

Richard L. Merson

Publications

1. Merson, R.L., and J.A. Quinn. Nov. 1964. Diffusion and flow in a radially moving film. *AICHe (American Institute of Chemical Engineers) Journal* 10(6):804-809.
2. Merson, R.L., and J.A. Quinn. May 1965. Stagnation in a fluid interface: Properties of the stagnant film. *AICHe (American Institute of Chemical Engineers) Journal* 11(3):391-395.
3. Morgan, A.I., Jr., E. Lowe, R.L. Merson and E.L. Durkee. Dec. 1965. Reverse osmosis. *Food Technology* 19(12):52-54.
4. Popper, Karel, Richard L. Merson and Wayne M. Camirand. March 1968. Desalination by osmosis--Reverse osmosis couple. *Science* 159:1364-1365.
5. Merson, R.L., and A.I. Morgan, Jr. May 1968. Juice concentration by reverse osmosis. *Food Technology* 22(5):97-100.
6. Merson, R.L., L.F. Ginnette and A.I. Morgan, Jr. 1969. Reverse osmosis for food processing. *Dechema-Monographien* 63:179-201.
7. Lowe, E., E.L. Durkee, R.L. Merson, K. Ijichi and S.L. Cimino. June 1969. Egg white/concentrated by reverse osmosis. *Food Technology* 23(6):45-54.
8. Merson, Richard L., and L. Frank Ginette. 1970. Improved processing of foods by reverse osmosis. p.309-322, IN: Albin F. Turbak (ed.), **Membranes from Cellulose and Cellulose Derivatives**, Applied Polymer Symposia No. 13, John Wiley & Sons, New York.
9. Lim, Toh Hoy, W.L. Dunkley and R.L. Merson. March 1971. Role of protein in reverse osmosis of cottage cheese whey. *Journal of Dairy Science* 54(3):306-311.
10. Merson, R.L., and L.F. Ginnette. 1972. Reverse osmosis in the food industry. Chapter X, p. 191-221, IN: R. E. Lacey and S. Loeb (eds.), **Industrial Processing with Membranes**, John Wiley & Sons, Inc., New York.
11. Kennedy, Timothy J., Luis E. Monge, Benjamin J. McCoy and Richard L. Merson. 1973. Concentrating liquid foods by reverse osmosis: The problems of polarization and high osmotic pressure. *AICHe (American Institute of Chemical Engineers) Symposium Series* 6(132):81-86.
12. Bomben, John L., Solke Bruin, Hans A.C. Thijssen and Richard L. Merson. 1973. Aroma recovery and retention in concentration and drying of foods. *Advances in Food Research* 20:1-111.
13. Monge, L.E., B.J. McCoy and R.L. Merson. June 1973. Improved reverse osmosis permeation by heating. *Journal of Food Science* 38(4):633-636.
14. Mehta, R.V., R.L. Merson and B.J. McCoy. Sept. 1973. Moment analysis of experiments in gel permeation chromatography. *AICHe (American Institute of Chemical Engineers) Journal* 19(5):1068-1070.
15. Mehta, R.V., R.L. Merson and B.J. McCoy. Jan. 1974. Hermite polynomial representation of chromatography elution curves. *Journal of Chromatography* 88(1):1-6.

16. Kennedy, T.J., R.L. Merson, and B.J. McCoy. Sept. 1974. Improving permeation flux by pulsed reverse osmosis. *Chemical Engineering Science* 29:1927-1931.
17. Leonard, S.J., R.L. Merson, G.L. Marsh, G.K. York, J.R. Heil and T. Wolcott. April 1975. Flame sterilization of canned foods: An overview. *Journal of Food Science* 40(2):246-249.
18. Leonard, S.J., G. Marsh, R.L. Merson, G. York, J.E. Buhlert, J.R. Heil and T. Wolcott. April 1975. Quality evaluation of canned fruit cocktail experimentally processed by Steriflamme. *Journal of Food Science* 40(2):257-258.
19. Leonard, S.J., G.L. Marsh, R.L. Merson, G.K. York, J.R. Heil, S. Freyer, T. Wolcott and Ali Ansar. April 1975. Comparative procedures for calculating Steriflamme thermal processes. *Journal of Food Science* 40(2):250-253.
20. Leonard, Sherman, George L. Marsh, R.L. Merson, George K. York, J.E. Buhlert, J.R. Heil and T. Wolcott. April 1975. Chemical, physical, and biological aspects of canned whole peeled tomatoes when thermally processed by steriflamme. *Journal of Food Science* 40(2):254-256.
21. Vorsilak, P., B.J. McCoy and R.L. Merson. April 1975. Enzyme immobilized in a membrane sandwich reactor. *Journal of Food Science* 40(2):431-432.
22. Lee, Doretta N., Mary G. Miranda and Richard L. Merson. April 1975. Scanning electron microscope studies of membrane deposits from whey ultrafiltration. *Journal of Food Technology* 10(2):139-146.
23. Lee, Doretta N., Edwin E. Moore, Richard L. Merson. May 1975. Electrophoresis of cottage cheese whey protein and their polymers. *Journal of Dairy Science* 58(5):658-667.
24. York, George K., J.R. Heil, George L. Marsh, Ali Ansar, R.L. Merson, T. Wolcott and Sherman Leonard. July 1975. Thermobacteriology of canned whole peeled tomatoes. *Journal of Food Science* 40(4):764-769.
25. Lee, D.N., and R.L. Merson. Oct. 1975. Examination of cottage cheese whey proteins by scanning electron microscopy: Relationship to membrane fouling during ultrafiltration. *Journal of Dairy Science* 58(10):1423-1432.
26. Marrazzo, W.N., R.L. Merson and B.J. McCoy. Oct. 1975. Enzyme immobilized in a packed-bed reactor: Kinetic parameters and mass transfer effects. *Biotechnology and Bioengineering* 17:1515-1528.
27. Lee, D.N., and R.L. Merson. April 1976. Prefiltration of cottage cheese whey to reduce fouling of ultrafiltration membranes. *Journal of Food Science* 41(2):403-410.
28. Lee, D.N., and R.L. Merson. Aug. 1976. Chemical treatments of cottage cheese whey to reduce fouling of ultrafiltration membranes. *Journal of Food Science* 41(4):778-786.
29. Leonard, Sherman, G.L. Marsh, G.K. York, R.L. Merson, J.R. Heil, T. Wolcott and A. Ansar. Aug. 1976. Flame sterilization of some tomato products and fruits in 603 x 700 cans. *Journal of Food Science* 41(4):828-832.
30. Merson, R.L., R.P. Singh and P.A. Carroad. March 1978. An evaluation of Ball's formula method of thermal process calculations. *Food Technology* 32(3):66-72, 75.

