

## Publications by Diane M. Barrett Lab

### Refereed Publications, Category I - (All Topics)

153. Peng, J., J. Tang, D.M. Barrett, S.S. Sablani, N. Anderson, and J.R. Powers. 2017. [Thermal pasteurization of ready-to-eat foods and vegetables: Critical factors for process design and effects on quality](#). Critical Reviews in Food Science and Nutrition. 57(14):2970-2995. [PDF](#)
152. Techakanon, C., G.M. Smith, J. Jernstedt, and D.M. Barrett. 2017. [The effect of high pressure processing on clingstone and freestone peach cell integrity and enzymatic browning reactions](#). Innovative Food Science and Emerging Technologies 39:230-240. [PDF](#)
151. Techakanon, C. and D.M. Barrett. 2017. [The effect of calcium chloride and calcium lactate pretreatment concentration on peach cell integrity after high-pressure processing](#). International Journal of Food Science and Technology. 52: 635–643. [PDF](#)
150. Techakanon, C., T. Gradziel, and D.M. Barrett. 2016. [Effect of peach cultivar on enzymatic browning following cell damage from high pressure processing](#). Journal of Agricultural and Food Chemistry. 64:7606-7614. [PDF](#)
149. Techakanon, C., T. Gradziel, and D.M. Barrett. 2016. [The impact of maturity stage on cell membrane integrity and enzymatic browning reactions in high pressure processed peaches \(\*Prunus persica\*\)](#). Journal of Agricultural and Food Chemistry. 64:7216-7224. [PDF](#)
148. Ngamchuachit, P., E. J. Mitcham, and D. M. Barrett. 2016. [Spatial variance of physicochemical properties within mangos and the effect of initial ripeness stage on the quality of fresh-cut mangos](#). Journal of the Science of Food and Agriculture. 96(10):3613-3620. [PDF](#)
147. Barrett, D. M., and G. Anthon. 2016. [Factors affecting the loss of consistency during the concentration of tomato juice to paste and consistency changes during paste storage](#). ActaHort (ISHS) 1159, 175-182.
146. Shiu, J., D. Slaughter, L. Boyden, and D.M. Barrett. 2016. [Correlation of descriptive analysis and instrumental puncture testing of watermelon cultivars](#). Journal of Food Science 81(6):S1506-14. [PDF](#)
145. Vázquez-Gutiérrez J.L., A. Quiles, E. Vonasek J.A. Jernstedt, I. Hernando, N. Nitin, and D.M. Barrett. 2016. [High hydrostatic pressure as a method to preserve fresh-cut Hachiya persimmons: A structural approach](#). Food Science and Technology International (accepted online ahead of print April 18th, 2016.) [PDF](#)
144. Wheeler, L., L. Kitinoja, and D.M. Barrett. 2015. [Use of Insulated Covers over Product Crates on Reducing Losses in Amaranth during Shipping Delays](#). Agriculture 5(4):1204-1223. [PDF](#)

143. Tang, J.M., D.M. Barrett, N. Anderson, and S.S. Sablani. 2015. [Thermal pasteurization of vegetables: critical factors for process design and effects on quality](#). *Critical Reviews in Food Science and Nutrition* (Accepted version ahead of final.) [PDF](#)
142. Kitinoja, L., and D.M. Barrett. 2015. [Extension of Small-Scale Postharvest Horticulture Technologies – a Model Training and Services Center](#). *Agriculture* 5:441-455. [PDF](#)
141. Ngamchuachit, P., H.K. Sivertsen, E.J. Mitcham, and D.M. Barrett. 2015. [Influence of cultivar and ripeness stage at the time of fresh-cut processing on instrumental and sensory qualities of fresh-cut mangos](#). *Postharvest Biology and Technology* 106:11–20. [PDF](#)
140. Bouzari, A., D. Holstege and D.M. Barrett. 2015. [Vitamin Retention in Eight Fruits and Vegetables: A Comparison of Refrigerated and Frozen Storage](#). *Journal of Agricultural and Food Chemistry*, 63(3):957–962. [PDF](#)
139. Bouzari, A., D. Holstege and D.M. Barrett. 2015. [Mineral, Fiber, and Total Phenolic Retention in Eight Fruits and Vegetables: A Comparison of Refrigerated and Frozen Storage](#). *Journal of Agricultural and Food Chemistry* 63(3):957–962. [PDF](#)
138. Shiu, J.W., D.C. Slaughter, L.E. Boyden and D.M. Barrett. 2015. [Effect of the shear-to-compressive force ratio in puncture tests quantifying watermelon mechanical properties](#). *Journal of Food Engineering* 150:125-131. [PDF](#)
137. Held, M.T., G.E. Anthon, and D.M. Barrett. 2015. [The Effects of Bruising and Temperature on Enzyme Activity and Textural Qualities of Tomato Juice](#). *Journal of the Science of Food and Agriculture* 95(8):1598–1604. [PDF](#)
136. Barrett, D. M. 2015. [Future innovations in tomato processing](#). IN: **13<sup>th</sup> Symposium on the Processing Tomato**. *Actae Horticulturae* 1081:49-55. [PDF](#)
135. Schultz, A.K., D. M. Barrett and S. R. Dungan. 2014. [Effect of Acidification on Carrot \(\*Daucus carota\*\) Juice Cloud Stability](#). *Journal of Agricultural and Food Chemistry* 62(47):11528–11535. [PDF](#)
134. Kirtil, E., M.H. Oztop, A. Sirijariyawat, P. Ngamchuachit, D.M. Barrett, and M.J. McCarthy. 2014. [Effect of pectin methyl esterase \(PME\) and CaCl<sub>2</sub> infusion on the cell integrity of fresh-cut and frozen-thawed mangoes: An NMR Relaxometry Study](#). *Food Research International* 66:409-416. [PDF](#)
133. Fisklements, M., and D.M. Barrett. 2014. [New methods for measuring surface area, seed coat separation, and ‘chip and scratch’ damage in almonds](#). *Journal of Food Engineering* 142:1-8. [PDF](#)
132. Fisklements, M., and D.M. Barrett. 2014. [Kinetics of Almond Skin Separation as a Function of Blanching Time and Temperature](#). *Journal of Food Engineering* 138:11-16. [PDF](#)

