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Associate Professor, Food Biotechnology Department, Research Institute for Food Science and Technology
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EDUCATION:

PhD in Food Science and Technology, Major: Microbiology Department of Food Science and Technology, Faculty of Agriculture, Ferdowsi University of Mashhad, Iran, 2012.

Thesis: “*Quantitative study of aflatoxigenic and ochratoxigenic fungi based on PCR methods and evaluation of its correlation to the toxin concentration in raisins varieties of Khorasan Razavi,*”

Supervisor: *Prof. Fakhri Shahidi, Prof. Ahmad Reza Bahrami*

Master of Science in Food Science and Technology, Department of Food Science and Technology, Tarbiat Modares University, Tehran, Iran, Jan. 2003.

Thesis: “*Evaluation of the based collagen Edible Film Production,*”

Supervisor: *Prof. Fakhri Shahidi*

Bachelor of Science in Food Science and Technology, Department of Food Science and Technology , Faculty of Agriculture, Ferdowsi University of Mashhad, Iran, September 2000.

Diploma in Science, Parvin Etesami High School, Mashhad, Iran, June 1995.

FIELDS OF INTEREST:

Food Microbiology

Food Biotechnology

Beverages and Food Powders

PUBLICATIONS IN JOURNALS:

R. Farhoosh, R. Niazmand, M. Rezaee, **M. Sarabi Jamab**, “Kinetic parameter determination of vegetable oil oxidation under Rancimat test conditions,” *European Journal of lipid Science and Technology*, 2008.

M. Sarabi Jamab, R. Niazmand, “Effect of essential oil of *Mentha piperita* and *Ziziphora clinopodioides* on lactobacillus acidophilus activity as bioyogurt starter culture,” *American-Eurasian Journal of Agricultural & Environmental Science.*, 2009.

R. Niazmand A. Niazmand , **M. Sarabi Jamab**, N. Arabporiani, A. Doaei, “Effect of bioyogurt consumption on fatty metabolites of serum and colonic microflora in healthy subjects”, *Journal of Agricultural Science and Technology*, 2010.

A. Arianfar, **M. Sarabi Jamab** R. Niazmand, “Effect of Edible Coating and Treatment Condition on Osmotic Dehydration of Button Mushroom (*Agaricus bisporus*),” *Iranian Food Science and Technology Research Journal*, 2011.

M. Mehraban, **M. Sarabi Jamab**, R. Noorbakhsh, F. Gholasi, A.S. Vosoogh, M. Mohsenzadeh, “Determination of Contamination Sources During The Manufacturing of Traditional Iranian Yoghurt Drink,” *Iranian Food Science and Technology Research Journal*, 2011.

E. haghghi, M. Mehraban, S.A. Mortazavi, **M. Sarabi Jamab**, R. Nourbakhsh, M. Armin, “Isolation and Characterization of aflatoxigenic Fungi from Raisins Varieties in Khorasane Razavi,” *Iranian Food Science and Technology Research Journal*, 2013.

M. Sarabi Jamab, M. Hosseini Nejad, M Mehraban, F. Shahidi, A. R. Bahrami, S. A. Mortazavi, M. Reza Naseery, “Isolation and identification of fungi from raisins varieties in Khorasane Razavi, based on morphological and molecular characterization ” *Iranian Food Science and Technology Research Journal*, 2013.

M. Mehraban Sangatash, R. Niazmand, **M. Sarabi Jamab**, A. S. Modaressi “Development of antioxidant active films containing sodium ascorbate (SA) and ethylene vinyl alcohol (EVOH) to extend the shelf life of peanut” *Journal of Food Science and Technology*, 2016

P. Rahneemoun, **M. Sarabi Jamab**, M. Javanmard Dakheli, A. Bostan, “Phenolic compounds and antimicrobial properties of pomegranate (*Punica granatum*) peel extracts” *International of Biological, Biomolecular, Agricultural, Food and Biotechnological Engineering*, 2016.

N. Adibpour, S. Soleimani-Zad1 , **M. Sarabi-Jamab**, and F. Tajalli “Effect of storage time and concentration of aflatoxin M1 on toxin binding capacity of *L. acidophilus* in fermented milk product” *Journal of Agricultural Science and Technology*, 2016.