31. Patel, P.C., and R.L. Merson. March 1978. Ultrafiltration of cottage cheese whey; Influence of whey constituents on membrane performance. *Journal of Food Science and Technology* 15(2):56-61.
32. Loncin, Marcel, and Richard Larry Merson. 1979. **Food Engineering; Principles and Selected Applications**. Academic Press, New York, 494 pp.
33. Carroad, Paul A., Sherman J. Leonard, Juliana R. Heil, Teresa K. Wolcott and R. Larry Merson. June 1980. High vacuum flame sterilization: process concept and energy use analysis. *Journal of Food Science* 45(3):696-699.
34. Merson, R.L., G. Paredes and D.B. Hosaka. 1980. Concentrating fruit juices by reverse osmosis. p.405-413, IN: Anthony R. Cooper (ed.), **Ultrafiltration Membranes and Applications**, Plenum Publishing Corp., New York.
35. Merson, R.L., S.J. Leonard, Ernesto Mejia and J. Heil. Dec. 1980. Temperature distributions and liquid-side heat transfer coefficients in model liquid foods in cans undergoing flame sterilization heating. *Journal of Food Process Engineering* 4(2):85-98.
36. Valle Vega, P., and R.L. Merson. 1981. Calculation of the time of thermal treatment in cans by a general graphical method (In Spanish). *Technologia de Alimentos (Mexico)* 16(3):10-12, 14, 16, 18, 20, 22.
37. Bressan, Juan A., Paul A. Carroad, R. Larry Merson and Walter L. Dunkley. Dec. 1981. Temperature dependence of effective diffusion coefficient for total solids during washing of cheese curd. *Journal of Food Science* 46(6):1958-1959.
38. Bressan, Juan A., Paul A. Carroad, R. Larry Merson and Walter L. Dunkley. Feb. 1982. Modeling of isothermal diffusion of whey components from small curd cottage cheese during washing. *Journal of Food Science* 47(1):84-88.
39. Peralta Rodriguez, Rene D., and R.L. Merson. 1982. Heat transfer and chemical kinetics during flame sterilization. p.58-67, IN: Henry G. Schwartzberg, Daryl Lund and John L. Bomben (eds.), **Food Process Engineering**, AIChE Symposium Series NO. 218 (v.78), American Institute of Chemical Engineers, New York.
40. Griffiths, R. Cefn, Gustavo Paramo and R.L. Merson. 1982. Preliminary investigation of lactose crystallization using the population balance technique. p.118-128, IN: Henry G. Schwartzberg, Daryl Lund and John L. Bomben (eds.), **Food Process Engineering**, AIChE Symposium Series No. 218 (v.78), American Institute of Chemical Engineers, New York.
41. Merson, Richard L., and Gustavo Paramo. 1983. Heat transfer in bulk food during heat sterilization. p.98-108, IN: K.I. Hayakawa and T. Motohiro (eds.), **Heat Sterilization of Food**, Koseisha-Koseikaku Publishing Co., Tokyo.
42. Merson, Richard L. 1983. Heat transfer in food undergoing nonconventional thermal processes. p.130-137, IN: K.I. Hayakawa and T. Motohiro (eds.), **Heat Sterilization of Food**, Koseisha-Koseikaku Publishing Co., Tokyo.
43. Merson, Richard L. 1983. Mathematical procedures for estimating heat sterilization processes of bulk food in continuous heat exchangers. p.148-154, IN: K.I. Hayakawa and T. Motohiro (eds.), **Heat Sterilization of Food**, Koseisha-Koseikaku Publishing Co., Tokyo.

