

CHRISTINE M. BRUHN

Cooperative Extension Specialist Emerita, University of California

Business Address Department Food Science & Technology **Home** 627 Georgetown Place
University of California Davis, CA 95616-1821
Davis, California 95616-8598 (530) 758-2220
E-mail: cmb Bruhn@ucdavis.edu (530) 219-2888 (Mobile)

Education B.S., M.S. Home Economics, University of California Davis
Ph.D. Consumer Behavior, University of California Davis
Certified Food Scientist (A certification program through the Institute of Food Technologists)

Professional Program: Dr. Christine Bruhn is recognized nationally and internationally for her programs in consumer behavior, food science, and food safety. She studied consumer concerns about food safety, quality and nutrition, investigated consumer response to new technologies or ingredients, identified factors which influence consumer food choice, including perception of risk, and developed appropriate educational programs. Dr. Bruhn has authored over 170 professional papers on consumer attitudes toward food. She is a Fellow of the Institute of Food Technologists in the United States, the Institute of Food Science and Technology in the United Kingdom, and the International Association for Food Protection. She has provided consultations to the FAO and WHO on food safety and food irradiation and served a four year term on the US Food and Drug Administration Risk Communication Advisory Committee.

Membership in Professional Associations

International Association for Food Protection
Institute of Food Technologists
Phi Tau Sigma Honorary Society

Academic Positions

1970-1978 Lecturer in Food Science, University of California, Davis
1979-1981 Part-time Lecturer, California State University, Sacramento
1986-2014 Cooperative Extension Specialist, University of California
1992-2014 Director, Center for Consumer Research

Awards and Honors

1986 First Place, Developing Scientist Award, International Assoc. for Food Protection
1989 Outstanding Performance, Regional Communicator, Institute of Food Technologist (IFT)
1992 Cooperative Extension, Distinguished Service Award for Outstanding Teaching
1992 Outstanding Performance as a Food Science Communicator, IFT
1990-97 Scientific Lecturer, IFT
1998 Ivan Parkin Lecturer, International Association For Food Protection
1999 C.W. England Dairy Technology Lectureship, University of Maryland
1999 Bawden Memorial Lecturer, British Crop Protection Council, United Kingdom
2000 Certificate of Merit, International Association for Food Protection
2000 G. Malcolm Trout Visiting Scholar, Michigan State University
2000 Fellow, Institute of Food Science and Technology, United Kingdom
2001 R.E Engel Award for outstanding contribution to food irradiation, Food & Agricultural Organization, International Atomic Energy Agency, and World Health Organization
2002 Fellow, Institute of Food Technologists
2002 Program Award in Food Safety, California Extension Association and Consumer Science
2005 Educator Award, International Association for Food Protection
2006 Julius Bauermann Leadership Award

- 2008 Outstanding volunteer, IFT Extension Division
2009 Lifetime Achievement Award, California Cheese and Butter Association
2010 Food Safety Award, Western Region, Nat. Extension Assoc. Family & Consumer Science
2011 Carl R. Fellers Award for service to the profession of food science and technology, IFT
2012 Fellow, International Association for Food Protection
2014 Award of Distinction: Outstanding Faculty, College of Ag and Natural Resources, UC Davis
2015 Honorary Life Member, International Association for Food Protection
2017 Presidents Lifetime Achievement Award, International Association for Food Protection
2020 Trailblazer Award, Institute of Food Technologists/Academy of Nutrition and Dietetic

Publications

Labeling and Communication

- Hodgson, A.S., and C.M. Bruhn. Feb. 1992. Geographical names on product labels: Consumer attitudes toward their use. *Food Technology* 46(2):83-86, 88-89.
- Bruhn, C.M., S. Peterson, P. Phillips and N. Sakovich. 1992. Consumer response to information on integrated pest management. *J. of Food Safety* 12(4):315-326.
- Bruhn, C.M., A. Cotter, K. Diaz-Knauf, J. Sutherlin, E. West, N. Wightman, E. Williamson and M. Yaffee. Sept. 1992. Consumer attitudes and market potential for dairy products utilizing fat substitutes. *J. of Dairy Science* 75(9):2569-2577.
- Bruhn, C.M. 1992. Public perceptions - Building educational programs. p.167-173, IN: **Proceedings, Agricultural Research Institute's International Conference: Safeguarding the Food Supply through Irradiation Processing Techniques**, Orlando, Florida.
- Díaz-Knauf, K., M. López, C. Ivankovich, F. Aguilar, C.M. Bruhn and H. Schutz. 1993. Hispanic consumer acculturation and food safety concerns. *J. Con. Studies and Home Ec* 17:233-243.
- Hodgson, A.S. and C.M. Bruhn. June 1993. Consumer attitudes toward the use of geographical product descriptors as a marketing technique for locally grown or manufactured foods. *J. Food Quality* 16(3):163-174.
- Bruhn, C.M. Feb. 1995. Strategies for communicating the facts on food irradiation to consumers. *J. of Food Protection* 58(2):213-216.
- Bruhn, C.M. Dec. 1997. Consumer concerns: Motivating to action. *Emerging Infectious Diseases* 3(4):511-515.
- Joint Food and Agriculture Organization of the United States (FAO) and World Health Organization (WHO), including Christine M. Bruhn as Expert Participant and Co-Author. Feb. 1998. **The Application of Risk Communication to Food Standards and Safety Matters**, Joint FAO/WHO Expert Consultation Report, FAO, /WHO, Rome. 39 pp. (Publication inadvertently left out of Merit Increase to Cooperative Extension Specialist II (Professional Research Scale), effective July 1999)
- Bruhn, C.M., C.K. Winter, G.A. Beall, S. Brown, J.O. Harwood, C.L. Lamp, G. Stanford, Y.J. Steinbring and B. Turner. May 1998. Consumer response to pesticide/food safety risk statements: Implications for consumer education. *Dairy, Food and Environmental Sanitation* 18(5):278-287.
- Bruhn, C.M. Nov. 1998. Communicating food safety to the consumer. *Dairy, Food and Environmental Sanitation* 18(10):742-744.
- Bruhn, C.M. 1999. Consumer food safety concerns: Acceptance of new technologies that enhance food safety. p.476-481, IN: John R. Whitaker, Norman F. Haard, Charles F. Shoemaker and R. Paul Singh (eds.), **Food for Health in the Pacific Rim**. 3rd International Conference of Food Science and Technology, Food and Nutrition Press, Connecticut.
- Bruhn, C.M. Nov. 1999. Public communication on the food chain; the foundation of global progress. The 1999 Brighton Conference-Weeds, United Kingdom.
- Bruhn, C.M. 1999. Consumer reactions, popular fancies, and scientific facts related to the healthfulness of meat products. *Proceedings, American Society of Animal Science*. 3 pp.
-