D. Zaeim, **M. Sarabi-Jamab**, B. Ghorani, R. Kadkhodaeab, R. H. Tromp, “Electrospray assisted fabrication of hydrogel microcapsules by single- and double-stage procedures for encapsulation of probiotics” *Food and Bioproducts Processing*, 2017.

A. Alehosseini, **M. Sarabi-Jamab**, B. Ghorani, R. Kadkhodaeab, “Investigating the Efficiency of Artificial Neural Networks in predicting the effect of polymer concentration and electro-spraying voltage on physical properties of particles” *Innovative Food Technologies* (in Persian), 2017.

M. Sarabi-Jamab, and F. Tajalli, N. Adibpour, “Investigating the *Bifidobacterium bifidum* ability to absorb Aflatoxin M1 from probiotic yogurt” *Journal of Food Research* (in Persian), 2017.

H. Azizniz, **M. Sarabi Jamab**, “Use of nanotechnology to identify pathogenic bacteria and toxins in food” *Bio-Safety Journal* (in Persian), 2017.

M. Kaveh, A. Pahlavanloo, **M. Sarabi Jamab**, “Mushrooms: valuable sources of bio-active beta-glucans” *Bio-Safety Journal* (in Persian), 2017.

S. Rajabzadeh, **M. Sarabi Jamab**, “A review of food allergies and new methods for identification of allergens in foods” *Bio-Safety Journal* (in Persian), 2017.

F. Ziaeiyan Yazdi Nezhad, M. Najaf Najafi, **M. Sarabi Jamab**, “Evaluation of survival of encapsulated *Lactobacillus casei* with sodium alginate and silica” *Food Science and Technology* (in Persian), 2018.

E. Mansouri, **M. Sarabi Jamab**, B.Ghorani, S. A. Mohajeri, “Imprinted Polymer film production based on electrospinning technique and its effectiveness in removing Mecoprop pesticide from aquatic environment” *Applied Research of Chemical Engineering – Polymer Journal* (in Persian), 2018.

D. Zaeim, **M. Sarabi-Jamab**, B. Ghorani, R. Kadkhodaeab, R. H. Tromp, “Electrospray-assisted drying of live probiotics in acacia gum microparticles matrix” *Carbohydrate Polymers*, 2018.

A. Alehosseini, E. M. Gomez del Pulgar, L. G. Gómez-Mascaraque, M. Martínez-Sanz, M. J. Fabra, Y. Sanz, **M. Sarabi-Jamab**, B. Ghorani, A. Lopez-Rubio, “Unpurified Gelidium-extracted carbohydrate-rich fractions improve probiotic protection during storage” *LWT - Food Science and Technology*, 2018.

P. Rahnemoon, **M. Sarabi Jamab**, M. Javanmard Dakheli, A. Bostan, O. Safari, “Comparison of Two Methods of Solvent Extraction of Phenolic Compounds from Pomegranate (*Punica granatum* L.) Peels” *Journal of Agricultural Science and Technology*, 2018.

M. Foroughi, **M. Sarabi Jamab**, J. Keramat, and M. Foroughi, “Immobilization of *Saccharomyces cerevisiae* on Perlite Beads for the Decontamination of Aflatoxin M1 in Milk” *Journal of Food Science*, 2018.

A. Alehosseini, E. M. Gomez del Pulgar, M. J. Fabra, L. G. Gómez-Mascaraque, A. Benítez-Páez, **M. Sarabi-Jamab**, B. Ghorani, A. Lopez-Rubio, “Agarose-based freeze-dried capsules prepared by the oil-induced biphasic hydrogel particle formation approach for the protection of sensitive probiotic bacteria” *Food Hydrocolloids*, 2018.

E. Mansouri, **M. Sarabi Jamab**, B.Ghorani, S. A. Mohajeri, “Preparation and Characterization of Herbicide Mecoprop Imprinted Polymer and Its Application as a Selective Sorbent in Water Sample” *Bulletin of Environmental Contamination and Toxicology*, 2018.