44. Peralta Rodriguez, Rene D., and R.L. Merson. June 1983. Experimental verification of a heat transfer model for simulated liquid foods undergoing flame sterilization. *Journal of Food Science* 48(3):726-733.
45. Heil, J.R., P.A. Carroad, R.L. Merson and Sherman Leonard. Aug. 1983. Development of high vacuum flame processes for sliced peaches and pears. *Journal of Food Science* 48(4):1106-1112, 1123.
46. Leonard, S.J., J.R. Heil, P.A. Carroad, R.L. Merson and T.K. Wolcott. Oct. 1983. High vacuum flame sterilized fruits: Storage study on sliced clingstone peaches, sliced Bartlett pears, and diced fruit. *Journal of Food Science* 48(5):1484-1491.
47. Loncin, Marcel, and Richard Larry Merson. 1983. **Food Engineering; Principles and Selected Applications** (translated into Russian). Moscow.
48. Leonard, S.J., J.R. Heil, P.A. Carroad, R.L. Merson and T.K. Wolcott. Feb. 1984. High vacuum flame sterilized fruits: Influence of can type on storage stability of vacuum packed peach and pear slices. *Journal of Food Science* 49(1):263-266.
49. Soule, Carlos Lucio, and Richard L. Merson. 1985. Heat transfer coefficients to Newtonian liquids in axially rotated cans. *Journal of Food Process Engineering* 8(1):33-46.
50. Leonard, Sherman J., Richard L. Merson, George L. Marsh and Julianna R. Heil. June 1986. Estimating thermal degradation in processing of foods. *Journal of Agricultural and Food Chemistry* 34(3):392-396.
51. Peralta Rodriguez, R.D., and R.L. Merson. 1986. Heat transfer coefficients in flame sterilization of simulated canned liquid foods. p.285-298, IN: M. Le Maguer and P. Jelen (eds.), **Food Engineering and Process Applications, Vol. 1 - Transport Phenomena**, Elsevier Applied Science Publishers, New York.
52. Merson, R. Larry, and T.K. Wolcott. 1986. Recent developments in thermal process design. p.501-520, IN: M. Le Maguer and P. Jelen (eds.), **Food Engineering and Process Applications, Vol. 1 - Transport Phenomena**, Elsevier Applied Science Publishers, New York.
53. Sawada, Hiroshi, and R.L. Merson. 1986. Estimation of process conditions for bulk sterilization of particulate foods in water-fluidized beds. p.569-581, IN: M. Le Maguer and P. Jelen (eds.), **Food Engineering and Process Applications, Vol. 1 - Transport Phenomena**, Elsevier Applied Science Publishers, New York.
54. Hamblin, C.L., J.R. Heil, R.L. Merson, R.A. Bernhard and H. Patino. April 1987. Comparing flame and mechanical deaeration of high vacuum canned green beans and apple slices. *Journal of Food Science* 52(2):425-428.
55. Wolcott, Teri, G.L. Marsh and R.L. Merson. 1987. Methods for rapidly evaluating consistency potential of new processing tomato varieties. *Acta Horticulturae* 200:115-124.
56. Deniston, Mark F., Bakri H. Hassan and Richard L. Merson. Aug. 1987. Heat transfer coefficients to liquids with food particles in axially rotating cans. *Journal of Food Science* 52(4):962-966, 979.
57. Young-Perkins, Kathleen E., and R.L. Merson. Aug. 1987. *Clostridium botulinum* spore germination, outgrowth, and toxin production below pH 4.6; Interactions between pH, total acidity, and buffering capacity. *Journal of Food Science* 52(4):1084-1088, 1096.