131. Ngamchuachit, P., H.K. Sivertsen, E.J. Mitcham, and D.M. Barrett. 2014. [Effectiveness of Calcium Chloride and Calcium Lactate on Maintenance of Textural and Sensory Qualities of Fresh-Cut Mangos](#). *Journal of Food Science* 79(5):C786-C794. [PDF](#)
130. Fuentes, A., J.L. Vázquez-Gutiérrez, M.B. Pérez-Gago, E. Vonasek, N. Nitin, and D.M. Barrett. 2014. [Application of nondestructive impedance spectroscopy to determination of the effect of temperature on potato microstructure and texture](#). *Journal of Food Engineering* 133:16-22. [PDF](#)
129. Ngamchuachit, P., D.M. Barrett, and E.J. Mitcham. 2014. [Effects of 1-Methylcyclopropene and Hot Water Quarantine Treatment on Quality of “Keitt” Mangos](#). *Journal of Food Science* 79(4):C505–C509. [PDF](#)
128. Zhang, L., M.A. Schultz, R. Cash, D.M. Barrett, and M.J. McCarthy. 2014. [Determination of quality parameters of tomato paste using guided microwave spectroscopy](#). *Food Control* 40:214-223. [PDF](#)
127. Schultz, A.K; G.E. Anthon, S.R. Dungan, and D.M. Barrett. 2014. [Effect of Pectin Methylsterase on Carrot \(\*Daucus carota\*\) Juice Cloud Stability](#). *Journal of Agricultural and Food Chemistry*, 62(5):1111–1118. [PDF](#)
126. Ringeisen, B., D.M. Barrett, and P. Stroeve. 2014. [Concentrated Solar Drying of Tomatoes](#). *Energy for Sustainable Development* 19:47-55. [PDF](#)
125. Peng J., J. Tang, D.M. Barrett, S.S. Sablani, and J.R. Powers. 2014. [Kinetics of Carrot Texture Degradation under Pasteurization Conditions](#). *Journal of Food Engineering*, 122:84-91. [PDF](#)
124. Peng, J., J. Tang, Y. Jiao, S.G. Bonet, and D.M. Barrett. 2013. [Dielectric properties of tomatoes assisting in the development of microwave pasteurization and sterilization processes](#). *LWT - Food Science and Technology* 54(2):367-376. [PDF](#)
123. Wilkerson E.D., G.E. Anthon, D.M. Barrett, G.F.G. Sayajon, A.M. Santos, and L.E. Rodriguez-Saona. 2013. [Rapid Assessment of Quality Parameters in Processing Tomatoes Using Hand-Held and Benchtop Infrared Spectrometers and Multivariate Analysis](#). *Journal of Agricultural and Food Chemistry* 61(9):2088–2095. [PDF](#)
122. Vallone, S., H. Sivertsen, G.E. Anthon, D.M. Barrett, E.J. Mitcham, S. E. Ebeler, and F. Zakharov. August 2013. [An integrated approach for flavor quality evaluation in muskmelon \(\*Cucumis melo L. reticulatus\* group\) during ripening](#). *Food Chemistry* 139(1-4):171-183. [PDF](#)
121. Zhang, L., D.M. Barrett and M. McCarthy. January 2013. [Characterization of the Red Layer and Pericarp of Processing Tomato Using Magnetic Resonance Imaging](#). *Journal of Food Science* 78(1):E50-55. [PDF](#)