- Bruhn, C.M. 2000. Introduction, consumer needs. IN: J. Ralph Blanchfield (ed.), Food Labelling, CRC Press, Boca Raton, Florida and Woodhead Publishing Limited, Cambridge, UK.
- Bruhn, C.M. 2000. Food safety education: Consumer. Sources of consumer information. p.1014-1017, IN: Frederick J. Francis (ed.), Wiley Encyclopedia of Food Science and Technology, 2nd Edition, John Wiley & Sons, Inc., New York.
- Vanderveen, J.E., J.W. Bode, C.M. Bruhn, E. Campbell et al. Sept. 2000. Labeling of rDNA biotechnology-derived foods. Panel participant and co-author, IFT Expert Report on Biotechnology and Foods. Food Technology 54(9):62-74.
- Consortium. 2002. A Report for the Animal Agriculture Alliance (AAA): Criteria for the Evaluation of Animal Care Guidelines. Federation of Animal Science Societies, Savoy, IL. 26pp. (Christine M. Bruhn was a Steering Committee Member.)
- Council of the National Academies. Dec. 2002. Frontiers in Agricultural Research: Food, Health, Environment, and Communities. (Including Christine Bruhn as Expert Advisor, Committee on Opportunities in Agriculture, Subcommittee on Economic and Social Development in a Global Context.) Report. 241pp.
- Bruhn, C.M. July 2005. Explaining the concept of health risks versus hazards to consumers. Food Control 16(6):487-490.
- Bruhn, C.M. 2007. Enhancing consumer acceptance of new processing technologies. Innovative Food Science and Emerging Technologies 8: 555-558.
- Harris, M., Bruhn, C., Schor, D., Kapsak, W.R., Blakistone, B. 2009 Communicating the net benefits of seafood consumption. Food Technology 63(11): 38-44
- Brown, Mary and Christine Bruhn. 2011. Information and Persuasion. In Communicating Risks and Benefits: An Evidence-based User's Guide. B. Fischhoff, N. Brewer and J. Downs Editors. Food And Drug Administration. MD. pp101-109. Available at <http://www.fda.gov/scienceresearch/specialtopics/riskcommunication/default.htm>
- Feng, Y., C.M. Bruhn, and David Marx. 2016. Evaluation of different food safety educational interventions. British Food J. 118(4):762-776. Available at <http://www.emeraldinsight.com/doi/abs/10.1108/BFJ-10-2015-0372>.
- Banna. M. Ricks, C. Gunther, R. Richards, C. Bruhn, M Cluskey, S.S. Wong, S. Misner, N.K. Hongo, and N. P. Johnston. 2016 Evaluation of the emotion-based messages designed to motivate Hispanic and Asian parents of early adolescents to engage in calcium-rich food and beverage parenting practices. Nutrition Research and Practice. Aug 10(4):456-463.
- Feng, Y. C. M. Bruhn, and D. Marx. 2016. Evaluation of the effectiveness of food irradiation messages. Food Prot. Trends. 36:272-283.
- C.M. Bruhn. 2021. Stepping up to the plate: Institute of Food Technology/Academy of Nutrition and Dietetics Trailblazer Lecture 2020. Nutrition Today. 56(1):44-47.

Food Safety: Food Allergies

- Yu, J.M., A. Kumar, C. Bruhn, S.S. Teuber, S.H. Sicherer. 2008. Development of a food allergy education resource for primary care physicians. BMC Medical Education 8:45. doi:10.1186/1472-6920-8-45
- Olson, B.F., C.M. Bruhn, S.S. Teuber. 2008. Coping with Food Allergies. Center for Consumer Research, University of California, Davis.
- Olson, B., S. Teuber, C.M. Bruhn. 2009. Development of an educational packet for persons with life threatening food allergies. J. of Food Science Education 8: 73-77.

Food Safety: General, Chemical Safety and Microbiological Safety

- Archibald, S.O., C.M. Bruhn, S. Lane and R. Marsh. 1988. Perspectives of consumer advocates. p.5-8, IN: **Regulating Chemicals: A Public Policy Quandary**, Ag. Issues Center, U.C. Davis.

