

## John R. Whitaker

### Publications

1. Whitaker, John R., and F.E. Deatherage. June 1955. Hydrolysis of proteins and dipeptides by ion-exchange resin catalysis. *Journal of the American Chemical Society* 77(12):3360-3365.
2. Whitaker, John R., and F.E. Deatherage. Oct. 1955. Behavior of Dowex-50 as an aminopeptidase. *Journal of the American Chemical Society* 77(20):5298-5303.
3. Whitaker, John R., and Bernard J. Jandorf. Dec. 1956. Specific reactions of dinitrofluorobenzene with active groups of chymotrypsin. *The Journal of Biological Chemistry* 223(2):751-764.
4. Whitaker, John R. Oct. 1957. Assay and properties of commercial ficin. *Food Research* 22(5):468-478.
5. Whitaker, John R. Oct. 1957. Properties of the proteolytic enzymes of commercial ficin. *Food Research* 22(5):483-493.
6. Whitaker, John R. Aug. 1958. The effect of variety and maturity on the proteolytic enzyme content of figs. *Food Research* 23(4):371-379.
7. Whitaker, John R. Aug. 1958. The ficin content of the latex from different varieties of *Ficus carica* and a comparison of several micro-methods of protein determination. *Food Research* 23(4):364-370.
8. Whitaker, John R. 1959. Chemical changes associated with aging of meat with emphasis on the proteins. *Advances in Food Research* 9:1-60.
9. Whitaker, John R., and Robert Hughes. Feb. 1959. A rapid method for determining the concentration of ammonium sulfate solutions. *Nature* 183(4661):603-604.
10. Whitaker, John R. Feb. 1959. Inhibition of sulfhydryl enzymes with sorbic acid. *Food Research* 24(1):37-43.
11. Whitaker, John R. Feb. 1959. Properties of the milk-clotting activity of ficin. *Food Technology* 13(2):86-92.
12. Whitaker, John R. Feb. 1961. Ninhydrin assay in the presence of thiol compounds. *Nature* 189(4765):662-663.
13. Whitaker, John R. April 1961. Proteolytic enzymes. *Wallerstein Laboratories Communications* 24(83):4-20.
14. Simone, Marion, E.D. Carroll, C.O. Chichester and J.R. Whitaker. May 1961. Quality factors of beef as affected by delayed growth due to protein deficiency. *Journal of Animal Science* 20(2):353-357.
15. Castaneda-Agullo, M., Luz M. del Castillo, J.R. Whitaker and A.L. Tappel. July 1961. Effect of ionic strength on the kinetics of trypsin and alpha chymotrypsin. *The Journal of General Physiology* 44(6):1103-1120.

16. Asselbergs, E.A., and J.R. Whitaker. Sept. 1961. Determination of water-holding capacity of ground cooked lean meat. *Food Technology* 15(9):392-394.
17. Whitaker, J.R., A.L. Tappel and Eva Wormser. 1962. Modification of enzymic activity. I. Effect of organic additives on alpha-amylase activity. *Biochimica et Biophysica Acta* 62:300-309.
18. Whitaker, J.R., and A.L. Tappel. 1962. Modification of enzymic activity. II. Effect of salts on alpha-amylase, alcohol dehydrogenase, peroxidase and hematin catalysis. *Biochimica et Biophysica Acta* 62:310-317.
19. Yatco-Manzo, Emeteria, and J.R. Whitaker. April 1962. Ficin-catalyzed hydrolysis of elastin. *Archives of Biochemistry and Biophysics* 97(1):122-127.
20. Whitaker, John R. May 1962. The reaction of p-nitrophenyl acetate with thiols. *Journal of the American Chemical Society* 84(10):1900-1904.
21. Hinrichs, J.R., and J.R. Whitaker. June 1962. Enzymatic degradation of collagen. *Journal of Food Science* 27(3):250-254.
22. Martoadiprawito, Winoto, and John R. Whitaker. 1963. Potassium sorbate inhibition of yeast alcohol dehydrogenase. *Biochimica et Biophysica Acta* 77:536-544.
23. Brown, W.D., C. Sterling and J. Whitaker. Jan. 1963. Report on advanced study course: Biophysics and biochemistry in food research. *Food Technology* 17(1):62-64.
24. El-Gharbawi, M., and J.R. Whitaker. April 1963. Factors affecting enzymatic solubilization of beef proteins. *Journal of Food Science* 28(2):168-172.
25. El-Gharbawi, Mohamed, and John R. Whitaker. June 1963. Fractionation and partial characterization of the proteolytic enzymes of stem bromelain. *Biochemistry* 2(3):476-481.
26. Whitaker, John R. Nov. 1963. Determination of molecular weights of proteins by gel filtration on Sephadex. *Analytical Chemistry* 35(12):1950-1953.
27. Torten, Judith, and J.R. Whitaker. April 1964. Evaluation of the biuret and dye-binding methods for protein determination in meats. *Journal of Food Science* 29(2):168-174.
28. Sgarbieri, Valdemiro C., Shashikant M. Gupte, Donald E. Kramer and John R. Whitaker. July 1964. *Ficus* enzymes. I. Separation of the proteolytic enzymes of *Ficus carica* and *Ficus glabrata* latices. *The Journal of Biological Chemistry* 239(7):2170-2177.
29. Kramer, Donald E., and John R. Whitaker. July 1964. *Ficus* enzymes. II. Properties of the proteolytic enzymes from the latex of *Ficus carica* variety Kadota. *The Journal of Biological Chemistry* 239(7):2178-2183.
30. Feinstein, Gad, and John R. Whitaker. Aug. 1964. On the molecular weights of the proteolytic enzymes of stem bromelain. *Biochemistry* 3(8):1050-1054.
31. Bender, Myron L., John R. Whitaker, and Fred Menger. April 1965. The effect of enzyme acetylation on the kinetics of the carboxypeptidase-A-catalyzed hydrolysis of hippuryl-L-beta-phenyllactic acid. *Proceedings of the National Academy of Sciences* 53(4):711-716.

32. Whitaker, John R., and Myron L. Bender. June 1965. Kinetics of papain-catalyzed hydrolysis of alpha-N-benzoyl-L-arginine ethyl ester and alpha-N-benzoyl-L-argininamide. *Journal of the American Chemical Society* 87(12):2728-2737.
33. Kon, Samuel, and John R. Whitaker. Dec. 1965. Separation and partial characterization of the peroxidases of *Ficus glabrata* latex. *Journal of Food Science* 30(6):977-985.
34. Whitaker, John R. Jan. 1966. Kinetics of the carboxypeptidase-A-catalyzed hydrolysis of benzyloxycarbonylglycyl-L-phenylalanine. *Biochemical and Biophysical Research Communications* 22(1):6-12.
35. Whitaker, John R., Fred Menger, and Myron L. Bender. Jan. 1966. The kinetics of some carboxypeptidase A and acetylcarboxypeptidase A catalyzed hydrolyses. *Biochemistry* 5(1):386-392.
36. Zweig, Gunter, and John R. Whitaker. July 1967. **Paper Chromatography and Electrophoresis. Vol. 1. Electrophoresis in Stabilizing Media.** Academic Press, New York, 420 pp.
37. Perez-Villasenor, J., and J.R. Whitaker. Sept. 1967. Modification of enzymic activity. III. Effect of salts and organic additives on horseradish peroxidase. *Archives of Biochemistry and Biophysics* 121(3):541-547.
38. Williams, Donald C., and John R. Whitaker. Dec. 1967. Kinetics of papain-catalyzed hydrolyses of neutral substrates. *Biochemistry* 6(12):3711-3717.
39. Martins, Carlos Brunet, and John R. Whitaker. Feb. 1968. Catheptic enzymes and meat tenderization. 1. Purification of cathepsin D and its action on actomyosin. *Journal of Food Science* 33(1):59-64.
40. Whitaker, John R., and Javier Perez-Villasenor. March 1968. Chemical modification of papain. I. Reaction with the chloromethyl ketones of phenylalanine and lysine and with phenylmethylsulfonyl fluoride. *Archives of Biochemistry and Biophysics* 124(1-3):70-78.
41. Fossum, Kare, and John R. Whitaker. April 1968. Ficin and papain inhibitor from chicken egg white. *Archives of Biochemistry and Biophysics* 125(1):367-375.
42. Williams, Donald C., and John R. Whitaker. July 1968. On the possible involvement of an anhydride intermediate in papain-catalyzed hydrolyses. *Biochemistry* 7(7):2562-2569.
43. Williams, Donald C., Valdemiro C. Sgarbieri and John R. Whitaker. July 1968. Proteolytic activity in the genus *Ficus*. *Plant Physiology* 43(7):1083-1088.
44. Hagemeyer, Kris, Issam Fawwal and John R. Whitaker. Dec. 1968. Purification of protease from the fungus *Endothia parasitica*. *Journal of Dairy Science* 51(12):1916-1922.
45. Kramer, D.E., and J.R. Whitaker. April 1969. Ficin-catalyzed reactions. Hydrolysis of alpha-N-benzoyl-L-arginine ethyl ester and alpha-N-benzoyl-L-argininamide. *Plant Physiology* 44(4):609-614.
46. Whitaker, John R. May 1969. Papain- and ficin-catalyzed reactions. Effect of pH on activity and conformation of ficin. *Biochemistry* 8(5):1896-1901.

47. Whitaker, J.R. Nov. 1969. Ficin- and papain-catalyzed reactions. Changes in reactivity of the essential sulfhydryl group in the presence of substrates and competitive inhibitors. *Biochemistry* 8(11):4591-4597.
48. Kramer, Donald E., and John R. Whitaker. Nov. 1969. Nature of the conversion of *Ficus carica* variety Kadota ficin component D to component C. Some physicochemical properties of components C and D. *Plant Physiology* 44(11):1566-1573.
49. Kramer, Donald E., and John R. Whitaker. Nov. 1969. Multiple molecular forms of ficin-- Evidence against autolysis as explanation. *Plant Physiology* 44(11):1560-1565.
50. Williams, Don C., and John R. Whitaker. Nov. 1969. Multiple molecular forms of *Ficus glabrata* ficin. Their separation and relative physical, chemical, and enzymatic properties. *Plant Physiology* 44(11):1574-1583.
51. Marshall, Thomas H., John R. Whitaker and Myron L. Bender. Dec. 1969. Porcine elastase. I. The presence of tyrosinate-splitting enzymes as impurities in elastase preparations. *Biochemistry* 8(12):4665-4671.
52. Marshall, Thomas H., John R. Whitaker and Myron L. Bender. Dec. 1969. Porcine elastase. II. Properties of the tyrosinate-splitting enzymes and the specificity of elastase. *Biochemistry* 8(12):4671-4677.
53. Whitaker, J.R. 1970. Protease of *Endothia parasitica*. p.436-445, IN: G.E. Perlmann and L. Lorand (eds.), **Methods in Enzymology, Volume XIX, Proteolytic Enzymes**, Academic Press, New York.
54. Larson, Merle K., and John R. Whitaker. March 1970. *Endothia parasitica* protease. Parameters affecting activity of the rennin-like enzyme. *Journal of Dairy Science* 53(3):252-261.
55. Larson, Merle K., and John R. Whitaker. March 1970. *Endothia parasitica* protease. Parameters affecting stability of the rennin-like enzyme. *Journal of Dairy Science* 53(3):262-269.
56. McFeeters, Roger F., Clinton O. Chichester and John R. Whitaker. May 1971. Purification and properties of chlorophyllase from *Ailanthus altissima* (Tree-of-Heaven). *Plant Physiology* 47(5):609-618.
57. Wong, Thomas C., Bor S. Luh and John R. Whitaker. July 1971. Effect of phloroglucinol and resorcinol on the clingstone peach polyphenol oxidase-catalyzed oxidation of 4-methylcatechol. *Plant Physiology* 48(1):24-30.
58. Wong, Thomas C., Bor S. Luh and John R. Whitaker. July 1971. Isolation and characterization of polyphenol oxidase isozymes of clingstone peach. *Plant Physiology* 48(1):19-23.
59. McCullough, James M., and John R. Whitaker. Nov. 1971. Substrate specificity of the milk-clotting protease from *Mucor pusillus* determined on the oxidized B-chain of insulin. *Journal of Dairy Science* 54(11):1575-1578.
60. Whitaker, John R. 1972. **Principles of Enzymology for the Food Sciences**. Marcel Dekker, Inc., New York, 636 pp.