58. Heil, J.R., C.L. Hamblin, R.A. Bernhard, R.L. Merson and H. Patino. Feb. 1988. Evaluation of mechanical deaeration parameters for high vacuum canned foods. *Journal of Food Science* 53(1):157-161.
59. Wong, D. Michael, Kathleen E. Young-Perkins and Richard L. Merson. June 1988. Factors influencing *Clostridium botulinum* spore germination, outgrowth, and toxin formation in acidified media. *Applied and Environmental Microbiology* 54(6):1446-1450.
60. Heil, J.R., M.J. McCarthy and R.L. Merson. Dec. 1988. Influence of gluconic acid on enzyme inactivation and color retention in canned apricots and peaches. *Journal of Food Science* 53(6):1717-1719.
61. Merson, Richard L. 1989. Heat penetration and bacteriological properties of foods for heat sterilization process design. p.93-96, IN: R. Paul Singh and Augusto G. Medina (eds.), **Food Properties and Computer-Aided Engineering of Food Processing Systems**, Kluwer Academic Publishers, Dordrecht, The Netherlands.
62. McCarthy, K.L., and R.L. Merson. June 1989. An integral method analysis of steam infusion heating of a free falling film. *Journal of Food Science* 54(3):734-737, 747.
63. McCarthy, Kathryn L., and Richard L. Merson. 1989. A finite element method to model steam infusion heat transfer to a free falling film. *Journal of Food Process Engineering* 11(1):43-54.
64. Heil, J.R., M.J. McCarthy, D.J. McIntyre and R.L. Merson. Dec. 1989. Influence of gluconic acid on thermal processing requirements for canned whole peeled tomatoes. *Journal of Food Processing and Preservation* 13(6):431-445.
65. Stoforos, Nikolaos G., and Richard L. Merson. April 1990. Estimating heat transfer coefficients in liquid/particulate canned foods using only liquid temperature data. *Journal of Food Science* 55(2):478-483, 521.
66. David, Jairus R.D., and R.L. Merson. April 1990. Kinetic parameters for inactivation of *Bacillus stearothermophilus* at high temperatures. *Journal of Food Science* 55(2):488-493, 515.
67. Stoforos, N.G., and R.L. Merson. 1990. An overview of heat transfer studies in rotated liquid/particulate canned foods. p.50-59, IN: W.E.L. Spiess and H. Schubert (eds.), **Engineering and Food. Volume 2. Preservation Processes and Related Techniques**, Elsevier Applied Science Publishers, London.
68. Merson, R.L., and N.G. Stoforos. 1990. Motion of spherical particles in axially rotating cans. Effect on liquid-particle heat transfer. p.60-69, IN: W.E.L. Spiess and H. Schubert (eds.), **Engineering and Food. Volume 2. Preservation Processes and Related Techniques**, Elsevier Applied Science Publishers, London.
69. Stoforos, Nikolaos G., and Richard L. Merson. June 1991. Measurement of heat transfer coefficients in rotating liquid/particulate systems. *Biotechnology Progress* 7(3):267-271.
70. Stoforos, Nikolaos G., and Richard L. Merson. June 1992. Physical property and rotational speed effects on heat transfer in axially rotating liquid/particulate canned foods. *Journal of Food Science* 57(3):749-754.

71. Sawada, H., and R.L. Merson. 1994. A new method of monitoring particle motion and temperature in a liquid/particle system. p.292-294, IN: Toshimasa Yano, Ryuichi Matsuno and Kozo Nakamura (eds.), **Developments in Food Engineering**, Blackie Academic & Professional, London.
72. Stoforos, Nikolaos G., and Richard L. Merson. 1995. A solution to the equations governing heat transfer in agitating liquid/particulate canned foods. *Journal of Food Process Engineering* 18:165-185.

Richard L. Merson

Reports, Regular Distribution

1. Merson, R.L. April 1971. New concepts in processing technology. Western Milk and Ice Cream News 72(4):11-15.
2. Merson, R.L. 1976. Les nouvelles tendances du genie industriel alimentaire. p.82-93, IN: **Proceedings, Premier Congres International Pour La Promotion Des Industries Alimentaires**, Paris, November 16-17, 1976.
3. Merson, R.L., G. Paredes and D.B. Hosaka. Jan. 1980. Reverse osmosis for concentrating fruit juices. p.14-18, IN: Proceedings, 52nd Annual Rural Energy Conference, University of California, Davis, January 17.
4. Schweigert, Bernard S., and R. Larry Merson. 1983. Food processing technology and engineering, 1983 ± 25 years. p.57-61, IN: California Agriculture, Now and the Next Quarter Century, Symposium Proceedings, College of Agricultural and Environmental Sciences, University of California, Davis.
5. Merson, R.L. March 1988. Thermal process design - a research update. IN: Pack Alimentaire '88, Second annual Food and Beverage Packaging Expo, Conference Proceedings, 8 pp.
6. Merson, R. Larry. Aug. 1990. Dedication to Bernard Schweigert, PhD. Journal of the American College of Nutrition 9(4):372-373.
7. Mannapperuma, Jatal D., R. Larry Merson and Sharon P. Shoemaker. 1993. Membrane applications in olive processing industry. IN: Food Processing Environmental Conference.
8. Mannapperuma, Jatal D., Kihwan Park, Sharon P. Shoemaker and R. Larry Merson. 1993. Testing and demonstration of membrane applications in the California fruit and vegetable processing industry. IN: Proceedings, Membrane Technology Short Course, Texas A&M University, San Diego, California.

