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EDUCATION

Ph. D., University of Wisconsin-Madison (Food Science), 1984

APPOINTMENTS

- Professor, Department of Food Science and Technology, OSU 2002-Present
- Professor (Graduate Faculty), Department of Microbiology, OSU 2002-Present
- Associate Professor, Department of Food Science and Technology, OSU 1996-2002
- Associate Professor (Graduate Faculty), Department of Microbiology, OSU 1996-2002
- Assistant Professor, Department of Food Science and Technology, OSU 1991-1996
- Post-doctoral Researcher, Department of Food Microbiology & Toxicology (Food Research Institute), University of Wisconsin-Madison 1990-1991
- Post-doctoral Researcher, Department of Food Science, University of Wisconsin-Madison 1985-1990

AWARDS

2021 Virginia Hutchinson Bazler and Frank E. Bazler Chair in Food Science, Department of Food Science and Technology, OSU

2021 Distinguished Professor, College of Food, Agricultural, and Environmental Sciences, OSU

2020 Fellow, International Academy of Food Science and Technology (IAFoST)

2019 Gerhard Haas Award, Institute of Food Technologists, Chicago, IL

2019 Outstanding Service Award, Institute of Food Technologists-Nonthermal Processing Division, Chicago, IL

2017 Senior Faculty Research Award, College of Food, Agricultural, and Environmental Sciences, OSU

2015 Research and Development Award, Institute of Food Technologists, Chicago, IL

2014 Innovator of the Year Award, College of Food, Agricultural, and Environmental Sciences, OSU

2014 Educator of the Year Award, Ohio Association for Food Protection, Columbus, Ohio

2008 Bazlers Designated Professorship, College of Food, Agricultural, and Environmental Sciences, OSU

2007 Powerene Departmental Teaching Excellence Award, College of Food, Agricultural, and Environmental Sciences, OSU

2000 Departmental Research Award, Ohio Agricultural Research and Development Center, OSU

1996 Departmental Research Award, Ohio Agricultural Research and Development Center, OSU

RESEARCH

- **Discovery of antimicrobial peptides for revitalizing food preservation**
  These are natural, effective, and safe peptides for potential use as alternatives to conventional preservatives.
  - Discovered and elucidated the structure and spectrum of the following antimicrobial peptides: Paenibacillin (*He et al., 2007, 2008*), Paenibacterin (*Guo et al., 2012*), Brevibacillin (*Yang et al., 2016*), Paraplantaricin (*Hussein et al., 2020*), and Amyloliquecidin (*Gerst et al., 2021*)
  - Developed and improved methods to expedite the discovery of new antimicrobial peptides (*Burianek & Yousef 2000; Gerst & Yousef, 2018; Hussein et al., 2020; Gerst et al., 2021*)
  - Implementation is underway by interested industries (e.g., Procter & Gamble)
  - Pursuing studies needed to generate data required for regulatory approval
- **Developing ozone applications for decontamination of raw foods and processing environments**
  The goal is to enhance the safety of hard-to-decontaminate raw foods, improve sanitization of processing equipment and environment, and protect workers in these facilities.
  - Currently developing ozone-based air filter for elimination of airborne **coronavirus** and other biohazardous aerosols; research is funded by an several food and healthcare industries.
  - Invented ozone-based methods for shell eggs pasteurization (*US Patents: 6,800,315; 7,419,417; 9,113,640; 9,568,457; 10,466,188*). The process is now being validates, ahead of commercialization by Egg Tech Ltd., an Ohio-based company.
  - Developed processes to decontaminate fresh produce during vacuum cooling (nicknamed "San-Vac") and transportation (nicknamed "San-Trans") using gaseous ozone; currently, these processes are industrially applied.
  - Established, on OSU campus, the largest laboratory for ozone research on food in the US.
- **Investigating microbial inactivation mechanisms of emerging food processing technologies**
  The goal is to assist process developers in ensuring the safety of foods processed by these technologies.
  - Discovered the most-likely mechanism for microbial inactivation by ultra-high pressure (*Malone et al., 2006 & 2008*).
  - Shed light on the causes of microbial resistance to pulsed electric field processing (*Lado et al., 2002 & 2004*).
  - Selected the most suitable and safe surrogate bacteria for testing the efficacy of emerging processing technologies (*Waite-Cusic et al., 2011; Smith et al., 2014; Perry et al., 2019*).

TEACHING

- Teach the main food microbiology courses, campus-wide, Ohio State University, 1996-Present:
  - Food Microbiology Lecture (FDSCTE 5536/MICROBIO 5536), 3 credits, offered Autumn Semester. Annual enrollment: 50- 100 students.
  - Food Microbiology Laboratory (FDSCTE 5546/MICROBIO 5546), 3 credits, offered Spring Semester. Annual enrollment: 30-45 students.
- Contribute to teaching MIEH 607, with a team from the Maryland Institute for Applied Environmental Health, University of Maryland. Course title: A risk-based approach to ensure global food safety and security.
- Taught the following courses:
  - Food Processing-II, University of Illinois, 1989
  - Food Sanitation and Protection, Ohio State University, 1991-1995

- Food Fermentation, Ohio State University, 1992-2000

OUTREACH

- Provided televised interviews to TV channels, covering emerging food safety issues; these include reporters' visits to the laboratory and interviews with members of the research team.
- Provided phone interviews to radio reporters, addressing microbial issues of great public concerns.
- Contributed to articles (on food safety) published in local and national newspapers.
- Provided material to newsletters educating the public and increasing their awareness of proper processing and handling of food.
- Delivered presentations at workshops aiming at training industry personnel on safe use of emerging processing technologies.
- Answered public's food safety questions and concerns, in forums or by phone.
- Shared food safety knowledge with international organizations and authorities. For example, provided help to the Chilean salmon industry when invited to tour facilities affected by *Listeria* contamination of smoked salmon.
- Contributed to USAID project (2005-2010) that led to the establishment of the first Egyptian "Food Safety Agency." More recently (January 2021), gave interview to the Egyptian television (Mehwar Channel) about food safety and the role of the Food Safety Agency.

MENTORING

Since joining OSU in 1991, 22 students completed their Master's and 22 completed their Ph. D. degrees under my supervision. Most of these graduates currently occupy prominent positions in the industry, academia, and government. Additionally, tens of post-doctoral researchers and visiting scholars have been mentored since I joined OSU.

PUBLICATIONS

Books

1. **Yousef AE**, Waite-Cusic JG, Perry JJ. 2022. Analytical Food microbiology: A laboratory manual, 2nd ed. John Wiley and Sons, Inc., Hoboken, NJ, USA.
2. Sapers GM, Gorny JR, **Yousef AE**. 2006. Microbiology of Fruits and Vegetables. CRC Press, Boca Raton, FL, USA.
3. **Yousef AE**, Carlstrom C. 2006. Microbiologia de los Alimentos: Manual de Laboratorio. Editorial Acribia, Zaragoza SA, Espana (*Spanish translation of book # 5*)
4. **Yousef AE**, Juneja VK. 2003. Microbial Stress Adaptation and Food Safety. CRC Press, Boca Raton, FL, USA.
5. **Yousef AE**, Carlstrom C. 2003. Food Microbiology: A Laboratory Manual. John Wiley and Sons, Inc., Hoboken, NJ, USA.

Chapters in edited books

1. Abdelhamid AG, Chung Y-K, Malone AS, **Yousef AE.** 2022. Enhancing microbial lethality of ultra-high pressure by phenolic and microbially-derived antimicrobial additives. *In* Doona CJ, Feeherry FE (ed), High pressure processing of foods, 2nd ed. Blackwell Publishing, Ames, IA, USA (*in press*).
2. Huang E, Hussein WE, Campbell EP, and **Yousef AE**. 2021. Applications in food technology: antimicrobial peptides p 745-770. *In* Toldrá F, Wu J (ed), Biologically active peptides: From basic science to applications for human health. Elsevier, Amsterdam, Netherlands.