61. Whitaker, John R., and Lai-Su Lee. Jan. 1972. Ficin- and papain-catalyzed reactions. Effect of temperature on reactivity of the essential sulfhydryl group of ficin in the presence and absence of competitive inhibitors. *Archives of Biochemistry and Biophysics* 148(1):208-216.
62. Williams, Don C., John R. Whitaker and Pamela V. Caldwell. March 1972. Hydrolysis of peptide bonds of the oxidized B-chain of insulin by *Endothia parasitica* protease. *Archives of Biochemistry and Biophysics* 149(1):52-61.
63. Whitaker, John R. June 1972. The next 50 years in meat science research. *Journal of Animal Science* 34(6):957-959.
64. Whitaker, John R. June 1972. Activity assay for *Endothia parasitica* protease using trypsinogen as substrate. *Journal of Dairy Science* 55(6):719-725.
65. Tam, Jorge Juan, and John R. Whitaker. Nov. 1972. Rates and extents of hydrolysis of several caseins by pepsin, rennin, *Endothia parasitica* protease and *Mucor pusillus* protease. *Journal of Dairy Science* 55(11):1523-1531.
66. Whitaker, J.R., and R.E. Feeney. 1973. Enzyme inhibitors in foods. p.276-298. IN: **Toxicants Occurring Naturally in Foods**, National Academy of Sciences, Washington, D.C.
67. Sen, Lourminia Carino, and John R. Whitaker. Oct. 1973. Some properties of a ficin-papain inhibitor from avian egg white. *Archives of Biochemistry and Biophysics* 158(2):623-632.
68. Rivas, Nilo de Jesus, and John R. Whitaker. Nov. 1973. Purification and some properties of two polyphenol oxidases from Bartlett pears. *Plant Physiology* 52(5):501-507.
69. Whitaker, John R., and Pamela V. Caldwell. Nov. 1973. Unusual kinetic behavior of *Endothia parasitica* protease in hydrolysis of small peptides. *Archives of Biochemistry and Biophysics* 159(1):188-200.
70. Whitaker, John R. (ed.). 1974. **Food Related Enzymes**, Advances in Chemistry Series No. 136. American Chemical Society, Washington, D.C., 365 pp.
71. Whitaker, John R. 1974. Analytical applications of enzymes. p.31-78, IN: John R. Whitaker (ed.), **Food Related Enzymes**, Advances in Chemistry Series No. 136, American Chemical Society, Washington, D.C.
72. Whitaker, J.R., D.W. Yates, N.G. Bennett, J.J. Holbrook and H. Gutfreund. June 1974. The identification of intermediates in the reaction of pig heart lactate dehydrogenase with its substrates. *Biochemical Journal* 139(3):677-697.
73. Fossum, Kare, and John R. Whitaker. July 1974. Simple method for detecting amylase inhibitors in biological materials. *The Journal of Nutrition* 104(7):930-936.
74. Lu, Alice T., and John R. Whitaker. Dec. 1974. Some factors affecting rates of heat inactivation and reactivation of horseradish peroxidase. *Journal of Food Science* 39(6):1173-1178.
75. Mahoney, R. R., T. A. Nickerson and J. R. Whitaker. Nov. 1975. Selection of strain, growth conditions, and extraction procedures for optimum production of lactase from *Kluyveromyces fragilis*. *Journal of Dairy Science* 58(11):1620-1629.
76. Whitaker, John R. 1976. Development of flavor, odor, and pungency in onion and garlic. *Advances in Food Research* 22:73-133.

77. Hevia, Patricia, John R. Whitaker and Harold S. Olcott. March 1976. Solubilization of a fish protein concentrate with proteolytic enzymes. *Journal of Agricultural and Food Chemistry* 24(2):383-385.
78. Boonvisut, Sureepan, and John R. Whitaker. Nov. 1976. Effect of heat, amylase, and disulfide bond cleavage on the in vitro digestibility of soybean proteins. *Journal of Agricultural and Food Chemistry* 24(6):1130-1135.
79. Whitaker, John R., and Robert E. Feeney. 1977. Behavior of O-glycosyl and O-phosphoryl proteins in alkaline solution. p.155-175, IN: Mendel Friedman (ed.), **Advances in Experimental Medicine and Biology, v.86B, Protein Crosslinking-B, Nutritional and Medical Consequences**, Plenum Publishing Corp., New York.
80. Whitaker, John R., Charles E. Hess and Alex F. McCalla. 1977. Faculty and administrative response to the changing needs of education in agricultural and environmental sciences at the University of California, Davis. p.311-330, IN: David L. Armstrong (ed.), **Impact of Enrollments and Student Body Composition on Academic Program, Design and Delivery; a RICOP Report**, Michigan State University, East Lansing, Michigan.
81. Fox, Patrick F., John R. Whitaker and P. A. O'Leary. Feb. 1977. Isolation and characterization of sheep pepsin. *Biochemical Journal* 161(2):389-398.
82. Nashef, Aws S., David T. Osuga, Honson S. Lee, Ahmed I. Ahmed, John R. Whitaker and Robert E. Feeney. March 1977. Effects of alkali on proteins. Disulfides and their products. *Journal of Agricultural and Food Chemistry* 25(2):245-251.
83. Galembeck, Fernando, Dale S. Ryan, John R. Whitaker and Robert E. Feeney. March 1977. Reaction of proteins with formaldehyde in the presence and absence of sodium borohydride. *Journal of Agricultural and Food Chemistry* 25(2):238-245.
84. Savaiano, D.A., J.R. Powers, M.J. Costello, J.R. Whitaker and A.J. Clifford. April 1977. The effect of an alpha-amylase inhibitor on the growth rate of weanling rats. *Nutrition Reports International* 15(4):443-449.
85. Sen, Lourminia C., Elvira Gonzalez-Flores, Robert E. Feeney and John R. Whitaker. May 1977. Reactions of phosphoproteins in alkaline solutions. *Journal of Agricultural and Food Chemistry* 25(3):632-638.
86. Feeney, Robert E., and John R. Whitaker (eds.). June 1977. **Food Proteins; Improvement Through Chemical and Enzymatic Modification**, *Advances in Chemistry Series 160*. American Chemical Society, Washington, D.C., 312 pp.
87. Whitaker, John R. June 1977. Enzymatic modification of proteins applicable to foods. Chapter 5, p.95-155, IN: R.E. Feeney and J.R. Whitaker (eds), **Food Proteins; Improvement Through Chemical and Enzymatic Modification**, American Chemical Society, Washington, D.C.
88. Whitaker, J.R. June 1977. Denaturation and renaturation of proteins. Chapter 2, p.14-49, IN: John R. Whitaker and Steven R. Tannenbaum (eds), **Food Proteins**, Avi Publishing Co., Westport, Connecticut.
89. Whitaker, John R., and Steven R. Tannenbaum (eds.). June 1977. **Food Proteins**. Avi Publishing Co., Westport, Connecticut, 603 pp.

90. Powers, Joseph R., and John R. Whitaker. July 1977. Effect of several experimental parameters on combination of red kidney bean (*Phaseolus vulgaris*) alpha-amylase inhibitor with porcine pancreatic alpha-amylase. *Journal of Food Biochemistry* 1(3):239-260.
91. Powers, Joseph R., and John R. Whitaker. July 1977. Purification and some physical and chemical properties of red kidney bean (*Phaseolus vulgaris*) alpha-amylase inhibitor. *Journal of Food Biochemistry* 1(3):217-238.
92. Lee, Honson S., David T. Osuga, Aws S. Nashef, Ahmed I. Ahmed, John R. Whitaker and Robert E. Feeney. Sept. 1977. Effects of alkali on glycoproteins. Beta-elimination and nucleophilic addition reactions of substituted threonyl residues of antifreeze glycoprotein. *Journal of Agricultural and Food Chemistry* 25(5):1153-1158.
93. Mahoney, Raymond R., and John R. Whitaker. Oct. 1977. Stability and enzymatic properties of beta-galactosidase from *Kluyveromyces fragilis*. *Journal of Food Biochemistry* 1(4):327-350.
94. Granum, Per Einar, and John R. Whitaker. Oct. 1977. Purification and characterization of alpha-amylase inhibitors in wheat (*Triticum aestivum* var. anza). *Journal of Food Biochemistry* 1(4):385-401.
95. Puigserver, Antoine J., Lourminia C. Sen, Andrew J. Clifford, Robert E. Feeney and John R. Whitaker. 1978. A method for improving the nutritional value of food proteins: Covalent attachment of amino acids. p.587-612, IN: Mendel Friedman (ed.), **Advances in Experimental Medicine and Biology, Vol. 105, Nutritional Improvement of Food and Feed Proteins**, Plenum Publishing Co., New York.
96. Al-Bakir, A., and J.R. Whitaker. 1978. Purification and characterization of invertase from dates (*Phoenix dactylifera* L., var. zahdi). *Journal of Food Biochemistry* 2(2):133-160.
97. Mahoney, R.R., and J.R. Whitaker. March 1978. Purification and physicochemical properties of beta-galactosidase from *Kluyveromyces fragilis*. *Journal of Food Science* 43(2):584-591.
98. Lee, Honson S., Lourminia C. Sen, Andrew J. Clifford, John R. Whitaker and Robert E. Feeney. April 1978. Effect of reductive alkylation of the epsilon-amino group of lysyl residues of casein on its nutritive value in rats. *The Journal of Nutrition* 108(4):687-697.
99. Whitaker, John R. May 1978. Biochemical changes occurring during the fermentation of high-protein foods. *Food Technology* 32(5):175-180.
100. Lee, Shih-Lo, and John R. Whitaker. 1979. Acyl transpeptidation and hydrolytic reactions catalyzed by *Endothia parasitica* protease with small peptide substrates. *Journal of Food Biochemistry* 3(1):53-72.
101. Puigserver, A.J., L.C. Sen, R.E. Feeney and J.R. Whitaker. 1979. Hydrolyse enzymatique et stabilite en milieu acide des liaisons isopeptidiques de la L-methionyl-caseine. *Annales de Biologie Animale, Biochimie, Biophysique* 19(3B):749-755.
102. Feeney, R.E., and J.R. Whitaker (eds.). 1979. **Food Proteins; Improvement Through Chemical and Enzymatic Modification** (translated into Japanese). Japan Scientific Societies Press, 306 pp.
103. Coll, R.J., and J.R. Whitaker. Oct. 1979. The effect of the N-acyl moiety of the substrate on alpha-chymotrypsin binding and catalysis. *Journal of Molecular Catalysis* 6(4):235-249.

