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BIO SKETCH

Mary Ellen Sanders is an internationally recognized consultant in the area of probiotic microbiology. She helps food and supplement companies develop new probiotic products and provides technical support for enhancing existing probiotic product lines. She works with non-profit organizations to develop strategies for research and market development for probiotic products. She has extensively reviewed the technical literature on probiotics, published on the science and marketing of probiotic bacteria, coordinated clinical studies to validate probiotic efficacy, updated the FDA on the topic of probiotics, served on GRAS determination panels, participated in a working group convened by the FAO/WHO to make recommendations to Codex for guidelines for use of probiotics and serves on the Product Quality Working Group of the NIH National Advisory Council for Complementary and Alternative Medicine. Dr. Sanders has volunteer appointments as a visiting Research Scientist at California Polytechnic State University, San Luis Obispo and as a Clinical Instructor in the Department of Family Medicine, University of Colorado at Denver.

Dr. Sanders received her B.S. in Food Science at University of California at Davis, and her M.S. and Ph.D. in Food Science with an emphasis in microbiology at North Carolina State University in Raleigh. From 2002-2006, Dr. Sanders served as the founding President of the International Scientific Association for Probiotics and Prebiotics (ISAPP) and is currently the organization's Executive Director. This international, non-profit association of academic and industrial scientists is dedicated to advancing the fundamental and applied science of probiotics and prebiotics (www.isapp.net). Dr. Sanders hosts a website along with the California Dairy Research Foundation which provides objective, evidence-based information on probiotics for consumers and professionals www.usprobiotics.org.

Dr. Sanders' does not currently operate a research laboratory. Her past research efforts have focused on strain development of lactic acid bacteria with a primary emphasis on genetic improvement of starter cultures as a scientist in the Biotechnology Group of Miles Laboratories and *in vitro* characterization and identification of probiotic lactobacilli and bifidobacteria for commercial applications, evaluation of the effect of probiotics on fecal microecology and tracking specific probiotics through the gastrointestinal tract at the Dairy Products Technology Center at California Polytechnic State University.

PRESENTATIONS

1. *Upcoming*: Sanders, M.E. 2008. Probiotics: part of a healthy diet. Nebraska Dietetics Association Annual Meeting, April 24, Omaha, NE.
2. *Upcoming*: Sanders, M.E. 2008. Establishing guidelines for defining probiotics and product quality standards. International Probiotics Association meeting, April 11-12, Beverly Hills.
3. *Upcoming*: Sanders, M.E. 2008. Probiotics: the health impact of active cultures, Family Medicine Grand Rounds, Department of Family Medicine, University of Colorado at Denver Health Sciences Center, March 5, Aurora, CO.
4. *Upcoming*: Sanders, M.E. 2007. Factors influencing gut microflora: Probiotics. NIH/NIDDK Conference on Gastrointestinal Microbiota and Advances in Prebiotic and Probiotic Research. December 11-12, Bethesda, MD.
5. *Upcoming*: Sanders, M.E. 2007. Use of probiotics and yogurts in maintenance of health. Advances in Clinical Use of Probiotics – 2007. November 16, Yale University, New Haven, CT.
6. Sanders, M.E. 2007. Gut flora and the impact of probiotics on intestinal health. American College of Gastroenterology annual conference. Satellite symposium. October 16, Philadelphia.
7. Sanders, M.E. 2007. Probiotics: The health impact of active cultures. Indiana Academy of Family Physicians 59th Annual Meeting, July 26, French Lick, IN.
8. Sanders, M. E. 2007. Health benefits of probiotics. ILSI China Workshop on Fermented Milk and Health, June 8, Beijing, China.
9. Sanders, M.E. 2007. Breaking the barriers - connecting with consumers and delivering the benefits of probiotic cultures. IDFA Cultured Products Symposium. May 23, Minneapolis, MN.
10. Sanders, M.E. 2007. Barriers to commercialization of probiotic products. ILSI North America meeting, January 24, Cancun, Mexico.
11. Sanders, M.E. 2006. Probiotics: Definition, Source, Selection and Uses. At “Developing Probiotics as Foods and Drugs – Scientific and Regulatory Challenges”. Conference sponsored by Natural Health Products Special Area Interest Community (NHP- SIAC) of the Drug Information Association. October 16-17, College Park MD.
12. Sanders, M.E. 2006. Probiotics: What, Why and When? Presented to the American Academy of Family Practitioners, Satellite Symposium, September 29, Washington DC. Webcast at: www.presentme.com/harvard/sept2006.asp#
13. Sanders, M.E. 2006. Probiotics: benefits and applications. American Dietetic Association Food & Nutrition Conference, September 19, Honolulu, HI.
14. Sanders, M.E. 2006. Probiotic cultures for cheese. 17th Biennial Cheese Industry Conference. August 9, Sun Valley, Idaho.
15. Sanders, M.E. 2006. Probiotics: considerations for human health. Council for Responsible Nutrition’s Day of Science, July 25, Washington DC.
16. Sanders, M.E. 2006. The contribution of microbes in fermented dairy products to health. IFT, June 24-28, Orlando FL.
17. Sanders, M.E. 2006. Health benefits of probiotics. Pennsylvania Dietetic Association Annual Meeting, April 28, King of Prussia, PA.
18. Sanders, M.E. 2006. Health benefits of probiotics in dairy foods. 8th Symposium on Advances in Dairy Products Technology, February 27-28, Shell Beach, CA.
19. Sanders, M.E. 2005. What is a probiotic and how do you choose it? European Conference on Probiotics and Their Applications, October 6 – 8, Krakow, Poland.
20. Sanders, M.E. 2005. Myths about probiotics. The Pennsylvania State University, Departmental Seminar, September 15, University Park, PA.