Richard L. Merson

Reports, Limited Distribution

1. Popper, K., R.L. Merson, W.M. Camirand and F.P. Boyle. June 1967. Possible uses of osmosis--Reverse osmosis couple for concentration. Report to the Wine Institute Technical Advisory Committee Meeting, 8 pp.
2. Bomben, J.L., and R.L. Merson. Nov. 1969. Vapor-liquid equilibria of aroma solutions. Paper No. 34a, IN: **Flavors for Processed Foods: Retention, Recovery and Addition**, Symposium, American Institute of Chemical Engineers 62nd Annual Meeting, 36 pp.
3. Merson, R.L. March 1970. Reverse osmosis, Part I, Principles. IN: Innovation in Food Engineering, Course sponsored by Continuing Education in Engineering and the College of Engineering, University of California, Berkeley, 14 pp.
4. Merson, R.L. Dec. 1971. Membrane separation concepts in food processing. American Society of Agricultural Engineers Paper No. 71-875, 22 pp. (Presented at the 1971 Winter Meeting).
5. Leonard, Sherman, P.A. Carroad, R.L. Merson, J.R. Heil and T.K. Wolcott. Dec. 1978. Steril-Vac Peach Study 1978--Brief Report of Progress. Progress Report to the Cling Peach Advisory Board.
6. Merson, Richard L. June 1979. Heat transfer in bulk food during heat sterilization. p.23-27, IN: Digest of Papers, Japan-U.S. Joint Seminar on Mathematical Determination of Proper Heat Sterilization Processes to Food, National Education Center, Tokyo.
7. Merson, Richard L. June 1979. Mathematical procedures for estimating heat sterilization processes of bulk food in continuous heat exchangers. p.74-78, IN: Digest of Papers, Japan-U.S. Joint Seminar on Mathematical Determination of Proper Heat Sterilization Processes To Food, National Education Center, Tokyo.
8. Merson, Richard L. June 1979. Heat transfer in food undergoing nonconventional thermal processes. p.33-37, IN: Digest of Papers, Japan-U.S. Joint Seminar on Mathematical Determination of Proper Heat Sterilization Processes to Food, National Education Center, Tokyo.
9. Dunkley, W.L., R.L. Merson, E.E. Moore and L.M. Smith. Sept. 1979. Memorial resolution honoring Thomas Andrew Nickerson. p.78-80, IN: **In Memorium**, University of California.
10. Leonard, Sherman, Paul Carroad, R.L. Merson, M. O'Mahony, J.R. Heil, T.K. Wolcott, L. Buteau and P. Schweingruber. Jan. 1980. High Vacuum Flame Sterilized Peach Study. Progress Report presented to the Cannery League of California, 24 pp.
11. Leonard, Sherman, Paul Carroad, R.L. Merson, J.R. Heil and T.K. Wolcott. Jan. 1980. High Vacuum Flame Sterilized Pear Study 1979. Progress Report presented to the Pacific Pear Association, 18 pp.
12. Leonard, Sherman, Paul Carroad, R.L. Merson, J.R. Heil and T.K. Wolcott. April 1981. High Vacuum Flame Sterilized Pear Study. Final Project Report to the Pacific Pear Association, 28 pp.

13. Leonard, Sherman, Paul Carroad, R.L. Merson, M. O'Mahony, J.R. Heil and T.K. Wolcott. May 1981. High Vacuum Flame Sterilized Peach Study. Research Report to the Cannery League of California/Cling Peach Advisory Board, 38 pp.
14. Valle Vega, Pedro, and Richard L. Merson. 1983. **Thermal Processing of Canned Foods** (In Spanish). Report, Universidad Autonoma Chapingo, Industria Agricolas, Chapingo, Mexico, 123 pp.
15. Merson, R.L., and E.L. Barrett. Feb. 1983. Enzyme Inactivation in Ultrahigh Temperature (UHT) Processing. Progress Report to the Dairy Council of California, 6 pp.
16. Merson, R.L. Nov. 1983. Effect of Temperature on the Crystallization of Lactose. Final Report to the Dairy Council of California, 7 pp.
17. Merson, R.L., and E.L. Barrett. Nov. 1983. Enzyme Inactivation in Ultrahigh Temperature (UHT) Processing. Progress Report to the Dairy Council of California, 4 pp.
18. Marsh, G.L., T.K. Wolcott, J.R. Heil and R.L. Merson. Jan. 1984. 1983 Processing Tomato Variety Trials. Research Report to the California League of Food Processors, 26 pp.
19. Merson, R.L., and E.L. Barrett. March 1984. Enzyme Inactivation in Ultrahigh Temperature (UHT) Processing. Progress Report to the Dairy Council of California, 2 pp.
20. Merson, R.L., and E.L. Barrett. Oct. 1984. Enzyme Inactivation in Ultrahigh Temperature (UHT) Processing. Progress Report to the Dairy Council of California, 2 pp.
21. Marsh, G.L., T.K. Wolcott, J.R. Heil and R.L. Merson. Jan. 1985. 1984 Processing Tomato Variety Trials. Research Report to the California League of Food Processors, 33 pp.
22. Merson, R.L., and E.L. Barrett. March 1985. Enzyme Inactivation in Ultrahigh Temperature (UHT) Processing. Progress Report to the Dairy Council of California, 7 pp.
23. Merson, R.L., and E.L. Barrett. Sept. 1985. Improved Bacterial Quality Control in Milk by ELISA Monitoring of Metabolites. Progress Report to the Dairy Council of California, 6 pp.
24. Marsh, G.L., T.K. Wolcott and R.L. Merson. Jan. 1986. 1985 Processing Tomato Variety Trials. Research Report to the California League of Food Processors, 25 pp.
25. Merson, R.L., and E.L. Barrett. Feb. 1986. Improved Bacterial Quality Control in Milk by ELISA Monitoring of Metabolites. Progress Report to the Dairy Council of California, 4 pp.
26. Merson, R.L., and E.L. Barrett. Sept. 1986. Improving Bacterial Quality Control in Milk by ELISA Monitoring of Metabolites. Progress Report to the Dairy Council of California, 5 pp.
27. Merson, R.L. Feb. 1987. Improving Bacterial Quality Control in Milk by ELISA Monitoring of Metabolites. Progress Report to the Dairy Council of California, 3 pp.
28. Marsh, G.L., T.K. Wolcott and R.L. Merson. Feb. 1987. 1986 Processing Tomato Variety Trials. Research Report to the California League of Food Processors, 29 pp.
29. Merson, R.L. Oct. 1987. Improving Bacterial Quality Control in Milk by ELISA Monitoring of Metabolites. Progress Report to the Dairy Council of California, 4 pp.

