhancing soft white cheese quality. PLOS ONE. 20(3): e0315771.
<https://doi.org/10.1371/journal.pone.0315771>

37. **Ghadeer F. Mehyar**, Nihad G. Alsmairat, Zaina A. Fahil, Dana M. Alangar, Nour T. Hasan, Salam A. Ibrahim. (2025). Application of whey protein and pea starch edible coatings with citric acid: impact on the quality and texture of dried apple and potato slices. Discover Food. 5:168.
<https://doi.org/10.1007/s44187-025-00464-w>

38. Saleh, Mohammed; Al-Ismail, Khalid; **Mehyar, Ghadeer**; Ajo, Radwan; Lee, Young Seung. Effects of chemically modified Acorn starch on its functional characteristics and the sustained release properties of monolithic tablets. (2025). Italian Journal of Food Science. 37 (3): 108–119. DOI 10.15586/ijfs.v37i3.3001

39. **Ghadeer F. Mehyar**, Mohammed I. Saleh, Najlaa I. Ahmed and Salam A. Ibrahim. (2025). Application of Polyamide Microfilters as an Alternative to Cheesecloth in Labneh Production: Effects on Processing Efficiency and Product Quality. Polish Journal of Food and Nutrition Sciences. 75, No. 4, 336–350. DOI: 10.31883/pjfps/211767

40. Elham Y. Al-Barghouthy, Saja Hamed, **Ghadeer F. Mehyar**, Hatim. AlKhatib. (2025). Comparative evaluation of spreadability measurement methods for topical semisolid formulations/ A Scoping Review. Gels. 11(12), 1006;<https://doi.org/10.3390/gels11121006>.

b. Refereed Conference Proceedings

1. **Mehyar, G. F.**, and Han, J. H. (2003). Physical and mechanical properties of edible films made from high-amylose rice and pea starches. Poster, IFT meeting. Chicago, IL.
2. **Mehyar, G. F.**, Holley, R. A., Blank, G., and Han, J. H. (2004). The improved efficiency of the commercial antimicrobials on chicken carcasses by sequential treatments. Oral presentation, IFT meeting. Las Vegas, NV.
3. **Mehyar, G. F.**, Ibrahim, S. A., and Al-Delaimy, K. S. (2005). Citric acid production by *Aspergillus niger* using date base medium fortified with whey, methanol and tricalcium phosphate. Poster, IFT meeting. New Orleans, LA.

4. **Mehyar, G. F.**, Ibrahim, S. A., and Yamani, M. I. (2005). Use of chemical preservatives to extend the shelf life of hummus. Poster. IFT meeting. New Orleans, LA.

5. **Mehyar, G. F.**, Holley, R. A., Blank, G., Han, J. H., and Hydamaka, A. W. (2005). Antimicrobial edible packaging incorporated with trisodium phosphate and acidified sodium chlorite (Sanova) to reduce pathogens on chicken carcasses. Oral presentation, IFT meeting. New Orleans, LA.

6. **Mehyar, G. F.**, Blank, G., Han, J. H., Hydamaka, A. and Holley, R. A. (2006). Physical characterization of antimicrobial pea starch and calcium alginate coatings to reduce bacterial pathogens on chicken skin. Oral presentation, IFT meeting, Orlando, FL.

7. Alsaed, A. K., **Mehyar, G. F.** and Arar A. (2011). Effect of harvesting date and storage temperature on the duration of Khalal stage of fresh Barhi dates. Oral presentation, The 7th International Postharvest Symposium, Kuala Lumpur, Malaysia.

8. **G. F. Mehyar** (2015). Potential biodegradable materials to replace LDPE in moist foods wrapping. Poster. International Conference on Advanced Materials. 27-29 April, JUST, Irbid, Jordan.

c. Theses

1. **Mihyar (Mehyar), G. F.** (1996). The use of sorbate and benzoate salts to inhibit the growth of yeast in labaneh. Masters thesis, University of Jordan.

2. **Mehyar, G. F.** (2006). Development of antimicrobial edible coatings to reduce microbial contamination of broiler carcasses. Ph. D. thesis, University of Manitoba, MB.

d. Technical Reports

Mehyar, G. F. (1998). Workshops on the application of good milking and good dairy manufacturing practices in ten different provinces in Jordan conducted in March through September of 1998. Hygienic Milk Handling TCP/JOR/6611. Report to FAO. Rome, Italy.

e. Manuscript Revisions

Participated as a reviewer in the following peer-reviewed journals:

- Journal of Dairy Science, American Dairy Science Association, USA
- Journal of Food Science, IFT, USA
- Food Biotechnology, Taylor and Francis, USA
- Turkish Journal of Biology, Scientific and Technological Research Council, Turkey
- African Journal of Biotechnology, Academic Journals, Nigeria
- Jordan Journal of Agricultural Sciences, The University of Jordan, Jordan
- International Journal of Food Science and Technology, Wiley, UK - Journal of Food Processing and Preservation, UK - Journal of Microencapsulation, Taylor and Francis, UK
- Journal of Applied Microbiology, Wiley, UK - Letters in Applied Microbiology, Wiley, UK

- Oleo Science, Japan Oil Chemists' Society, Japan

Professional website link:

<https://eacademic.ju.edu.jo/g.mehyar/Lists/Published%20Research/AllItems.aspx>

<https://scholar.google.com/citations?user=weYImvgAAAAJ&hl=en>