3. **Yousef AE**, Abdelhamid AG. 2019. Behavior of microorganisms in food: Growth, survival and death, p 3-21. *In* Doyle M, Diez-Gonzalez F, Hill C (ed), Food microbiology: Fundamentals and frontiers, 5th ed. American Society for Microbiology, Washington, DC, USA.
4. Kasler D, **Yousef AE**. 2018. Antimicrobial gases for food application, p 327-348. *In* Juneja V, Dwivedi HP, Sofos JN (ed), Microbial control and food preservation: theory and practice. Springer, New York, NY, USA.
5. Kasler D, **Yousef AE**. 2018. Ozone antimicrobial effects on fruits and fruit juices, p 505-522. *In* Rosenthal A, Deliza R, Barbosa-Cánovas GV, Welti-Chanes J (ed), Fruit preservation: novel and conventional technologies. Springer, New York, NY, USA.
6. Daryaei H, **Yousef AE**, Balasubramaniam VM. 2016. Microbiological aspects of high-pressure processing of food: Inactivation of microbial vegetative cells and spores, p 271-294. *In* Balasubramaniam VM, Barbosa-Canovas GV, Lelieveld HLM (ed), High pressure processing in food. Springer, New York, NY, USA.
7. **Yousef AE**. 2014. Resistance to processing, p 280-283. *In* Batt CA, Tortorello M-L (ed), Encyclopedia of food microbiology, vol 3. Elsevier Ltd, New York, NY, USA.
8. **Yousef AE**, Balasubramaniam VM. 2013. Physical methods of food preservation, p 737-763. *In* Doyle M, Buchanan R (ed), Food microbiology: Fundamentals and frontiers, 4th ed. American Society for Microbiology, Washington, DC, USA.
9. Ramaswamy R, Ahn J, Balasubramaniam VM, Rodriguez-Saona LE, **Yousef AE**. 2013. Food safety engineering, p 43-66. *In* Kutz M (ed), Handbook farm, dairy, and food machinery, 2nd ed. William Andrew Pub. Norwich, New York, NY, USA.
10. Perry JJ, **Yousef AE**. 2012. *Salmonella* Enteritidis in shell eggs: Evolving concerns and innovative control measures, p 239-269. *In* Sariaslani S, Gadd GM (ed), Advances in applied microbiology, vol 81. Elsevier, Boston, MA, USA.
11. Chawla AS, Kasler DR, Sastry SK, **Yousef AE**. 2012. Food decontamination using ozone, p 495-532. *In* Demirci A, Ngadi M (ed), Microbial decontamination in the food industry: novel methods and applications. Woodhead Publishing, Cambridge, UK.
12. **Yousef AE**, Vurma M, Rodriguez-Romo LA. 2011. Basics of ozone sanitization and food applications, p 291-313. *In* Zhang HQ, Barbosa-Canovas GV, Balasubramaniam VM, Dunne CP, Farkas DF, Yuan JTC (ed), Nonthermal processing technologies for food. Wiley-Blackwell, Hoboken, NJ, USA.
13. Waite JG, **Yousef AE**. 2010. Overview of food safety, p 11-65. *In* Ortega-Rivas E (ed), Processing effects on safety and quality of foods. CRC Press, Boca Raton, FL, USA.
14. Waite JG, **Yousef AE**. 2009. Antimicrobial properties of hydroxyxanthenes, p 79-98. *In* Laskin A, Gadd G, Sariaslani S (ed), Advances in applied microbiology, vol 69. Elsevier Inc., Amsterdam, Netherlands.
15. **Yousef AE**. 2008. Detection of bacterial pathogens in different matrices: current practices and challenges, p 31-48. *In* Zourob M, Elwary S, Turner A (ed), Principles of bacterial detection-biosensors, recognition receptors and microsystems. Springer, New York, NY, USA.
16. Ramaswamy R, Ahn J, Balasubramaniam VM, Rodriguez Saona L, **Yousef AE**. 2007. Food safety engineering, p 45-69. *In* Kutz M (ed), Handbook Farm, Dairy, and Food Machinery. William Andrew Pub. Norwich, New York, NY, USA.
17. Lado BH, **Yousef AE**. 2007. Characteristics of *Listeria monocytogenes* important to food processors, p 157-213. *In* Ryser ET, Marth EH (ed), *Listeria*, listeriosis and food safety, 3rd ed. Marcel Dekker, Inc., New York, NY, USA.

18. Chung Y-K, Malone AS, **Yousef AE**. 2007. Sensitization of microorganisms to high-pressure processing by phenolic compounds, p 145-172. *In* Doona CJ, Feeherry FE (ed), High pressure processing of foods. Blackwell Publishing, Ames, IA, USA.
19. Rodriguez-Romo L, **Yousef AE**. 2006. Microbial stress adaptation and safety of produce, p 95-114. *In* Sapers GM, Gorny JR, **Yousef AE** (ed), Microbiology of fruits and vegetables. CRC Press, Boca Raton, FL, USA.
20. **Yousef AE**, Zhang QH. 2006. Microbiological and safety aspects of pulsed electric field technology, p 152-166. *In* Juneja VK, Cherry JP, Tunick MH (ed), Advances in microbiological food safety. American Chemical Society, Washington, DC, USA.
21. Rodriguez-Romo L, **Yousef AE**. 2005. Cross-protective effects of bacterial stress, p 128-151. *In* Griffiths M (ed), Understanding pathogen behavior: Virulence, stress response and resistance. Woodhead Publishing Ltd., Cambridge, England.
22. Frank JF, **Yousef AE**. 2004. Tests for groups of microorganisms, p 227-247. *In* Wehr HM, Frank JF (ed), Standard methods of the examination of dairy products, 17th ed. American Public Health Association, Washington, DC, USA.
23. **Yousef AE**, Courtney PD. 2003. Basics of stress adaptation and implications in new-generation foods, p 1-30. *In* **Yousef AE**, Juneja V (ed), Microbial stress adaptation and food safety. CRC Press, Boca Raton, FL, USA.
24. Kim J-G, **Yousef AE**, and Khadre MH. 2003. Ozone and its current and future application in the food industry, p 167-218. *In* Taylor S (ed), Advances in food science and nutrition, vol 45. Elsevier, London, UK.
25. Sastry SK, **Yousef AE**, Cho H, Unal R, Salengke S, Wang W, Lima M, Kulshrestha S, Wongsa-Ngasri P, Sensoy I. 2002. Ohmic heating and moderate electric field (MEF) processing, p 785-793. *In* Welti-Chanes J, Barbosa-Canovas G, Aguilera JM (ed), Engineering and food for the 21st century. CRC Press, Boca Raton, FL, USA.
26. Jin ZT, Su Y, Tuhela L, Zhang QH, Sastry SK, **Yousef AE**. 2001. Inactivation of *Bacillus subtilis* spores using high voltage pulsed electric fields, p 167-181. *In* Barbosa-Canovas GV, Zhang QH (eds.), Pulsed Electric Fields in Food Processing. Technomic Publishing Co., Inc., Lancaster, PA, USA.
27. Lou Y, **Yousef AE**. 1999. Characteristics of *Listeria monocytogenes* important to food processors, p 131-224. *In* Ryser ET, Marth EH (ed), *Listeria*, Listeriosis and Food safety, 2nd ed. Marcel Dekker, Inc., New York, NY, USA.
28. Marth EH, **Yousef AE**. 1990. Fungi in dairy products. p 375-414. *In* Arora DK, Mukerji KG, Marth EH. (ed), Handbook of applied mycology: Foods and feeds, vol 3. Marcel Dekker, Inc., New York, USA
29. **Yousef AE**, Marth EH. 1989. Stability and degradation of AFM1, p 127-162. *In* van Egmond HP (ed), Mycotoxins in dairy products. Elsevier, London, UK
30. **Yousef AE**, Marth EH. 1986. Biosynthesis of polyketides. p 1-18. *In* Venkitasubramanian TA (ed), Cell metabolism, growth and environment. CRC Press, Boca Raton, FL, USA

Publications in refereed journals

1. Abdelhamid AG, Campbell EP, Hawkins Z, **Yousef AE.** 2022. Efficient production of broad-spectrum antimicrobials by *Paenibacillus polymyxa* OSY-EC using acid whey-based medium and novel antimicrobial concentration approach. Front Bioeng Biotechnol 10:869778. https://doi.org/10.3389/fbioe.2022.869778

2. Abdelhamid AG, Faraone JN, Evans JP, Liu S-L, **Yousef AE**. 2022. SARS-CoV-2 and emerging foodborne pathogens: intriguing commonalities and obvious differences. Pathogens 11:837. https://doi.org/10.3390/pathogens11080837
3. Abdelhamid AG, **Yousef AE**. 2022. Carvacrol and thymol combat desiccation resistance mechanisms in *Salmonella enterica* Serovar Tennessee. Microorganisms 10:44. https://doi.org/10.3390/microorganisms10010044
4. Beyene AM, Gezachew M, Mengesha D, **Yousef A**, Gelaw G. 2022. Prevalence and drug resistance patterns of Gram-negative enteric bacterial pathogens from diarrheic patients in Ethiopia: A systematic review and meta-analysis. PLOS ONE https://doi.org/10.1371/journal.pone.0265271
5. Campbell EP, Kasler DR, **Yousef AE**. 2022. Maximizing recovery of paenibacillin, a bacterially produced lantibiotic, using continuous foam separation from bioreactors. Foods 11:2290. https://doi.org/10.3390/foods11152290
6. El-Sharoud WM, Zalma SA, **Yousef AE**. 2022. Inducing the production of the bacteriocin paenibacillin by *Paenibacillus polymyxa* through application of environmental stresses with relevance to milk biopreservation. Int J Food Microbiol 371:109637. https://doi.org/10.1016/j.ijfoodmicro.2022.109637
7. Gerst MM, Somogyi A, Yang X, **Yousef AE**. 2022. Detection and characterization of a rare two-component lantibiotic, amyloliquecidin GF610 produced by *Bacillus velezensis*, using a combination of culture, molecular and bioinformatic analyses. J Appl Microbiol 132:994-1007. https://doi.org/10.1111/jam.15290
8. Mok JH, Niu Y, **Yousef A**, Zhao Y, Sastry S. 2022. A microfluidic approach for studying microcolonization of *Escherichia coli* O157:H7 on leaf trichome-mimicking surfaces under fluid shear stress. Biotechnol Bioeng. https://doi.org/10.1002/bit.28057
9. Xu Y, Abdelhamid AG, Sabag-Daigle A, Sovic MG, Ahmer BMM, **Yousef AE**. 2022. The role of egg yolk in modulating the virulence of Salmonella enterica serovar Enteritidis. Front Cell Infect Microbiol 12:903979. https://doi.org/10.3389/fcimb.2022.903979
10. Xu Y, Abdelhamid AG, Sabag-Daigle A, Ahmer BMM, **Yousef AE**. 2022. Heating rate during shell egg thermal treatment elicits stress responses and alters virulence of *Salmonella enterica* serovar Enteritidis; implications for shell egg pasteurization. Appl Environ Microbiol 88:e0114022. https://doi.org/10.1128/aem.01140-22
11. **Yousef AE**. 2022. Fresh produce decontamination: adapting to a world of sustainable resources. IUFoST SIB. 10-22. https://iufost.org/sites/default/files/IUFoST%20SIB.Fresh%20Produce%20Decontamination.10.22.pdf
12. Abdelhamid AG, **Yousef AE**. 2021. Natural antimicrobials suitable for combating desiccation-resistant *Salmonella enterica* in milk powder. Microorganisms 9:421. https://doi.org/10.3390/microorganisms9020421
13. Abdelhamid AG, Xu Y, **Yousef AE**. 2021. Draft genome sequence of *Salmonella enterica* subsp. *enterica* serovar Livingstone1236H, a desiccation-resistant strain that poses a salmonellosis hazard in low-moisture foods. Microbiol Resour Announc 10:e01197-20. https://doi.org/10.1128/MRA.01197-20

