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Professional Profile

Dr. Petersen is internationally recognized for her expertise in exposure/risk assessment methodology, functional food safety and efficacy evaluations, nutrient intakes, fatty acid metabolism, food additives, food consumption profile modeling, and applications of Monte Carlo techniques to risk assessments for chemicals including contaminants, pesticides, and nutrients. Dr. Petersen is also a specialist in addressing regulatory issues involving exposure and risk assessments including FDA, EPA, EFSA, and other International and California issues. She has provided specialized expertise in developing compliance procedures for foods derived from modern biotechnology (GMOs), heavy metals in toys, dishes, contaminants in food and other consumer products (dioxins, fumonosins, heavy metals, etc.). Dr. Petersen has pioneered the technical methods for incorporating information about dietary practices, actual agricultural practices, and commercial food processing technologies into regulatory science issues. Dr. Petersen has successfully applied these approaches to develop software that maximizes the utility of data and provides realistic risk assessments that allow the user to understand the sources of potential exposure. Applications include FQPA compliance, regulatory strategies for existing products, intake calculations to support new pesticides, GRAS self-affirmations and preparation of food additive petitions, nutrition labeling justifications, new food product designs and marketing strategies, and product stewardship program designs. She led the scientific team that identified and resolved the issues raised by the split registration of Starlink ™ corn. This project required the design, conduct and interpretation of rigorous sampling and analysis programs, and the communication of the results of that testing to US, Japanese and other regulatory authorities from 2002 to 2010. She prepared risk assessments, and detailed estimates of the extent of comingling of the Starlink corn with non GMO corn. The results were presented to the EPA, the EPA Science Advisory Panel, and the FDA. Reports were prepared and submitted to regulatory authorities in the US and Japan and to many affected stakeholders. The work results in quantitative estimates of the presence of Starlink in the US corn supply as well as the decline in levels over time and the final resolution of the problem.

Dr. Petersen has directed the design and conduct of numerous statistically based market basket studies. These studies were designed for different purposes, including acute and chronic assessments for pesticides, contaminants and compliance assessments under Proposition 65, International Regulations and biotechnology food technology.

Dr. Petersen served on the EPA Science Advisory Board's Integrated Exposure Committee and as an Expert Advisor to WHO/FAO for several session of JECFA, the ad hoc Committee on Foods Derived from Modern Biotechnology (beginning in 2000), and the FAO/WHO CODEX Working Group on Allergenicity of the Ad Hoc Task Force on Foods Derived from Biotechnology (Vancouver, Canada, Sept. 2001 FAO/WHO CODEX and for numerous consultations on risk assessment.

Dr. Petersen chaired the WHO working group on methods for estimating intakes of food additives, nutrients, new biochemical traits associated with foods derived from modern biotechnology (GMOs), and

contaminants in foods. Also she served as Principal Investigator for the National Cancer Institute's International FOODBASE project, a major effort to collect and computerize descriptive and summary information on food consumption surveys conducted in more than 40 countries. Dr. Petersen has provided statistical support to FDA's Center for Food Safety and Nutrition, including developing criteria for evaluating nutrition databases, and specifically for the International Interface Standard for food databases and to EPA's Office of Research and Development. Dr. Petersen expanded Novigen's (now Exponent) expertise in aggregate/integrated exposure assessment to refine the treatment of residential exposure information and in developing new methods to conduct food safety risk assessments for microbiological contaminants. She has been a faculty member in risk assessment training programs for government scientists in the European Union, Thailand, the U.S., and China.

Academic Credentials & Professional Honors

Ph.D., Biochemistry , George Washington University, 1976

M.P.H., Nutrition, University of California, Los Angeles (UCLA), 1972

B.S., Nutrition, New Mexico State University, 1970

Recipient of the Institute of Food Technologists 2010 Bernard L. Oser Food ingredients Safety Award

Professional Affiliations

Councilor, International Society for Exposure Assessment, 1995-1997

GAO Expert Panel member for the evaluation of the National Surveys of Food Consumption, 1993-1994

1997 Eastern Food Science Conference Planning Committee

Institute of Food Technologists, Elected IFT Fellow, 2004, Chair the Toxicology and Safety Assessment Division, 2012 and Bernard L. Oser Ingredient Safety Award 2010 which "honors an IFT member for his or her contribution to the scientific knowledge of food ingredient safety or leadership in establishing principles for food ingredient safety evaluation or regulation. Bernard Oser award, 2010"

International Society of Exposure Analysis

Society of Risk Analysis

Program Co-Chair, Exposure Specialty Committee, Society for Risk Analysis, Exposure Section, 1991 and 1992