21. Sanders, M.E. 2005. The value of revising the standard of identity for yogurt: why bacteria are important. Presentation made to Congressional Staffers on behalf of the National Yogurt Association, May 17, Washington DC.
22. Korzenik, J., Kitts, C., Pittler, A., Engelbrekton, A., Sanders, M. and Klaenhammer, T. 2005. A randomized, double-blind, controlled trial of probiotics to minimize the disruption of gut flora as assessed by 16s rRNA terminal restriction fragment length polymorphism and culture enumeration in healthy subjects undergoing antibiotic therapy. Digestive Disease Weekly, May 14-19, Chicago, IL.
23. Sanders, M.E. 2005. Prebiotics and probiotics. Albuquerque District Dietetic Association, March 7, Albuquerque NM.
24. Sanders, M.E. 2005. Communicating about efficacy of probiotic products in the US market: scientific and regulatory considerations. Univ. of Guelph, March 2, Guelph, Ontario Canada.
25. Sanders, M.E. 2005. Probiotic and prebiotic use in a hospital setting: antibiotic induced diarrhea, Crohn's disease and other indications. February 18, Longmont United Hospital, Longmont, CO.
26. Sanders, M.E. 2004. The potential impact of probiotics and prebiotics on gastrointestinal and immune health of combat soldiers. Paper presented at the Institute of Medicine Workshop on Optimization of Nutrient Composition of Military Rations for Short-Term, High-Stress Situations. Institute of Medicine. Committee on Optimization of Nutrient Composition of Military Rations for Short-Term, High-Stress Situations. August 9-11, Natick MA.
27. Nguyen, H.D., Lung, D.Y., Engelbrekton, A.L., Korzenik, J., Sanders, M.E., Leyer, G. and Kitts, C. 2004. The effect of probiotics on the species distribution of *Bifidobacterium* and *Lactobacillus* in healthy subjects undergoing antibiotic therapy. International Society of Microbial Ecology, August 22-27, Cancun, Mexico.
28. Sanders, M.E. 2004. Probiotics in the control of allergy: clinical support and product development. Institute of Food Technologist Annual Meeting, July 12-16, Las Vegas NV.
29. Sanders, M. E. and J. Heimbach. 2004. Probiotic and prebiotic standards for yogurt and yogurt drinks. IDFA Cultured Dairy Products Conference, May 18-19, Minneapolis, MN.
30. Sanders, M.E. 2004. Probiotic bacteria in yogurt: how much is enough? Nutracon, March 4, Anaheim, CA.
31. Sanders, M. E. 2003. Building a probiotic dairy product: a case study. Worldwide Food Expo 2003, October 30, Chicago, IL.
32. Sanders, M. E. 2003. Probiotic dairy products: marketing challenges. 40th Annual Marschall Cheese & Dairy Expo, September 17-18, Visalia, CA.
33. Sanders, M. E. 2003. Probiotics: What's New? 40th Annual Marschall Cheese & Dairy Expo, September 17-18, Visalia, CA.
34. Sanders, M. E. 2003. Update on probiotics – new research. Cultured Dairy Products Conference, May 20-21, Milwaukee, WI.
35. Sanders, M. E. 2003. Probiotics: definition, importance to microbiology and health, and optimal standards for human use. American Society for Microbiology, May 18 – 23, Washington DC.
36. Sanders, M. E. 2003. The role of probiotics in human health. Wisconsin Dietetics Association 2003 Annual Conference, April 10, Madison, WI.
37. Sanders, M. E. 2003. The science and marketing of probiotics: emphasis on opportunity for dairy products. 2003 All Star Convention, March 12-16, La Jolla, CA.
38. Sanders, M.E. 2003. *L. acidophilus* NCFM[®]: functional properties of a unique probiotic strain. Expo West, March 7, Anaheim, CA.
39. Sanders, M. E. 2003. Probiotics: scientific basis and clinical applications. American Society of Parenteral and Enteral Nutrition, National Nutrition Week, January 20-24, San Antonio, TX.