14. Campbell EP, Hussein WE, Huang E, **Yousef AE**. 2021. Enhancing titer and production stability of paenibacillin from *Paenibacillus polymyxa* by sequential drug resistance screening. J Appl Microbiol 131:2876-2885. https://doi.org/10.1111/jam.15165
15. Mok JH, Niu Y, **Yousef A**, Zhao Y, Sastry SK. 2021. Spatial persistence of *Escherichia coli* O157:H7 flowing on micropatterned structures inspired by stomata and microgrooves of leafy greens. Innov Food Sci Emerg Technol. https://doi.org/10.1016/j.ifset.2021.102889
16. Mok JH, Pyatkovskyy T, **Yousef A**. Sastry SK. 2021. Effects of combination shear stress, moderate electric field (MEF), and nisin on kinetics and mechanisms of inactivation of *Escherichia coli* K12 and *Listeria innocua* in fresh apple-kale blend juice. J Food Eng 292:110262. https://doi.org/10.1016/j.jfoodeng.2020.110262
17. Xu J, Janahar JJ, Park HW, Balasubramaniam VM, **Yousef AE**. 2021. Influence of water activity and acidity on *Bacillus cereus* spore inactivation during combined high pressure-thermal treatment. LWT - Food Sci Technol 146:111465. https://doi.org/10.1016/j.lwt.2021.111465
18. Xu Y, Abdelhamid AG, **Yousef AE**. 2021. Draft genome sequence of *Salmonella enterica* subsp. *enterica* serovar Enteritidis ODA 99-30581-13, a heat-resistant strain isolated from shell eggs. Microbiol Resour Announc 10:e01461-20. https://doi.org/10.1128/MRA.01461-20
19. Yi Y, Abdelhamid AG, Xu Y, **Yousef AE**. 2021. Characterization of broad-host lytic *Salmonella* phages isolated from livestock farms and application against *Salmonella* Enteritidis in liquid whole egg. LWT - Food Sci Technol 144:111269. https://doi.org/10.1016/j.lwt.2021.111269
20. Abdelhamid AG, **Yousef AE**. 2020. Collateral adaptive responses induced by desiccation stress in *Salmonella enterica*. LWT Food Sci Technol 133:110089. https://doi.org/10.1016/j.lwt.2020.110089
21. Garcia-Cano I, Hussein W, Rocha-Mendoza D, Yousef A., Jimenez-Flores R. 2020. Draft genome sequence of *Lactobacillus rhamnosus* OSU-PECh-69, a cheese isolate with antibacterial activity. Microbiol Resour Announc 9:e00803-20. https://doi.org/10.1128/MRA.00803-20
22. Hu X, Huang E, Barringer SA, **Yousef AE**. 2020. Factors affecting *Alicyclobacillus acidoterrestris* growth and guaiacol production and controlling apple juice spoilage by lauric arginate and ϵ-polylysine. LWT Food Sci Technol 119:108883. https://doi.org/10.1016/j.lwt.2019.108883
23. Hussein W, Abdelhamid A, Rocha-Mendoza D, García-Cano I, **Yousef AE**. 2020. Assessment of safety and probiotic traits of *Enterococcus durans* OSY-EGY, isolated from Egyptian artisanal cheese, using comparative genomics and phenotypic analyses. Front Microbiol 11:608314. https://doi.org/10.3389/fmicb.2020.608314
24. Hussein WE, Huang E, Ozturk I, Somogyi A, Yang X, Liu B, **Yousef AE**. 2020. Genome-guided mass spectrometry expedited the discovery of paraplantaricin TC318, a lantibiotic produced by *Lactobacillus paraplantarum* strain isolated from cheese. Front Microbiol 11:1381. https://doi.org/10.3389/fmicb.2020.01381
25. Kasler DR, Pyatkovskyy T, **Yousef AE**, Sastry SK. 2020. Effect of moderate electric field pretreatment in combination with ozonation on inactivation of *Escherichia coli* K12 in intact shell eggs. LWT - Food Sci Technol 127:109338. https://doi.org/10.1016/j.lwt.2020.109338
26. Mok JH, Pyatkovskyy T, **Yousef A**, Sastry SK. 2020. Synergistic effects of shear stress, moderate electric field, and nisin for the inactivation of *Escherichia coli* K12 and *Listeria innocua* in clear apple juice. Food Cont 113:107209. https://doi.org/10.1016/j.foodcont.2020.107209

27. Pyatkovskyy T, Shynkaryk M, **Yousef A**, Sastry SK. 2020. *In-situ* monitoring of inactivation of *Listeria innocua* under high hydrostatic pressure using electrical conductivity measurement. J Food Eng 285:110087. https://doi.org/10.1016/j.jfoodeng.2020.110087
28. Wang L-H, Pyatkovskyy T, **Yousef A**, Zeng X-A, Sastry SK. 2020. Mechanism of *Bacillus subtilis* spore inactivation induced by moderate electric fields. Innov Food Sci Emerg Technol 62:102349. https://doi.org/10.1016/j.ifset.2020.102349
29. Yi Y, Abdelhamid AG, Xu Y, **Yousef AE**. 2020. Draft genome sequence of the lytic *Salmonella* phage OSY-STA, which infects multiple *Salmonella* serovars. Microbiol Resour Announc 9:e00868-20. https://doi.org/10.1128/MRA.00868-20
30. Abdelhamid AG, Hussein WE, Gerst MM, **Yousef AE**. 2019. *Bacillus velezensis* OSY-GA1 draft genome sequence encoding multiple antimicrobial metabolites and expressing antimicrobial activity against foodborne pathogens. Microbiol Resour Announc 8:e01725-18. https://doi.org/10.1128/MRA.01725-18
31. Abdelhamid AG, **Yousef AE**. 2019. The microbial lipopeptide paenibacterin disrupts desiccation resistance in *Salmonella enterica* serovars Tennessee and Eimsbuettel. Appl Environ Microbiol 85:e00739-19. https://doi.org/10.1128/AEM.00739-19
32. Campbell E, Gerst M, Huang BC, Kong N, Weimer BC, **Yousef AE**. 2019. Draft genome sequence of *Bacillus velezensis* CE2, which genetically encodes a novel multicomponent lantibiotic. Microbiol Resour Announc 8:e01420-18. https://doi.org/10.1128/MRA.01420-18
33. Hussein WE, Huang E, Ozturk I, **Yousef AE**. 2019. Draft genome sequence of *Lactobacillus paraplantarum* OSY-TC318, producer of the novel lantibiotic paraplantaracin TC318. Microbiol Resour Announc 8:e00274-19. https://doi.org/10.1128/MRA.00274-19
34. Hussein WE, Xiaoli L, **Yousef AE**. 2019. Draft genome sequence of *Enterococcus durans* OSY-EGY, a multiple antimicrobial peptides producer, isolated from Egyptian hard cheese. Microbiol Resour Announc 8:e00303-19. https://doi.org/10.1128/MRA.00303-19
35. Mok JH, Pyatkovskyy T, **Yousef A**, Sastry SK. 2019. Combined effect of shear stress and moderate electric field on the inactivation of *Escherichia coli* K12 in apple juice. J Food Eng 262:121-130. https://doi.org/10.1016/j.jfoodeng.2019.05.019
36. Noden M, Moreira R, Huang E, **Yousef A**, Palmer M, Taylor SD. 2019. Total synthesis of paenibacterin and its analogues. J Org Chem 84:5339-5347. https://doi.org/10.1021/acs.joc.9b00364
37. Perry JJ, Peña-Melendez M, **Yousef AE**. 2019. Ozone-based treatments for inactivation of *Salmonella enterica* in tree nuts: Inoculation protocol and surrogate suitability considerations. Int J Food Microbiol 297:21-26. https://doi.org/10.1016/j.ijfoodmicro.2019.02.025
38. El-Baz AF, El-Enshasy HA, Shetaia YM, Mahrous H, Othman N, **Yousef AE**. 2018. Semi-industrial scale production of a new yeast with probiotic traits, *Cryptococcus* sp. YMHS, isolated from the Red See. Probiot Antimicrob Protein 10:77-88. https://doi.org/10.1007/s12602-017-9291-9
39. Gerst MM, Yesil M, **Yousef AE**. 2018. Draft genome sequence of *Bacillus velezensis* OSY-S3, a producer of potent antimicrobial agents active against bacteria and fungi. Microbiol Resour Announc 6:e01465-17. https://doi.org/10.1128/genomeA.01465-17
40. Gerst MM, **Yousef AE**. 2018. Modified microassay for the isolation of antimicrobial-producing spore-forming and non-spore-forming bacteria. J Appl Microbiol 124:1401-1410. https://doi.org/10.1111/jam.13724