Chair, Toxicology and Safety Evaluation Section, Institute of Food Technologists, 2008 and 1997; chair Food Laws and Regulations Division, 2003-2005, and CODEX Committee, 1999-2006, Chair, Special Task Force, Biotechnology and representative to CODEX General Principles, 2005-2008

Invited participant, EPA National Human Exposure Assessment Survey Workshop

Invited participant, European Food Safety Authority workshop on dioxins in foodstuffs, 2004

Invited participant in the Joint FAO/WHO Expert Consultation on Food Consumption Methodologies and risk assessments: 1997, 1998, 2001, 2002

Member, Food Safety Expert Panel, California Water Boards, Food Safety Project On the Reuse of Oil Field Produced Water for Irrigation of Food Crops In Central Kern County, California, 1996-2021.

Fellowships

NIH Post-Doctoral Fellow, NIAAA, Biochemistry Laboratory. 1978-1980. Specialization: genetics of alcoholism, basic enzymology.

Post-Doctoral Fellow, Georgetown University, Department of Biochemistry. 1976-1978. Specialization: mechanisms of action of insulin and glucagon hormone receptors, particularly in patients with cancer and other disorders affecting taste.

Publications

Barraj, L, Murphy, M, Tran, N and Petersen, B. Chemistry, Manufacturing and Exposure Assessments to Support Generally Recognized As Safe (GRAS) Determinations. Regul. Toxicol. Pharmacol. 2016 Aug:79 Suppl 2:S99-S104. Epub 2016 Jul 5.

Remington BC, Taylora SL, Marx DB, Petersen BJ, Baumerta JL. Soy in wheat — Contamination levels and food allergy risk assessment. Food and Chemical Toxicology. Available on line 9/13/2013.

Petersen B. Overview of Dietary Exposure (Chapter 4) and Automated Dietary Exposure Calculations (Chapter 45). In: Total Diet Studies. Moy G, Verge P (ed), Springer Publishers, New York, 2012, in press.

Lefevre M, Mensink RP, Kris-Etherton PM, Petersen B, Smith K, Flickinger BD. Predicted changes in fatty acid intakes, plasma lipids, and cardiovascular disease risk following replacement of trans fatty acid-containing soybean oil with application-appropriate alternatives. Lipids 2012 Oct; 47(10):951-962. Epub 2012 Aug 18.

WHO Food Additive Series: 64. Safety evaluation of certain food additives and contaminants. Prepared by the 73rd meeting of the Joint Food and Agriculture Organization/World Health Organization (FAO/WHO) Expert Committee on Food Additives (JECFA). Food Consumption and Dietary Exposure Estimates, Chapter 7, pp. 448-464, 2011. (Lead author, Chapter 7, contributor to other chapters on dietary exposure and food consumption).

WHO Technical Report Series 960. Evaluation of Certain Food Additives and Contaminants. Prepared by the 73rd meeting of the Joint Food and Agriculture Organization/World Health Organization (FAO/WHO) Expert Committee on Food Additives (JECFA), 2011.

DiRenzio MA, Lemke SL, Petersen BJ, Smith KM. Effect of substitution of high stearic low linoleic acid soybean oil for hydrogenated soybean oil on fatty acid intake. Lipids 2008; 43:451-456.

Petersen, BJ. Exposure intake assessments for protein in food safety of proteins in agricultural biotechnology. Food Science and Technology, CRC Press, Vol. 172, 2007.

Petersen BJ, Stephen R, Barraj L, Johnston J. Using two-day food consumption survey data for longitudinal dietary exposure analysis. In: Assessing Exposures and Reducing Risks to People from the Use of Pesticides. Krieger RI, Ragsdale N, and Seiber JN (eds), American Chemical Society, Washington, DC, 2007.

MacAulay J, Petersen BJ, Shank F (eds). IFT Expert Report. Functional Foods. Opportunities and Challenges. IFT, 2006.

DiRienzo MA, Astwood JD, Petersen BJ, Smith KM. Effect of substitution of low linolenic acid soybean oil for hydrogenated soybean oil on fatty acid intak. Paper No. L9868, Lipids 41: 149-157, February 2006.

Tran N, Petersen BJ. Exposure to Acrylamide: Placing exposure in context. In: Chemistry and Safety of

Acrylamid in Food. Friedman and Mottram (eds), Springer Science, Inc. 2005.

Butchko HH, Petersen BJ. Functional foods: Regulatory aspects. In: The Encyclopedia of Human Nutrition. Caballero et al. (eds), Elsevier, Oxford 2005.