30. Merson, R.L. Feb. 1988. Improving Bacterial Quality Control in Milk by ELISA Monitoring of Metabolites. Progress Report to the Dairy Council of California, 4 pp.
31. Marsh, G.L., T.K. Wolcott and R.L. Merson. March 1988. 1987 Processing Tomato Variety Trials. Research Report to the California League of Food Processors, 20 pp.
32. Wolcott, Teri, G.L. Marsh and R.L. Merson. March 1989. 1988 Processing Tomato Variety Trials. Research Report to the California League of Food Processors, 13 pp.
33. Mannapperuma, Jatal D., Leo D. Pedersen, R. Larry Merson and Sharon P. Shoemaker. March 1993. Membrane Applications in Olive Processing. A Report on the Membrane Application Trials Conducted by the Mobile Test Demonstration Unit (MTDU) at Oberti Olives, Madera, California, during October to December, 1992. 27 pp.
34. Mannapperuma, Jatal D., Leo D. Pedersen, R. Larry Merson and Sharon P. Shoemaker. March 1993. Membrane Applications in Raisin Processing. A Report on the Membrane Application Trials Conducted by the Mobile Test Demonstration Unit (MTDU) at Dole Raisins, Kerman, California, During January and February, 1993. 33 pp.
35. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. 1993. Membrane Applications in a Green Pea Freezing Plant. A Report on the Membrane Application Trials Conducted by the Mobile Test Demonstration Unit (MTDU) at Patterson Frozen Foods, Patterson, California, during April-June 1993. 39 pp.
36. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. Jan. 1994. Membrane Applications in a Carrot Freezing Plant. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at Norcal Crosetti Foods, Salinas, California during November-December 1993. 21 pp.
37. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. Jan. 1994. Membrane Applications in a Green Pea Freezing Plant. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at Patterson Frozen Foods, Patterson, California, during April-June 1993. 25 pp.
38. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. Jan. 1994. Membrane Applications in Raisin Processing. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at Dole Raisins, Kerman, California, during January and February 1993. 15 pp.
39. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. Jan. 1994. Membrane Applications in Olive Processing. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at Oberti Olives, Madera, California, during October to December 1992. 15 pp.
40. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. Jan. 1994. Membrane Applications in a Tomato Processing Plant. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at Hunt-Wesson Tomato Processing Plant, Fullerton, California, during September-October, 1993. 18 pp.
41. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. Jan. 1994. Membrane Applications in a Fruit Canning Plant. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at Del Monte foods, Plant #3, San Jose, California, during June-August 1993. 22 pp.

42. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. Jan. 1994. Membrane Applications in a Hominy and Bean Processing Plant. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at Atwater Canning Company, Atwater, California, during March-April 1993. 17 pp.
43. Mannapperuma, Jatal D., Ki Hwan Park, R. Larry Merson and Sharon P. Shoemaker. March. 1994. Membrane Applications in a Fruit Freezing Plant. A Report on the Membrane Application Trials Conducted by the Mobile Testing Demonstration Unit (MTDU) at The J.M. Smucker Company, Watsonville, California, during January-February 1994. 19 pp.