104. Puigserver, Antoine J., Lourminia C. Sen, Elvira Gonzales-Flores, Robert E. Feeney and John R. Whitaker. Oct. 1979. Covalent attachment of amino acids to casein. 1. Chemical modification and rates of in vitro enzymatic hydrolysis of derivatives. *Journal of Agricultural and Food Chemistry* 27(5):1098-1104.
105. Lee, Honson S., Lourminia C. Sen, Andrew J. Clifford, John R. Whitaker and Robert E. Feeney. Oct. 1979. Preparation and nutritional properties of caseins covalently modified with sugars. Reductive alkylation of lysines with glucose, fructose, or lactose. *Journal of Agricultural and Food Chemistry* 27(5):1094-1098.
106. Puigserver, Antoine J., Lourminia C. Sen, Andrew J. Clifford, Robert E. Feeney and John R. Whitaker. Dec. 1979. Covalent attachment of amino acids to casein. 2. Bioavailability of methionine and N-acetylmethionine covalently linked to casein. *Journal of Agricultural and Food Chemistry* 27(6):1286-1293.
107. Whitaker, John R. 1980. Some present and future uses of enzymes in the food industry. p.53-73, IN: James P. Danehy and Bernard Wolnak (eds.), **Enzymes; The Interface Between Technology and Economics**, Marcel Dekker, New York.
108. Whitaker, John R., and Maseo Fujimaki (eds.). 1980. **Chemical Deterioration of Proteins**, American Chemical Society Symposium Series No. 123. American Chemical Society, Washington, D.C., 268 pp.
109. Whitaker, John R. 1980. Changes occurring in proteins in alkaline solution. p.147-163, IN: John R. Whitaker and Maseo Fujimaki (eds.), **Chemical Deterioration of Proteins**, American Chemical Society, Washington, D.C.
110. Granum, Per Einar, and John R. Whitaker. June 1980. Improved method for purification of enterotoxin from *Clostridium perfringens* Type A. *Applied and Environmental Microbiology* 39(6):1120-1122.
111. Whitaker, John R., Per Einar Granum and Gunilla Aasen. Oct. 1980. Reaction of ammonia with trinitrobenzene sulfonic acid. *Analytical Biochemistry* 108(1):72-75.
112. Whitaker, John R., and Per Einar Granum. Nov. 1980. An absolute method for protein determination based on difference in absorbance at 235 and 280 nm. *Analytical Biochemistry* 109(1):156-159.
113. Whitaker, John R., and Per Einar Granum. Dec. 1980. The role of amino groups in the biological and antigenic activities of *Clostridium perfringens* type A enterotoxin. *Journal of Food Biochemistry* 4(4):201-217.
114. Granum, Per Einar, and John R. Whitaker. Dec. 1980. Perturbation of the structure of *Clostridium perfringens* enterotoxin by sodium dodecyl sulfate, guanidine hydrochloride, pH and temperature. *Journal of Food Biochemistry* 4(4):219-234.
115. Whitaker, John R. 1981. Naturally occurring peptide and protein inhibitors of enzymes. p.57-104, IN: John C. Ayres and John C. Kirschman (eds.), **Impact of Toxicology on Food Processing**, Avi Publishing Co., Westport, Connecticut.
116. Sen, Lourminia C., Honson S. Lee, Robert E. Feeney and John R. Whitaker. April 1981. In vitro digestibility and functional properties of chemically modified casein. *Journal of Agricultural and Food Chemistry* 29(2):348-354.



117. Granum, Per Einar, John R. Whitaker and Reidar Skjelkvale. May 1981. Trypsin activation of enterotoxin from *Clostridium perfringens* type A; Fragmentation and some physicochemical properties. *Biochimica et Biophysica Acta* 668(3):325-332.
118. Whitaker, John R., and Valdemiro C. Sgarbieri. July 1981. Purification and composition of the trypsin-chymotrypsin inhibitors of *Phaseolus vulgaris* L. var Rosinha G2. *Journal of Food Biochemistry* 5(3):197-213.
119. Sgarbieri, Valdemiro C., and John R. Whitaker. July 1981. Partial characterization of trypsin-chymotrypsin inhibitors from bean (*Phaseolus vulgaris* L., var. Rosinha G2): Chemical and physical properties. *Journal of Food Biochemistry* 5(3):215-232.
120. Feeney, Robert E., and John R. Whitaker (eds.). 1982. **Modification of Proteins: Food, Nutrition, and Pharmacological Aspects**, Advances in Chemistry Series No. 198. American Chemical Society, Washington, D.C., 402 pp.
121. Whitaker, John R., and Antoine J. Puigserver. 1982. Fundamentals and applications of enzymatic modifications of proteins: An overview. p.57-87, IN: R.E. Feeney and J.R. Whitaker (eds.), **Modification of Proteins: Food, Nutritional, and Pharmacological Aspects**, Advances in Chemistry Series No. 198, American Chemical Society, Washington, D.C.
122. Puigserver, Antoine J., Hubert F. Gaertner, Lourminia C. Sen, Robert E. Feeney and John R. Whitaker. 1982. Covalent attachment of essential amino acids to proteins by chemical methods: Nutritional and functional significance. p.149-167, IN: R.E. Feeney and J.R. Whitaker (eds.), **Modification of Proteins: Food, Nutritional, and Pharmacological Aspects**, Advances in Chemistry Series No. 198, American Chemical Society, Washington, D.C.
123. Whitaker, John R. 1982. Inhibitors of enzymes in biological materials used for foods. p.37-43, IN: E.F. Patrice Jelliffe and Derrick B. Jelliffe (eds.), **Adverse Effects of Foods**, Plenum Press, New York.
124. Maehler, Roger, and John R. Whitaker. Sept. 1982. Dynamics of ligand binding to  $\alpha$ -chymotrypsin and to *N*-methyl- $\alpha$ -chymotrypsin. *Biochemistry* 21(19):4621-4633.
125. Sgarbieri, Valdemiro C., and John R. Whitaker. 1982. Physical, chemical and nutritional properties of common bean (*Phaseolus*) proteins. *Advances in Food Research* 28:93-166.
126. Feeney, Robert E., and John R. Whitaker. 1982. The Maillard reaction and its prevention. Chapter 9, p.201-229, IN: J.P. Cherry (ed.), **Food Protein Deterioration: Mechanisms and Functionality**, ACS Symposium Series No. 206, American Chemical Society, Washington, D.C.
127. Whitaker, J.R. 1982. Enzymes of importance in high protein foods. p.329-358, IN: P. Dupuy (ed.), **Use of Enzymes in Food Technology**, Symposium International, Technique et Documentation Lavoisier, Paris.
128. Matheis, Gunter, Michael H. Penner, Robert E. Feeney and John R. Whitaker. April 1983. Phosphorylation of casein and lysozyme by phosphorus oxychloride. *Journal of Agricultural and Food Chemistry* 31(2):379-387.
129. Whitaker, John R. 1983. Protease and amylase inhibitors in biological materials. p.15-46, IN: John W. Finley and Daniel E. Schwass (eds.), **Xenobiotics in Foods and Feeds**, ACS Symposium Series NO. 234, American Chemical Society, Washington, D.C.

130. Kahn, Varda, Avi Golan-Goldhirsch and John R. Whitaker. Sept. 1983. Evidence against superoxide involvement in tyrosine hydroxylation by mushroom tyrosinase. *Phytochemistry* 22(9):1875-1883.
131. Whitaker, John R., and Robert E. Feeney. 1983. Chemical and physical modification of proteins by the hydroxide ion. *CRC Critical Reviews in Food Science and Nutrition* 19(3):173-212.
132. Granum, Per Einar, Halvor Holm, Ed Wilcox and John R. Whitaker. Dec. 1983. Inhibitory properties of two commercially available starch blocker preparations. *Nutrition Reports International* 28(6):1233-1244.
133. Whitaker, J.R., and G.E. Means (eds.). Feb. 1984. *Journal of Protein Chemistry* 3(1):1-130.
134. Matheis, G., and J.R. Whitaker. Feb. 1984. Peroxidase-catalyzed cross linking of proteins. *Journal of Protein Chemistry* 3:35-48.
135. Wilcox, Edward R., and John R. Whitaker. April 1984. Some aspects of the mechanism of complexation of red kidney bean  $\alpha$ -amylase inhibitor and  $\alpha$ -amylase. *Biochemistry* 23(8):1783-1791.
136. Williams, D.C., J.R. Whitaker and W. Jennings. June 1984. Air monitoring for nicotine contamination. *Journal of Chromatographic Science* 22(6):259-261.
137. Feeney, Robert E., and John R. Whitaker (eds.). 1984. **Modification of Proteins: Food, Nutritional, and Pharmacological Aspects**, Advances in Chemistry Series No. 198, American Chemical Society, Washington, D.C., 402 pp. (Japanese translation)
138. Gruenwedel, Dieter W., and John R. Whitaker (eds.). 1984. **Food Analysis; Principles and Techniques. Volume 1, Physical Characterization**. Marcel Dekker, New York, 338 pp.
139. Matheis, Gunter, and John R. Whitaker. Aug. 1984. Chemical phosphorylation of food proteins: An overview and a prospectus. *Journal of Agricultural and Food Chemistry* 32(4):699-705.
140. Matheis, Gunter, and John R. Whitaker. Aug. 1984.  $^{31}\text{P}$  NMR chemical shifts of phosphate covalently bound to proteins. *International Journal of Biochemistry* 16(8):867-873.
141. Whitaker, John R. Aug. 1984. Pectic substances, pectic enzymes and haze formation in fruit juices. *Enzyme and Microbial Technology* 6(8):341-350.
142. Golan-Goldhirsch, Avi, John R. Whitaker and Varda Kahn. 1984. Relation between structure of polyphenol oxidase and prevention of browning. p.437-456, IN: Mendel Friedman (ed.), **Nutritional and Toxicological Aspects of Food Safety**, Plenum Press, New York.
143. Matheis, G., and J.R. Whitaker. Sept. 1984. Modification of proteins by polyphenol oxidase and peroxidase and their products. *Journal of Food Biochemistry* 8(3):137-161.
144. Wilcox, E., and J.R. Whitaker. Sept. 1984. Structural features of red kidney bean  $\alpha$ -amylase inhibitor important in binding with  $\alpha$ -amylase. *Journal of Food Biochemistry* 8(3):189-213.
145. Stewart, K.K., and J.R. Whitaker (eds.). 1984. **Modern Methods of Food Analysis**, Avi Publishing Co., Westport, Connecticut.

146. Whitaker, J.R. 1984. Biological and biochemical assays in food analysis. p.187-225, IN: K.K. Stewart and J.R. Whitaker (eds.), **Modern Methods of Food Analysis**, Avi Publishing Co., Westport, Connecticut.
147. Whitaker, J.R., and G.E. Means (eds.). 1984. *Journal of Protein Chemistry* 3(2):131-141, 157-193, 215-228.
148. Gruenwedel, Dieter W., and John R. Whitaker (eds.). Nov. 1984. **Food Analysis: Principles and Techniques, Vol. 2, Physicochemical Techniques**, Marcel Dekker, New York, 591 pp.
149. Golan-Goldhirsh, Avi, and John R. Whitaker. Oct. 1984. Effect of ascorbic acid, sodium bisulfite, and thiol compounds on mushroom polyphenol oxidase. *Journal of Agricultural and Food Chemistry* 32(5):1003-1009.
150. Gruenwedel, Dieter W., and John R. Whitaker (eds.). 1985. **Food Analysis: Principles and Techniques, Volume 3, Biological Techniques**, Marcel Dekker, New York, 395 pp.
151. Whitaker, John R. 1985. Analytical uses of enzymes. p.297-377, IN: Dieter W. Gruenwedel and John R. Whitaker (eds.), **Food Analysis: Principles and Techniques, Volume 3, Biological Techniques**, Marcel Dekker, New York.
152. Feeney, R.E., and J.R. Whitaker. 1985. Chemical and enzymatic modification of plant proteins. p.181-219, IN: H.L. Wilcke and A.M. Altschul (eds.), **New Protein Foods, Vol. 5, Seed Storage Proteins**, Academic Press, New York.
153. Matheis, Gunter, Lourminia C. Sen, Andrew J. Clifford and John R. Whitaker. Feb. 1985. Attachment of N-acetyl-L-methionine into whole soybeans and the nutritional consequences for the rat. *Journal of Agricultural and Food Chemistry* 33(1):39-44.
154. Williams, Don C., John R. Whitaker and Walter G. Jennings. May 1985. Measurement of nicotine in building air as an indicator of tobacco smoke levels. *Environmental Health Perspectives* 60:405-410.
155. Whitaker, John R. 1985. Mechanisms of oxidoreductases important in food component modification. p.121-176, IN: T.R. Richardson and J.W. Finley (eds.), **Chemical Changes in Food During Processing**, Avi Publishing Co., Westport, Connecticut.
156. Feeney, Robert E., John R. Whitaker, W.S. Dominic Wong, David T. Osuga and M. Eric Gershwin. 1985. Chemical reactions of proteins. p.255-287, IN: T.R. Richardson and J.W. Finley (eds.), **Chemical Changes in Food During Processing**, Avi Publishing Co., Westport, Connecticut.
157. Golan-Goldhirsh, Avi, and John R. Whitaker. Sept. 1985.  $k_{cat}$  inactivation of mushroom polyphenol oxidase. *Journal of Molecular Catalysis* 32(2):141-147.
158. Chen, Andi Ou, and John R. Whitaker. April 1986. Purification and characterization of a lipoxygenase from immature English peas. *Journal of Agricultural and Food Chemistry* 34(2):203-211.
159. Feeney, Robert E., and John R. Whitaker (eds.). 1986. **Protein Tailoring for Food and Medical Uses**, Marcel Dekker, New York, 392 pp.