Petersen BJ. Working group for intake assessment for chemicals in food joint FAO/WHO project to update principles and methods for the risk assessment of chemicals in food. Participant as a WHO Temporary Adviser, Loews Annapolis Hotel, Annapolis, MD, May 2-6, 2005.

Petersen BJ, Adams J. FAO/WHO Seminar on Acrylamide in food: Current state of affairs; exchange of views — Update on ongoing research — Identification of gaps. JIFSAN international workshop, research priority needs. Mbayuwayu Conference Room, International Congress Centre Arusha, March 16, 2005.

Petersen, BJ. Pesticides in foods: Ensuring a safe food supply and promoting new pesticides within the context of international trade and new regulations. Presented at the 229th ACS National Meeting. San Diego, CA, March 14, 2005.

Dybing E, Farmer PB, Andersen M, Fennell TR, Lalljie SPD, Müller DJG, Olin S, Petersen BJ, Schlatter J, Scholz G, Scimeca JA, Slimani N, Törnqvist M, Tuijtelaars S, Verger P. Human exposure and internal dose assessments of Acrylamide in food. Food and Chemical Toxicology; 43(3):365-410, 2005.

Petersen B. Faculty member/lecturer. SOT Special Course on Protein Safety of foods derived through modern biotechnology, March 2005.

Petersen B, Taylor S, NIST. 2 week course for the Chinese government on protein safety of foods derived from biotechnology including exposure assessments taught at various locales. 2004. (The team consisted of Steve Taylor, University of Nebraska FARP, representatives of the US National Institute of Standards and Technology, and Barbara Petersen).

Petersen BJ, Butchko HH. The obesity epidemic: Stakeholder initiatives and cooperation. Nutrition Today November/December 2004; 39(6):234-244.

Appel KE, Hanberg A, Jensen AM, Keenan R, Nicolopoulou-Stamati P, Nouwen J, Petersen BJ, Rose M, Rottler H, Tohyama C, Tritscher A, Van Leeuwen R, Verstraete F, Walker N. Dioxins: Methodologies and principles for setting tolerable intake levels for dioxins, furans and dioxin-like PCBs. EFSA Scientific Colloquium Summary Report, Brussels, Belgium, June 28-29, 2004.

Petersen BJ. Issues related to exposure estimation for heat-formed compounds in foods. 2004 ILSI Annual Meeting, p. 86, January 21, 2004.

Petersen BJ (Contributor). Pesticide residues in food and drinking water: Human exposure and risks. D. Hamilton and S. Crossley (eds), 2004.

Barraj LM, Petersen BJ. Food consumption data in microbiological risk assessment. J Food Prot 2004; 67:1972-1976.

Petersen BJ, Butchko HH. The obesity epidemic: Issues and potential product liability. Georgia Defense Lawyer, pp. 20-21, Fall 2004.

Hamilton D, Ambrus A, Dieterle R, Felsot A, Harris C, Petersen P, Racke K, Wong S, Gonzalez R, Tanaka K, Earl M, Roberts G, Bhula R. Pesticide residues in food: Acute dietary exposure. Pest Management Science 2003; 59.

Petersen BJ. Methodological aspects related to aggregate and cumulative exposures to contaminants with common mechanisms of toxicity. Toxicol Lett 2003; 4/11:140-141:427-435.

Petersen BJ. Excherichia coli O157:H7 in ground beef: Review of a draft risk assessment. Committee on the Review of the USDA E. coli O157:H7, Farm-to-Table Process Risk Assessment. The National Academies Press; 172 pages, 6 x 9, 2002.

Petersen B. Estimating dietary exposure: Methods, algorithms, and general considerations. In: Human and Ecological Risk Assessment: Theory and Practice. Paustenbach DJ (ed), New York: John Wiley and Sons, 2002; 895-912 pp.

Petersen BJ, Youngren SH, Walls CL. Modeling dietary exposure with special sections on modeling aggregate and cumulative exposure. Handbook of Pesticide Toxicology. 2nd Edition. San Francisco, CA. Academic Press 2001.

Julien EA, Barraj LM, Petersen BJ, Tomerlin JR. Considerations when choosing a threshold of regulation for acute dietary exposure to pesticides. J Food and Drug Law 2001; 56(2).

Petersen BJ. Probabilistic modeling: Theory and practice. Food Addit Contam 2000; 17(7):591-599.

Petersen BJ. Methods for estimating dietary exposure and quantifying variability. International Standards for Food Safety. Handbook of Pesticide Toxicology. Gaithersburg, MD, Aspen Publishers, Inc. 2000.

Petersen BJ. Regulation of food additives, contaminants and pesticides in the United States. International Standards for Food Safety. Handbook of Pesticide Toxicology. Gaithersburg, MD, Aspen Publishers, Inc. 2000.