40. Sanders, M. E. 2002. Safety of oral probiotics in human health: what is known? Montreal International Symposium Probiotics and Health: Biofunctional Perspectives. October 24-25, 2002, Montreal, Quebec.
41. Sanders, M. E. 2002. Probiotics: what are they and how are they used? American College of Nutrition 43rd Annual Symposium on Advances in Clinical Nutrition, October 3-6, 2002, San Antonio, TX.
42. Sanders, M. E. and F. Guarner. 2002. Convene round table on: Yogurts and Fermented Milks. Benefits of Live Cultures. September 25, 2002. World Dairy Congress, Paris.
43. Sanders, M. E. 2002. *L. acidophilus* NCFM[®]: functional properties of a unique probiotic strain. Vitafoods International 2000 Exhibition and Conference, Geneva, Switzerland.
44. Sanders, M. E. 2002. Probiotics for humans: status and future of the science and marketplace. FDA National Center for Toxicological Research, Jefferson, AK.
45. Sanders, M. E. 2002. The scientific basis and clinical effects of probiotics. Michigan State University Malcolm Trout Lecture Series, E. Lansing, MI.
46. Sanders, M. E. 2002. Marketing opportunities for nutraceuticals and probiotics. SmartMarketing 2002 (sponsored by IDFA), San Diego, CA.
47. Sanders, M. E. 2001. Probiotic delivered through foods. Probiotics, Prebiotics and New Foods Conference. Rome, Italy.
48. Sanders, M. E. 2001. Regulatory aspects of health claims associated with probiotics. International Dairy Federation Nutrition Conference. Auckland, New Zealand.
49. Sanders, M.E. 2001. Probiotics: new strains and strain specific research. Nutricon 2001, San Diego, CA.
50. Sanders, M. E. 2001. Probiotics in the human diet: what is their role? American Dietetic Association Annual Meeting, St. Louis, MO.
51. Sanders, M. E. 2001. Probiotics: efficacy and applications to dairy products. 2001 Annual Meeting of Institute of Food Technologist, New Orleans, LA.
52. Sanders, M. E. 2001. Regulatory considerations for labeling foods and supplements with health statements in the U.S. First International Bio-Minerals Symposium: Trace Elements in Nutrition, Health and Disease. Salt Lake City, UT.
53. Sanders, M. E. 2001. Dairy foods and those friendly bacteria important to your health. California Dairy Industry Conference, Pomona, CA.
54. Sanders, M. E. 2001. The emerging role of probiotics in health. Food 3000, Rome, Italy.
55. Sanders, M. E. 2000. Functional foods in the USA: can probiotics and prebiotics play a role? American Association of Candy Technologists, Section Meeting, Chicago, IL.
56. Sanders, M. E. 2000. Probiotics: foods in the marketplace. Food Advisory Committee to FDA, meeting on probiotics, Arlington, VA.
57. Sanders, M. E. 2000. Probiotic theory and application in foods. General Mills Technical Seminar Series, Minneapolis, MN.
58. Sanders, M. E. 2000. Probiotics/prebiotics. Cultured Dairy Products Conference, Las Vegas, NV.
59. Sanders, M. E. 2000. The perfect partnership: milk and probiotics. Fluid Milk Forum, Dairy Management Inc., Rosemont, IL.
60. Sanders, M. E. 2000. Probiotic products in the U.S.: current status and future challenges. California Institute for Agricultural Research Conference XIII, Sacramento, CA.
61. Sanders, M. E. 2000. Better health and better foods: the role of probiotics. East Coast Section of IFT, Philadelphia, PA.
62. Sanders, M. E. 2000. Probiotics. Oregon Dairy Industries 2000 Conference. Eugene, OR.
63. Sanders, M.E. 2000. USA perspectives on probiotics. PROBDEMO Meeting, Rovaniemi, Finland.
64. Sanders, M. E. 1999. Current market and potential for probiotic-containing products in the U.S. IFT Scientific Lecturer. Ohio IFT Division, Cleveland, OH.