160. Whitaker, John R. 1986. Covalent attachment of essential amino acids to proteins to improve their nutritional and functional properties. p.41-74, IN: Robert E. Feeney and John R. Whitaker (eds.), **Protein Tailoring for Food and Medical Uses**, Marcel Dekker, New York.
161. Williams, Don C., Miang H. Lim, Andi O. Chen, Rose Marie Pangborn and John R. Whitaker. June 1986. Blanching of vegetables for freezing -- Which indicator enzyme to choose. *Food Technology* 40(6):130-140.
162. Whitaker, John R. Nov. 1986. Flavor development in foods: Some opportunities for biotechnology. p.39-49, IN: **The World Biotech Report 1986, Vol. 2: Part 1, Food Processing**, Online International, Inc., New York.
163. Golan-Goldhirsh, Avi, Varda Kahn and John R. Whitaker. 1986. Immunoglobulin affinity chromatography of mushroom polyphenol oxidase. *Israel Journal of Botany* 35(3/4):203-214.
164. Gruenwedel, Dieter W., and John R. Whitaker (eds.). 1987. **Food Analysis; Principles and Techniques, Volume 4, Separation Techniques**, Marcel Dekker, New York, 458 pp.
165. Whitaker, John R. 1987. Ion-exchange and affinity chromatography. p.55-133, IN: Dieter W. Gruenwedel and John R. Whitaker (eds.), **Food Analysis; Principles and Techniques, Volume 4, Separation Techniques**, Marcel Dekker, New York.
166. Whitaker, John R. May 1987. The promise of China. *Food Technology* 41(5):128, 130, 132, 134, 136, 138, 140.
167. Bhatt, R.S., and J.R. Whitaker. June 1987. *In vivo* and *in vitro* protein digestibilities of regular and mutant barleys and their isolated protein fractions. *Cereal Chemistry* 64(3):144-149.
168. Froehlich, Deborah A., Rose Marie Pangborn and John R. Whitaker. 1987. The effect of oral stimulation on human parotid salivary flow rate and alpha-amylase secretion. *Physiology and Behavior* 41(3):209-217.
169. Matheis, Gunter, and John R. Whitaker. Dec. 1987. A review: Enzymatic cross-linking of proteins applicable to foods. *Journal of Food Biochemistry* 11(4):309-327.
170. Chobert, Jean-Marc, Mahmoud Sitohy and John R. Whitaker. Dec. 1987. Specific limited hydrolysis and phosphorylation of food proteins for improvement of functional and nutritional properties. *Journal of the American Oil Chemists Society* 64(12):1704-1711.
171. Chobert, Jean-Marc, Mahmoud Z. Sitohy and John R. Whitaker. Feb. 1988. Solubility and emulsifying properties of caseins modified enzymatically by *Staphylococcus aureus* V8 protease. *Journal of Agricultural and Food Chemistry* 36(1):220-224.
172. Feeney, Robert E., and John R. Whitaker. 1988. Importance of cross-linking reactions in proteins. *Advances in Cereal Science and Technology* 9:21-46.
173. Abe, Makoto, and John R. Whitaker. 1988. Purification and characterization of a cysteine proteinase inhibitor from the endosperm of corn. *Agricultural and Biological Chemistry* 52(6):1583-1584.
174. Whitaker, J.R., F. Finardi Filho and F.M. Lajolo. 1988. Parameters involved in binding of porcine pancreatic  $\alpha$ -amylase with black bean inhibitor: Role of sulfhydryl groups, chloride, calcium, solvent composition and temperature. *Biochimie* 70(9):1153-1161.

175. Velasco, P.J., M.H. Lim, R.M. Pangborn and J.R. Whitaker. Feb. 1989. Enzymes responsible for off-flavor and off-aroma in blanched and frozen-stored vegetables. *Biotechnology and Applied Biochemistry* 11(1):118-127.
176. Velasco, P.J., R. Tischner, R.C. Huffaker and J.R. Whitaker 1989. Synthesis and degradation of nitrate reductase during the cell cycle of *Chlorella sorokiniana*. *Journal of Plant Physiology* 89(1):220-224.
177. Whitaker, John R., and Philip E. Sonnet (eds.). 1989. **Biocatalysis in Agricultural Biotechnology**, ACS Symposium Series No. 389. American Chemical Society, Washington, D.C. 397 pp.
178. Whitaker, John R. 1989. Interdependence of enzymology and agricultural biotechnology. p.1-9, IN: John R. Whitaker and Philip E. Sonnet (eds.), **Biocatalysis in Agricultural Biotechnology**, ACS Symposium Series No. 389, American Chemical Society, Washington, D.C.
179. Whitaker, John R. 1989. Introduction: Tailoring enzymes for industrial uses. p.12-13, IN: John R. Whitaker and Philip E. Sonnet (eds.), **Biocatalysis in Agricultural Biotechnology**, ACS Symposium Series No. 389, American Chemical Society, Washington, D.C.
180. Whitaker, John R. 1989. Characteristics of some enzymes used in genetic engineering. p.44-64, IN: John R. Whitaker and Philip E. Sonnet (eds.), **Biocatalysis in Agricultural Biotechnology**, ACS Symposium Series No. 389, American Chemical Society, Washington, D.C.
181. Whitaker, John R. 1989. Introduction: Enzymatic biosynthesis and degradation of polymers. p.82-83, IN: John R. Whitaker and Philip E. Sonnet (eds.), **Biocatalysis in Agricultural Biotechnology**, ACS Symposium Series No. 389, American Chemical Society, Washington, D.C.
182. Whitaker, John R. 1989. Introduction: Specialty uses of enzymes. p.174-175, IN: John R. Whitaker and Philip E. Sonnet (eds.), **Biocatalysis in Agricultural Biotechnology**, ACS Symposium Series No. 389, American Chemical Society, Washington, D.C.
183. Lim, Miang H., Patricia J. Velasco, Rose Marie Pangborn and John R. Whitaker. 1989. Enzymes involved in off-aroma formation in broccoli. p.72-83, IN: J. Jen (ed.), **Quality Improvement in Fruits and Vegetables**, ACS Symposium Series No. 405, American Chemical Society, Washington, D.C.
184. Chobert, J.-M., M.Z. Sitohy and J.R. Whitaker. 1989. Covalent attachment of phosphate and amino acids to zein; Functional and nutritional properties. *Sciences des Aliments* 9(4):749-761.
185. Whitaker, John R. 1989.  $\alpha$ -Amylase inhibitors of higher plants and microorganisms. p.354-380, IN: John E. Kinsella and William G. Soucie (eds.), **Food Proteins**, American Oil Chemists' Society, Champaign, Illinois.
186. Lim, Miang Hoong, Andi Ou Chen, Rose Marie Pangborn and John R. Whitaker. 1989. Effects of enzymes on aroma changes in vegetables during frozen storage. IN: A.H. Ghee, N.B. Hen and L.K. Kong (eds.), **Trends in Food Biotechnology**, Proceedings, 7th World Congress on Food Science and Technology, Singapore.
187. Bracho, Geracimo E., and John R. Whitaker. Feb. 1990. Characteristics of the inhibition of potato (*Solanum tuberosum*) invertase by an endogenous proteinaceous inhibitor in potatoes. *Plant Physiology* 92(2):381-385.

188. Bracho, Geracimo E., and John R. Whitaker. Feb. 1990. Purification and partial characterization of potato (*Solanum tuberosum*) invertase and its endogenous proteinaceous inhibitor. *Plant Physiology* 92(2):386-394.
189. Whitaker, John R. 1990. New and future uses of enzymes in food processing. *Food Biotechnology* 4(2):669-697.
190. Wu, Chao, and John R. Whitaker. July 1990. Purification and partial characterization of four trypsin chymotrypsin inhibitors from red kidney beans (*Phaseolus vulgaris*, var *Linden*). *Journal of Agricultural and Food Chemistry* 38(7):1523-1529.
191. Kumagai, Monto J., Mena Shah, Masaaki Terashima, Zeljko Vrkljan, John R. Whitaker and Raymond L. Rodriguez. Oct. 1990. Expression and secretion of rice  $\alpha$ -amylase by *Saccharomyces cerevisiae*. *Gene* 94(2):209-216.
192. Whitaker, John R. 1990. Microbial pectolytic enzymes. p.133-176, IN: William M. Fogarty and Catherine T. Kelly (eds.), **Microbial Enzymes and Biotechnology**, 2nd ed., Elsevier Applied Science Publishers, New York.
193. Casella, Massimo L.A., and John R. Whitaker. 1990. Enzymatically and chemically modified zein for improvement of functional properties. *Journal of Food Biochemistry* 14(6):453-475.
194. Kahn, Varda, David T. Osuga and John R. Whitaker. 1991. 2,4,5-Trihydroxybutyrophenone (2,4,5-THBP) as a substrate for mushroom tyrosinase. *Journal of Food Biochemistry* 15(1):1-15.
195. Whitaker, John R., and Mendel Mazelis. 1991. Enzymes important in flavor development in the Alliums. p.479-497, IN: P.F. Fox (ed.), **Food Enzymology**, Vol. 1, Elsevier Applied Science Publishers, London.
196. Whitaker, John R. 1991. Enzymes in analytical chemistry. p.287-308, IN: P.F. Fox (ed.), **Food Enzymology**, Vol. 2, Elsevier Applied Science Publishers, London.
197. Whitaker, John R. April 1991. Enzymes: Monitors of food stability and quality. *Trends in Food Science and Technology* 2(4):94-97.
198. Whitaker, John R. 1991. Lipoxygenases. p.175-215, IN: D.S. Robinson and N.A.M. Eskin (eds.), **Oxidative Enzymes in Foods**, Elsevier Applied Science Publishers, London.
199. Wu, Chao, and John R. Whitaker. Sept. 1991. Homology among trypsin/chymotrypsin inhibitors from red kidney bean, Brazilian pink bean, lima bean and soybean. *Journal of Agricultural and Food Chemistry* 39(9):1583-1589.
200. Wu, Chao, and John R. Whitaker. Oct. 1991. Binding and cleavage by trypsin and chymotrypsin at the reactive sites of proteinase inhibitors from Brazilian pink beans (*Phaseolus vulgaris*, variety Rosinha G2). *Journal of Agricultural and Food Chemistry* 39(10):1743-1751.
201. Ahn, Jong Kun, Lourminia C. Sen and John R. Whitaker. 1991. Stability of tertiary structure of phaseolin of red kidney bean (*Phaseolus vulgaris*) as limiting factor in proteolysis. *Journal of Food Biochemistry* 15(4):263-278.
202. Golan-Goldhirsh, Avi, David T. Osuga, Andi O. Chen and John R. Whitaker. 1992. Effect of ascorbic acid and copper on proteins. p.61-76, IN: Valerian T. D'Souza and Joseph Feder (eds.),