Petersen BJ. Pesticide residues in food: Problems and data needs. Regulatory Toxicology and Pharmacology 1999; 31:297-299.

Petersen BJ. Food safety: Fast forward or sound science? The Indianapolis Star, Indiana, Indianapolis, Sunday, April 19, 1998.

Barraj LM, Petersen BJ, Tomerlin JR. Report on cumulative dietary risk assessment of organophosphorus insecticides is flawed. Regulatory Toxicology and Pharmacology 1998; 28:67-68.

Tomerlin JR, Berry MR Jr., Tran NL, Chew SB, Petersen BJ, Tucker KD, Fleming KH. Development of an exposure potential model for evaluating dietary exposure to chemical residues in food. Journal of Exposure Analysis and Environmental Epidemiology 1997; 7(1).

Petersen BJ, Barraj L. Assessing the Intake of contaminants and nutrients: A review of methods. Journal of Food Composition and Analysis 1996; 9:243-254.

Petersen B, Tomerlin JR, Barraj L. Pesticide degradation: Exceptions to the rule. Food Technology 1996; 50(5):221-223.

Pennington JAT, Hendricks TC, Douglass JS, Petersen B, Kidwell J. International interface standard for food databases. Food Additives and Contaminants 1995; 12(6):809-820.

Petersen BJ, Chaisson CF. Simulation studies in dietary exposure assessment. TNO Topics in Nutrition and Food Research 2. Proceedings of the TNO/WHO conference on Dietary Exposure to Contaminants and Additives: Risk Assessment in Europe, The Netherlands, June 1995.

Petersen BJ, Barraj LM, Muenz LR, Harrison SL. An alternative approach to dietary exposure assessment. Risk Analysis 1994; 14(6):913-916.

Petersen BJ, Chaisson CF, Douglass JS. Use of food-intake surveys to estimate exposures to

nonnutrients. Am J Clin Nutr 1994; 59(suppl):240S-243S.

Petersen BJ (Co-Author). Scientists' review of pesticides in the diets of infants and children. Special publication/Council for Agricultural Science and Technology 1993; 17.

Petersen BJ, Tomerlin JR. Assessing product vulnerability due to pesticide issues. Food Technology 1992; 109-115.

Egan SK, Douglass JS, Chew SB, Szurley JE, Fleming KH, Petersen BJ. FOODBASE Retrieval System User Manual. Prepared for the U.S. National Cancer Institute, submitted January 6, 1992.

Leparulo-Loftus M, Petersen BJ, Chaisson CF, Tomerlin JR. Dietary exposure assessment in the analysis of risk from pesticides in foods. ACS Symposium Series 484, Food Safety Assessment 1992; 21:214-229.

Douglass JS, Chaisson CF, Petersen BJ. Pesticides in food: A guide for professionals. The American Dietetic Association, 1991.

Chaisson CF, BJ Petersen, Douglass JS. Understanding pesticides in foods. Washington, DC, The American Dietetic Association, 1991.

Tomerlin JR, Petersen BJ. Pesticide residues in food: A risk to health...or not? Proceedings of the 84th Annual Meeting of the Air and Waste Management Association, 1991; 91-150.6:2-15.

Tomerlin JR, Petersen BJ. Evaluating human health risks with food consumption data. Food technology in Malaysia, Malaysian Institute of Food Technology 1991; 12.

Petersen BJ, Chaisson CF. Approach for addressing issues mushroom industry: Vulnerability assessment and advisory of available options. Paper submitted March 7, 1990.

Chaisson CF, Petersen BJ, Eickhoff JC, Slesinski RS. Pesticides in our food: Facts, issues, debates and perceptions. Technical Assessment Systems, Inc., 1989.

Chaisson CF, Petersen B, Eickhoff JC. Practical uses of the 1987 California processing tomato pesticide use survey. California Tomato Grower, February 1989.

Petersen B, Chaisson CF. Pesticides and residues in food. Food Technology 1988; 42(7):59-64.

Eickhoff JE, Petersen B. Practical uses of the California citrus pesticide use survey. Prepared by Technical Assessment Systems, Inc., for California Citrus Mutual, 1988.

Petersen B, Chaisson CF. Estimation of exposure to toxic chemicals via the diet. Technical Assessment Systems, Inc., March 1987.

Saunders S, Petersen B. Introduction to the tolerance assessment system. Environmental Protection Agency, May 1986.

Petersen B, Chaisson CF. Chronic and daily exposure to chemicals in the food supply. Technical Assessment Systems, Inc, 1985.