65. Sanders, M. E. 1999. Microbiological issues in marketing probiotic products. International Workshop on Dairy Products and Colon Cancer Risk Reduction, Utrecht, The Netherlands.
66. Sanders, M. E. 1999. Bringing a probiotic-containing functional food product to market: microbiological, product, regulatory and labeling issues. Sixth Symposium on Lactic Acid Bacteria, Veldhoven, The Netherlands.
67. Sanders, M. E. 1999. Approaches and limitations of in vitro characterization of probiotic bacteria. Submitted to 1999 Annual Meeting of the American Dairy Science Association, Memphis, TN.
68. Yeung, P. S. M., R. Cano, C. L. Kitts, M. E. Sanders and P. S. Tong. 1999. Gene-based techniques for species identification and strain relatedness of commercial probiotic strains. 1999 IFT Annual Meeting, Abstract 37D-27.
69. Yeung, P.S.M., R. Cano, P. S. Tong, and M. E. Sanders. 1999. Comparison of API, 16S rDNA sequencing and fatty acid analysis as methods to speciate commercial probiotic bacteria. 1999 Annual Meeting of the American Dairy Science Association, Memphis, TN.
70. Iturriria-Laverty, K., P. S. Tong, and M. E. Sanders. 1999. Microbiological stability of probiotic and starter bacteria in commercial yogurt and cottage cheese. 1999 Annual Meeting of the American Dairy Science Association, Memphis, TN.
71. Sanders, M. E. 1999. Functional properties of yogurt. Dannon International Research Center Symposium: "Yogurt: Eighty Years of Active Research for Health", Barcelona, Spain.
72. Sanders, M. E. 1999. Probiotics and health. IRTU Conference on "Dairy Products and Health", Ulster, Northern Ireland.
73. Sanders, M. E. 1999. Considerations for use of probiotic bacteria to modulate human health. 1999 Experimental Biology annual meeting, Washington, D.C.
74. Sanders, M. E., R. Cano and T. R. Klaenhammer. 1998. Lactic acid bacteria – they can be "healthy" for the consumer and you. California Milk Producer Research Conference: Report on Producers' Investments, Visalia, CA.
75. Sanders, M. E. 1998. Current market and potential for probiotic-containing products in the U.S. Northern California Section IFT, San Jose, CA.
76. Sanders, M. E. 1998. Overview of functional foods with an emphasis on probiotic bacteria. Washington DC Section IFT, October 22, Washington DC.
77. Sanders, M. E. 1998. Current market and potential for probiotic-containing products in the U.S., Bonneville Section IFT, September 18, Park City, UT.
78. Sanders, M. E. 1998. Scientific basis of probiotic functionality. Brigham Young University, Departmental Seminar Series, Provo, UT.
79. Sanders, M. E. 1998. Current market and potential for probiotic-containing products in the U.S. Cultured Dairy Products Symposium, Milwaukee, WI.
80. Sanders, M. E. 1997. Overview of functional foods. US/Ireland Co-operation Programme in Agricultural Science and Technology, Conference on Functional Foods, Cork, Ireland.
81. Sanders, M. E. 1997. Probiotics: theory, potential and use. Nutracon 97 Conference, Las Vegas, NV.
82. Sanders, M. E. 1997. Development of consumer probiotics in the US market. Institute of Food Technologists Annual Convention, Orlando, FL.
83. Sanders, M. E. 1996. Probiotic cultures and human health. XII International Symposium on Gnotobiology (ISG), Honolulu, HI.
84. Sanders, M. E. 1996. Probiotic cultures for milk products: positive human health effects and microbiological challenges. Departmental Seminar, Dairy Products Technology Center, Cal Poly State University, San Luis Obispo, CA.
85. Sanders, M. E. 1996. Overview of probiotics: their effect on human health. 16th Symposium on Nutrition and Food Technology, Chicago, IL.
86. Sanders, M. E. 1995. Probiotics: from all things to all people, to snake oil. World Congress on Anaerobic Bacteria and Infections, San Juan, Puerto Rico.

