

Ahmed E. Yousef

Professor

The Ohio State University

2015 Fyffe Road, Parker Building

Columbus, Ohio 43210-1007

Phone: 614-292-7814 Fax: 614-292-0218

E-mail: Yousef.1@osu.edu

Web-sites: <http://www.fst.ohio-state.edu/foodsafetylab/index.htm>

<http://www.osumicrobiology.org/faculty/ayousef.htm>

http://class.fst.ohio-state.edu/fst636/FoodMicro_636.htm



EDUCATION

- **Ph.D.** 1984. University of Wisconsin-Madison. Major: Food Science.

POISITIONS

July 2002-Present:

Professor, Department of Food Science and Technology, The Ohio State University.

Professor, Department of Microbiology, The Ohio State University.

1996-2002

Associate Professor, Department of Food Science and Technology, The Ohio State University.

Associate Professor, Department of Microbiology, The Ohio State University.

1991- 1996

Assistant Professor, Department of Food Science and Technology, The Ohio State University.

1990-1991

Research Associate (Post-Doctorate), Department of Food Microbiology and Toxicology (Food Research Institute), University of Wisconsin-Madison.

1985-1990

Research Associate (Post-Doctorate), Department of Food Science, University of Wisconsin-Madison.

1985

Assistant Professor, Department of Food Science, Faculty of Agriculture at Moshtohor, University of Zagazig, Egypt.

AWARDS

- Departmental Research Award, Ohio Agricultural Research and Development Center (OARDC), the Ohio State University. 2000.
- Outstanding Teaching Award, College of Food, Agricultural and Environmental Sciences, the Ohio State University. 1998.
- Departmental Research Team Award, OARDC, the Ohio State University. 1996.

PROFESSIONAL SERVICES

- Chair, Research Committee, Ohio Agricultural Research and Development Center. 2004-Present.
- Associate Editor, Journal of Food Science, April 2001-2004.
- Member of the Editorial Board, Journal of Food Protection, 1998-2000.
- Ad-hoc reviewer, Journal of Food Safety, Food Microbiology, Trends in Food Technology, Journal of Dairy Science, CRC Press, Inc., and Blackwell Scientific Publications.
- Member of the Institute of Food Technologists (1986-present), International Association of Milk, Food and Environmental Sanitarians (1980-1990& 1995-Present) and the Association of Egyptian-American Scholars (1995-1998).

TEACHING

- Food Microbiology (Lecture and Laboratory, 3 credits each). Department of Food Science & Technology and the Department of Microbiology. Taught twice a year. Enrollment: 60-70 students/Quarter.
- Food Sanitation and Protection (Department of Foods Science and Technology)
- Cheese and Fermented Foods (Department of Foods Science and Technology)

RESEARCH

Microbial safety of foods covering these areas:

- Biopreservation of food using bacteriocin-producing lactic acid bacteria
- New applications of ozone in food processing.
- Safety of foods processed by novel technologies such as pulsed electric fields, high pressure processing and ohmic heating.

Achievements:

- Principal or co-investigator on more than 25 projects during the past five years, with a total budget over \$5 Million.
- Published more than 70 peer review articles, two books, ten book chapters and a patent.
- Supervised 11 students who obtained MS degrees and 8 students who earned Ph. D. degree.

PUBLICATIONS (past five years)

Books

1. Yousef, A.E., and Courtney, P. D. 2003. Basics of stress adaptation and implications in new-generation foods, p. 1-30. *In* A. E Yousef, A. E. and Carlstrom, C. 2003. Food microbiology: a laboratory manual. John Wiley and Sons, Inc., Hoboken, NJ
2. Yousef, A. E. and Juneja, V. K. 2003. Microbial stress adaptation and food safety. CRC Press, Boca Raton, FL

Book chapters

3. Frank, J. F. and Yousef, A. E. 2004. Tests for groups of microorganisms, p. 227-247. *In* H. M. Wehr and J. F. Frank (eds.), Standard methods of the examination of dairy products, 17th ed. Am. Publ. Health Assoc., Washington, DC.
4. Lado, B. H. and Yousef, A. E. 2004. Characteristics of *Listeria monocytogenes* important to food processors. *In* E. T. Ryser and E.H. Marth (eds.), *Listeria*, listeriosis and food safety. Marcel Dekker, Inc., New York. (In press)
5. Yousef, A. . Yousef and V. Juneja (eds.), Microbial stress adaptation and food safety. CRC Press, Boca Raton, FL.
6. Kim, J.-G., Yousef, A. E., and Khadre, M. H. 2003. Ozone and its current and future application in the food industry, p. 167-218. *In* S. Taylor (ed.) Advances in food science and nutrition, Vol 45. Elsevier Sci. Ltd., London, UK
7. Sastry, S. K., Yousef, A. E., Cho, H-Y., Unal, R., Salengke, S., Wang, W., Lima, M., Kulshrestha, S., Wongsanngasri, P., and Sensoy, I. 2002. Ohmic heating and moderate electric field (MEF) processing. *In* J. Welti-Chanes, G.V. Barbosa-Canovas, and J. M. Aguilera, (Eds.), Engineering and food for the 21st century. pp. 785-793. Technomic Publishing Co., Inc., Lancaster, PA.
8. Jin, Z. T., Su, Y., Tuhela, L., Zhang, Q. H., Sastry, S. K., and Yousef, A. E. 2001. Inactivation of *Bacillus subtilis* spores using high voltage pulsed electric fields, p. 167-181. *In* G. V. Barbosa-Canovas and Q.H. Zhang (eds.), Pulsed Electric Fields in Food Processing. Technomic Publishing Co., Inc., Lancaster, PA.
9. Lou, Y. and Yousef, A. E. 1999. Characteristics of *Listeria monocytogenes* important to food processors, p. 131-224. *In* E. T. Ryser and E.H. Marth (eds.), *Listeria*, Listeriosis and Food safety. Marcel Dekker, Inc., New York