- Bruhn, C.M., S. Lane and L. Walton. 1988. Perspectives of consumers. p.9-13, IN: **Regulating Chemicals: A Public Policy Quandary**, Ag. Issues Center, U.C. Davis.
- Bruhn, C.M. 1991. Food safety and the consumer: Making informed decisions. *Utah Science* 51(4):165-168.
- Beall, G.A., C.M. Bruhn, A.L. Craigmill and C.K. Winter. Aug. 1991. Pesticides and your food: How safe is "safe"? *California Agriculture* 45(4):4-11.
- Bruhn, C.M. March 1992. Consumer perceptions: safety means more than microbiology. *Dairy, Food and Environmental Sanitation* 12(3):134-135.
- Bruhn, C.M., K. Diaz-Knauf, N. Feldman, J. Harwood, G. Ho, E. Ivans, L. Kubin, C. Lamp, M. Marshall, S. Osaki, G. Stanford, Y. Steinbring, I. Valdez, E. Williamson and E. Wunderlich. 1992. Consumer food safety concerns and interest in pesticide-related information. *J. of Food Safety* 12(3):253-262.
- Díaz-Knauf, K., C. Ivankovich, F. Aguilar, C.M. Bruhn and H. Schutz. 1993. Consumer attitudes toward food safety of produce in Costa Rica. *J. of Foodservice Systems* 7(2):105-115.
- Bruhn, C.M., Diana Lee, Dennis Thompson, Hans Riemann, Donald L. Zink and Carl Winter. Dec. 1994. Food safety. p.1-12, IN: **Future Direction for Nutrition Policy in California**, California Nutrition Council's Symposium Proceedings Document.
- Díaz-Knauf, K., M. López, C. Ivankovich, F. Aguilar, C.M. Bruhn and H. Schutz. 1995. Hispanic consumer response to information on integrated pest management and food safety concerns. *J. of Sustainable Agriculture* 5(1/2):137-149.
- Brotman, M., et al (including C.M. Bruhn). June 1995. Consensus conference statement: *Escherichia coli* O157:H7 infections - An emerging national health crisis, June 11-13, 1994. *Gastroenterology* 108(6):1922-1934.
- Bruhn, C.M. April 1996. Consumer perceptions and concerns about veterinary drug residues. p.18-21, IN: William A. Moats and Marjorie B. Medina (eds.), **Veterinary Drug Residues**, ACS Symposium Series 636, American Chemical Society, Washington, D.C
- Bruhn, C.M. Jan. 1999. Consumer food safety perceptions. **Proceedings, California Weed Science Society** 51:32-36.
- Bruhn, C.M. and H.G. Schutz. April 1999. Consumer food safety knowledge and practices. *J. of Food Safety* 19(1):73-87.
- Bruhn, C.M. 1999. Consumer perceptions and concerns about food contaminants. p.1-7, IN: Jackson et al. (eds.), *Impact of Processing on Food Safety*, Kluwer Academic/Plenum Publishers, New York.
- Bruhn, C.M. 2001. Consumer attitudes toward food additives. p.101-107, IN: A. Larry Branen, P. Michael Davidson, Seppo Salminen and John H. Thorngate III (eds.), *Food Additives*, Marcel Dekker, New York.
- Li-Cohen, A.E., M. Klenk, Y. Nicholson, J. Harwood and C.M. Bruhn. July 2002. Refining consumer safe handling educational materials through focus groups. *Dairy, Food and Environmental Sanitation* 22(7):539-551.
- Li-Cohen, A.E. and C.M. Bruhn. Aug. 2002. Safety of consumer handling of fresh produce from the time of purchase to the plate: A comprehensive consumer survey. *J. of Food Protection* 65(8):1287-1296.
- Bruhn, C.M. Dec. 2005. Consumer handling of fresh produce, p. 221-231. IN: K.R. Matthews (ed.), *Microbiology of Fresh Produce*. ASM Press, Washington D.C.
- Bruhn, C.M. June 2006. Consumer handling of fresh produce from supermarket to table, p. 261-277. IN: J. James (ed.), *Microbial Hazard Identification in Fresh Fruits and Vegetables*. John Wiley & Sons, Hoboken, NJ.
- Byrd-Bredbenner, C., V. Wheatley, D. Schaffner, C. Bruhn, L. Blalock, J. Maurer. 2007. Development of food safety psychosocial questionnaires for young adults. *J. of Food Science Education* 6: 30-37.