Chaisson CF, Petersen B, White SB, Clayton A, Brassard D, Johnson P. The tolerance assessment system. Environmental Protection Agency, 1984.

Chaisson CF, Petersen B, Brassard D, Johnson P, Evans J. TAS Index to foods, codes and crop groups. Environmental Protection Agency, August 1984.

Petersen B. Setting limits on pesticide residues. EPA Journal 1984; 10(5):27.

Petersen B, Chaisson CF, White SB, Clayton CA. Relationship between food consumption and body weight in the U.S. population: Impact on risk assessment. Environmental Protection Agency, May 1984.

Chaisson CF, Petersen B, White SB, Clayton CA, Johnson EL. Tolerance assessment: I. A new approach to estimating public risk due to pesticide residues in food. Environmental Protection Agency, 1984.

Kisner D, Haller D, Blecher M, Hamosh M, Petersen B, Schein P. Insulin resistance in malignant cachexia. Georgetown University School of Medicine, Washington, DC, 1980.

Petersen B, Cornell N, Veech RL. Alcohol dehydrogenase in human fibroblasts. National Institute on Alcoholism and Alcohol Abuse, Laboratory of Metabolism, Rockville, MD, 1980.

Petersen B, Blecher M. Insulin receptors and functions in normal and spontaneously transformed cloned rat hepatocytes. Experimental Cell Research 1979; 120:119-125.

Petersen B, Vahouny GV. Cardiac structure and function in vitamin B-12-deprived rats. J. Nutrition 1975; 105(12):1567-1577.

Petersen B. Guidelines for nutritional training, studies, and developmental projects. United States Department of Agriculture, 1971.

Presentations

Petersen B, Barraj L, Tran N. Chemistry, manufacturing and exposure assessments to support generally recognized as safe (GRAS) Determinations. ISRTP Symposium, October, 13, 2014.

Petersen B. National Academy of Sciences Institute of Medicine Organizing Committee for Workshop Identifying Potential Health Hazards Associated with Consumption of Caffeine in Food and Dietary Supplements. Chair, Exposure Assessment Session, August 5-6, 2013.

Petersen BJ. Pesticides in foods: Ensuring a safe food supply and promoting new pesticides within the context of international trade and new regulations. Accepted for presentation at the 229th ACS National Meeting, San Diego, CA; March 13-17, 2005.

Walls CL, Petersen BJ, Scrafford C, Barraj LM. Calendar model methodologies for assessing drinking water exposure. Presentation at the International Society of Exposure Analysis, Charleston, SC, November 2001.

Johnston JE, Walls CL, Petersen BJ. CalendexTM a calendar-based model to assess aggregate exposure. Presentation at the International Society of Exposure Analysis, Charleston, SC, November 2001.

Rachman NJ, Watters JL, Petersen BJ. Issues and opportunities in the US market: Creative use of intake assessment for nutraceuticals. SMI Nutraceuticals Conference, London England, January 2001.

Watters JL, Petersen BJ, Rachman NJ. The value of intake assessments for nutraceuticals. International Conference on Nutraceuticals. Houston TX, September 2000. (Presented by JL Watters).

Anderson SA, Barraj LM, Yeaton-Woo RM, Petersen BJ, Crawford LM. Quantitative risk assessment for veterinary fluoroquinolones on campylobacter in beef. Society for Risk Analysis Annual Meeting, 1999.

Barraj LM, Petersen BJ. A method for revising and redefining regional diets for use in estimating the intake of pesticides. Presented at the 31st Codex Committee on Pesticide Residues, The Hague, The

Netherlands, April 1999.

Petersen BJ. Update on EPA's implementation of FQPA. Presented to the Technical Committee on Food Toxicology and Safety Assessment ILSI, Washington, DC, January 1999.

Petersen BJ, Barraj LM. Exposure assessment for lead. Presented at the Joint FAO/WHO Expert Committee on Food Additives (JECFA), Rome, June 1999.

Petersen BJ. First lesson on probabilistic and non-probabilistic models. Presented at the International Symposium on Acute Dietary Intake of Pesticide Residues, The Hague, The Netherlands, April 1999.

Petersen BJ, Tomerlin JR, Barraj LM, Julien B. Aggregate exposure risk assessments and the upcoming challenge of cumulative exposure. Presented at the 1998 SOT Annual Meeting, Seattle, Washington, March 1998.

Petersen BJ. Use of the CSFII for risk assessment under FQPA. Presented to USDA, Washington, DC, July 1998.

Driver J, Petersen BJ, Barraj LM, Wilkinson C. Estimation of dietary exposures to isoflavones in soyaben-base products. Presented at the 1997 ISRTP Annual Meeting in Raleigh-Durham, NC, 1998.