N. Nadali, A. Pahlevanlo, **M. Sarabi Jamab**, A. Balandary, “Effect of maltodextrin dextrose equivalent and inlet air temperature on physicochemical properties of barberry fruit powder produced by spray drying”, *Journal of Food Research* (in Persian), 2019.

A. Alehosseini, B. Ghorani, **M. Sarabi-Jamab**, N. Tucker, “Principles of electrospinning: A new approach in protection of bioactive compounds in foods” *Critical Reviews in Food Science and Nutrition*, 2019.

M. Foroughi1, **M. Sarabi jamab**, J. Keramat, M. Najaf Najafi, “The use of *Saccharomyces cerevisiae* immobilized on activated alumina, and alumina silicate beads for the reduction of Aflatoxin M1 in vitro” *Journal of Food Processing and Preservation*, 2019.

A. Alehosseini, **M. Sarabi-Jamab**, B. Ghorani, R. Kadkhodaeab, "Electro-encapsulation of *Lactobacillus casei* in high-resistant capsules of whey protein containing transglutaminase enzyme" *LWT - Food Science and Technology*, 2019.

H. DavoudiMoghadam, F. Shahidi, F. Tabatabaei Yazdi, **M. Sarabi Jamab**, Z. Eshaghi, "Biological detoxification of *Monascus purpureus* pigments by heat-treated *Saccharomyces cerevisiae*" *Journal of the Science of Food and Agriculture*, 2019.

D. Zaeim, **M. Sarabi-Jamab**, B. Ghorani, R. Kadkhodaeab, "Double layer co-encapsulation of probiotics and prebiotics by electro-hydrodynamic atomization" *LWT - Food Science and Technology*, 2019.

ACCOMPLISHED PROJECTS:

The Use of Food Industrial Waste Base on Collagen for Production of Degradable Packaging (2001-2002).

Effect of Essential Oil of *Mentha piperita*, *Thymus vulgaris* and *Ziziphora clinopodioides* on *Lactobacillus acidophilus* Activity as Bioyogurt Starter Culture (2005-2006).

Determination of Contamination Sources during the Manufacturing of Traditional Iranian Yoghurt Drink (2006-2007).

Effect of Edible Coating and Treatment Condition on Osmotic Dehydration of Button Mushroom (*Agaricus bisporus*) (2006-2007).

Isolation and Characterization of Aflatoxigenic Fungi from Raisins Varieties in Khorasane Razavi by Coconut Agar Medium (2008-2009).

Evaluation and Introduction of Chemical Pollutant in Milk and Dairy Products (2008-2009).

Identification of Ochratoxigenic Fungi from Raisins Varieties in Khorasan Razavi by Molecular Method (PCR, RT-PCR) (2009-2011).

The Effect of *Lactobacillus acidophilus* and *Bifidobacterium bifidum* on Reduction of Aflatoxin M₁ in Simulated Gastric and Intestinal Model (2010-2011).

Feasibility studies and pilot design of electrolyte and non-electrolyte beverage powders in high shelf life (2010-2011).

Effect of *Lactobacillus acidophilus*, *Lactobacillus rhamnosus* and *Bifidobacterium bifidum* on Reduction of aflatoxin M₁ of Probiotic Yoghurt (2011-2012).

Investigation on Production Active Plastics Films Based on Ascorbat Salt and Ethylene Vinyl Alcohol for Food Packaging (2011-2013).

Investigating the possibility of production and evaluation of bioactive components, physicochemical properties and vitality of drink based on Razavi Hadith (2014-2015).

Production of nanocapsule containing *Monascus purpureus* pigment and garlic oil for induction of apoptosis (2014-2016).

Encapsulation of Probiotic Bacteria (*Lactobacillus acidophilus* & *Bifidobacterium bifidum*) in Polymer Hydrocolloid/Protein Networks by Electrospinning (2015-2017).

Encapsulation of Probiotic Bacteria (*Lactobacillus Plantarum* and *Bifidobacterium bifidum*) in Prebiotic Networks of Resistant Starch and Alginate- Chitosan Hydrogel by Electrospaying Technique (2015-2017).

Aflatoxin reduction of milk using microbial cell immobilization technique on fixed bed (2015-2017).

Pomegranate peel extract contains antimicrobial compounds by modern methods and assess the impact of nano-extract production on the shelf life of chicken meat (2015-2017).