- Byrd-Bredbenner, C., J. Maurer, V. Wheatley, D. Schaffner, C. Bruhn, L. Blalock. 2007. Food safety self-reported behaviors and cognitions of young adults: Results of a national study. *J. of Food Protection* 70(8): 1917-1926.
- Blalock, L. C. Bruhn, C. Byrd-Bredbenner, J. Maurer, D. Schaffner, V. Wheatley. 2007. Development and implementation of a food safety knowledge instrument. *J. Food Science Education* 6: 45-55.
- Palumbo, M., J. Gorny, D. Gombas, L. Beuchat, C. Bruhn, B. Cassens, P. Delaquis, J. Farber, L. Harris, K. Ito, M. Osterholm, M. Smith, K. Swanson. 2007. Recommendations for handling fresh cut leafy green salads by consumers and retail foodservice operators. *Food Protection Trends* 27(11): 892-898
- Byrd-Bredbenner, C. J.M. Abbot, V. Wheatley, D. Schaffner, C. Bruhn, L. Blalock. 2008. Risky eating behaviors of young adults-implications for food safety education. *J. American Dietetic Association* 108: 549-552.
- Abbot, J.M., C. Byrd-Bredbenner, D. Schaffner, C.M. Bruhn, L. Blalock. 2009. Comparison of food safety cognitions and self-reported food handling behaviors with observed food safety behaviors of young adults. *European J. of Clinical Nutrition* 64: 572-579.
- Bruhn, C.M. Consumer and food-service handling of fresh produce. 2009. *Microbial Safety of Fresh Produce*. IN: *Microbial Safety of fresh Produce*. B.A. Xueting Fan, B.A. Niemira, C.J. Doona, F.E. Freeherry, and R.B. Gravani, eds. Wiley-Blackwell. P 291-306.
- Bruhn, C.M. 2009. History of consumer food safety education focus on beef: Impact on risk of foodborne illness. *Food Protection Trends*. 29(11):793-799
- Niode, O. C. Bruhn, and A.H. Simonne. 2011. Insight into Asian and Hispanic restaurant manager needs for safe food handling. *Food Control*. 22:34-42.
- Lee, L. E, D. Metz, M. Giovanni, and C. M. Bruhn. 2011 Consumer knowledge and handling of tree nuts: food safety implications. *Food Protection Trends*. 31:18-27
- Phang, Ho S. and Christine M. Bruhn. May 2011. Observations of consumer salad preparation. *Food Protection Trends*. 31: 274-279
- Phang, Ho S. and Christine M. Bruhn. 2011. Burger Preparation: What consumers say and do in the home. *J. Food Protection*. 74:1708-1716.
- Lee, L.E., Niode, O., Simonne, A. and Bruhn, C.M. 2012. Consumer Perceptions on Food Safety in Asian and Mexican Restaurants. *Food Control*. 26: 531-538.
- Abbot, Jaclyn Maurer; Policastro, Peggy; Bruhn, Christine; Schaffner, Donald W.; Byrd-Bredbenner, Carol. 2012. Development and evaluation of a university campus-based food safety media campaign for young adults. *J. Food Protection®*, Volume 75(6):1117-1124(8)
<http://www.ingentaconnect.com/content/iafp/jfp/2012/00000075/00000006/art00016>
- Blackburn, M.L., C. M. Bruhn, L. S Miller, C. Ganthavorn, B. A. Ober. 2014. Seniors and their food handlers and caregivers, need food safety and nutrition education. *California Ag*. 68(1)30-37. Available at
<http://californiaagriculture.ucanr.edu/landingpage.cfm?article=ca.v068n01p30&fulltext=yes>
- Bruhn, C. 2014 Chicken preparation in the home: An observational study. *Food Prot. Trends*. 34(5):318-330.
- Feng, Y. C.M. Bruhn, and Health Management and Education. 2016. Food safety education for people diabetes and pregnant women: a positive deviance approach. *Food Control* 66:107-115.
- Woods, R.D. and C.M. Bruhn. 2016. Television celebrity chefs as role models for consumer's safe food handling in the home. *Food Prot. Trends*. 36:443-457..
- Whited, T. Y Feng, and C.M. Bruhn. 2019 Evaluation of the high school food curriculum using a positive deviance model. *Food Control*. 96:324-328.
- Yeung, H.F., C.M. Whited, T. Y Feng, and C.M. Bruhn. 2019 Evaluation of the high school food curriculum using a positive deviance model. *Food Control*. 96:324-328. Bruhn, M. Blackburn, C. Ganthavorn, A. Martin, C. Mendoza, M. Nelon, D. Smith, K. Soule, T M Spezzano, T Barrett,

- Y. Feng. 2019. Evaluation of in-person and on-line food safety education programs for community volunteers. *Food Control*. 99: 34-39.
- Y. Feng and C.M. Bruhn. 2019. Motivators and Barriers to Cooking and Refrigerator Thermometer Use Among Consumers and Food Workers: A Review. *J. Food Protection* 18(1):128-150.
- Feng, Y, C. M Bruhn, Gary Elder, and Dawn Boyden. 2019. Assessment of knowledge and behavior change of a high school positive deviance food safety curriculum. *Food Science Education*. 18:45-52. DOI:10.1111/1541-4329.12157.

New Technologies: Irradiation

- Bruhn, C.M., H.G. Schutz and R. Sommer. Jan. 1986. Attitude change toward food irradiation among conventional and alternative consumers. *Food Technology* 40(1):86-91.
- Bruhn, C.M., R. Sommer and H.G. Schutz. 1986. Effect of an educational pamphlet and posters on attitude toward food irradiation. *J. of Industrial Irradiation Technology* 4(1):1-20.
- Bruhn, C.M., and J.W. Noell. Sept. 1987. Consumer in-store response to irradiated papayas. *Food Technology* 41(9):83-85.
- Bruhn, C.M., H.G. Schutz and R. Sommer. 1988. Food irradiation and consumer values. *Ecology of Food and Nutrition* 21:219-235.
- Bruhn, C.M. Aug. 1988. Irradiation: Risk or benefit? *School Food Service J.* 42(7):62.
- Bruhn, C.M., and H.G. Schutz. July 1989. Consumer awareness and outlook for acceptance of food irradiation. *Food Technology* 43(7):93-94, 97.
- Schutz, H.G., C.M. Bruhn and K.V. Diaz-Knauf. Oct. 1989. Consumer attitude toward irradiated foods: Effects of labeling and benefits information. *Food Technology* 43(10):80-86.
- Bruhn, C.M. Sept. 1992. Consumer acceptance of irradiated food. p.57-62, IN: John A. Marcy (ed.), **Proceedings of the 1992 National Food Safety Workshop**, The National Educational Forum on Food Safety Issues, Washington, D.C.
- Bruhn, C.M. April 1993. Setting the record straight about food irradiation. *Dairy, Food and Environmental Sanitation* 13(4):220-221.
- Bruhn, C.M. 1993. Psychological influences, consumer acceptance of irradiated food. *Activities Report of the Research and Development Associates for Military Food and Packaging Systems* 45(1):100-103.
- Bruhn, C.M. Oct. 1994. United States consumer attitudes and market response to irradiated food. p.F330-2-1 TO F330-2-5, IN: **Proceedings, International Symposium on Radiation Utilization**, JAIF, Tokyo, Japan.
- Bruhn, C.M. Feb. 1995. Consumer attitudes and market response to irradiated food. *J. of Food Protection* 58(2):175-181.
- Bruhn, C.M. Dec. 1995. How food irradiation can improve public health. *Veterinary Medicine* 90(12):1164, 1166-1168.
- Bruhn, C.M. and O.B. Wood. Jan. 1996. Position of the American Dietetic Association: Food irradiation. *J. of the American Dietetic Association* 96(1):69-72.
- Bruhn, C.M. 1998. Consumer acceptance of irradiated food: Theory and reality. *Radiation, Physics and Chemistry* 52(1-6):129-133.
- Bruhn, C.M. Aug. 1998. Food irradiation: Will consumers make the choice? *Dairy, Food and Environmental Sanitation* 18(8):560, 552.
- Bruhn, C.M. July 1998. Irradiation pasteurization: Efficacy, marketability, consumer acceptance. p.264-271, IN: Richard K. Gast and Charles L. Hofacre (eds.), **Proceedings, International Symposium on Food-Borne Salmonella in Poultry**, American Assoc. of Avian Pathologists.
- Bruhn, C.M. Spring 1999. Food irradiation: A step up in safety. *Positive Communication* 3(1):5-6.
- Bruhn, C.M. 1999. Consumer Attitudes and Market Response to Irradiated Food. *International Consultative Group on Food Irradiation*. Vienna: The ICGFI Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture. 39 pp.