Kidwell JL, Petersen BJ, R Dybas, Grosso L, Barraj L. Comparison of methodologies for estimating dietary exposure to abamectin residues in foods. Presented at the 1996 SOT Annual Meeting, Anaheim, CA, March 1996.

Petersen BJ. The importance of valid and comparable food consumption data. Speech presented at the 16th Annual Meeting of the American College of Toxicology, November 12-15, 1995.

Petersen BJ. Incorporating risk assessment into HACCP/total quality systems: Limitations, benefits and critical components. Presented at the 1995 IFT Annual Meeting, Anaheim, CA, June 1995.

Petersen BJ. Introduction to food safety evaluations: Data requirements, methodologies and public data sources. Speech presented at the 9th Biennial Easter Food Science Conference, Princeton, NJ, October 22-25, 1995.

Petersen BJ. Improving our confidence in intake assessments: Methodologies for maximizing the use of existing data. Presented at the Second International Food Database Conference, Food Composition Research: The Broader Context, Lahti, Finland, August 1995.

Petersen BJ. Food consumption data in predicting dietary exposure to pesticides. Presented at the FAO/WHO Joint Consultation on Guidelines for Predicting Dietary Intake of Pesticide Residues Conference, York, UK, May 1995.

Douglass JS, Chew S, Lee K, Kidwell JL, Petersen BJ, Pennington JAT, Hendricks T, Bohannon B. The international interface standard for food databases. Paper presented at the 20th National Nutrient Databank Conference, Buffalo, NY, June 1995.

Slesinski RS, Barraj L, Petersen BJ. Evaluating potential risk from exposure to multiple pesticide residues in food: Possible approaches for estimating total dietary risk. Poster presented at the Society of Toxicology Annual Meeting, Baltimore, MD, March 1995.

Douglass JS, Chew SB, Lee KH, Petersen BJ, Hendricks TC, Pennington JAT. Use of an international interface standard for food databases in comparing food-related datasets. Paper presented at the 2nd International Conference on Dietary Assessment Methods, Boston, MA, January 1995.

Barraj LM, Petersen BJ, Francis M. Composite sampling versus sampling individual units: Impact on estimates of the residue distribution and associated potential exposure. Paper presented at the Conference on Environ-metrics, 5th International Conference on Statistical Methods for the Environmental Sciences and Fourth General Meeting of the International Environmetrics Society, Burlington, Canada, August 1994.

Douglass JS, Heimbach JT, Waylett DK, Sever BE, Petersen BJ. Dietary impact of 'fat-free' food products. Paper presented at the Annual Meeting of the American Chemical Society, Washington, DC, August 1994.

Petersen BJ. Incorporating risk assessment into HAACP systems: Limitations, benefits and critical components. Paper presented at the American Oat Association 1994 Annual Meeting, Minneapolis, MN, December 1994.

Petersen BJ. Influence of processing on residues in food. Paper presented at the IFT Annual Meeting, Atlanta, GA, June 1994.

Petersen BJ. State of the industry: Regulatory perspective. Paper presented at the META Wonewok Conference, St. Paul, MN, June 1994.

Petersen BJ. Overview of agriculture and food industry concerns with EPA's draft reassessment of dioxin risks to human health. Paper presented for the Institute for Food Technologists-D.C. Section, October 1994.

Petersen BJ, Tomerlin JR, Barraj LM, Wehr HM. The Impact of the recommendations of the National Academy of Sciences on analytical methods and the exposure and risk assessments. Paper presented at the AOAC International Meeting, Portland, OR, September 1994.

Petersen BJ. Modeling dietary exposure for risk assessment. Paper presented at the Environmental and Occupational Health Sciences Institute (EOHSI), New Jersey, September 1994.

Tomerlin JR, Tran NL, Petersen BJ. Development of a dietary exposure potential matrix. Paper presented at the ISEE/ISEA Joint Conference, Research Triangle Park, NC, September 1994.

Tomerlin JR, Barraj LM, Francis MA, Petersen BJ. A comparison of exposure calculation methodologies: Joint distribution analysis vs. Monte Carlo simulations. Poster presented at the ISEE/ISEA Joint Conference, Research Triangle Park, NC, September 1994.

Tran NL, Petersen BJ. Pesticide residues and dietary exposure assessment — A probabilistic approach. Paper presented at the Conference on Environmetrics, 5th International Conference on Statistical Methods for the Environ-mental Sciences and Fourth General Meeting of the International Environmetrics Society, Burlington, Canada, August 1994.