Patent

10. Yousef, A.E. and Rodriguez-Romo, L. 2004. Methods for decontaminating shell eggs. **US Patent # 6,800,315 B2.**

Research papers/review articles

11. Liu, X., Chung, Y-K., Yang, S. T., and Yousef, A. E. 2005. Continuous nisin production in laboratory media and whey permeate by immobilized *Lactococcus lactis*. Process Biochem. 40: 13-24.
12. Luo, H., Yousef, A. E., and Wang, H. H. 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.

13. Lado, B. H., Bomser, J. A., Dunne, C. P., and Yousef, A. E. 2004. Pulsed electric field alters molecular chaperone expression and sensitizes *Listeria monocytogenes* to heat. *Appl. Environ. Microbiol.* 70: 2289-2295
14. Tay, A., Shellhammer, T. H., Yousef, A. E., and Chism, G. W. 2003. Pressure death and tailing behavior of *Listeria monocytogenes* strains having different barotolerances. *J. Food Prot.* 66: 2057-2061
15. Lado, B. H. and Yousef, A. E. 2003. Selection and identification of a *Listeria monocytogenes* target strain for pulsed electric field process optimization. *Appl. Environ. Microbiol.* 69:2223-2229
16. Leung, P. P., Yousef, A. E., and Shellhammer, T. H. 2003. Antimicrobial properties of nisin-coated polymeric films as influenced by film type and coating conditions. *J. Food Safety* 23:1-12
17. Khadre, M. A. and Yousef, A. E. 2002. Susceptibility of human rotavirus to ozone, high pressure, and pulsed electric field. *J. Food Prot.* 65: 1441-1446.
18. Unal, R., Yousef, A. E., and Dunne, C. P. 2002. Spectrophotometric assessment of bacterial cell membrane damage by pulsed electric field. *Innovative Food Sci. Emerging Technol.* 3: 247-254.
19. Lado, B. H. and Yousef, A.E. 2002. Alternative food preservation technologies: Efficacy and mechanisms. *Microbes and Infection* 4: 433-440.
20. Leung, P.P., Khadre, M.A., Shellhammer, T.H. and Yousef, A.E. 2002. Immunoassay method for quantitative determination of nisin in solution and on polymeric films. *Let. Appl. Microbiol.* 34: 199-204.
21. Khadre, M. A. and Yousef, A.E. 2001. Sporicidal action of ozone and hydrogen peroxide, a comparative study. *Int. J. Food Microbiol.* 71:131-138.
22. Achen, M and Yousef, A.E. 2001. Efficacy of ozone against *Escherichia coli* O157:H7 on apples. *J. Food Sci.* 66:1380-1384.
23. Khadre, M. A., Yousef, A.E. and Kim, J-G. 2001. Microbiological aspects of ozone application in food: a review. *J. Food Sci.* 66:1-11
24. Khadre, M. A. and Yousef, A.E. 2001. Decontamination of multilaminated aseptic food packaging material and stainless steel by ozone. *J. Food Safety* 21:1-13.
25. Unal, R., Kim, J. G., and Yousef, A.E. 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
26. Burianek, L.L. and Yousef, A.E. 2000. Solvent extraction of bacteriocins from liquid cultures. *Let. Appl. Microbiol.* 30: 193-197.
27. Lucore, L. A., Shellhammer, T., and Yousef, A. E. 2000. Inactivation of *Listeria monocytogenes* Scott A in artificially contaminated frankfurters by high-pressure processing. *J. Food Prot.* 63:662-664.
28. Kim, J-G. and Yousef, A. E. 2000. Inactivation kinetics of foodborne spoilage and pathogenic bacteria by ozone. *J. Food Sci.* 65:521-528.
29. Yousef, A. E. 2000. The stressful life of bacteria in food and safety implications. *Dairy Food Environ. Sanitation* 20:586, 592.
30. Kim, J-G., Yousef, A.E., and Dave, S. 1999. Application of ozone for enhancing the microbiological safety and quality of foods: a review. *J. Food Prot.* 62:1071-1087.
31. Kim, J-G., Yousef, A.E., and Chism, G. W. 1999. Use of ozone to inactivate microorganisms on lettuce. *J. Food safety* 19:17-34.
32. Yousef, A. E. 1999. Nuevas tecnologías en desarrollo procesamiento y preservación de alimentos. *Enfasis Alimentacion.* 5(9): 26-31.
33. Cho, H.Y., Yousef, A.E., and Sastry, S.K. 1999. Kinetics of inactivation of *Bacillus subtilis* spores by continuous or intermittent ohmic and conventional heating. *Biotech. Bioeng.* 62:368-372.