- Wood, O.B. and C.M. Bruhn. Feb. 2000. Position of The American Dietetic Association: Food irradiation. (Statistical data included). *J. of the American Dietetic Association* 100(2):246-253.
- Fox, J., C.M. Bruhn and S. Sapp. 2001. Consumer acceptance of irradiated meats. p.139-158, IN: Neal H. Hooker and Elsa A. Murano (eds.), *Interdisciplinary Food Safety Research*, CRC Press, Boca Raton, Florida.
- Bruhn, C.M. 2001. United States consumer choice of irradiated food. p.169-173, IN: Paisian Loaharanu and Pal Thomas (eds.), *Irradiation for Food Safety and Quality*, Techomic Production, Lancaster, Pennsylvania.
- Bruhn, C.M. 2003. Consumer acceptance of irradiated foods in the US. Chapter 10. Online Course on Food Irradiation, Michigan State University. 10 pp.
- Eustice, R.F. and C.M. Bruhn. 2006. Consumer acceptance and marketing of irradiated foods, p. 63-84. IN: C.H. Sommers and X. Fan (eds.), *Food Irradiation Research and Technology*. Blackwell Publishing, Ames IA.
- Bhumiratana, N., L.K. Belden, C. Bruhn. 2007. Effect of an educational program on attitudes of California consumers toward food irradiation. *Food Protection Trends* 27(10): 744-748.
- Eustice, R.F. and C. M. Bruhn., 2010. Consumer acceptance and marketing of irradiated meat. IN: *Case Studies in Novel Food Processing Technologies: Innovations in processing, packaging and predictive modelling*. Christopher J. Doona, Kenneth Kustin and Florence E. Feeherry, eds. Pg 442-463, Woodhead Publishing Limited, 2010.
- Feng, Y. C. M. Bruhn, and D. Marx. 2016. Evaluation of the effectiveness of food irradiation messages. *Food Protection Trends*. 36:272-283.
- Feng, Y. T/ Ramos. S Shankar. and C. Bruhn. 2019. Meat Irradiation technology Usage: Challenges and recommendations from expert interviews. *Food Protection Trends* 39(1):84-94.

New Technologies: Biotechnology/Genetic Engineering

- Bruhn, C.M. March 1992. Consumer concerns and educational strategies: Focus on biotechnology. *Food Technology* 46(3):80, 95, 97.
- Bruhn, C.M. July 1993. Biotechnology and consumer concerns. p.28-34, IN: **Proceedings, Lillian Fountain Smith Conference for Nutrition Educators**, Colorado State University.
- Bruhn, C.M. Feb. 1994. What consumers want to know about biotechnology. p.23-27, IN: "**Labeling of Biotechnology Products**", National Agricultural Biotechnology Council Workshop, Cornell University, Ithaca, New York.
- Bruhn, C.M. Feb. 1998. Biotechnology: Realizing the promise through innovation and meaningful labeling. *Nutrition Today* 33(1):13-18.
- Bruhn, C. and A. Mason. Feb. 2002. Community leader response to educational information about biotechnology. *J. of Food Science* 67(1):399-403.
- Bruhn, C.M. July 2002. Biotechnology overview, product application, consumer response. Chapter 1. P.35-45, IN: **Benefits and Risks of Food Biotechnology**, California Council on Science and Technology, Sacramento, California.
- Bruhn, C.M. Jan. 2003. Approaches to build consumer knowledge in rDNA technology. *Food Science and Technology* 17(1):20-22.
- Bruhn, C.M. Feb. 2003. Consumer attitudes toward biotechnology: lessons for animal related applications. *J. of Animal Science* 81(14 Electronic Supplement):E196-E200.
- Bruhn, C.M. Jan. 2004. Consumer attitudes toward biotechnology: implications for functional foods, p. 427-435. IN: J.-R. Neeser and J.B. German (eds.), *Bioprocesses and Biotechnology for Functional Foods and Nutraceuticals*. Marcel Dekker, Inc., New York.
- Bruhn, C.M. and R. Earl. Feb. 2006. Position of the American dietetic association: agriculture and food biotechnology. *J. of the American Dietetic Association* 106(2):285-293.
- Bruhn, C.M. 2010. Genetically Modified Foods: Consumer attitudes. *Encyclopedia of Biotechnology in Agriculture and Food* 1: 1, 297 – 300.