87. Sanders, M. E. 1995. Probiotics: definition and range of applications. Institute of Food Technologists Annual Meeting, Anaheim, CA.
88. Sanders, M. E. 1994. Lactic acid bacteria and human health. Old Herborn University Seminar, Herborn, Germany.
89. Sanders, M. E. 1994. The effect of lactic acid bacteria on human health. Univ. Minnesota Departmental Seminar, St. Paul, MN.
90. Sanders, M. E. 1994. The next generation of fluid milks with added lactic cultures. Spring Dairy Industry Conference, Sacramento, CA.
91. Sanders, M. E. 1994. Culture containing milks for the California market: project update. California Cheese Symposium, San Francisco, CA.
92. Sanders, M. E. 1993. Health attributes of cultured dairy foods. Annual Meeting of American Cultured Dairy Products Institute, Las Vegas, NV.
93. Sanders, M. E. 1992. Rapid Microbiological Methods. Rocky Mountain Section of IFT Suppliers Night, Denver, CO.
94. Sanders, M. E. 1991. HACCP. Rocky Mountain Section of IFT, Denver, CO.
95. Sanders, M. E. 1990. Genetic approaches for the improvement of strains for Italian cheese manufacture. Marschall Italian Cheese Seminar, Madison, WI.
96. Sanders, M. E. 1990. Genetic approaches for improving food starter cultures. ASM Conference on Biotechnology, Chicago, IL.
97. Sanders, M. E. 1989. Bacteriophage resistance and its applications to yogurt flora. International Conference on Health Attributes of Live Active Culture Yogurt, New York.
98. Sanders, M. E. 1989. Phage-resistance in cheese-making bacteria. Western Michigan University, Kalamazoo, MI.
99. Sanders, M. E. 1988. Phage resistant starters. E.M.B.O. Workshop on Genetic Manipulation of Lactic Acid Bacteria: A Breakthrough in the Food Industry, Annecy, France.
100. Sanders, M. E., P.J. Leonhard, and T.R. Klaenhammer. 1986. The use of pTR2030 for the conjugal construction of a fast acid-producing, phage-resistant strain of *Streptococcus lactis*. American Dairy Science Association Annual Meeting, Davis, CA.
101. Sanders, M. E. 1986. Genetic characterization of lactic acid bacteria. Western Food Industry Conference, Davis, CA.
102. Sanders, M. E. 1985. Advances in starter culture technology. X Food Microbiology Research Conference, Chicago, IL.
103. Sanders, M. E. 1985. Protoplast transformation of *Streptococcus cremoris*. Wind River Conference on Genetic Exchange, Estes Park, CO.
104. Sanders, M. E. and T. R. Klaenhammer. 1984. Temperature-sensitive phage resistance in a phage-insensitive strain of *Streptococcus lactis*. 84th Annual Meeting of the American Society of Microbiology, St. Louis, MO.
105. Klaenhammer, T.R. and M. E. Sanders. 1983. Resistance of group N streptococci to lytic bacteriophage: mechanisms and genetic determinants. International Symposium on Lactic Acid Bacteria in Foods: Genetics, Metabolism and Applications. Netherlands Society for Microbiology, Wageningen, The Netherlands.
106. Sanders, M. E. and T. R. Klaenhammer. 1983. Phage resistance in a phage insensitive strain of *Streptococcus lactis*: involvement of plasmid DNA in genetically determining phage adsorption. 77th Annual Meeting of the American Dairy Science Association, University of Wisconsin, Madison, WI.
107. Sanders, M. E. 1982. Involvement of plasmid DNA in the bacteriophage resistance of the lactic streptococci. Carolina - Virginia Section Meeting of Institute of Food Technologists, Winston-Salem, NC.
108. Sanders, M. E. and T. R. Klaenhammer, 1981. Plasmid composition of mutants deficient in restriction and modification and proteolytic capacities in *Streptococcus cremoris* KH.