41. Li R, Du W, Yang J, Liu Z, **Yousef AE**. 2018. Control of *Listeria monocytogenes* biofilm by paenibacterin, a natural antimicrobial lipopeptide. Food Control 84:529-535. https://doi.org/10.1016/j.foodcont.2017.08.031
42. Pyatkovskyy TI, Shynkaryk MV, Mohamed HM, **Yousef AE**, Sastry SK. 2018. Effects of combined high pressure (HPP), pulsed electric field (PEF) and sonication treatments on inactivation of *Listeria innocua*. J Food Eng 233:49-56. https://doi.org/10.1016/j.jfoodeng.2018.04.002
43. Yang X, **Yousef AE**. 2018. Antimicrobial peptides produced by *Brevibacillus* spp.: structure, classification and bioactivity: a mini review. World J Microbiol Biotechnol 2018: 34-57. https://doi.org/10.1007/s11274-018-2437-4
44. Elkhtab E, El-Alfy M, Shenana M, Mohamed A, **Yousef AE**. 2017. New potentially antihypertensive peptides liberated in milk during fermentation with selected lactic acid bacteria and kombucha cultures. J Dairy Sci 100:9508-9520. https://doi.org/10.3168/jds.2017-13150
45. Gerst MM, Dudley EG, Xiaoli L, **Yousef AE**. 2017. Draft genome sequence of *Bacillus velezensis* GF610, a producer of potent anti-*Listeria* agents. Genome Announc 5:e01046-17. https://doi.org/10.1128/genomeA.01046-17
46. Huang E, Yang X, Zhang L, Moon SH, **Yousef AE**. 2017. New *Paenibacillus* strain produces a family of linear and cyclic antimicrobial lipopeptides: Cyclization is not essential for their antimicrobial activity. FEMS Microbiol Lett 364. https://doi.org/10.1093/femsle/fnx049
47. Pyatkovskyy T, Shynkaryk M, **Yousef A**, Sastry SK. 2017. Fresh produce sanitization by combination of gaseous ozone and liquid sanitizer. J Food Eng 210:19-26. https://doi.org/10.1016/j.jfoodeng.2017.03.031
48. Yang X, Huang E, Yesil M, Xiaoli L, Dudley EG, **Yousef AE**. 2017. Draft genome sequence of *Brevibacillus laterosporus* OSY-I1, a strain that produces brevibacillin, which combats drug-resistant Gram-positive bacteria. Genome Announc 5:e01093-17. https://doi.org/10.1128/genomeA.01093-17
49. Yang X, Huang E, **Yousef AE**. 2017. Brevibacillin, a cationic lipopeptide that binds to lipoteichoic acid and subsequently disrupts cytoplasmic membrane of *Staphylococcus aureus*. Microbiol Res 195:18-23. https://doi.org/10.1016/j.micres.2016.11.002
50. Yesil M, Huang E, Yang X, **Yousef AE**. 2017. Complete genome sequence of *Escherichia* phage OSYSP. Genome Announc 5:e00880-17. https://doi.org/10.1128/genomeA.00880-17
51. Yesil M, Kasler DR, Huang E, **Yousef AE.** 2017. Efficacy of gaseous ozone application during vacuum cooling against *Escherichia coli* O157:H7 on spinach leaves as influenced by bacterium population size. J Food Prot 80:1066-1071. https://doi.org/10.4315/0362-028X.JFP-16-284
52. Balasubramaniam VM, **Yousef AE**, Wan J, Husain A. 2016. Kinder, gentler processing. Food Technol 70:21-28.
53. Daryaei H, Balasubramaniam VM, **Yousef AE**, Legan JD, Tay A. 2016. Lethality enhancement of pressure-assisted thermal processing against *Bacillus amyloliquefaciens* spores in low-acid media using antimicrobial compounds. Food Control 59:234-242.
54. El-Alfy MB, Shenana ME, Abd-El-Aty MA, **Yousef AE**, Elkhtab ES. 2016. The production of novel functional yoghurt containing angiotensin i-converting enzyme (ace)-inhibitory activity. Zagazig J Agri. Res 43:1267-1278.
55. Guo Y, Huang E, Yang X, Zhang L, **Yousef AE**, Zhong J. 2016. Isolation and characterization of a *Bacillus atrophaeus* strain and its potential use in food preservation. Food Control 60:511-518.

56. Hao L, Shavezipur M, **Yousef A**, Maleky F. 2016. Prediction of growth of Pseudomonas fluorescens in milk during storage under fluctuating temperature. J Dairy Sci 99:1822-1830.
57. Pyatkovskyy T, Shynkaryk M, **Yousef A**, Sastry S. 2016. Reduction of *Escherichia coli* O157:H7 population on baby spinach leaves by liquid sanitizers. J Food Process Eng. https://doi.org/10.1111/jfpe.12479
58. Shynkaryk MV, Pyatkovskyy TI, **Yousef A**, Sastry S. 2016. Gaseous ozone treatment of baby spinach within the existing production chain for inactivation of *Escherichia coli* O157:H7. J Food Eng 191:10-18.
59. Snyder AB, Perry JJ, **Yousef AE**. 2016. Developing and optimizing bacteriophage treatment to control enterohemorrhagic *Escherichia coli* on fresh produce. Int J Food Microbiol 236:90-97.
60. Yang X, Huang E, Yuan C, Zhang L, **Yousef AE**. 2016. Isolation and structural elucidation of brevibacillin, an antimicrobial lipopeptide from *Brevibacillus laterosporus* combating drug-resistant Gram-positive bacteria. Appl Environ Microbiol 82:2763-2772.
61. Gerst MM, Huang E, Zhang L, **Yousef AE**. 2015. Development of a new paenibacillin-producing strain and testing its usability in improving food safety. J Food Sci 80:M1538-M1543.
62. Huang E, **Yousef AE**. 2015. Biosynthesis of paenibacillin, a lantibiotic with N-terminal acetylation, by *Paenibacillus polymyxa*. Microbiol Res 181:15-21.
63. Shynkaryk M, Pyatkovskyy T, Mohamed HM, **Yousef AE**, Sastry SK. 2015. Physics of fresh produce safety: Role of diffusion and tissue reaction in sanitization of leafy green vegetables with liquid and gaseous ozone-based sanitizers. J Food Prot 78:2108-2116.
64. Huang E, **Yousef AE**. 2014. Paenibacterin, a novel broad-spectrum lipopeptide antibiotic, neutralises endotoxins and promotes survival in a murine model of *Pseudomonas aeruginosa*-induced sepsis. Int J Antimicrob Ag 44:74-77.
65. Huang E, **Yousef AE**. 2014. The lipopeptide antibiotic paenibacterin binds to the bacterial outer membrane and exerts bactericidal activity through cytoplasmic membrane damage. Appl Environ Microbiol 80:2700-2704.
66. Huang E, Guo Y, **Yousef AE**. 2014. Biosynthesis of the new broad-spectrum lipopeptide antibiotic paenibacterin in *Paenibacillus thiaminolyticus* OSY-SE. Res Microbiol 165:243-251.
67. Pena-melendez M, Perry JJ, **Yousef AE**. 2014. Changes in thermal resistance of three *Salmonella* serovars in response to osmotic shock and adaptation at water activities reduced by different humectants. J Food Prot 77:914-918.
68. Smith AL, Perry JJ, Marshall JA, **Yousef AE**, Barringer SA. 2014. Oven, microwave, and combination roasting of peanuts: comparison of inactivation of *Salmonella* surrogate *Enterococcus faecium*, color, volatiles, flavor, and lipid oxidation. J Food Sci 79:S1584-1594.
69. Graham DM, Sopher CD, Rice RG, **Yousef AE**. 2013. Confronting myths about ozone and food safety. Food Technol 67: 83-84.
70. Huang E, Zhang L, Chung Y-K, Zheng Z, **Yousef AE**. 2013. Characterization and application of enterocin RM6, a bacteriocin from *Enterococcus faecalis*. BioMed Res Int 2013:6-12.
71. Kamonpatana P, Mohamed MH, Shynkaryk M, Heskitt B, **Yousef AE**, Sastry SK. 2013. Mathematical modeling and microbiological verification of ohmic heating of a multicomponent mixture of particles in a continuous flow ohmic heater system with electric field parallel to flow. J Food Sci 78:E1721-1734.