New Technologies: Laser, High Pressure Processing and others

- Bruhn, C.M., H.G. Schutz, M.C. Johns, C. Lamp, G. Stanford, Y.J. Steinbring and D. Wong. Dec. 1996. Consumer response to the use of lasers in food processing. *Dairy, Food and Environmental Sanitation* 16(12):810-816.
- Moughan, P.J., C.M. Bruhn, J. L. Mercure. 2008. Consumer acceptance of food innovations. *Innovation: Management Policy & Practice. Food related Innovation: Technology, Genetics, and Consumer Impacts* 10(1): 91-95.
- Delgado-Gutierrez, C. C.M. Bruhn. 2008. Health professionals' attitudes and educational needs regarding new food processing technologies. *J. of Food Science Education* 7: 78-83
- Bruhn, C.M. 2011. Consumer trends and perception of novel technologies. IN: *Nonthermal Processing Technologies for Food*. G.C.H. Zhong, A.P. Dunne, eds. Pg 475-481, Wiley-Blackwell.
- Bruhn, C. 2014. Consumer acceptance of high-pressure processed products – American Perspective. "High Pressure Processing of Food – Principles, Technology and Applications" with VM Balasubramaniam, Gustavo V. Barbosa-Cánovas, and Huub L.M. Lelieveld, Editors. Springer Book.
- Bruhn, C.M. Consumer perception of Food Preservation Techniques. 2017. In *Microbial Control and Food Preservation Theory and Practice*. V.J. Juneja, H. P Dwivedi, and J.N. Sofos, Editors. Springer, New York. pp. 373-380.

Characteristics of Foods

- Bruhn, C.M., and J.C. Bruhn. March 1988. Observations on the whipping characteristics of cream. *J. of Dairy Science* 71(3):857-862.
- Bruhn, C.M. April 1989. Consumer perceptions and attitudes related to nutrition and ice cream. IN: **Proceedings, Ice Cream Symposium: Current Trends in the Ice Cream Industry**, University of Guelph, Ontario, Canada.
- Bruhn, C.M., N. Feldman, C. Garlitz, J. Harwood, E. Ivans, M. Marshall, A. Riley, D. Thurber and E. Williamson. July 1991. Consumer perceptions of quality: Apricots, cantaloupes, peaches, pears, strawberries, and tomatoes. *J. of Food Quality* 14(3):187-195.
- Bruhn, C.M. 1991. Trends in consumer perceptions and the need for cheese. p.1889-1895, IN: **Proceedings, XXIII International Dairy Congress: Dairying in a Changing World**, Vol. 3, Oct. 1990, Montreal, Quebec, Canada.
- Bruhn, C.M., A. Cotter, K. Diaz-Knauf, J. Sutherlin, E. West, N. Wightman, E. Williamson and M. Yaffee. April 1992. Consumer attitudes and market potential for foods using fat substitutes. *Food Technology* 46(4):81-82, 84, 86
- Bruhn, C.M. 1994. Consumer perceptions of quality. p.493-504, IN: R. Paul Singh and Fernanda A.R. Oliveira (eds.), **Minimal Processing of Foods and Process Optimization: An Interface**, CRC Press, Boca Raton, Florida.
- Reed, B.A. and C.M. Bruhn. Sept. 2003. Sampling and farm stories prompt consumers to buy specialty cheeses. *California Agriculture* 57(3):76-80.
- Diehl, D.C., Sloan, N.L., Bruhn, C.M., Simonne, A.H., Brecht, J.K. and Mitcham, E.J. 2013. Exploring produce industry attitudes: relationships between postharvest handling, fruit flavor and consumer purchasing. *Hort Technology* 23(5)642-650.
- M. Daniels, A.H. Simonne, S Jensen, D. Diehl, K.P. Shelnett, C. Bruhn, J.K. Brecht, A.F. Wysocki, R. Cook and E Mitcham. 2018 Consumer perceptions of quality and price of high-value specialty crops in supermarkets in the United States: Lessons for producers, handlers and educators. *Acta Hort.* 1213. ISHS 2018 Proc III Asian Pacific Symposium on Postharvest Research, Education and Extension