Heimbach JT, Egan SK, Petersen BJ. Nutrient databases for food labeling under NLEA: Meeting FDA's requirements. Paper presented at the Workshop of Nutrition Labeling, Eastern Food Science Conference VIII, Princeton, NJ, October 1993.

Petersen BJ. Methods for retrieving data. Paper presented at the 3rd Annual Flair Eurofoods-Enfant Project Meeting, Vilamoura, Portugal, November 10-12, 1993.

Petersen BJ. Dietary exposure analysis: Data, systems, and policies in the U.S. Paper presented at the 3rd Annual Flair Eurofoods-Enfant Project Meeting, Vilamoura, Portugal, November 10-12, 1993.

Petersen BJ. Pesticides in the diets of infants and children: Review of the NAS report. Presented at the National Agri-Marketing Association (NAMA) Meeting, September 16, 1993.

Chaisson CF, Petersen BJ. Use of food intake surveys to estimate exposure to non-nutrients. Paper presented at the 1st International Conference on Dietary Assessment Methods: Assessing Intake of Specific Food Components, Minneapolis, MN, September 20-23, 1992.

Chaisson CF, Petersen BJ. California's Proposition 65. Paper presented at the International Life Sciences Institute: Risk Science Institute, Washington, D.C., July 28, 1992.

Egan SK, Heimbach JT, Petersen BJ, Douglass JS, Fleming KH, Chew SB. Intake of fatty acids: Contribution of specific foods. Paper presented at the International Food Technology Exposition and Conference, The Hague, Netherlands, November 1992.

Egan SK, Heimbach JT, Petersen BJ. Estimating the consumption of ingredients and ingredient substitutions. Paper presented at the International Food Technology Exposition and Conference, The Hague, Netherlands, November 1992.

Fleming KH, Douglass JS, Barraj L, Egan SK, Petersen BJ. Disappearance data vs. survey data in epidemiologic analyses. Poster presented at the First International Conference on Dietary Assessment Methods: Assessing Intake of Specific Food Components, Minneapolis, MN, September 20-23, 1992.

Heimbach JT, Petersen BJ. Estimating intakes of non-nutrient food constituents: Multi-country intakes of pesticide residues. Paper presented at the International Food Technology Exposition and Conference, The Hague, Netherlands, November 1992.

Petersen BJ. Utility and limitations of the Dietary Residue Evaluation System (DRES). Paper presented at the 1992 American Phytopathological Society/Mycological Society of America Joint Meeting, Portland, Oregon, August 8-12, 1992.

Petersen BJ. Product specific dietary exposure assessments. Presented at the Society for Risk Analysis Workshop, California's Proposition 65: Risk Assessment and Dietary Exposure Assessment Methodologies, San Diego, California, December 6, 1992.

Petersen BJ. Practical applications and case studies for assessing risks for populations. Paper presented at the Annual Meeting of the American College of Toxicology, San Francisco, California, October 23, 1992.

Petersen BJ. Labelling: The analytical dilemma. Paper presented at The Toxicology Forum, Aspen, Colorado, July 13, 1992.

Petersen BJ. Comparison of food survey intake data to the FAO food balance sheets. Paper presented at the 2nd Annual Flair Eurofoods-Enfant Project Meeting, Killiney Bay, Ireland, June 10-12, 1992.

Tomerlin JR, Eickhoff JE, Petersen BJ. Pesticide use: Reality vs. perception. Presented at the American Chemical Society Annual Fall Meeting, August 25, 1992.

Tomerlin JR, Chaisson CF, Petersen BJ. Politics and food safety: Impact of exposure on assessment. Presented at the American Chemical Society Annual Fall Meeting, August 25, 1992.

Tomerlin JR, Petersen BJ. Dietary exposure: Recent advances in data and models. Paper presented at the American Chemical Society 1992 Spring Meeting, San Francisco, CA, April 7, 1992.

Barraj LM, Loftus ML, Petersen BJ. Selecting analytical methods for monitoring foods for toxicants. Presented at the Eastern Food Science Conference, The Integrated Food Technologist, Hunt Valley, MD, October 20-23, 1991.

Douglass JS, Barraj L, Egan SK, Petersen BJ. Disappearance data vs. survey data in epidemiologic analyses: Fat intake, energy intake, and percent energy intake as fat. Prepared for the U.S. National Cancer Institute, December 19, 1991.

Petersen BJ, and Chaisson CF. Determination of aggregate exposure: Utility and limitations of the Dietary Residue Evaluation System (DRES) and recent modifications. Presented at the Society for Risk Analysis, 1991 Annual Meeting, Baltimore, Maryland, December 8-11, 1991.