**The Bioorganic Chemistry of Enzymatic Catalysis: An Homage to Myron L. Bender**, CRC Press, Boca Raton, Florida.

203. Chobert, J.-M., M. Sitohy and J.R. Whitaker. 1992. Proteolytic degradation of food proteins. p.291-304, IN: G.J. Flick, Jr., and R.E. Martin (eds.), **Advances in Seafood Biochemistry: Composition and Quality**, Technomic Publishing Co., Lancaster, Pennsylvania.
204. Casella, Massimo L.A., Andrew Clifford and John R. Whitaker. 1992. Effect of ascorbate and copper on rat serum albumin. *Journal of Food Biochemistry* 16(3):193-206.
205. Whitaker, John R. 1992. Importance of enzymes to value-added quality of foods. *Food Structure* 11(3):201-208.
206. George, Aswathi A., Benito O. DeLumen, John R. Whitaker and Valdemiro C. Sgarbieri. May 1992. Methionine-containing proteins in two *Phaseolus vulgaris* cultivars with different methionine bioavailabilities. *Plant Foods for Human Nutrition* 43(3):225-232.
207. Ho, M. Frank, and John R. Whitaker. 1993. Purification and partial characterization of white kidney bean (*Phaseolus vulgaris*)  $\alpha$ -amylase inhibitors from two experimental cultivars. *Journal of Food Biochemistry* 17(1):15-33.
208. Ho, M. Frank, and John R. Whitaker. 1993. Subunit structures and essential amino acid residues of white kidney bean (*Phaseolus vulgaris*)  $\alpha$ -amylase inhibitors. *Journal of Food Biochemistry* 17(1):35-52.
209. Whitaker, John R. 1993. Enzymes: Functions and characteristics. p.1629-1635, IN: D. Atkins and S. Robertson (eds.), **Encyclopaedia of Food Science, Food Technology and Nutrition**, Academic Press, New York.
210. Whitaker, John R. 1993. Enzymes: Use in analysis. p.1643-1647, IN: D. Atkins and S. Robertson (eds.), **Encyclopaedia of Food Science, Food Technology and Nutrition**, Vol. 6, Academic Press, New York.
211. Garcia, Elisabeth, David Johnston, John R. Whitaker and Sharon P. Shoemaker. 1993. Assessment of endo-1,4-beta-D-glucanase activity by a rapid colorimetric assay using disodium 2,2'-bicinechoninate. *Journal of Food Biochemistry* 17:135-145.
212. Ampon, K., A.B. Salleh, M. Basri, W.M.Z. Yunus, C.N.A. Razak and J.R. Whitaker. 1993. Relationship of surface hydrophobicity to the sugar esterification activity of alkylated trypsin. *Journal of Bioscience (Pegang, Malaysia)* 4(2):154-160. (English Edition)
213. Vojdani, Fakrieh, and John R. Whitaker. 1994. Chemical and enzymatic modification of proteins for improved functionality. p.261-309, IN: N.S. Hettiarachy and G.R. Ziegler (eds.), **Protein Functionality in Food Systems**, Marcel Dekker, New York.
214. Whitaker, John R. 1994. Future directions and needs in food research. p.6-32, IN: **Impact of Food Research on New Product Development**, University of Humberside, Cottingham Road, England.
215. Whitaker, John R. 1994. The need for biosensors in the food industry and food research. p.13-30, IN: Gabriele Wagner and George G. Guilbault (eds.), **Food Biosensor Analysis**, Marcel Dekker, New York.

216. Whitaker, John R. 1994. **Principles of Enzymology for the Food Sciences**, 2nd ed., Marcel Dekker, New York, 615 pp.
217. Osuga, D., A. Van der Schaaf and J.R. Whitaker. 1994. Control of polyphenol oxidase activity using a catalytic mechanism. p.62-88, IN: R.Y. Yada, R.L. Jackman and J.L. Smith (eds.), **Protein Structure-Function Relationships in Foods**, Blackie Academic & Professional, London.
218. Ho, M.F., X. Yin, F.F. Filho, F. Lajolo and J.R. Whitaker. 1994. Naturally occurring  $\alpha$ -amylase inhibitors: Structure/function relationships. p.89-119, IN: R.Y. Yada, R.L. Jackman and J.L. Smith (eds.), **Protein Structure-Function Relationships in Foods**, Blackie Academic & Professional, London.
219. Smith, G.M., and J.R. Whitaker. 1994. Food biochemistry: Lipids, carbohydrates, and nucleic acids. p.213-228, IN: **The Encyclopedia of Agricultural Sciences, Volume 2**, Academic Press, San Diego, California.
220. Smith, G.M., and J.R. Whitaker. 1994. Food biochemistry: Pigments, flavors, aromas, and stabilities. p.229-248, IN: **The Encyclopedia of Agricultural Sciences, Volume 2**, Academic Press, San Diego, California.
221. Smith, G.M., and J.R. Whitaker. 1994. Food biochemistry: Proteins, enzymes and enzyme inhibitors. p.249-263, IN: **The Encyclopedia of Agricultural Sciences, Volume 2**, Academic Press, San Diego, California.
222. Whitaker, John R. 1995. Polyphenol oxidase. p.271-307, IN: Dominic W.S. Wong, **Food Enzymes: Structure and Mechanism**, Chapman & Hall, New York.
223. Martinez, M. Victoria, and John R. Whitaker. 1995. The biochemistry and control of enzymatic browning. *Trends in Food Science and Technology* 6(6):195-200.
224. Lee, Chang Y., and John R. Whitaker (eds.). 1995. **Enzymatic Browning and Its Prevention**, ACS Symposium Series 600, American Chemical Society, Washington, D.C. 338 pp.
225. Whitaker, John R., and Chang Y. Lee. 1995. Recent advances in chemistry of enzymatic browning: An overview. p.2-7, IN: Chang Y. Lee and John R. Whitaker (eds.), **Enzymatic Browning and Its Prevention**, ACS Symposium Series 600, American Chemical Society, Washington, D.C.
226. Osuga, David T., and John R. Whitaker. 1995. Mechanisms of some reducing compounds that inactivate polyphenol oxidases. p.210-222, IN: Chang Y. Lee and John R. Whitaker (eds.), **Enzymatic Browning and Its Prevention**, ACS Symposium Series 600, American Chemical Society, Washington, D.C.
227. Whitaker, J.R. 1995. Enzyme action in aqueous systems with special emphasis on intermediate and high moisture foods. p.255-277, IN: Gustavo V. Barbosa-Cánovas and Jorge Welti-Chanes (eds.), **Food Preservation by Moisture Control: Fundamentals and Applications**, Technomic Publishing Co., Lancaster, Pennsylvania.
228. Whitaker, John R. 1995. Future food research needs in the U.S.A. p.9-15, IN: Rashda Ali, Philip J. Barlow and John R. Whitaker (eds.), **Impact of Food Research on New Product Development**, 2nd International Conference on the Impact of Food Research on New Product Development, Karachi, Pakistan.



229. Ali, Rashda, Philip J. Barlow and John R. Whitaker (eds.). 1996. **Impact of Food Research on New Product Development**, 2nd International Conference on the Impact of Food Research on New Product Development, Karachi, Pakistan.
230. Beldman, Gerrit, David Osuga and John R. Whitaker. 1996. Arabinoxylan degrading enzymes of wheat flour. Effects on the quality of doughs and breads. p.173-188, IN: Rashda Ali, Philip J. Barlow and John R. Whitaker (eds.), **Impact of Food Research on New Product Development**, 2nd International Conference on the Impact of Food Research on New Product Development, Karachi, Pakistan.
231. Beldman, G., D. Osuga and J.R. Whitaker. March 1996. Some characteristics of  $\beta$ -D-xylopyranosidases,  $\alpha$ -L-arabinofuranosidases and an arabinoxylan  $\alpha$ -L-arabinofuranohydrolase from wheat bran and germinated wheat. *Journal of Cereal Science* 23(2):169-180.
232. Whitaker, John R. 1996. Enzymes. p.431-530, IN: Owen R. Fennema (ed.), **Food Chemistry**, 3rd ed., Marcel Dekker, New York.
233. Vojdani, Fakhrieh and John R. Whitaker. 1996. Phosphorylation of proteins and their functional and structural properties. p.210-229, IN: Nicholas Parris, Akio Kato, Lawrence K. Creamer and John Pearce (eds.), **Macromolecular Interactions in Food Technology**, ACS Symposium Series 650, American Chemical Society, Washington, D.C.
234. Hernández-Cortes, Patricia, John R. Whitaker and Fernando Luis García-Carreño. Dec. 1997. Purification and characterization of chymotrypsin from *Penaeus vannamei* (Crustacea: Decapoda). *Journal of Food Biochemistry* 21(6):497-514.
235. Whitaker, John R. 1997. Protease and  $\alpha$ -amylase inhibitors of higher plants. P.10-30, IN: Fereidoon Shahidi (ed.), **Antinutrients and Phytochemicals in Foods**, ACS Symposium Series 662, American Chemical Society, Washington, D.C.
236. Whitaker, John R. 1997. Structural properties of proteins. p.1-17, IN: Valdemiro Carlos Sgarbieri and Jane Menegaldo Turatti (eds.), **Special Topics on Science and Technology of Proteins**, Proceedings, Center for Food Chemistry and Applied Nutrition, Institute of Food Technology, Campinas, Brazil.
237. Whitaker, John R. 1997. Chemical and enzymatic modification to improve functional properties of milk whey proteins. p.29-43, IN: Valdemiro Carlos Sgarbieri and Jane Menegaldo Turatti (eds.), **Special Topics on Science and Technology of Proteins**, Proceedings, Center for Food Chemistry and Applied Nutrition, Institute of Food Technology, Campinas, Brazil.
238. Ramírez, E.C. and J.R. Whitaker. 1998. Cystine lyase as blanching indicator in broccoli. *Italian Journal of Food Science* 10(2):171-176.
239. Johnston, D.B., S.P. Shoemaker, G.M. Smith and J.R. Whitaker. Sept. 1998. Kinetic measurements of cellulase activity on insoluble substrates using disodium 2,2' bicinechoninate. *Journal of Food Biochemistry* 22(4):301-319.
240. Whitaker, John R., Fereidoon Shahidi, Agustin López Munguia, Rickey Y. Yada and Glenn Fuller (eds.). 1998. **Functional Properties of Proteins and Lipids**, ACS Symposium Series 708, American Chemical Society, Washington, D.C.
241. Vojdani, Fakhrieh and John R. Whitaker. 1998. Limited proteolysis of  $\alpha$ -lactalbumin and whey protein isolate: Effect on their functional properties. p.184-204, IN: Whitaker, John R.,

Fereidoon Shahidi, Agustin López Munguia, Rickey Y. Yada and Glenn Fuller (eds.), **Functional Properties of Proteins and Lipids**, ACS Symposium Series 708, American Chemical Society, Washington, D.C.

242. Ramirez, E.C. and J.R. Whitaker. Nov. 1998. Cystine lyases in plants: A comprehensive review. *Journal of Food Biochemistry* 22(5):427-440.
243. Regalado, C., B. García-Almendárez, L.M. Venegas-Barrera, J. Domínguez-Domínguez, A. Téllez-Jurado, G. Rodríguez-Serrano, S. Huerta-Ochoa and J.R. Whitaker. Jan. 1999. Maximization by response surface methodology of  $\beta$ -mannase production from solid state fermentation of coffee wastes, using *Aspergillus oryzae*. *Advances in Food Science (CMTL)* 21(1/2):34-38.
244. Whitaker, John R., Norman F. Haard, Charles F. Shoemaker and R. Paul Singh (eds.). 1999. **Food for Health in the Pacific Rim**, Food and Nutrition Press, Trumbull, Connecticut.
245. Ramirez, Edna C. and John R. Whitaker. June 1999. Biochemical characterization of cystine lyase from broccoli (*Brassica oleracea* var. *italica*). *Journal of Agricultural and Food Chemistry* 47(6):2218-2225.
246. Shahidi, Fereidoon, Paul Kolodziejczyk, John R. Whitaker, Agustin Lopez Munguia and Glenn Fuller (eds.) 1999. **Chemicals via Higher Plant Bioengineering**, *Advances in Experimental Medicine and Biology* 464. Kluwer Academic/Plenum Publishers, New York.
247. Ali, Rashda, Philip J. Barlow and John R. Whitaker (eds.) 1999. **Impact of Food Research on New Product Development**, Proceedings, 3<sup>rd</sup> International Conference on the Impact of Food Research on New Product Development, Karachi, Pakistan. HEJ Research Institute of Chemistry, University of Karachi, Pakistan.
248. Luh, B.S. and J.R. Whitaker. 1999. Processing and utilization of rice bran and rice oil. p.211-224, IN: Rashda Ali, Philip J. Barlow and John R. Whitaker (eds.), **Impact of Food Research on New Product Development**, Proceedings, 3<sup>rd</sup> International Conference on the Impact of Food Research on New Product Development, Karachi, Pakistan. HEJ Research Institute of Chemistry, University of Karachi, Pakistan.
249. Regalado, C., O. Pérez Arvizu and B.E. García-Almendárez and J.R. Whitaker. Oct. 1999. Purification and properties of two acid peroxidases from Brussels sprouts (*Brassica oleracea* L.). *Journal of Food Biochemistry* 23:435-450.
250. Lee, Shih-Chieh and John R. Whitaker. March 2000. The molecular weight of  $\alpha$ -amylase inhibitor from white bean cv 858B (*Phaseolus vulgaris* L.) is 56 kDa, not 20 kDa. *Journal of Food Biochemistry* 24(1):55-67.
251. Duarte-Vasquez, Miguel A., Blanca Garcia-Almendarez, Carlos Regalado and John R. Whitaker. May 2000. Purification and partial characterization of three turnip (*Brassica napus* L. var. *esculenta* DC) peroxidases. *Journal of Agricultural and Food Chemistry* 48(5):1574-1579. Need copies
252. Regalado, Carlos, Blanca E. Garcia-Almendarez, Luz M. Venegas-Barreta, Alejandro Tellez-Jurado, Garbiela Rodriguez-Serrano, Sergio Huerta-Ochoa and John R. Whitaker. July 2000. Production, partial purification and properties of beta-mannanases obtained by solid substrate fermentation of spent soluble coffee wastes and copra paste using *Aspergillus oryzae* and *Aspergillus niger*. *Journal of the Science of Food and Agriculture* 80(9):1343-1350. Need copies.