Richard L. Merson

List of Abstracts

1. Morton, D.J., L. Marlow, R.L. Merson and E.L. Barrett. June 1982. Inactivation of *Pseudomonas* protease in ultrahigh temperature (UHT) processing. Abstract No. 287, IN: Program, 42nd Annual Institute of Food Technologists Meeting, Las Vegas, Nevada.
2. Peralta Rodriguez, R.D., and R.L. Merson. June 1982. Experimental verification of heat transfer model for simulated liquid foods undergoing flame sterilization. Abstract No. 492, IN: Program, 42nd Annual Institute of Food Technologists Meeting, Las Vegas, Nevada.
3. Rodrigo, M., R.D. Peralta Rodriguez, G.K. York, N. Hatzilias, T.K. Wolcott and R.L. Merson. June 1983. Sterilization of foods in glass containers heated by microwave energy. p.199, Abstract NO. 442, IN: Program and Abstracts, 43rd Annual Institute of Food Technologists Meeting, New Orleans, Louisiana.
4. Peralta Rodriguez, Rene D., Miguel Rodrigo and R.L. Merson. Sept. 1983. Heat penetration measurement in glass jars undergoing microwave sterilization. Abstract No. 4.33, IN: Abstracts of Papers, Third International Congress, Engineering and Food, Agricultural Engineering Division of the Institute of Engineers of Ireland, Dublin, Ireland.
5. Tamura, M.S., C.F. Shoemaker and R.L. Merson. June 1984. Computer real-time data processing for flame sterilizer. Abstract No. 200, p.133, IN: Program and Abstracts, 44th Annual Institute of Food Technologists Meeting, Anaheim, California.
6. David, J.R.D., and R.L. Merson. June 1985. Reactor for measuring kinetic parameters for thermal processing at high temperatures: Heat transfer studies. p.139, Abstract 214, IN: Program and Abstracts, 45th Annual IFT Meeting, Institute of Food Technologists, Chicago, Illinois.
7. Pratt-Lowe, E., K.E.Y. Perkins and R.L. Merson. June 1985. An immunoassay for bacterial enzymes in milk. p.112, Abstract 86, IN: Program and Abstracts, 45th Annual IFT Meeting, Institute of Food Technologists, Chicago, Illinois.
8. David, J.R.D., and R.L. Merson. June 1985. Reactor for measuring kinetic parameters for thermal processing at high temperatures: Thermal death time studies. Abstract No. 12, IN: Fourth International Congress, Engineering and Food, Digest of Papers, Edmonton, Alberta, Canada.
9. Peralta Rodriguez, R.D., and R.L. Merson. July 1985. Heat transfer coefficients during flame sterilization of simulated liquid foods. Abstract No. 13, IN: Fourth International Congress, Engineering and Food, Digest of Papers, Edmonton, Alberta, Canada.
10. Merson, R. Larry. July 1985. Recent developments in thermal process design. Abstract No. 111, IN: Fourth International Congress, Engineering and Food, Digest of Papers, Edmonton, Alberta, Canada.
11. Sawada, Hiroshi, and R.L. Merson. July 1985. Estimation of process conditions for bulk sterilization of particulate foods in water fluidized beds. Abstract No. 125, IN: Fourth International Congress, Engineering and Food, Digest of Papers, Edmonton, Alberta, Canada.

12. Young-Perkins, Kathleen E., Nadine M. Sullivan and R. Larry Merson. March 1986. Converging on absolute anaerobiosis. Abstract No. K-104, p.210, IN: Abstracts of the Annual Meeting of the American Society for Microbiology, Washington, D.C.
13. Young-Perkins, K.E., and R.L. Merson. June 1986. *Clostridium botulinum* germination, outgrowth and toxin production below pH 4.6; Interactions among pH, total acidity and buffering capacity. Abstract No. 252, p.151, IN: Program and Abstracts, 46th Annual IFT Meeting, Institute of Food Technologists, Dallas, Texas.
14. Pratt-Lowe, E.L., R.M. Geiger, T. Richardson, E.L. Barrett and R.L. Merson. June 1986. Production of heat-sensitive alkaline phosphatases in Mexican-style cheese: Implications for the phosphatase test. Abstract No. D71, p.73, IN: ADSA Annual Meeting and Divisional Abstracts Program, 81st Annual American Dairy Science Association Meeting, Davis, California.
15. Wolcott, Teri, G.L. Marsh and R.L. Merson. Aug. 1986. Processing studies for evaluating new tomato varieties. Abstract No. 1619, p.330, IN: Program and Abstracts, XXII International Horticultural Congress, Davis, California.
16. Stoforos, N.G., and R.L. Merson. June 1987. Prediction of heat transfer coefficients in axially rotating cans containing liquid and solid particles. Abstract No. 461, p.182, IN: Program and Abstracts, 47th Annual IFT Meeting, Institute of Food Technologists, Las Vegas, Nevada.
17. Stoforos, N.G., and R.L. Merson. Aug. 1987. Prediction and experimental measurements of heat transfer coefficients in axially rotating containers of liquid and solid particles. Abstract No. 27A, IN: Extended Abstracts, American Institute of Chemical Engineers 1987 Summer National Meeting, Minneapolis, Minnesota.
18. McCarthy, K.L., and R.L. Merson. Aug. 1987. Modeling and experimental measurement of parameters in steam infusion sterilization of fluid foods. Abstract No. 27B, IN: Extended Abstracts, American Institute of Chemical Engineers 1987 Summer National Meeting, Minneapolis, Minnesota.
19. McCarthy, K.L., and R.L. Merson. June 1988. Direct heating sterilization of fluid foods by steam infusion. Abstract No. 192, p.127, IN: IFT 88, Program and Abstracts, 1988 Annual Meeting, Institute of Food Technologists, New Orleans, Louisiana.
20. Stoforos, N.G., and R.L. Merson. June 1988. Heat transfer in liquid/particulate food systems. Abstract No. 439., p.183, IN: IFT 88, Program and Abstracts, Annual Meeting, Institute of Food Technologists, New Orleans, Louisiana.
21. Stoforos, N.G., and R.L. Merson. Nov. 1988. Heat transfer coefficients during aseptic processing of particulate foods. Abstract No. 47G, IN: Extended Abstracts, American Institute of Chemical Engineers 1988 Annual Meeting, Washington, D.C.
22. Stoforos, N.G., and R.L. Merson. May 1989. An overview of heat transfer studies in rotated liquid-particulate canned foods. Abstract No. 6.03, p.98, IN: Abstracts of Papers, Fifth International Congress on Engineering and Food, Cologne, West Germany.
23. Merson, R.L. May 1989. Motion of spherical particles in axially rotating cans. Effect on liquid-particle heat transfer coefficients. Abstract No. 6.04, p.98, IN: Abstracts of Papers, Fifth International Congress on Engineering and Food, Cologne, West Germany.