72. Kamonpatana P, Mohamed MH, Shynkaryk M, Heskitt B, **Yousef AE**, Sastry SK. 2013. Mathematical modeling and microbiological verification of ohmic heating of a solid-liquid mixture in a continuous flow ohmic heater system with electric field perpendicular to flow. J Food Eng 118: 312-325.

73. Perry JJ, **Yousef AE**. 2013. Factors affecting thermal resistance of *Salmonella enterica* serovar Enteritidis ODA 99-30581-13 in shell egg contents and use of heat plus ozone combinations for egg pasteurization. J Food Prot 76:213-219.

74. Pilavtepe-Celik M, **Yousef A**, Alpas H. 2013. Physiological changes of *Escherichia coli* O157:H7 and *Staphylococcus aureus* following exposure to high hydrostatic pressure. J Verbr Lebensm 8:175-183.

75. Yan Y, Waite-Cusic J, Kuppusamy P, **Yousef AE**. 2013. Intracellular free iron and its potential role in ultrahigh-pressure-induced inactivation of *Escherichia coli*. Appl Environ Microbiol 79:722-724.

76. Azevedo MSP, Zhang W, Wen K, Gonzalez AM, Saif LJ, **Yousef AE**, Yuan L. 2012. *Lactobacillus acidophilus* and *Lactobacillus reuteri* modulate cytokine responses in gnotobiotic pigs infected with human rotavirus. Benef Microbes 3:33-42.

77. Guo Y, Huang E, Yuan C, Zhang L, **Yousef AE**. 2012. Isolation of a strain of *Paenibacillus* sp. and structural elucidation of its broad-spectrum lipopeptide antibiotic. Appl Environ Microbiol78:3156-3165.

78. Huang E, **Yousef AE**. 2012. Draft genome sequence of *Paenibacillus polymyxa* OSY-DF that coproduces a lantibiotic, paenibacillin, and polymyxin E1. J Bacteriol 194:4739-4740.

79. Huang E, Guo Y, **Yousef AE**. 2012. Draft genome sequence of *Paenibacillus* sp. OSY-SE, a bacterium produces a novel broad-spectrum lipopeptide antibiotic, paenibacterin. J Bacteriol 194:6306-6306.

80. Mohamed HMH, Diono BHS, **Yousef AE**. 2012. Structural changes in *Listeria monocytogenes* treated with gamma radiation, pulsed electric field and ultra-high pressure. J Food Safety 32:66-73.

81. Rosenblum J, Ge C, Bohrerova Z, **Yousef A**, Lee J. 2012. Ozonation as a clean technology for fresh produce industry and environment: sanitizer efficiency and wastewater quality. J Appl Microbiol 113:837-845.

82. Somavat R, Mohamed HMH, Chung Y-K, **Yousef AE**, Sastry SK. 2012. Accelerated inactivation of *Geobacillus stearothermophilus* spores by ohmic heating. J Food Eng 108:69-76.

83. Mohamed HMH, Elnawawi FA, **Yousef AE**. 2011. Nisin treatment to enhance the efficacy of gamma radiation against *Listeria monocytogenes* on meat. J Food Prot 74:193-199.

84. Perry JJ, **Yousef AE**. 2011. Decontamination of raw foods using ozone-based sanitization techniques. Ann Rev Food Sci Technol 2: 281-298.

85. Perry JJ, Rodriguez-Saona LE, **Yousef AE**. 2011. Quality of shell eggs pasteurized with heat or heat-ozone combination during extended storage. J Food Sci 76:S437-S444.

86. Waite-Cusic JG, **Yousef AE**. 2011. Inactivation of pathogenic bacteria by FD&C Red no. 3 and high-pressure processing combination treatment in food systems. J Food safety 31:472-479.

87. Waite-Cusic JG, Diono BHS, **Yousef AE**. 2011. Screening for *Listeria monocytogenes* surrogate strains applicable to food processing by ultrahigh pressure and pulsed electric field. J Food Prot 74:1655-1661.

88. Wen K, Li G, Zhang W, Azevedo MSP, Saif LJ, Liu F, Bui T, **Yousef A**, Yuan L. 2011. Development of γδ T cell subset responses in gnotobiotic pigs infected with human rotaviruses and colonized with probiotic lactobacilli. Vet Immunol Immunopath 141:267-275.

89. Chung H-J, **Yousef AE**. 2010. Inactivation of *Escherichia coli* in broth and sausage by combined high pressure and *Lactobacillus casei* cell extract. Food Sci Tech Int 16:381-388.

90. Chung H-J, **Yousef AE**. 2010. Synergistic effect of high pressure processing and *Lactobacillus casei* antimicrobial activity against pressure resistant *Listeria monocytogenes*. New Biotechnol 27:403-408.

91. De Lamo-Castellví S, Ratphitagsanti W, Balasubramaniam VM, **Yousef AE**. 2010. Inactivation of *Bacillus amyloliquefaciens* spores by a combination of sucrose laurate and pressure-assisted thermal processing. J Food Prot 73:2043-2052.

92. Ratphitagsanti W, De Lamo-Castellvi S, Balasubramaniam VM, **Yousef AE**. 2010. Efficacy of pressure-assisted thermal processing, in combination with organic acids, against *Bacillus amyloliquefaciens* spores suspended in deionized water and carrot puree. J Food Sci 75: M46-M52.

93. Chung H-J, **Yousef AE**. 2009. Screening of lactobacilli derived from fermented foods and partial characterization of *Lactobacillus casei* OSY-LB6A for its antibacterial activity against foodborne pathogens. J Food Sci Nutr 14:162-167.

94. Grasso EM, **Yousef AE**, Castellvi SL, Rodriguez-Saona LE. 2009. Rapid detection and differentiation of *Alicyclobacillus* species in fruit juice using hydrophobic grid membranes and attenuated total reflectance infrared microspectroscopy. J Agric Food Chem 57:10670-10674.

95. Grasso EM, **Yousef AE**, Rodriguez-Romo LA, Rodriguez-Saona LE. 2009. Rapid differentiation of *Bacillus* Strains using hydrophobic grid membranes and attenuated total reflectance infrared microspectroscopy. J Food Prot 72:1909-1915.

96. Loghavi L, Sastry SK, **Yousef AE**. 2009. Effect of moderate electric field frequency and growth stage on the cell membrane permeability of *Lactobacillus acidophilus*. Biotechnol Prog 25:85-94.

97. Ratphitagsanti W, Ahn J, Balasubramaniam VM, **Yousef AE**. 2009. Influence of pressurization rate and pressure pulsing on the inactivation of *Bacillus amyloliquefaciens* spores during pressure-assisted thermal processing. J Food Prot 72:775-782.

98. Sastry SK, Jun S, Somavat R, Samaranayake C, **Yousef AE**, Pandit RB. 2009. Heating and sterilization technology for long-duration space missions: transport processes in a reusable package. Ann NY Acad Sci 1161:562-569.

99. Vurma M, Pandit RB, Sastry SK, **Yousef AE**. 2009. Inactivation of *Escherichia coli* O157:H7 and natural microbiota on spinach leaves using gaseous ozone during vacuum cooling and simulated transportation. J Food Prot 72:1538-1546.

100. Waite JG, **Yousef AE**. 2009. Food microbiology projects: Student ownership from topic selection and experimentation to presentation in 10 weeks. ASM Curriculum Archives http://www.asmscience.org/content/education/curriculum/curriculum.5

101. Waite JG, Jones JM, **Yousef AE**. 2009. Isolation and identification of spoilage microorganisms using food-based media combined with rDNA sequencing: Ranch dressing as a model food. Food Microbiol 26:235-239

102. Waite JG, Jones JM, Turek EJ, Dunne CP, Wright AO, YangTCS, Beckwitt R, **Yousef AE**. 2009. Production of shelf-stable ranch dressing using high-pressure processing. J Food Sci 74:M83-M93.