Monitoring and control of microbial agents causing bitterness and swelling in pasteurized yogurt drink (DOOGH) (2016-2018).

Optimization of *Salvia leriifolia* leaf extract contains antimicrobial compounds and evaluation of antimicrobial properties of extract and nanocapsule containing extract on the shelf life of meat product (2017-2019).

ONGOING PROJECTS:

Production of probiotic beverage powder based on Barberry.

Optimization of submerged production of Beta-Glucans from *Pleurotus ostreatus* and its utilization as a fat replacer in functional low fat yogurt.

Creating elastic gel systems of Ricotta cheese containing hydrocolloids in the olive core.

Definition of quality control criteria in Tayyib saffron production chain.

Study the effect of probiotics on the health improvement of children with symptoms of attention deficit hyperactivity disorder (ADHD).

TEACHING:

From 2003 to 2018

Courses: Biochemistry, General Microbiology, Food Microbiology and Fermentation, Molecular Biology, Principles of Biotechnology, Immunology, New Methods for Detection of Microorganisms

GUIDANCE OF THESES:

Effect of *Lactobacillus acidophilus* on reduction of aflatoxin M1 in simulated gastric and intestinal model, *MS Thesis*, 2013.

Effect of *Lactobacillus acidophilus* on reduction of aflatoxin M1 in probiotic yoghurt, *MS Thesis*, 2015.

Investigating the Possibility of Producing Activated Plastic Film Based on Ascorbate Salt to Increasing Peanut Shelf life, *MS Thesis*, 2015.

Study of the antioxidant properties of instant drink from tree leaves of Quince, *MS Thesis*, 2016.

Possibility of microencapsulation of probiotics with silica, *MS Thesis*, 2017.

pomegranate peel extract contains antimicrobial compounds by novel extraction methods and evaluation of effect of the nano extract on the shelf life of chicken meat, *PhD Thesis*, 2018.

Microencapsulation of probiotic bacteria with gum arabic, inulin and resistant starch through electrospray technique and study on the survival of bacteria, *PhD Thesis*, 2018.

Effect of three species of lactic acid bacteria on Aflatoxin of *Aspergillus flavus* fungus in simulated gastric and intestinal model, *MS Thesis*, 2018.

Aflatoxin reduction of milk using microbial cell immobilization technique on ceramic beads, *PhD Thesis*, 2018.

Encapsulation of Probiotic Bacteria in Polymer Hydrocolloid/Protein Networks by Electrohydrodynamic Atomization and Study on the Survival of Bacteria, *PhD Thesis*, 2019.

Preparation and characterization of mecoprop imprinted polymer and its application as a selective sorbent for phenoxy acid herbicides, *PhD Thesis*, 2019.

BOOKS:

Chemical Contaminants in Milk and Dairy Products (in Persian)

Knowledge and industry of nuts (in Persian)

Food Microbial Ecology (in Persian)

PATENTS:

Process and Tools for Reducing Aflatoxin from Liquid Food Products (Such as Milk) by Microbial Immobilization in a Ceramic Bed (Iranian Patent, 2018, No: 94897)

PARTICIPATE IN WORKSHOPS:

Extraction of DNA, PCR and Electrophoresis, Iran.

Quantification of Microorganisms by Competitive PCR, Iran.

Genbank Databases and Design PCR Primers, Iran.

Quantification of Gene Expression of Microorganisms by Real-Time PCR Method, Iran.

Gene Cloning and Transformation in Bacteria, Iran.

Measurement of Aflatoxin B₁ and G₁ by HPLC Method, Iran.

TEACHER IN WORKSHOPS:

Methods of Microbial Contaminant Detection in Food, 2010, Iran.

Laboratory Skills in Microbiological Operations, 2011, Iran.

Advanced Laboratory Techniques: ELISA and Its Applications, 2012, Iran.

Toxicology in Food, 2015, Iran.

SPSS and Minitab Applications in Food Industry, 2016, Iran.

PROFESSIONAL QUALIFICATIONS:

Languages: English (fluent), Arabic (basic)

Computer Skills: Microsoft Office, MSTAT-C, SPSS, Minitab, Design Expert