Nutrition and Food Choice

- Bruhn, C.M. 1971. Food purchasing pattern of migrant agricultural families. *J. of Con. Affairs* 5(1):41-55.
- Pangborn, R.M. and C.M. Bruhn. 1971. Concepts of food habits of "other" ethnic groups. *J. Nutr Ed* 2(3):106-110.
- Bruhn, C.M., and R.M. Pangborn. May 1971. Reported incidence of Pica among migrant families. *J. American Dietetic Association* 58(5):417-420.
- Bruhn, C.M., and R.M. Pangborn. Oct. 1971. Food habits of migrant farm workers in California. *J. American Dietetic Association* 59(4):347-355.
- Bruhn, C.M. Jan. 1976. Quality and the consumer. IN: **Proceedings, California Plant and Soil Conference**, California Chapter of the American Society of Agronomy.
- Bruhn, C.M., and H.G. Schutz. Jan. 1986. Consumer perception of dairy and related foods. *Food Technology* 40(1):79-85.
- Pastore, M.A., and C.M. Bruhn. Feb. 1991. A shoppers' survey: California nuts and produce, food quality, and food safety. *California Agriculture* 45(1):25-27.
- Bruhn, C.M., P.M. Vossen, E. Chapman and S. Vaupel. Aug. 1992. Consumer attitudes toward locally grown produce. *California Agriculture* 46(4):13-16.
- Bruhn, C.M. June 1995. Consumer and retailer satisfaction with the quality and size of California peaches and nectarines. *J. of Food Quality* 18(3):241-256.
- Medeiros, D.M., G.W. Auld, M.A. Bock, C.M. Bruhn, K. Gabel, Y.S. Lee, J. McNulty, R. Newman, S. Nitzke, M. Ortiz, M. Read, H. Schutz and E.T. Sheehan. May 1996. Diet fat and fiber knowledge, beliefs and practices are minimally influenced by health status. *Nutrition Research* 16(5):751-758.
- Bruhn, C.M., D. Wong and H.G. Schutz. Sept. 1996. Californians' eating habits differ from their dietary attitudes. *California Agriculture* 50(5):22-26.
- Read, M.H., G. Auld, M.A. Bock, C.M. Bruhn, K. Gabel, G. Lauritzen, Y.S. Lee, D. Medeiros, J. McNulty, R. Newman, S. Nitzke, M. Ortiz, H. Schutz and E. Sheehan. Dec. 1996. Age, dietary behaviors and the stages of change model. *American J. of Health Behavior* 20(6):417-424.
- Auld, G.W., S.A. Nitzke, J. McNulty, M.A. Bock, C.M. Bruhn, K. Gabel, G. Lauritzen, Y.F. Lee, D. Medeiros, R. Newman, M. Ortiz, M. Read, H. Schutz and E. Sheehan. Feb. 1997. A stage-of-change classification system based on actions and beliefs regarding dietary fat and fiber. *American J. of Health Promotion* 12(3):192-201.
- Bruhn, C.M. and J.C. Bruhn. March 1997. Ice creams and frozen yogurts vary widely in key nutrients. *California Agriculture* 51(2):36-40.
- Gabel, K., R. Newman, G. Lauritzen, G. Auld, M. Bock, C. Bruhn, Y. Lee, D. Medeiros, J. McNulty, S. Nitzke, M. Ortiz and E. Sheehan. Nov. 1997. Fat and fiber knowledge and behaviors related to body mass index. *Nutrition Research* 17(11-12):1643-1653.
- Bruhn, C.M. 1998. Consumer attitudes and perceptions. p.507-517, IN: I.A. Taub and R.P. Singh (eds.), **Food Storage Stability**, CRC Press, Boca Raton, Florida.
- Read, M.H., G. Auld, M.A. Bock, C.M. Bruhn, K. Gabel, G. Lauritzen, Y.S. Lee, D. Medeiros, J. McNulty, R. Newman, S. Nitzke, M. Ortiz, H. Schutz and E. Sheehan. 1998. Dietary fat practices: Age, gender and nutrition knowledge. *Topics in Clinical Nutrition* 13(3):53-60.
- Bock, M.A., M. Read, C. Bruhn, G. Auld, K. Gabel, G. Lauritzen, Y. Lee, J. McNulty, D. Medeiros and R. Newman. March 1998. Gender and ethnic differences in factors that influence food intake. *J. of Consumer Studies and Home Economics* 22(1):25-37.
- Nitzke, S., G. Auld, J. McNulty, M. Bock, C. Bruhn et al. June 1999. Stages of change for reducing fat and increasing fiber among dietitians and adults with a diet-related chronic disease. *J. of the American Dietetic Association* 99(6):728-731.
- Auld, G.W., C.M. Bruhn, et al. Jan. 2000. Reported adoption of dietary fat and fiber recommendations among consumers. *J. of the American Dietetic Association* 100(1):52-58.

- Bruhn, C.M. 2002. Consumer issues in quality and safety. p.31-37. IN: Kader, Adel A. (ed.), Postharvest Technology of Horticultural Crops, Publication 3311, University of California Division of Agriculture and Natural Resources Press.
- Bruhn, C.M., J.C. Bruhn, A. Cotter, C. Garrett, M. Klenk, C. Powell, G. Stanford, Y. Steinbring and E. West. July 2002. Consumer attitudes toward use of probiotic cultures. *J. of Food Science* 67(5):1969-1972.
- Read, M.H., R. Novotny, G. Auld, M.A. Bock, C.M. Bruhn, D. Gustafson, K. Gabel, B. Holmes, S. Misner, L. Peck, S. Pelican and D. Pond-Smith. Sept. 2002. Age differences in milk consumption as a snack and by eating occasion. *Topics Clinical Nutrition* 17(4):55-62.
- Auld, G., C.J. Boushey, M.A. Bock, C.M. Bruhn, K. Gabel, D. Gustafson, B. Holmes, S. Misner, R. Novotny, L. Peck, S. Pelican, D. Pond-Smith and M. Read. Oct. 2002. Perspectives on intake of calcium-rich foods among Asian, Hispanic, and white preadolescent and adolescent females. *J. of Nutrition Education Behavior* 34(5):242-251.
- Novotny, R., C. Boushey, M.A. Bock, L. Peck, G. Auld, C.M. Bruhn, D. Gustafson, K. Gabel, J.K. Jensen, S. Misner and M. Read. Feb. 2003. Calcium intake of Asian, Hispanic and white youth. *J. of the American College of Nutrition* 22(1):64-70.
- Jenson, J.K., D. Gustafson, C. Boushey, G. Auld, M.A. Bock, C.M. Bruhn, K. Gabel, S. Misner, R. Novotny, L. Peck and M. Read. May 2004. Development of a food frequency questionnaire to estimate calcium intake of Asian, Hispanic and white youth. *J. of the American Dietetic Association* 104(5):762-769.
- Rickman, Joy, D. Barrett, C. Bruhn. 2007. Nutritional comparison of fresh, frozen, and canned fruits and vegetables. Part I. Vitamins C and B and phenolic compounds. *J. of the Science of Food and Agriculture*. 87: 930-944.
- Rickman, Joy, D. Barrett, C. Bruhn. 2007. Nutritional comparison of fresh, frozen, and canned fruits and vegetables. Part II. Vitamin A and carotenoids, vitamin E, minerals, and fiber. *J. of the Science of Food and Agriculture*. 87: 1185-1196.
- Auld, GW, A. Diker, A. Bock, CJ Boushey, CM Bruhn, M Cluskey, M Edlefsen DL Goldberg, SL Miser, BH Olson, M Reicks, C Wang, S Zaghoul. 2007. Development of a decision tree to determine appropriateness of NVivo® in analyzing qualitative data sets. *J. of Nutrition Education and Behavior* 39(1): 37-47.
- Wright, C.A., C.M. Bruhn, H.Heymann, C.W. Bamforth. 2008. Beer and wine consumers' perceptions of the nutritional value of alcoholic and nonalcoholic beverages. *J. Food Science* 73(1): H8-H11.
- Wright, C.A., C.M. Bruhn, H. Heymann, C.W. Bamforth. 2008. Beer consumer's perceptions of the health aspects of alcoholic beverages. *J. Food Science* 73(1): H12-H17.
- M. Cluskey, G.W. Auld, M.A. Bock, C.J. Boushey, C.M. Bruhn, M. Edlefsen, D.L. Goldberg, S.L. Misner, B.H. Olson, M. Reicks, C. Wang, S. Zaghoul. 2008. At home and away-from-home eating patterns influencing preadolescents' intake of calcium rich foods as perceived by Asian, Hispanic, and non-Hispanic parents. *J. of Nutrition Education and Behavior* 40: 72-79.
- Cluskey, M., G. Auld, M. Edlefsen, S. Zaghoul, M.A. Bock, C.J. Boushey, C. Bruhn, D. Goldberg, S. Misner, B. Olson, M. Reicks, C. Wang. 2008. Calcium knowledge, concern, and expectations for intake among parents of Asian, Hispanic, and non-Hispanic white early adolescents. *The Forum for Family and Consumer Issues* 13(3).
<http://ncsu.edu/ffci/publications/2008/v13-n3-2008-winter/index-v13-n3-winter-2008.php>
- Edlefsen, M. M. Reicks, D.L. Goldberg, G.W. Auld, A. Bock, C.J. Boushey, C.M. Bruhn, M. Cluskey, S.L. Misner, B.H. Olson, C. Wang, S. Zaghoul. 2008. Strategies of Asian, Hispanic, and non-Hispanic White parents to influence young adolescents' intake of calcium-rich foods, 2004 and 2005. *Preventing Chronic Disease* 5(4).
http://www.cdc.gov/pcd/issues/2008/oct/07_0174.htm.
- Bruhn, C.M. 2009. Understanding 'Green' consumers. *Food Technology* 63(7): 28-35.