103. Wen K, Azevedo MSP, Gonzalez A, Zhang W, Saif LJ, Li G, **Yousef A**, Yuan L. 2009. Toll-like receptor and innate cytokine responses induced by lactobacilli colonization and human rotavirus infection in gnotobiotic pigs. Vet Immunol. Immunopath 127: 304-315.
104. Chung Y-K, **Yousef AE**. 2008. Inactivation of barotolerant strains of *Listeria monocytogenes* and *Escherichia coli* O157:H7 by ultrahigh pressure and tert-butylhydroquinone combination. J Microbiol 46:289-294.
105. He Z, Yuan C, Zhang L, **Yousef AE**. 2008. N-terminal acetylation in paenibacillin, a novel lantibiotic. FEBS Lett 582:2787-2792
106. Loghavi L, Sastry SK, **Yousef AE**. 2008. Effect of moderate electric field frequency on growth kinetics and metabolic activity of *Lactobacillus acidophilus*. Biotechnol Prog 24:148-153.
107. Malone AS, Chung Y-K, **Yousef AE**. 2008. Proposed mechanism of inactivating *Escherichia coli* O157:H7 by ultra-high pressure in combination with tert-butylhydroquinone. J Appl Microbiol 105:2046-2057.
108. Männig A, Baldauf NA, Rodriguez-Romo LA, **Yousef AE**, Rodriguez-Saona LE. 2008. Differentiation of *Salmonella enterica* serovars and strains in cultures and food using infrared spectroscopic and microspectroscopic techniques. J Food Protect 71:2249-2256.
109. Perry JJ, Rodriguez-Romo LA, **Yousef AE**. 2008. Inactivation of *Salmonella enterica* serovar Enteritidis in shell eggs by sequential application of heat and ozone. Lett Appl Microbiol 46:620-625.
110. Pilavtepe-Celik M, Balaban MO, Alpas H, **Yousef AE**. 2008. Image analysis based quantification of bacterial volume change with high hydrostatic pressure. J Food Sci 73:M423-M429.
111. Waite JG, **Yousef AE**. 2008. Enhanced inactivation of foodborne pathogenic and spoilage bacteria by FD&C Red No. 3 and other xanthene derivatives during ultrahigh pressure processing. J Food Prot 71:1861-1867.
112. Zhang W, Azevedo MSP, Gonzalez AM, Saif LJ, Nguyen TV, Wen K, **Yousef AE**, Yuan L. 2008. Influence of probiotic lactobacilli colonization on neonatal B cell responses in a gnotobiotic pig model of human rotavirus infection and disease. Vet Immunol Immunopath 122:175-181.
113. Zhang W, Azevedo MSP, Wen K, Gonzalez A, Saif LJ, Li G, **Yousef AE**, Yuan L. 2008. Probiotic *Lactobacillus acidophilus* enhances the immunogenicity of an oral rotavirus vaccine in gnotobiotic pigs. Vaccine 26:3655-3661.
114. Zhang W, Wen K, Azevedo MSP, Gonzalez A, Saif LJ, Li G, **Yousef AE**, Yuan L. 2008. Lactic acid bacterial colonization and human rotavirus infection influence distribution and frequencies of monocytes/macrophages and dendritic cells in neonatal gnotobiotic pigs. Vet Immunol Immunopathol 121:222-231.
115. Ahn J, Balasubramaniam VM, **Yousef AE**. 2007. Inactivation kinetics of selected aerobic and anaerobic bacterial spores by pressure-assisted thermal processing. Int J Food Microbiol 113: 321-329.
116. Baldauf NA, Rodriguez-Romo LA, Männig A, **Yousef AE**, Rodriguez-Saona LE. 2007. Effect of selective growth media on the differentiation of *Salmonella enterica* serovars by Fourier-transform mid-infrared spectroscopy. J Microbiol Methods 68:106-114.
117. Chung Y-K, **Yousef AE**. 2007. Culturability of *Clostridium botulinum* spores under different germination conditions, sublethal heat treatments, and in the presence of nisin. J Food Sci Nutr 12:251-258.

118. Chung Y-K, **Yousef AE**. 2007. Effect of nisin against *Clostridium botulinum* during spore-to-cell transformation. J Food Sci Nutr 12:259-266.
119. He Z, Kisla D, Zhang L, Yuan C, Green-Church KB, **Yousef AE**. 2007. Isolation and identification of a *Paenibacillus polymyxa* strain that co-produces a novel lantibiotic and polymyxin. Appl Environ Microbiol 73:168-178.
120. Loghavi L, Sastry SK, **Yousef AE**. 2007. Effect of moderate electric filed on the metabolic activity and growth kinetics of *Lactobacillus acidophilus*. Biotechnol Bioeng 98:872-881.
121. Malone AS, **Yousef AE**, Lejeune JT. 2007. Association of prophage antiterminator Q alleles and susceptibility to food-processing treatments applied to *Escherichia coli* O157 in laboratory media. J Food Prot 70:2617-2619.
122. Rodriguez-Romo LA, Vurma M, Lee K, **Yousef AE**. 2007. Penetration of ozone gas across the shell of hen eggs. Ozone Sci Eng 29:147-150.
123. Baldauf NA, Rodriguez-Romo LA, **Yousef AE**, Rodriguez-Saona LE. 2006. Differentiation of selected *Salmonella enterica* serovars by Fourier transform mid-infrared spectroscopy. Applied Spectroscopy 60:592-598.
124. Malone AS, Chung Y-K, **Yousef AE**. 2006. Genes of *Escherichia coli* O157:H7 that are involved in high pressure resistance. Appl Environ Microbiol 77:2661-2671.
125. Rajan S, Ahn J, Balasubramaniam VM, **Yousef AE**. 2006. Combined pressure-thermal inactivation kinetics of *Bacillus amyloliquefaciens* spores in egg patty mince. J Food Protect 69:853-860.
126. Rajan S, Pandrangi S, Balasubramaniam VM, **Yousef AE**. 2006. Inactivation of *Bacillus stearothermophilus* spores in egg patties by high-pressure-assisted thermal processing. LWT Food Sci Technol 39:844-851.
127. Vurma M, Chung Y-K, Shellhammer TH, Turek EJ, **Yousef AE**. 2006. Use of phenolic compounds to sensitize Listeria monocytogenes to high pressure processing. Int. J. Food. Microbiol. 106:263-269.
128. Wan K, **Yousef AE**, Schwartz SJ, Wang H. 2006. Rapid, specific and sensitive detection of spoilage molds in orange juice using real-time Taqman PCR assay. J Food Prot 69:385-390.
129. Wang HH, Manuzon M, Lehman M, Wan K, Luo H, Wittum TE, **Yousef AE**, Bakaletz, LO. 2006. Food commensal microbes as a potentially important avenue in transmitting antibiotic resistance genes. FEMS Microbiol Lett 255:328-323.
130. Chung H-J, **Yousef AE**. 2005. *Lactobacillus curvatus* produces a bacteriocin-like agent active against gram-negative pathogenic bacteria. J Food Safety 25:59-79.
131. Chung Y-K, Vurma M, Turek EJ, Chism GW, **Yousef AE**. 2005. Inactivation of barotolerant *Listeria monocytogenes* in sausage by combination of high-pressure processing and food-grade additives. J Food Prot 68:744-750.
132. Liu X, Chung Y-K, Yang ST, **Yousef AE**. 2005. Continuous nisin production in laboratory media and whey permeate by immobilized *Lactococcus lactis*. Process Biochem 40:13-24.
133. Rodriguez-Romo L, **Yousef AE**. 2005. Inactivation of *Salmonella enterica* serovar Enteritidis on shell eggs by ozone and ultraviolet radiation. J Food Prot 68:711-717.
134. Lado BH, Bomser JA, Dunne CP, **Yousef AE**. 2004. Pulsed electric field alters molecular chaperone expression and sensitizes *Listeria monocytogenes* to heat. Appl Environ Microbiol 70:2289-2295.

135. Luo H, **Yousef AE**, Wang HH. 2004. A real-time polymerase chain reaction-based method for rapid and specific detection of spoilage *Alicyclobacillus* spp. in apple juice. Lett Appl Microbiol 39:376-382.
136. Takemura K, Khadre M, Joseph D, **Yousef A**, Sreevatsan S. 2004. An overview of transmissible spongiform encephalopathies. Anim Health Res Rev 5: 103-124.
137. Lado BH, **Yousef AE**. 2003. Selection and identification of a *Listeria monocytogenes* target strain for pulsed electric field process optimization. Appl Environ Microbiol 69:2223-2229.
138. Leung PP, **Yousef AE**, Shellhammer TH. 2003. Antimicrobial properties of nisin-coated polymeric films as influenced by film type and coating conditions. J Food Safety 23:1-12.
139. Mermelstein NH, Fennema OR, Batt CA, Goff HD, Griffiths MW, Hoover DG, Hsieh FH, Juneja VK, Kroger M, Lund DB, Miller DD, Min DB, Murphy PA, Palumbo SA, Rao MA, Ryser ET, Schneeman BO, Singh H, Stone H, Whiting R, Wu JSB, **Yousef AE**, BeMiller JN, Dennis C, Doyle MP, Escher FE, Klaenhammer T, Knorr D, Kokini JL, Iwaoka W, Chism GW, Dong FM, Hartel R, Reitmeier C, Schmidt SJ, Wrolstad RE. 2002. Food research trends - 2003 and beyond. Food Technol 56(12):30-49.
140. Tay A, Shellhammer TH, **Yousef AE**, Chism GW. 2003. Pressure death and tailing behavior of *Listeria monocytogenes* strains having different barotolerances. J Food Prot 66:2057-2061.
141. Achen M, **Yousef AE**. 2001. Efficacy of ozone against *Escherichia coli* O157:H7 on apples. J Food Sci 66:1380-1384.
142. Khadre MA, **Yousef AE**. 2002. Susceptibility of human rotavirus to ozone, high pressure, and pulsed electric field. J Food Prot 65:1441-1446.
143. Lado BH, **Yousef AE**. 2002. Alternative food preservation technologies: Efficacy and mechanisms. Microbes Infect 4:433-440.
144. Leung PP, Khadre MA, Shellhammer TH, **Yousef AE**. 2002. Immunoassay method for quantitative determination of nisin in solution and on polymeric films. Let Appl Microbiol 34: 199-204.
145. Unal R, **Yousef AE**, Dunne CP. 2002. Spectrophotometric assessment of bacterial cell membrane damage by pulsed electric field. Innov Food Sci Emerg Technol 3:247-254.
146. Khadre MA, **Yousef AE**. 2001. Decontamination of multilaminated aseptic food packaging material and stainless steel by ozone. J Food Safety 21:1-13.
147. Khadre MA, **Yousef AE**. 2001. Sporicidal action of ozone and hydrogen peroxide, a comparative study. Int J Food Microbiol 71:131-138.
148. Khadre MA, **Yousef AE**, Kim J-G. 2001. Microbiological aspects of ozone application in food: a review. J Food Sci 66:1242-1252.
149. Unal R, Kim J-G, **Yousef AE**. 2001. Inactivation of *Escherichia coli* O157:H7, *Listeria monocytogenes* and *Lactobacillus leichmannii* by combinations of ozone and pulsed electric field. J Food Prot 64:777-782.
150. Burianek LL, **Yousef AE**. 2000. Solvent extraction of bacteriocins from liquid cultures. Let Appl Microbiol 30:193-197.
151. Kim J-G, **Yousef AE**. 2000. Inactivation kinetics of foodborne spoilage and pathogenic bacteria by ozone. J Food Sci 65:521-528.
152. Lucore LA, Shellhammer T, **Yousef AE**. 2000. Inactivation of *Listeria monocytogenes* Scott A in artificially contaminated frankfurters by high-pressure processing. J Food Prot 63:662-664.