American Society for Microbiology International Conference on Streptococcal Genetics, Sarasota, FL.

109. Sanders, M. E. and T. R. Klaenhammer, 1981. Evidence for plasmid linkage of restriction and modification systems in *Streptococcus cremoris*. 76th Annual Meeting of the American Dairy Science Association, Louisiana State University, Baton Rouge, LA.
110. Sanders, M. E. and T. R. Klaenhammer, 1980. Restriction and modification in the lactic streptococci: the effect of heat on the development of modified, lytic bacteriophage. 75th Annual Meeting of the American Dairy Science Association, Virginia Polytechnic Institute, Blacksburg, VA.
111. Sanders, M. E. and T. R. Klaenhammer, 1979. Host restriction and modification in the lactic streptococci: effect of environmental stress. North Carolina Branch of the American Society for Microbiology, Raleigh, NC.

PUBLICATIONS

1. Engelbrektson A.L., Korzenik J.R., Pittler A., Sanders M.E., Klaenhammer T.R. and Kitts C.L. A randomized, double blind, controlled trial of probiotics to minimize the disruption of fecal microbiota in healthy subjects undergoing antibiotic therapy. Submitted.
2. Sanders, M.E. Probiotics: Definition, Source, Selection and Uses. Clin Infect Dis. In Press.
3. Lenoir-Wijnkoop I, Sanders, M.E., Van Loo, J., Rayes, N., Timmerman, H., Sherman, P., Cabana, M., Corthier, G., Charbonneau, D., Vanechoutte, M., Caglar, E., Wolvers, D., Manneck, I. Probiotic and prebiotic influence beyond the intestinal tract. Nutr Rev. In Press.
4. Douglas L and Sanders ME. Probiotics and prebiotics in dietetic practice. J Amer Dietetics Assoc. In Press.
5. Sanders M.E., Gibson G.R., Gill H. and Guarner F. 2007. Probiotics in food: their potential to impact human health. Council for Agricultural Science and Technology (CAST), Issue Paper 36, CAST, Ames, Iowa. www.cast-science.org.
6. Sanders, ME. Probiotics: strains matter. Functional Food and Nutraceuticals. June, pages 34-41.
7. Sanders ME, Hamilton-Miller, J, Reid G, Gibson G. 2007. A non-viable preparation of *L. acidophilus* is not a probiotic. Clin Infect. Dis. 44:886.
8. Sanders, M.E. and Gibson, G.R. Probiotics & Prebiotics. Touch Briefings, US Gastroenterology Review 2006, pages 205-209.
9. Sanders, M.E. 2006. Summary of probiotic activities of *Bifidobacterium lactis* HN019. J. Clin Gastroenterol. 40:776-83.
10. Engelbrektson A.L., Korzenik J. R., Sanders M.E., Clement B. C., Leyer G., Klaenhammer T. R. and Kitts C. L. 2006. Analysis of treatment effects on the microbial ecology of the human intestine. FEMS Microbial Ecology 57(2):239-50.
11. Sanders, M.E. 2005. Objectives and activities of the International Scientific Association for Probiotics and Prebiotics. In, Cesare Schiavi (Ed.) Probiotics, Biotherapeutics & Health. Mofin Alce, Novara, Italy, p. 206-216.
12. Sanders, M.E. 2005. 10 myths about probiotics. Prepared Foods, July, p. 67-73.
13. Sanders, M.E., Guarner, F., Mills, D., Pot, B., Rafter, J., Rastall, R., Reid, G., Ringel, Y., Rowland, I., Saarela, M. and Tuohy, K. 2005. Selected Topics in Probiotics and Prebiotics: Meeting Report for the 2004 International Scientific Association for Probiotics and Prebiotics. Cur Iss Intestinal Microbiol. 6: 55-68.
14. Sanders, M.E. and J. Korzenik. 2005. The potential impact of probiotics and prebiotics on gastrointestinal and immune health of combat soldiers. Proceedings of Meeting on Optimization of Nutrient Composition for Assault Rations, Sponsored by the Committee on