253. Lee, Shih-Chieh (Jack) and John Whitaker. Oct. 2000. The structures of naturally-occurring  $\alpha$ -amylase inhibitors. p.8-27, IN: **Food of 21<sup>st</sup> Century - Food and Resource Technology and Environment**. China Light Industry Press.
254. Duarte-Vázquez, Miguel A., Blanca E. García-Almendárez, Carlos Regalado and John R. Whitaker. Sept. 2001. Purification and properties of a neutral peroxidase isozyme from turnip (*Brassica napus*L. var. purple top white globe) roots. *Journal of Agricultural and Food Chemistry* 49(9):4450-4456.
255. Lee, Shih-Chieh, Paul L. Gepts and John R. Whitaker. Oct. 2002. Protein structures of common bean (*Phaseolus vulgaris*)  $\alpha$ -amylase inhibitors. *Journal of Agricultural and Food Chemistry* 50(11):6618-6627.
256. Whitaker, John R., Alphons G.J. Voragen and Dominic W.S. Wong (eds.). 2003. **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York, 1128 pp.
257. Whitaker, John R. 2003. Protein structure and kinetics of enzyme reactions: A historical perspective. p.1-10, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
258. Whitaker, John R. 2003. What enzymes do and why they are highly specific and efficient catalysts. p.21-30, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
259. Whitaker, John R. 2003. Enzyme-catalyzed reactions: Experimental factors that affect rates. p.31-48, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
260. Whitaker, John R. 2003. Regulatory issues of food enzymes used in the United States. p.67-76, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
261. Whitaker, John R. 2003. Enzymes in protein biosynthesis. p.193-209, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
262. Wong, Dominic W.S. and John R. Whitaker. 2003. Catalase. p.389-401, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
263. Ramirez, Edna C., John R. Whitaker and Victoria M. Virador. 2003. Polyphenol oxidase. p.509-523, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
264. Whitaker, John R. 2003. Xanthine oxidase. p.547-556, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.
265. Whitaker, John R. 2003. Proteolytic enzymes. p.993-1018, IN: John R. Whitaker, Alphons G.J. Voragen and Dominic W.S. Wong (eds.), **Handbook of Food Enzymology**, Marcel Dekker, Inc., New York.

266. Duarte-Vazquez, Miguel A., Blanca E. Garcia-Almendarez, Arturo Rojo-Dominguez, John R. Whitaker, C. Arroyave-Hernandez and Carlos Regalado. Jan. 2003. Monosaccharide composition and properties of a deglycosylated turnip peroxidase isozyme. *Phytochemistry* 62(1):5-11.
267. Whitaker, John R. May 2003. Enzymes: Functions and characteristics. p.2119-2125, IN: D. Atkins and S. Robertson (eds.), **Encyclopaedia of Food Science, Food Technology and Nutrition**, Elsevier Science Ltd., London, England.
268. Whitaker, John R. May 2003. Enzymes: Uses in analysis. p.2139-2144, IN: D. Atkins and S. Robertson (eds.), **Encyclopaedia of Food Science, Food Technology and Nutrition**, Elsevier Science Ltd., London, England.
269. Jáuregui-Zúñiga, David, Juan Pablo Reyes-Grajeda, José David Sepúlveda-Sánchez, John R. Whitaker and Abel Moreno. March 2003. Crystallochemical characterization of calcium oxalate crystals isolated from seed coats of *Phaseolus vulgaris* and leaves of *Vitis vinifera*. *Journal of Plant Physiology* 160(3):239-245.
270. Duarte-Vazquez, Miguel A., John R. Whitaker, Arturo Rojo-Dominguez, Blanca E. Garcia-Almendarez and Carlos Regalado. 2003. Isolation and thermal characterization of an acidic isoperoxidase from turnip roots. *Journal of Agricultural and Food Chemistry* 51(17):5096-5102.

## John R. Whitaker

### Reports, Regular Distribution

1. Whitaker, John R. 1965. Post mortem proteolytic changes affecting myofibrillar proteins. p.153-160, IN: Proceedings of the 17th Annual Reciprocal Meat Conference, University of Wisconsin, Madison, Wisconsin.
2. Whitaker, John R. Jan. 1965. Proteins - A review of their basic structure and properties. The Brewers Digest 40(1):57-61.
3. Whitaker, John R. April 1973. Some recent developments in enzymology. Food Technology 27(4):16, 18, 20, 22, 24, 26.
4. Whitaker, John R. March 1981. This week's citation classic: Whitaker, J.R., Determination of molecular weights of proteins by gel filtration on Sephadex. Anal. Chem. 35:1950-3, 1963. Current Contents/Life Sciences 12(12):21.
5. Whitaker, John R., and Carlos E. Gonzalez Vincente (eds.). 1988. Proceedings of the UCD/INIFAP Conference "Agricultural Research Opportunities for U.S. and Mexico Collaboration." Guadalajara, Mexico. 315 pp.
6. Lim, M.H., P. Velasco, R.M. Pangborn and J.R. Whitaker. July 1989. Enzyme indicators of adequate blanching. p.67-72, IN: Proceedings, International Conference on Technical Innovations in Freezing and Refrigeration of Fruits and Vegetables, Dept. of Food Science and Technology, University of California, July 9-12, 1989.
7. Yin, Xiaoye, Frank M. Ho, Flavio Finardi Filho, Franco M. Lajolo and John R. Whitaker. 1991. Structural and mechanistic aspects of common bean (*Phaseolus vulgaris*)  $\alpha$ -amylase inhibitors. p.97-109, IN: Proceedings of the First Brazilian Congress on Proteins, Unicamp Press.
8. Whitaker, John R. 1991. Chemical and enzymatic modification of proteins. p.261-275, IN: Proceedings of the First Brazilian Congress on Proteins, Unicamp Press.
9. Zeidler, Gideon, John R. Whitaker, Norman Haard and Bor S. Luh (eds.). 1991. Proceedings of the First International Conference on Food Science and Technology, Wuxi Institute of Light Industry, Wuxi, People's Republic of China.
10. Osuga, David, Andre van der Schaaf and John R. Whitaker. 1991. Polyphenol oxidase: Mechanism and control. p.105-119, IN: Gideon Zeidler, John R. Whitaker, Norman Haard and Bor S. Luh (eds.), Proceedings of the First International Conference on Food Science and Technology, Wuxi Institute of Light Industry, Wuxi, People's Republic of China.
11. Lee, Shieh-Chieh, and John R. Whitaker. 1994. Structural aspects of  $\alpha$ -amylase inhibitors of common beans (*Phaseolus vulgaris*). p.1-19, IN: Proceedings of the Second International Conference on Food Science and Technology, Wuxi Institute of Light Industry, Wuxi, People's Republic of China.
12. Whitaker, John R. Sept. 1998. Propiedades funcionales de proteínas "Chemical and enzymatic modification to improve functional properties of milk whey proteins." p.6-20, IN: Advances in Food Science and Technology. 1st Colloquium of South Central Mexico, Tulca, Mexico. September 24-25, 1998.

**John R. Whitaker**

Reports, Limited Distribution

1. Whitaker, John R. 1958. The ficin content of figs and fig latex. p.4-9, IN: Proceedings of the 12th Annual Research Conference of the California Fig Institute.
2. Whitaker, John R., and Mohammed El-Gharbawi. 1959. Tenderization of meat with proteolytic enzymes. p.7-10, IN: Proceedings of the 13th Annual Research Conference of the California Fig Institute.
3. Whitaker, John R. 1968. Sources of proteins for modified dairy foods. p.128-134, IN: Proceedings of the 48th Annual California Dairy Industry Conference, Department of Food Science and Technology, University of California, Davis.
4. Whitaker, John R. Jan. 1976. Fundamental aspects of enzymology. p.6-15, IN: Proceedings of the Symposium on Enzymes in the Food Processing Industry, University of California, Cooperative Extension Service, Davis, California.
5. Whitaker, John R. June 1976. Fundamental aspects of enzymology. p.2-1 - 2-12, IN: Use and Control in Foods, 1976 Institute of Food Technologists Short Course, University of California, Davis, California.
6. Whitaker, John R. June 1976. Practical applications of enzyme technology. p.3-1 - 3-12, IN: Use and Control in Foods, 1976 Institute of Food Technologists Short Course, University of California, Davis, California.
7. Whitaker, J.R. 1988.  $\alpha$ -Amylase inhibitors. Molecule of the Month article, The Biochemistry News Magazine. University of California, Davis.

## John R. Whitaker

### Reviews

1. Whitaker, John R. 1966. Molecular biology of muscle proteins - summary. p.299-311, IN: E.J. Briskey, R.G. Cassens and J.C. Trautman (eds.), **The Physiology and Biochemistry of Muscle as a Food**, The University of Wisconsin Press, Madison, Wisconsin.
2. Whitaker, J.R., M.W. Montgomery, P. Hopper, W. Landmann, A. Mullins and J.C. Trautman. 1970. Summary and discussion of part 5. p.493-495, IN: E.J. Briskey, R.G. Cassens and B.B. Marsh (eds.), **The Physiology and Biochemistry of Muscle as a Food, 2**, The University of Wisconsin Press, Madison, Wisconsin.
3. Whitaker, John R. July 1977. Editorial. *Journal of Food Biochemistry* 1(3):209-210.
4. Whitaker, John R. 1979. *Methods in Enzymology*, Volume XLVII. Enzyme Structure (Part E) (book review). *Journal of Food Biochemistry* 2(3):289-291.
5. Whitaker, John R. 1979. *Methods in Enzymology*, Vol. XLVIII, Enzyme Structure (Part F) (book review). *Journal of Food Biochemistry* 2(3):291-293.
6. Whitaker, John R. Oct. 1979. *Functionality and Protein Structure* edited by A. Pour-El (book review). *Food Technology* 33(10):128-130.
7. Whitaker, John R. Jan. 1981. *Topics in Enzyme and Fermentation Biotechnology*, v.4, edited by A. Wiseman (book review). *Food Technology* 35(1):141, 144.
8. Whitaker, John R. Oct. 1982. *Developments in Food Proteins - 1*, edited by B.J.F. Hudson (book review). *Food Technology* 36(10):182-183.
9. Whitaker, John R. Sept. 1982. *Source Book of Food Enzymology* by Sigmund Schwimmer (book review). *Journal of Food Biochemistry* 6(3):207-209.
10. Whitaker, John R. Nov. 1983. *Methods of Enzymatic Analysis*, Vol. I: Fundamentals, edited by H.U. Bergmeyer (book review). *Food Technology* 37(11):142-143.
11. Whitaker, John R. Dec. 1983. *Developments in Food Proteins - 2*, edited by B.J.F. Hudson (book review). *Food Technology* 37(12):113.
12. Whitaker, John R. June 1984. *Methods of Enzymatic Analysis*, Vol. II: Samples, Reagents, Assessment of Results, edited by H.U. Bergmeyer (book review). *Food Technology* 38(6):101-102.
13. Whitaker, John R. June 1984. *Methods of Enzymatic Analysis*, Vol. III: Oxidoreductases, Transferases, edited by H.U. Bergmeyer (book review). *Food Technology* 38(6):101-102.
14. Whitaker, John R. June 1985. *Analytical Uses of Immobilized Enzymes* by George G. Guilbault (book review). *Journal of Food Biochemistry* 9(2):168-170.
15. Whitaker, John R. Sept. 1986. *Amino Acids and Peptides*, ed. by J.S. Davies (book review). *Journal of Food Biochemistry* 10(3):237-238.