Petersen BJ, Tomerlin JR, Kidwell JL. Dietary exposure workshop. Presented at the Annual Meeting of the Society for Risk Analysis, Baltimore, MD, December 8, 1991.

Petersen BJ, Egan SK. FOODBASE: International food consumption database and retrieval system. Poster session presented at the Nutrition and Cancer Conference, Atlanta, Georgia, April 17-19, 1991.

Douglass JS, Fleming KH, Petersen BJ, Egan SK, Butrum RR. FOODBASE: International Food Consumption Database. Poster session presented at the Second International Conference on the Health Effects of Omega-3 Polyunsaturated Fatty Acids in Seafood, Washington, D.C., March 20-23, 1990.

Harrison SL, Petersen BJ. An approach to estimating market place residues in food: A case study. Paper presented at Special Conference IV: Food Safety and Pesticide Residues, Point Clear, Alabama, January 23, 1990.

Petersen BJ. Maximally exposed individual. Paper presented at the Society for Risk Analysis Conference, October 1990.

Petersen BJ. Monitoring for pesticide residues. Paper presented at the Institute of Food Technologists Symposium, June 1990.

Tomerlin JR, Petersen B. Using food consumption data to estimate human health risks. Poster session at the First Asian Food Safety Conference, Kuala Lumpur, Malaysia, September 1990.

Douglass JS, Fleming KH, Petersen BJ. International food consumption database. Poster session presented at the 72nd Annual Meeting of the American Dietetic Association, October 26, 1989.

Petersen B. Using monitoring data for exposure assessment. Paper presented to the Food and Drug Administration Center for Veterinary Medicine Advisory Committee, April 25, 1989.

Petersen BJ, Douglass JS, Fleming KH, Butrum RR. The International Food Consumption/Composition Database: Foodbase. Paper presented at the 3rd International Conference on Food Science and Technology Information, Budapest, Hungary, October 3-5, 1989.

Petersen B, Eickhoff J. Model for focusing monitoring to provide supplementary data for risk assessments. Paper presented at the 9th Annual Meeting of the Society for Environmental Toxicologists and Chemists, Arlington, VA, November 14, 1988.

Petersen B, Chaisson CF. New strategies for efficiently assessing vulnerability and/or compliance under state and federal environmental laws. Paper presented at the SRA Annual Meeting, Washington, DC, 1988.

Petersen B, Gregorio CA. The utility of a national food survey in assessing dietary risk and exposure. Paper presented at the Annual Meeting of the Society for Risk Analysis, Houston, 1987.

Petersen B, Eickhoff J. The use of a national food survey in assessing dietary health risks. Paper presented at the 8th Annual Meeting of the Society for Environmental Toxicologists and Chemists, Pensacola, FL, 1987.

Petersen B. Designing residue analysis studies and dietary risk assessment. Paper presented to Produce Marketers' Association, San Antonio, TX, October 1986.

Petersen B, Chaisson CF. The TAS approach to estimation of exposure to acutely toxic dietary contaminants. Paper presented at 46th Annual Meeting of the Institute of Food Technologists, Dallas, TX, June 1986.

Petersen B. Designing residue analysis studies and dietary risk assessment. Paper presented at the Pesticide Registration Workshop, Washington, DC, March 1986.

Chaisson CF, Petersen B. The Tolerance assessment system: A general overview of TAS. Environmental Protection Agency, July 1985.

Petersen B. Consumption databases and dietary modeling to estimate exposure. Paper presented at 151st Annual Meeting of the American Association for the Advancement of Science, Los Angeles, CA, May 1985.

Petersen B, Chaisson CF, White SB. Relationship between food consumption and body weight in the U.S. population: Impact on assessment of food safety. Poster Session presented at the 4th Annual Meeting of the American College of Toxicology, Washington, DC, November 30-December 2, 1983.

Project Experience

Chemical defense strategies for international (including issues regarding heavy metals in toys and other consumer products) and U.S. regulatory needs, Canadian defenses and California issues including proposition 65.

Food additive and ingredient petitions, GRAS Notifications, and product safety assessments.

Acrylamide, lead, and other proposition 65 risk assessments.

Market Basket Survey Protocol design strategies.

FOODBASE project design and direction - international dietary practices including information for more than 40 countries.

Principal investigator, FDA Statistical Methodology support contract, nationwide market basket studies, and risk-based assessments.

Expert Advisor to WHO/FAO for several sessions of JECFA and for numerous consultations on risk assessment including dioxins, acrylamide, methyl mercury, and lead.

Advisory Appointments

Advisor, WHO/FAO Joint Expert Committee on Food Additives and Contaminants (1997-20011) and to numerous consultations

Member, EPA Science Advisory Board, IHEC, 1995-2001