- Military Nutrition Research, Food and Nutrition Board, Institute of Medicine, The National Academies Press, Washington DC, p. 341-361.
15. Rastall, R. A., Gibson, G. R., Gill, H.S., Guarner, F., Klaenhammer, T. R., Pot, B., Reid, G., Rowland, I. R., and Sanders, M. E. 2005. Modulation of the microbial ecology of the human colon by probiotics, prebiotics and synbiotics to enhance human health: An overview of enabling science and potential applications. *FEMS Microbiol. Ecol.* 52(2):145-152.
 16. Tompkins TA, Sanders ME. 2004. Good intentions, poor study design. *Can Fam Physician.* 50:1499-500.
 17. Reid G, Guarner F, Gibson G, Tompkins T, Gill H, Rowland I, Rastall B, Pot B, Sanders ME; International Scientific Association for Probiotics and Prebiotics. 2004. Discussion on toll-like receptor 9 signaling mediates the anti-inflammatory effects of probiotics in murine experimental colitis. *Gastroenterology.* 127(1):366-7.
 18. Sanders, M.E. and J. Heimbach. 2004. Functional foods in the USA: emphasis on probiotic-containing foods. *Food Sci. Technol. Bull.: Functional Foods* 1(8) 1–10.
 19. Sanders, M.E., T. Tompkins, J. Heimbach, S. Kolida. 2004. Weight of evidence needed to substantiate a health effect for probiotics and prebiotics: scientific and regulatory considerations in Canada, EU, and U.S. *Eur J Nutr.* 44(5): 303-310.
 20. Yeung, P. S. M., M. E. Sanders, C. L. Kitts, R. Cano, P. S. Tong. 2004. Application of genomic and phenotypic analyses to commercial probiotic strain identity and relatedness. *J. Appl. Microbiol.* 97:1095-1104.
 21. Reid, G, M. E. Sanders, H. R. Gaskins, G. Gibson, A. Mercenier, R. Rastall, M. Roberfroid, I. Rowland, C. Cherbut, and T. R. Klaenhammer. 2003. New scientific paradigms for probiotics and prebiotics. *J. Clin. Gastroenterol.* 37:105-118.
 22. Sanders, M. E., L. Morelli and T. Tompkins. 2003. Sporeformers as human probiotics: *Bacillus*, *Sporolactobacillus* and *Brevibacillus*. *Comp. Rev. Food Sci. Food Safety.* 2:101-110.
 23. Sanders, M. E. 2003. Probiotics: considerations for human health. *Nutr. Rev.* 61:91-99.
 24. Sanders, M. E. 2002. Probiotics: State of the art in the USA. *Microecol. Therapy* 29:1-5.
 25. Sanders, M. E. 2002. Market and regulatory challenges for functional dairy foods: communicating health benefits. *Bulletin of the International Dairy Federation* 375:17-19.
 26. Yeung, P. S. M., M. E. Sanders, C. L. Kitts, R. Cano and P. S. Tong. 2002. Species-specific identification of commercial probiotic strains. *J. Dairy Sci.* 85:1039-1051.
 27. Sanders, M. E., L. Morelli and S. Bush. 2001. "Lactobacillus sporogenes" is not a *Lactobacillus* probiotic. *ASM News* 67:385-386.
 28. Yeung, P. S. M. and M. E. Sanders. 2001. Probiotic Products: Considerations in Development and Labeling. *Food Technology International* 2001:37-41.
 29. Kaplan, C. W., J. C. Astaire, M. E. Sanders, B. S. Reddy and C. L. Kitts. 2001. Terminal restriction fragment pattern analysis of changing bacterial assemblages in rat feces during ingestion of *Lactobacillus acidophilus* NCFM®. *Appl. Environ. Microbiol.* 67:1935-1939.
 30. Sanders, M. E. and T. R. Klaenhammer. 2001. The scientific basis of *Lactobacillus acidophilus* NCFM® functionality as a probiotic. *J. Dairy Sci.* 84:319-331.
 31. Sanders, M. E. 2000. Dairy products. In J. Lederberg (Ed.) *Encyclopedia of Microbiology*, Second Edition, Academic Press, Orlando, FL. Vol. 2, p. 1-8.
 32. Sanders, M.E. 2000. Considerations for use of probiotic bacteria to modulate human health. *J. Nutr.* 130:384S-390S.
 33. Sanders, M. E. 1999. Probiotics. *Food Technology* 53:67-77.
 34. Sanders, M. E. and J. Huis in't Veld. 1999. Bringing a probiotic-containing functional food to the market: microbiological, product, regulatory and labeling issues. *Antonie van Leeuwenhoek* 76:293-315.
 35. Sanders, M. E. 1999. Capitalizing on probiotics and their potential as healthful food ingredients. *California Dairy Dispatch* 6:1-3.