16. Whitaker, J.R. 1995. Contributions to understanding the remarkable world of enzymes - An editorial. *Journal of Food Biochemistry* 19(1):R5-R6.

Whitaker, J.R. 1996. Letter from the Editor. *Journal of Food Biochemistry* 19(6):R5-R5.



## John R. Whitaker

### Abstracts

1. Whitaker, John R., and Bernard J. Jandorf. March 1956. Specific reactions of dinitrofluorobenzene with active groups of chymotrypsin. *Federation Proceedings* 15(1, Pt.1):383 (Abstract no. 1253).
2. Whitaker, John R. 1960. A model for sulfhydryl proteolytic enzyme catalysis. p.5, IN: *Proceedings of the Pacific Slope Biochemical Conference*.
3. Del Castillo, L.M., M. Castaneda-Agullo, J.R. Whitaker and A.L. Tappel. 1960. Effect of ionic strength on the kinetics of trypsin and alpha-chymotrypsin. p.1, IN: *Proceedings of the Pacific Slope Biochemical Conference*.
4. Whitaker, John R. July 1960. Mechanism of protein hydrolysis by ion-exchange resins. *Dissertation Abstracts* 20(7):2539-2544.
5. Whitaker, John R. 1961. Ficin (fig proteolytic enzymes). p.12-13, IN: *Proceedings of the 15th Annual Research Conference of the California Fig Institute*.
6. Whitaker, John R. 1961. A model for sulfhydryl proteolytic enzyme catalysis. p.33c, Abstract no. 80, IN: *Abstracts, Division of Biological Chemistry, American Chemical Society*.
7. Kramer, Donald E., and J.R. Whitaker. 1962. Studies on the proteolytic enzymes in the latex of *Ficus carica* var. Kadota. p.34, IN: *Proceedings of the Pacific Slope Biochemical Conference*.
8. Doyle, Miles R., and J.R. Whitaker. 1962. The cathepsins of chicken muscle. p.4c, Abstract 9, IN: *Abstracts, Division of Biological Chemistry, American Chemical Society*.
9. Perez-Villasenor, J., and J.R. Whitaker. 1965. Ionic and solvent effects on the activity of horse radish peroxidase. p.59, IN: *Proceedings of the Pacific Slope Biochemical Conference*.
10. Kramer, Donald E., and J.R. Whitaker. 1965. Physical properties of *Ficus carica* var. Kadota ficins C and D. p.93, IN: *Proceedings of the Pacific Slope Biochemical Conference*.
11. Williams, Donald C., and John R. Whitaker. 1966. The proteolytic enzymes of the genus *Ficus*. p.78, IN: *Proceedings of the Pacific Slope Biochemical Conference*.
12. Whitaker, John R., and Donald E. Kramer. April 1967. Physico-chemical and enzymatic properties of *Ficus carica* variety Kadota ficin D. *Federation Proceedings* 26(2):838 (abstract no. 3253).
13. Perez-Villasenor, J., and J.R. Whitaker. Aug. 1967. Chemical modification of the active site of papain. Abstract F-124, IN: *Abstracts Volume, Seventh International Congress of Biochemistry, Tokyo*.
14. Whitaker, John R. 1968. pH and substrate-induced conformational changes in the active site of the sulfhydryl proteolytic enzyme, ficin. IN: *Proceedings of the Physiological Society of Mexico*.
15. Williams, Donald C., and John R. Whitaker. April 1968. Anhydride intermediate in papain-catalyzed hydrolyses. *Federation Proceedings* 27(2):585 (Abstract no. 2073).

16. Whitaker, John R. 1969. Ligand-induced conformational changes in ficin and papain. p.34, IN: Proceedings of the Pacific Slope Biochemical Conference.
17. Whitaker, John R. 1969. Substrate-induced conformational changes in ficin and papain. Federation Proceedings 23:909 (Abstract no. 3661).
18. McFeeters, R., J.R. Whitaker and C. Chichester. 1970. Purification and some kinetic properties of chlorophyllase. Federation Proceedings 29:905.
19. Lee, L.S., and J.R. Whitaker. 1970. Ficin and papain-catalyzed reaction. Effect of temperature on reactivity of the essential sulfhydryl group of ficin in the presence and absence of competitive inhibitors. IN: Proceedings of the Pacific Slope Biochemical Conference.
20. Sen, L.C., and J.R. Whitaker. 1972. Purification and characterization of a ficin and papain inhibitor from avian egg white. IN: Proceedings of the Pacific Slope Biochemical Conference.
21. Whitaker, J.R. 1973. Some analytical applications of enzymes. Abstract no. AGFD-53, IN: Abstracts, Agricultural and Food Chemistry Division, American Chemical Society.
22. Whitaker, J.R., D. Yates and H. Gutfreund. 1974. Methods of following transient intermediates in dehydrogenase-catalyzed reactions. IN: Proceedings of the Pacific Slope Biochemical Conference.
23. Whitaker, J.R., H. Gutfreund and D. Yates. 1975. Evidence against subunit interaction and half site reactivity of porcine heart lactate dehydrogenase. IN: Fourth Enzyme Mechanisms Conference, San Juan, Puerto Rico.
24. Al-Bakir, A., and J.R. Whitaker. 1975. Kinetic approach to sucrose hydrolysis by invertase. IN: Abstracts, Third Annual Agricultural Chemistry Colloquium.
25. Whitaker, J.R. 1975. Enzymatic modification of proteins applicable to foods. IN: Abstracts of Symposium on Improvement of Food Proteins through Chemical and Enzymatic Modification, First North American Congress of Chemistry.
26. Powers, J.R., and J.R. Whitaker. 1975. Amylase inhibitor of red kidney beans (*Phaseolus vulgaris*). IN: Abstracts, 26th AIBS Meeting, Oregon State University.
27. Lee, S.H., D.T. Osuga, A.S. Nashef, A.I. Ahmed, J.R. Whitaker and R.E. Feeney. 1976. Alkali treatment of antifreeze glycoprotein; Beta-eliminations and nucleophilic addition reactions of substituted threonyl residues. IN; Abstracts, 31st Meeting, Northwest Region, American Chemical Society.
28. Sen, L.C., E. Gonzalez-Flores, R.E. Feeney and J.R. Whitaker. 1976. Chemical reactivities of phosvitin in alkaline solutions. Abstract no. Biol-75, IN: Division of Biological Chemistry, American Chemical Society.
29. Mahoney, R.R., and J.R. Whitaker. June 1976. Purification and some properties of lactase from *Kluyveromyces fragilis*. Abstract No. 348, IN: Program, Institute Food Technologists Annual Meeting, Anaheim, California.
30. Sen, L.C., E. Gonzalez-Flores, R.E. Feeney and J.R. Whitaker. Aug. 1976. Chemical reactivities of phosvitin in alkaline solutions. Abstract, Division of Biological Chemistry, American Chemical Society, San Francisco, California.

31. Nashef, Aws S., David T. Osuga, Ahmed I. Ahmed, Honson S. Lee, John R. Whitaker and Robert E. Feeney. Aug. 1976. Alkali treatment of proteins - Disulfide bonds. Abstract 377, IN: Abstracts, Biological Chemistry Divisional Meeting, American Chemical Society, San Francisco, California.
32. Whitaker, J.R., and R.E. Feeney. Aug. 1976. Behavior of O-glycosyl and O-phosphoryl proteins in alkaline solutions. IN: Symposium on Nutritional and Biochemical Consequences of Protein Crosslinking, American Chemical Society Meeting, San Francisco, California.
33. Lee, H.S., L. Sen, A.J. Clifford, J.R. Whitaker and R.E. Feeney. April 1977. Effect of reductive alkylation of epsilon-amino groups of casein on rat growth and in vitro enzyme digestion. Federation Proceedings 36:1179.
34. Sen, L.C., A. Puigserver, H. Lee, R.E. Feeney and J.R. Whitaker. June 1977. Chemical modification of casein and its digestibility. Pacific Slope Biochemical Conference, Corvallis, Oregon.
35. Powers, Joseph R., and John R. Whitaker. Sept. 1977. Factors affecting combination of red kidney bean (*Phaseolus vulgaris*) alpha-amylase inhibitor with porcine pancreatic alpha-amylase. Abstract No. 57, Division of Biological Chemistry, American Chemical Society, 174th National Meeting, Chicago, Illinois.
36. Puigserver, A.J., L.C. Sen, R.E. Feeney, J.R. Whitaker and A.J. Clifford. March 1978. Nutritional value of casein as influenced by the covalent attachment of amino acids. Federation Proceedings 37:839.
37. Puigserver, Antoine J., Lourminia C. Sen, Elvira Gonzales-Flores, Robert E. Feeney and John R. Whitaker. March 1978. Chemical modification of casein through covalent attachment of hydrophilic and hydrophobic amino acids. Abstract No. 47, IN: Division of Agricultural and Food Chemistry, American Chemical Society, 175th National Meeting, Anaheim, California.
38. Puigserver, Antoine J., Hubert F. Gaertner, Lourminia C. Sen, Robert E. Feeney and John R. Whitaker. Aug. 1980. Covalent attachment of essential amino acids to proteins by chemical methods - Nutritional and functional significance. Abstract No. 64, IN: Abstracts, Second Chemical Congress of the North American Continent, Division of Agricultural and Food Chemistry, American Chemical Society.
39. Whitaker, John R., and Antoine J. Puigserver. Aug. 1980. Fundamentals and applications of enzymatic modification of proteins--An overview. Abstract No. 61, IN: Abstracts, Second Chemical Congress of the North American Continent, Division of Agricultural and Food Chemistry, American Chemical Society.
40. Whitaker, John R., and Robert E. Feeney. Aug. 1981. The Maillard reaction and its prevention. Abstract No. 16, IN: Abstracts, 182nd ACS National Meeting, American Chemical Society, Division of Agricultural and Food Chemistry.
41. Whitaker, John R., and Robert E. Feeney. Aug. 1981. Chemical modifications of proteins by the hydroxide ion. Abstract No. 66, IN: Abstracts, 182nd ACS National Meeting, American Chemical Society, Division of Agricultural and Food Chemistry.
42. Whitaker, John R. May 1982. Enzymes in the protein food industry. International Symposium on the Use of Enzymes in Food Technology, Versailles, France.