153. **Yousef AE**. 2000. The stressful life of bacteria in food and safety implications. Dairy Food Environ Sanitation 20:586, 592.

154. Cho HY, **Yousef AE**, Sastry SK. 1999. Kinetics of inactivation of *Bacillus subtilis* spores by continuous or intermittent ohmic and conventional heating. Biotechnol Bioeng 62:368-372.

155. Kim J-G, **Yousef AE**, Chism GW. 1999. Use of ozone to inactivate microorganisms on lettuce. J Food safety 19:17-34.

156. Kim J-G, **Yousef AE**, Dave S. 1999. Application of ozone for enhancing the microbiological safety and quality of foods: a review. J Food Prot 62:1071-1087.

157. **Yousef AE**. 1999. Nuevas tecnologias en desarrollo procesamiento y preservación de alimentos. Enfasis Alimentacion. 5(9):26-31. {Translated to Spanish by Enfasis editors}

158. Reina LD, Jin ZT, Zhang QH, **Yousef AE**. 1998. Inactivation of *Listeria monocytogenes* in milk by pulsed electric field. J Food Prot 61:1203-1206.

159. Liu X, **Yousef AE**, Chism GW. 1997. Inactivation of *Escherichia coli* O157:H7 by the combination of organic acids and pulsed electric field. J Food Safety 16:287-299.

160. Lou Y, **Yousef AE**. 1997. Adaptation to sublethal environmental stress protects *Listeria monocytogenes* against lethal preservation factors. Appl Environ Microbiol 63:1252-1255.

161. Cho H-Y, **Yousef AE**, Sastry S. 1996. Growth kinetics of *Lactobacillus acidophilus* under ohmic heating. Biotechnol Bioeng 49:334-340.

162. Cho HY, **Yousef AE**, Yang ST. 1996. Continuous production of pediocin by immobilized *Pediococcus acidilactici* PO2 in a packed-bed bioreactor. Appl Microbiol Biotechnol 45:589-594.

163. Lou Y, **Yousef AE**. 1996. Resistance of *Listeria monocytogenes* to heat after adaptation to environmental stresses. J Food Prot 59:465-471.

164. Mansour N, **Yousef AE**, Kim J-G. 1996. Inhibition of surface growth of toxigenic and nontoxigenic Aspergilli and Penicillia by eugenol, isoeugenol and monolaurin. J Food Safety 16:292-229.

165. Yetim H, Ockerman HW, **Yousef AE**. 1996. Bacteriological evaluation of tumbled catfish with egg white. Food Microbiol 13:365-368.

166. **Yousef AE**, Rusli M. 1995. Modification of starter culture for production of calcium fortified yogurt. Cultured Dairy Prod J 30(4):20-25.

167. Liao C-C, **Yousef AE**, Chism GW, Richter ER. 1994. Inhibition of *Staphylococcus aureus* in buffer, culture media and foods by lacidin A, a bacteriocin produced by *Lactobacillus acidophilus* OSU133. J Food Safety 14:87-101.

168. El-Khateib T, **Yousef AE**, Ockerman HW. 1993. Inactivation and attachment of *Listeria monocytogenes* on beef muscle treated with lactic acid and selected bacteriocins. J Food Prot 56:29-33.

169. Huang IP-D, **Yousef AE**, Matthews ME, Marth EH. 1993. Growth and survival of *Listeria monocytogenes* in chicken gravy during cooling and refrigerated storage. J Foodservice Sys 7:285-292.

170. Liao C-C, **Yousef AE**, Richter ER, Chism GW. 1993. *Pediococcus acidilactici* PO2 bacteriocin production in whey permeate and inhibition of *Listeria monocytogenes* in foods. J Food Sci 58: 430-434.

171. Degnan AJ, **Yousef AE**, Luchansky JB. 1992. Use of *Pediococcus acidilactici* to control *Listeria monocytogenes* in temperature-abused vacuum-packaged wieners. J Food Prot 55:98-103.

172. Faith NG, **Yousef AE**, Luchansky JB. 1992. Inhibition of *Listeria monocytogenes* by liquid smoke and isoeugenol, a phenolic component found in smoke. J Food Safety 12: 303-314.
173. Huang IP-D, **Yousef AE**, Marth EH, Matthews ME. 1992. Thermal inactivation of *Listeria monocytogenes* in chicken gravy. J Food Prot 55:492-496.
174. Elkest SE, **Yousef AE**, Marth EH. 1991. Fate of *Listeria monocytogenes* during freezing and frozen storage. J Food Sci. 56:1068-1071.
175. Farrell GM, **Yousef AE**, Marth EH. 1991. Survival of *Borrelia burgdorferi* in whole milk, low fat milk and skim milk at 34°C and in skim milk at 5°C. J Food Prot 54:532-536.
176. Sabel D, **Yousef AE**, Marth EH. 1991. Behavior of *Listeria monocytogenes* during fermentation of beaker sausage made with or without a starter culture and antioxidant food additives. Lebensm Wiss Technol 24: 252-255.
177. **Yousef AE**, Gajewski II RJ, Marth EH. 1991. Kinetics of growth and inhibition of *Listeria monocytogenes* in the presence of antioxidant food additives. J Food Sci 56:10-13.
178. **Yousef AE**, Luchansky JB, Degnan AJ, Doyle MP. 1991. Behavior of *Listeria monocytogenes* in wiener exudates in the presence of *Pediococcus acidilactici* H or pediocin AcH during storage at 4 or 25°C. Appl Environ Microbiol 57:1461-1467.
179. Altug T, **Yousef AE**, Marth EH. 1990. Degradation of aflatoxin B1 in dried figs by sodium bisulfite with or without heat, ultraviolet energy or hydrogen peroxide. J Food Prot 53:581-582.
180. Bahk J, **Yousef AE**, Marth EH. 1990. Behavior of *Listeria monocytogenes* in the presence of selected spices. Lebensm Wiss U-Technol 23:66-69.
181. Lee SK, **Yousef AE**, Marth EH. 1990. Thermal inactivation of *Borrelia burgdorferi*, the cause of lyme disease. J Food Prot 53:296-299.
182. **Yousef AE**, Marth EH. 1990. Fate of *Listeria monocytogenes* during the manufacture and ripening of Parmesan cheese. J Dairy Sci 73:3351-3356.
183. El-Shenawy MA, **Yousef AE**, Marth EH. 1989. Radiation sensitivity of *Listeria monocytogenes* in broth or in raw ground beef. Lebensm Wiss U-Technol 22:378-390.
184. El-Shenawy MA, **Yousef AE**, Marth EH. 1989. Thermal inactivation and injury of *Listeria monocytogenes* in reconstituted nonfat dry milk. Milchwissenschaft 44:741-745.
185. **Yousef AE**, El-Shenawy MA, Marth EH. 1989. Inactivation and injury of *Listeria monocytogenes* in a minimal medium as affected by benzoic acid and incubation temperature. J Food Sci 54:650-652.
186. Olsen JA, **Yousef AE**, Marth EH. 1988. Growth and survival of *Listeria monocytogenes* during making and storage of butter. Milchwissenschaft 43:487-489.
187. **Yousef AE**, Marth EH., 1988. Behavior of *Listeria monocytogenes* during the manufacture and storage of Colby cheese. J Food Prot 51:12-15.
188. **Yousef AE**, Marth EH. 1988. Inactivation of *Listeria monocytogenes* by ultraviolet energy. J Food Sci 53:571-573.
189. **Yousef AE**, Ryser ET, Marth EH. 1988. Methods for improved recovery of *Listeria monocytogenes* from cheese. Appl Environ Microbiol 54:2643-2649.
190. **Yousef AE**, Marth EH. 1987. Kinetics of interaction of aflatoxin M1 in aqueous solutions irradiated with ultraviolet energy. J Agric Food Chem 35:785-789.
191. **Yousef AE**, Marth EH. 1987. Quantitation of growth of mold on cheese. J Food Prot 50:337-341.