36. Rao, C. V., M. E. Sanders, C. Indranie, B. Simi and B. S. Reddy. 1999. Prevention of colon carcinogenesis by the probiotic *Lactobacillus acidophilus*-NCFM[®] in rats. Intern. J. Oncol. 14:939-944.
37. Sanders, M. E. 1998. Development of Consumer Probiotics for the U.S. Market. Brit. J. Nutr. 80, Suppl. 2:S213-218.
38. Sanders, M. E. 1998. Overview of functional foods: emphasis on probiotic bacteria. Intern. Dairy J. 8:341-347.
39. Sanders, M. E. 1996. Probiotic cultures and human health. In Germfree Life and Its Ramifications, K. Hashimoto, et al. (eds.), XII ISG Publishing Committee, Shiozawa, Japan.
40. Sanders, M. E., D. C. Walker, K. M. Walker, K. Aoyama, and T. R. Klaenhammer. 1996. Performance of commercial cultures in fluid milk applications. J. Dairy Sci. 79:943-955.
41. Sanders, M. E. 1995. Lactic acid bacteria and human health. In R. Fuller, P. Heidt, V. Rusch and D. van der Waaij (Eds.) Probiotics: Prospects of Use in Opportunistic Infections, Institute for Microbiology and Biochemistry, Herborn, Germany, p. 126-140.
42. Sanders, M. E. 1995. Lactococci. In Y. H. Hui and G. G. Khachatourians (Eds.) Food Biotechnology: Microorganisms, VCH Publishers, Inc., New York, p. 645-664.
43. Sanders, M. E. Lactic acid bacteria as promoters of human health. 1994. In I. Goldberg (Ed.) Functional Foods. Chapman and Hall, New York, p. 294-322.
44. Sanders, M. E. 1994. How healthful is yogurt? Healthline 13:8.
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