24. Stoforos, N.G., K.H. Park and R.L. Merson. June 1989. Heat transfer in particulate foods during aseptic processing. Abstract No. 545, p.223, IN: Program and Abstracts, 1989 IFT Annual Meeting, Institute of Food Technologists, Chicago, Illinois.
25. Stoforos, N.G., and R.L. Merson. June 1990. Design of aseptic processes for particulate foods. Abstract No. 172, p.136, IN: Program and Abstracts, 1990 IFT Annual Meeting, Institute of Food Technologists, Anaheim, California.
26. Merson, R.L., and H. Sawada. March 1991. An analytical model for heat-hold-cool sterilization of particulate-containing foods. p.58, IN: Technical Program and Extended Abstracts, CoFE (Conference of Food Engineering), "Food Engineering: Advances and Technologies", Chicago, Illinois (Abstract No. IVC.6).
27. Park, K.H., and R.L. Merson. June 1992. Numerical study of transient heat transfer between a particle and a fluid in a holding tube. p.78, IN: Book of Abstracts, 1992 IFT Annual Meeting, Institute of Food Technologists, New Orleans, Louisiana (Abstract No. 299).
28. Park, K.H., and R.L. Merson. July 1993. Effects of relative velocity on heat transfer in liquid/particulate food systems. p.80, IN: Book of Abstracts, 1993 IFT Annual Meeting, Institute of Food Technologists, Chicago, Illinois (Abstract No. 307).
29. Kallitsis, T.G., H. Sawada, K.H. Park and R.L. Merson. July 1993. An optimized biological indicator for food thermal process design. p.211, IN: Book of Abstracts, 1993 IFT Annual Meeting, Institute of Food Technologists, Chicago, Illinois (Abstract No. 834).
30. Mannapperuma, Jatal D., R. Larry Merson and Sharon P. Shoemaker. June 1994. Recovery of sugar concentrate from raisin wash water using membrane filtration. p.55, IN: 1994 IFT Annual Meeting Technical Program Book of Abstracts, Institute of Food Technologists, Atlanta, Georgia (Abstract No. 22-8).
31. Park, K.H., J.D. Mannapperuma, R.L. Merson and S.P. Shoemaker. June 1994. Concentration of juice from peach processing streams using membrane filtration technology. p.100, IN: 1994 IFT Annual Meeting Technical Program Book of Abstracts, Institute of Food Technologists, Atlanta, Georgia (Abstract No. 36B-11).
32. Kallitsis, T.G., D.S. Reid and R.L. Merson. June 1995. Model system study of aqueous ozone attack on bacterial cells. p.13, IN: 1995 IFT Annual Meeting Book of Abstracts, Institute of Food Technologists, Anaheim, California (Abstract No. 7-2).
33. Kallitsis, T.G. and R.L. Merson. June 1996. Ozone reactive absorption in aqueous systems containing biological macromolecules. p.174, IN: 1996 IFT Annual Meeting Book of Abstracts, Institute of Food Technologists, New Orleans, Louisiana (Abstract No. 74-11).

ITEMS NOT ON MERSON PUB LIST (mimeo copies)

Merson, R.L., P. Granier and J.J. Bimbenet. Membrane separations in food processing. 27 pages.

Fikowara, Masataka and R.L. Merson. External heat transfer during canning by flame sterilization. 23 pages.

Merson, R.L., S.J. Leonard, Ernesto Mejia and J. Heil. Heat transfer to liquid canned foods during flame sterilization. For presentation at the First International Congress on Engineering and Food, Boston, Massachusetts, August 9-13, 1976. 24 pages.

Merson, Richard L. Heat transfer in food undergoing nonconventional thermal processes. 4 pages.

Merson, Richard L. Heat transfer in bulk food during heat sterilization. 5 pages.

Merson, Richard L. Mathematical procedures for estimating heat sterilization processes of bulk food in continuous heat exchangers. 5 pages.