- Blackburn, M.L., Bruhn, C.M, and Barrett, G.J. 2009 Food safety and nutrition education needs of individuals who serve food to elders at risk. *J. of the National Extension Association of Family and Consumer Sciences*. 4:50-54.
- Schaefer, Sara, Salazar, Melissa, Bruhn, Christine, Saviano, Dennis, Boushey, Carol, & Van Loan, Marta. (2009). Influence of Race, Acculturation, and Socioeconomic Status on Tendency Toward Overweight in Asian-American and Mexican-American Early Adolescent Females. *J. of Immigrant and Minority Health*, 11(3), 188-197. doi: 10.1007/s10903-008-9150-6
- Reicks, M., Ballejos, M.E., Goodell, S., Gunter, C., Richards, R., Wong, S.S., Auld, G., Boushey, C.J., Bruhn, C., Cluskey, M., Misner, S., Olson, B., and Zaghoul, S. 2011. Individual and family correlates of calcium-rich food intake among parents of early adolescent children. *J. of American Dietetic Association*. 111: 376-384.
- Davidov-Pardo, G., Moreno, M. Arozarena, I, Marin-Arroyo, M.R., Bleibaum, R.N., and Bruhn, C.M. 2012. Sensory and consumer perception of the addition of grape seed extracts in cookies. *J. Food Science* 77(12):S430-S438.
- Marla Reicks; Dennis Degeneffe; Koel Ghosh; Christine Bruhn; L Suzanne Goodell; Carolyn Gunther; Garry Auld; Miriam Ballejos; Carol Boushey; Mary Cluskey; et al.;2012.Parent calcium-rich-food practices/perceptions are associated with calcium intake among parents and their early adolescent children; *Public Health Nutrition*. 15(2):331-340.
- Richards, R, M. Reicks, S. Wong, C. Gunther, M. Cluskey, M. Ballejos, C. Bruhn, P Johnston, S. Misner, C. Watters. 2014. Perceptions of how parents of early adolescents will personally benefit from calcium-rich food and beverage parenting practices. *J. Nutrition Education and Behavior*. Available <http://www.sciencedirect.com/science/article/pii/S1499404614005533>
- Mary Cluskey, Siew Sun Wong, Rickelle Richards, Miriam Ballejos, Marla Reicks, Garry Auld, Carol Boushey, Christine Bruhn, Scotty Misner, Beth Olson, Sahar Zaghoul. 2015. Dietary sources of calcium among parents and their early adolescent children in the United States by parent race/ethnicity and place of birth. *J Immigrant and Minority Health*. Available at <http://link.springer.com/article/10.1007%2Fs10903-014-0026-7>.
- Gunther, Carolyn W.; Rose, Angela M.; Bruhn, Christine; Cluskey, Mary; Reicks, Marla; Richards, Rickelle; Sun Wong, Siew; Boushey, Carol J. Misner, Scottie; Olson, Beth. 2015. Parents' Calcium Knowledge Is Associated with Parental Practices to Promote Calcium Intake Among Parents of Early Adolescent Children. *J. of Extension*. Available at <<http://www.joe.org/joe/2015august/a5.php>>
- Vyduna, C. Boushey, C. Bruhn, M. Reicks, Marla; G. Auld, M. Cluskey, M. Edlefsen, B. Olson, S. Zaghoul. 2015. Field testing a questionnaire assessing parental psychosocial factors related to consumption of calcium-rich foods by Hispanic, Asian and non-Hispanic white young adolescent children. *Ecology of Food and Nutrition*. 55(1):1-15.
- Jinan Banna; Jessica O'Driscoll; Carol Boushey; Gary Auld; Beth Olson; Mary Cluskey; Miriam Edlefsen Ballejos; Christine Bruhn; Scottie Misner; Marla Reicks; Siew Sun Wong; Sahar Zaghoul, 2018 Parent and household influences on calcium intake among early adolescents. *BMC Public Health*. 18:1390.