192. **Yousef AE**, Marth EH. 1986. Use of ultraviolet energy to degrade aflatoxin M1 in raw or heated milk with and without added peroxide. J Dairy Sci 69:2243-2247.
193. **Yousef AE**, Marth EH. 1985. Degradation of aflatoxin M1 in milk by ultraviolet energy. J Food Prot 48:697-698.
194. **Yousef AE**, Marth EH. 1985. Rapid reverse phase liquid chromatographic determination of aflatoxin M1 in milk. J Assoc Off Anal Chem 68:462-465.
195. **Yousef AE**, Marth EH. 1984. Kinetics of growth and accumulation of Aflatoxin B1 by *Aspergillus parasiticus* in the presence of butylated hydroxyanisol, isoprothiolane and nystatin. Biotechnol Bioeng 26:6-11.
196. **Yousef AE**, Marth EH. 1983. Incorporation of [^{14}C]acetate into aflatoxin by resting culture of *Aspergillus parasiticus* in the presence of antifungal agents. Eur J Appl Microbiol Biotechnol 18:103-108.
197. **Yousef AE**, Marth EH. 1983. Kinetics of aflatoxin biosynthesis by *Aspergillus parasiticus* in the presence of N(alpha)-palmitoyl-L-lysyl-L-lysine ethyl ester dihydrochloride or dichlorovos. Biotechnol Bioeng 25:671-685.
198. **Yousef AE**, El-Gendy SM, Marth EH. 1980. Growth and biosynthesis of aflatoxin by *Aspergillus parasiticus* in cultures containing nisin. Z Lebensm Unters Forsch 171:341-343.
199. **Yousef AE**, Marth EH. 1981. Growth and synthesis of aflatoxin by *Aspergillus parasiticus* in the presence of sorbic acid. J Food Prot 44:736-741.

PATENTS

1. **Yousef AE**, Kasler D. 2019. Automated bioreactor with foam collector. WO2019165231. https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2019165231
2. **Yousef AE**, Kasler D, Shavezipur M. 2019. Thermal simulator. US Patent No. 10,466,188 B2.
3. **Yousef AE**, Kasler D, Shavezipur M. 2017. Thermal simulator. US Patent No. 9,568,457 B2.
4. **Yousef AE**, Yousef TA, Kasler D. 2015. Coated shell eggs and methods of making same. US Patent No. 9,113,640 B2.
5. **Yousef AE**, Guo Y, Huang E, Yuan C, Zhang L. 2015. Antimicrobial agents, bacterial strain, biosynthesis, and methods of use. US Patent No. 9,017,692 B2.
6. **Yousef AE**, He Z, Yuan C, Zhang L, Kisla D. 2012. Antimicrobial peptides and methods of their use. US Patent No. 8,299,020 B2.
7. **Yousef AE**, Rodriguez-Romo L. 2009. Process for ozone-based decontamination of shell eggs. US Patent No. 7,491,417 B2.
8. Ibrahim OO, **Yousef AE**, Chung H-J. 2006. Intracellular proteinaceous antimicrobial agents from lactic acid bacteria derived from fermented food samples. US Patent # 7,112,323 B2.
9. **Yousef AE**, Rodriguez-Romo L. 2004. Methods for decontaminating shell eggs. US Patent No. 6,800,315 B2.

RECENT GRANTS AND CONTRACTS

Served as principal investigator (PI) and Co-PI on many projects funded by government and industry. Currently serving on ~$10M projects, according to Ohio State University Research Foundation records. The following are recent projects:

- **Yousef AE** and Ahmer BM. How *Salmonella* Enteritidis changes virulence and resistance during mild processing: implications in shell egg pasteurization. USDA-AFRI. 5/2020-5/2023. .....$475,000
- **Yousef AE**. Validating ozone efficacy in various water products. PepsiCo, Inc. 11/2020-6/2023. .....$270,000
- **Yousef AE**, Sastry SK, and Kwick JJ. Air decontamination by destruction of aerosolized biological hazards using ozone-based filter. NSF Industry–University Cooperative Research Centers (IUCRC)/Advanced Processing and Packaging Studies (CAPPS) Program. 1/2020-12/2022. $120,000
- Kowalcyk B, **Yousef AE**, Gebreyes W, Scharff R, Weir M, Oppenheim E. The assessment and management of risk from non-typhoidal Salmonella and diarrheagenic Escherichia coli in raw dairy and beef in Ethiopia (TARTARE). Gates foundation and DFID. 1/2019-12/2023. .....$3,391,000
- Balasubramaniam VM, **Yousef AE**, Jimenes-Flores R, Simons C. Ultra-shear treatment of low-acid liquid foods. National Institute of Food & Agriculture, USDA. 4/2018-5/2023.....$891,500
- Sastry SK, **Yousef AE**, Kaletunc G, Kopec R. Combination mechanical shear and moderate electric field treatment for production of safe, nutritionally enhanced liquid foods and beverages. National Institute of Food & Agriculture, USDA. 3/2019-5/2023. .....$928,662
- Kowalcyk B, **Yousef AE**, Morgan KM, Ilic S, Scharff R, Gebreyes W, Canas L. Chakula salama: a risk-based approach to reducing foodborne disease and increasing production of safe foods in Kenya. U.S. Agency for International Development. 10/2020-3/2024 .....$770,000

PRESENTATIONS AT PROFESSIONAL MEETINGS

Most of the publications listed above have been presented at local, national, or international meetings or annual meetings of professional organizations. **The following are selected among recently invited presentations:**

1. Yousef AE. February 10, 2021. *Emerging Foodborne Pathogens: What have we learned from SARS-CoV-2?* Seminar, Department of Food Science and Technology, The Ohio State University, Columbus, OH, USA.
2. Yousef AE. January 29, 2020. *Emerging natural antimicrobials as future food preservatives*. The Ohio Association for Food Protection annual meeting, Columbus, OH, USA.
3. Yousef AE. September 12, 2019. *Natural antimicrobial peptides as a platform for combating foodborne and antibiotic-resistant pathogens.* The Infectious Disease Institute second annual meeting, Columbus, OH, USA.
4. Yousef AE. June 5, 2019. *Enhancing food safety education in food science and engineering courses using simulation.* Institute of Food Technologists annual meeting, New Orleans, LA, USA.
5. Yousef AE. December 26, 2018. *Ozone use for decontamination of food, water and environment: Research and Commercial Opportunities.* Association of Egyptian American Scholars, annual meeting: The Future of Higher Education: Challenges and Opportunities. Cairo, Egypt.
6. Yousef AE. June 13, 2018. *Emerging foodborne pathogens pose new challenges to global commerce.* MIEH 607: Global Classroom: A Risk Based Approach to Ensure Global Food Safety and Security. University of Maryland College Park, MD, USA.
7. Yousef AE. March 24, 2018. *Food microbiology projects: Student ownership from topic selection and experimentation to presentation in 10 weeks.* Ohio Branch ASM meeting, Ohio University, Athens, OH, USA.

8. Yousef AE. March 1, 2018. *Emerging food safety problems: New pathogens, new vehicles, new smaller world.* Ohio Food Industry Summit, Center for Innovative Food Technology, Columbus, OH, USA.
9. Yousef AE. October 29, 2017. *Inactivation of Bacteria: vegetative cells vs. spores.* Cornell University International Symposium, Validation of Nonthermal Technologies. Ithaca, NY, USA.
10. Yousef AE. May 24, 2017. *Safer fresh produce: meeting the challenge with ozone application.* IFT-EFFoST International Nonthermal Processing Workshop, Chicago. IL, USA.
11. Yousef AE. September 15, 2016. *Responsibilities of processing specialists in the commercialization of alternative processing technologies-Microbiological consideration.* Institute for Thermal Processing Specialists meeting, Columbus, Ohio, USA.
12. Yousef AE. May 18, 2016. *Novel natural antimicrobial peptides; Potential solution for chronic and emerging food safety problems.* Food Research Institute's 70th Anniversary and Annual Meeting. University of Wisconsin, Madison, WI, USA.
13. Yousef AE, Balasubramaniam VM, Wan J. February 25, 2016. *Extended shelf-life foods – Ensuring food safety through high pressure based technological solutions (Webcast)*. Nonthermal Processing Division, Institute of Food Technology, Chicago, IL, USA.
14. Yousef AE. October 28, 2015. *Emerging foodborne pathogens with potential significance to the Middle East.* Tenth Dubai International Food Safety Conference, Dubai, United Arab Emirates.
15. Yousef AE. May 26, 2015. *Listeria monocytogenes: the threat to the food industry and evolving control measures.* V R+D INTESAL Conference, Puerto Varas, Chili.
16. Yousef AE. December 27, 2014. *Advanced processing technologies for safer and higher-quality foods.* Association of Egyptian American Scholars, annual meeting. Sharm El-Sheikh, Egypt.

MEMBERSHIP AND SERVICE IN PROFESSIONAL SOCEITIES

- **American Society for Microbiology**: Member and ad-hoc reviewer for Applied and Environmental Microbiology
- **Institute of Food Technologists**: Professional member and ad-hoc reviewer for Journal of Food Science
- **International Association of Food Protection**: Member and served as associate editor for the Journal of Food Protection.
- **Association of Egyptian-American Scholars.** Member.