43. Whitaker, John R. Aug. 1982. Present and future importance of enzymes in food science and technology. First Symposium on Advances in Food Science and Technology, Vera Cruz, Mexico.
44. Whitaker, J.R. Sept. 1982. Protein inhibitors of enzymes in food materials. Abstract 71, IN: 184th ACS National Meeting, Division of Agricultural and Food Chemistry, American Chemical Society.
45. Golan, Avi, and John R. Whitaker. Oct. 1982. The structure of polyphenol oxidase (PPO) and its possible role in color development in foods. American Chemical Society Pacific Conference on Chemistry and Spectroscopy, San Francisco.
46. Wilcox, Edward R., and John R. Whitaker. March 1983. On the mechanism of red kidney bean  $\alpha$ -amylase inhibitor. Abstract No. 8, IN: Abstracts of the 185th ACS National Meeting, Div. of Agricultural and Food Chemistry, American Chemical Society, Seattle, Washington.
47. Whitaker, John R. March 1983. Instrumental techniques in use of enzymes in food analysis. Western Food Industry Conference, University of California, Davis, California.
48. Matheis, Gunter, Michael H. Penner, Robert E. Feeney and John R. Whitaker. May 1983. Use of  $^{31}\text{P}$  NMR spectroscopy to characterize covalently bound phosphate of proteins. Federation Proceedings 42(7):2034 (Abstract No. 1619).
49. Whitaker, John R. June 1983. Biological assays in food analysis. Basic Symposium, 43rd Annual Meeting, Institute of Food Technologists, New Orleans, Louisiana.
50. Whitaker, J.R. Sept. 1983. Chemical and enzymatic modification as related to food proteins. Abstract No. 79, IN: Abstracts of the 186th ACS National Meeting, Div. of Agricultural and Food Chemistry, American Chemical Society, Washington, D.C.
51. Chen, A., M. Aguirre, D. Williams, R.M. Pangborn and J.R. Whitaker. Sept. 1983. Contribution of peroxidase, catalase, lipase and lipoxygenase to quality deterioration in frozen peas. Abstract No. 106, IN: Abstracts of the 186th ACS National Meeting, Div. of Agricultural and Food Chemistry, American Chemical Society, Washington, D.C.
52. Wong, W.S. Dominic, David T. Osuga, John R. Whitaker and Robert E. Feeney. Sept. 1983. Cupric ion inactivation of lysozyme and ovomucoid. Abstract No. 174, IN: Abstracts of the 186th ACS National Meeting, Div. of Agricultural and Food Chemistry, American Chemical Society, Washington, D.C.
53. Williams, Don D., John R. Whitaker and Walter G. Jennings. Oct. 1983. Detection of nicotine residues in workplace environments. International Symposium on Advances in Chromatography, Amsterdam.
54. Whitaker, John R. Dec. 1983. Recent advances in enzyme technology; application to chemistry, biochemistry, medicine, food sciences and biology. 7th ACS Senior Technical Meeting, American Chemical Society, Mayaguez, Puerto Rico.
55. Golan-Goldhirsh, Avi, and John R. Whitaker. April 1984. Effect of ascorbic acid, sodium bisulfite and thiol compounds on mushroom polyphenol oxidase. Abstract No. 62, IN: Abstracts of the 187th ACS National Meeting, Div. of Agricultural and Food Chemistry, American Chemical Society, St. Louis, Missouri.

56. Whitaker, John R., and Robert E. Feeney. April 1984. Chemical and physical structure of proteins and their digestibilities. American Oil Chemists' Society Meeting, Dallas, Texas.
57. Feeney, Robert E., and John R. Whitaker. April 1984. Chemical modifications of proteins. American Oil Chemists' Society Meeting, Dallas, Texas.
58. Whitaker, John R. June 1984. Mechanisms of oxidoreductases important in food component modification. Basic Symposium, 44th Annual Meeting, Institute of Food Technologists, Anaheim, California.
59. Feeney, Robert E., John R. Whitaker, W.S. Dominic Wong, Dave T. Osuga and M. Eric Gershwin. June 1984. Chemical reactions of proteins. Basic Symposium 44th Annual Meeting, Institute of Food Technologists, Anaheim, California.
60. Whitaker, John R. June 1984. Protease inhibitors as metabolic regulators in health and disease. Canadian Federation of Biological Sciences, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.
61. Golan-Goldhirsh, Avi, and John R. Whitaker. July 1984. Specific modifications of histidine in proteins with ascorbic acid and cupric ions. Pacific Slope Biochemical Conference, Santa Cruz, California.
62. Williams, Don C., and John R. Whitaker. July 1984. Esterases and lipases in the garden pea (*Pisum sativum*). Pacific Slope Biochemical Conference, Santa Cruz, California.
63. Chen, Andi O., and John R. Whitaker. Aug. 1984. Purification and characterization of a pea lipoxygenase. American Society of Plant Physiologists, University of California, Davis, California.
64. Golan-Goldhirsh, Avi, and John R. Whitaker. Aug. 1984. Specific modification of histidine in proteins with ascorbic acid and cupric ions. Abstract No. 76, IN: Abstracts of the 188th ACS National Meeting, Div. of Agricultural and Food Chemistry, American Chemical Society, Philadelphia, Pennsylvania.
65. Whitaker, John R. Dec. 1984. Quality improvement of plant high protein sources by covalent attachment of limiting essential amino acids. 1984 International Chemical Congress of Pacific Basin Societies, American Chemical Society, Honolulu, Hawaii.
66. Whitaker, J.R. Oct. 1984. Cookability, digestability and nutritional quality of legume seeds, especially as affected by storage. 1984 Conference on the Biotechnology of Renewable Resources: Application of Biochemical, Microbiological, and Genetic Techniques to Enhance the Availability of Renewable Resources, National Academy of Science, St. Louis, Missouri.
67. Golan-Goldhirsh, A., J.R. Whitaker, A. Chen and D. Osuga. April 1985. Specific modification of histidine residues in proteins by ascorbic acid/ $\text{Cu}^{2+}$ . FASEB Meeting, Anaheim, California.
68. Chen, A., A. Lim, M. Aguirre, D.C. Williams, R.M. Pangborn, W.G. Jennings and J.R. Whitaker. June 1985. Role of several enzymes in quality deterioration of frozen foods. p.179, Abstract 402, IN: Program and Abstracts, 45th Annual IFT Meeting, Institute of Food Technologists, Chicago, Illinois.
69. Whitaker, J.R. Nov. 1985. Replacement of malt by other enzyme sources in beer. Enzymology Delegation, People's Republic of China.

70. Whitaker, J.R. Nov. 1985. Enzymes for enhancing food flavor. Enzymology Delegation, People's Republic of China.
71. Whitaker, J.R., and F.M. Lajolo. Jan. 1986. Binding of bean protein inhibitor with alpha-amylase. (Poster Session) Ninth Annual Symposium in Plant Physiology, University of California, Riverside.
72. Sitohy, M., J.M. Chobert and J.R. Whitaker. May 1986. Limited proteolysis and covalent attachment of phosphate and amino acids to proteins to improve their functional and nutritional properties. American Oil Chemists' Society, Honolulu, Hawaii.
73. Whitaker, J.R., F. Finardi Filho and F.M. Lajolo. Sept. 1986. Role of sulfhydryl groups, chloride, calcium solvent composition and temperature on binding of porcine pancreatic alpha-amylase with black bean inhibitor. American Chemical Society Meeting, Anaheim, California.
74. Golan-Goldhirsh, A., D.T. Osuga, A.O. Chen and J.R. Whitaker. April 1987. Effects of ascorbic acid and copper on proteins. 193rd American Chemical Society Annual Meeting, Denver, Colorado.
75. Chen, A.O., and J.R. Whitaker. May 1987. Chemical and enzymatic properties of lipoxygenase from immature English peas. 78th American Oil Chemists' Society Annual Meeting, New Orleans, Louisiana.
76. Chobert, J.M., M. Sitohy and J.R. Whitaker. Sept. 1987. Proteolytic degradation of proteins, including fish proteins. American Chemical Society Marine Products Composition and Properties Symposium, New Orleans, Louisiana.
77. Whitaker, John R. Jan. 1988. Biochemical aspects of enzymatic browning in fruits and vegetables. Eastern Regional Research Center Workshop on novel inhibitors of enzymatic browning in fresh fruits and vegetables and their products, Philadelphia, Pennsylvania.
78. Whitaker, J.R. May 1988. Properties of alpha-amylase inhibitors of common beans (*Phaseolus vulgaris*). 79th American Oil Chemists' Society Annual Meeting and Exposition, Phoenix, Arizona.
79. Whitaker, J.R. June 1988. Some characteristics of enzymes used in genetic engineering. The Third Chemical Congress of North America, Toronto, Canada.
80. Whitaker, J.R., M. Lim, P. Velasco, and R.M. Pangborn. July 1988. Enzymes responsible for off-flavor and off-aroma in blanched and frozen-stored vegetables. 14th International Congress of Biochemistry, Prague, Czechoslovakia.
81. Lim, Miang H., P.J. Velasco, R.M. Pangborn and John R. Whitaker. Sept. 1988. Enzymes involved in off-aroma formation in broccoli. American Chemical Society Meeting, Los Angeles, California.
82. Whitaker, J.R. Oct. 1988. Stabilization of vegetables to microbial and enzymatic degradation. Pacific Area Chemical Engineering Congress, Acapulco, Mexico.
83. Whitaker, J.R. Nov. 1988. Some new uses of enzymes in food processing. VII National Biochemical Engineering Congress, Mexico City, Mexico.

84. Wu, C., and J.R. Whitaker. April 1989. A new family of plant protease inhibitors. 197th National Meeting, American Chemical Society, Dallas, Texas.
85. Wu, C., and J.R. Whitaker. June 1989. Purification and partial characterization of four protease inhibitors of red kidney beans (*Phaseolus vulgaris*). p.122, IN: Program and Abstracts, 1989 Annual Meeting, Institute of Food Technologists, Chicago, Illinois (Abstract No. 97).
86. Vojdani, Fakrieh, and J.R. Whitaker. June 1989. Improvement of functional properties of milk proteins by limited hydrolysis. California Dairy Foods Research Center Conference, University of California, Davis.
87. Whitaker, John R. July 1989. Enzyme indicators of adequate blanching. International Conference on Technical Innovations in Freezing and Refrigeration of Fruits and Vegetables. University of California, Davis.
88. Ho, M.F., and J.R. Whitaker. June 1991. White kidney bean (*Phaseolus vulgaris*)  $\alpha$ -amylase inhibitor: Purification, characterization and structural properties. p.134, IN: Program, IFT Annual Meeting, Institute of Food Technologists, Dallas, Texas (Abstract No. 26).
- Stuchell, Y.M., J.M. Krochta and J.R. Whitaker. June 1992. Enzyme-catalyzed cross-linking of proteins and their use in edible films. IN: Program, IFT Annual Meeting, Institute of Food Technologists, New Orleans, Louisiana.
89. Martinez, M. Victoria, and J.R. Whitaker. Aug. 1994. Isolation of the gene encoding grape polyphenol oxidase and study of PPO control with antisense RNA. Abstract No. 2, IN: Abstracts, 208th ACS National Meeting, American Chemical Society, Washington, D.C.
90. Osuga, David T., and John R. Whitaker. Aug. 1994. Mechanisms of some reducing compounds that inactivate polyphenol oxidase. Abstract No. 163, IN: Abstracts, 208th ACS National Meeting, American Chemical Society, Washington, D.C.
91. Beldman, Gerrit, David Osuga and John R. Whitaker. Oct. 1994. Arabinoxylan degrading enzymes of wheat flour. Effects on the quality of doughs and breads. p.60, IN: 1994 Western Regional ACS Meeting and Pacific Conference, American Chemical Society, Sacramento, California (Abstract No. 60).
92. Martinez, M.V. and J.R. Whitaker. April 1995. Molecular analysis of grape polyphenol oxidase and study of antisense-mediated inhibition of PPO expression. IN: Abstracts, 209th ACS National Meeting, American Chemical Society, Anaheim, California.
93. Martinez, M.V., E. Ramirez, D. Johnston, G. Smith and J.R. Whitaker. June 1995. Use of computer animation programs in teaching food protein chemistry and enzymology. p.25, IN: 1995 IFT Annual Meeting Book of Abstracts, Institute of Food Technologists, Anaheim, California (Abstract No. 12A-19).
94. Whitaker, J.R. Aug. 1995. Protease and  $\alpha$ -amylase inhibitors of higher plants. IN: Abstracts, 210th ACS National Meeting, American Chemical Society, Chicago, Illinois.
95. Ramirez, E.C. and J.R. Whitaker. March 1996. Purification and characterization of cystine lyase in broccoli. IN: Abstracts, 211th ACS National Meeting, American Chemical Society, New Orleans, Louisiana.
96. Johnston, D.B., J.R. Whitaker, S.P. Shoemaker and G.M. Smith. April 1997. Measurements of cellulase kinetics and synergism using insoluble cellooligosaccharides. Abstract No. 29. IN:

Abstracts, 213th ACS National Meeting, American Chemical Society, San Francisco, California.

97. Lee, S.C. and John R. Whitaker. March 2000. Structures of  $\alpha$ -amylase inhibitors of common beans (*Phaseolus vulgaris*). Abstract No. 153. IN: Abstracts, 219<sup>th</sup> ACS National Meeting, American Chemical Society, San Francisco, California.
98. Whitaker, John R. March 2000. Role of enzymes in the foods we eat. Abstract No. 77. IN: 219<sup>th</sup> ACS National Meeting, American Chemical Society, San Francisco, California.