120. Sirijariyawat A., S. Charoenrein and D.M. Barrett. October 2012. [Texture Improvement of Fresh and Frozen Mangoes with Pectin Methylesterase and Calcium Infusion](#). Journal of the Science of Food and Agriculture 92(13):2581-2586. [PDF](#)
119. Stiling, J., S. Li, P. Stroeve, J. Thompson, B. Mjawa, K. Kornbluth, and D.M. Barrett. June 2012. [Performance evaluation of an enhanced fruit solar dryer using concentrating panels](#). Energy for Sustainable Development 16(2):224-230. [PDF](#)
118. Anthon, G.E. and D.M. Barrett. May 2012. [Pectin methylesterase activity and other factors affecting pH and titratable acidity in processing tomatoes](#). Food Chemistry 132(2):915-920. [PDF](#)
117. Asavasanti, A., P. Stroeve, D.M. Barrett, J.A. Jernstedt, and W.D. Ristenpart. March/April 2012. [Enhanced electroporation in plant tissues via low frequency pulsed electric fields: Influence of cytoplasmic streaming](#). Biotechnology Progress 28(2):445-453. [PDF](#)
116. Barrett, D.M., and B. Lloyd. Jan. 2012. [Advanced Preservation Methods and Nutrient Retention in Fruits and Vegetables](#). Journal of the Science of Food and Agriculture 92(1):7-22. [PDF](#)
115. Kumar, P., D.M. Barrett, M. Delwiche, and P. Stroeve. August 2011. [Pulsed Electric Field Pretreatment of Switchgrass and Woodchips Species for Biofuels Production](#). Industrial & Engineering Chemistry Research 50(19):10996–11001. [PDF](#)
114. Anthon, G.E., M. LeStrange and D.M. Barrett. May 2011. [Changes in pH, acids, sugars and other quality parameters during extended vine holding of ripe processing tomatoes](#). Journal of the Science of Food and Agriculture 91(7):1175-1181. [PDF](#)
113. Asavasanti, S., W. Ristenpart, P. Stroeve, and D.M. Barrett. Jan./Feb. 2011. [Permeabilization of Plant Tissues by Monopolar Pulsed Electric Fields: Effect of Frequency](#). Journal of Food Science 76(1):E98-E111. [PDF](#)
112. Ersus, S., M. Oztop, M. McCarthy, and D.M. Barrett. Sept. 2010. [Disintegration Efficiency of Pulsed Electric Field \(PEF\) Induced Effects on Onion \(Allium cepa L.\) Tissues as a Function of Pulse Protocol and Determination of Cell Integrity by <sup>1</sup>H NMR Relaxometry](#). Journal of Food Science 75(7):E444-E452. [PDF](#)
111. Asavasanti, S., S. Ersus, W. Ristenpart, P. Stroeve, and D.M. Barrett. Sept. 2010. [Critical Electric Field Strengths of Onion Tissues Treated by Pulsed Electric Fields](#). Journal of Food Science 75(7):E433-E443. [PDF](#)
110. Gonzales, M.E., G. Anthon, and D.M. Barrett. Sept. 2010. [Onion cells after High Pressure and Thermal Processing: Comparison of Membrane Integrity Changes Using Different Analytical Methods and Impact on Tissue Texture](#). Journal of Food Science 75(7):E426-E432. [PDF](#)

109. Gonzalez, M.E., D.M. Barrett, M.J. McCarthy, F.J. Vergeldt, E. Gerkema, A.M. Matser, and H. Van As. Sept. 2010. [<sup>1</sup>H-NMR Study of the Impact of High-Pressure and Thermal Processing on Cell Membrane Integrity of Onions.](#) Journal of Food Science 75(7):E417-425. [PDF](#)
108. Gonzalez, M.E., J.A. Jernstedt, D.C. Slaughter, and D.M. Barrett. Sept. 2010. [Influence of Cell Integrity on Textural Properties of Raw, High Pressure, and Thermally Processed Onions.](#) Journal of Food Science 75(7):E409-E416. [PDF](#)
107. Gonzalez, M.E., J.A. Jernstedt, D.C. Slaughter, and D.M. Barrett. Sept. 2010. [Microscopic Quantification of Cell Integrity in Raw and Processed Onion Parenchyma Cells.](#) Journal of Food Science 75(7):E402-E408. [PDF](#)
106. Gonzalez, M.E., and D.M. Barrett. Sept. 2010. [Thermal, High Pressure, and Electric Field Processing Effects on Plant Cell Membrane Integrity and Relevance to Fruit and Vegetable Quality.](#) Journal of Food Science 75(7):R121-R130. [PDF](#)
105. Ersus, S. and D.M. Barrett. August 2010. [Determination of membrane integrity in onion tissues treated by pulsed electric fields: Use of microscopic images and ion leakage measurements.](#) Innovative Food Science and Emerging Technologies 11(4):598-603. [PDF](#)
104. Anthon, G.E., and D.M. Barrett. June 2010. [Changes in Tomato Paste during Storage and the Effects of Heating on Consistency of Reconstituted Tomato Paste.](#) Journal of Texture Studies 41(3):262-278. [PDF](#)
103. Barrett, D.M., J.C. Beaulieu and R. Shewfelt. May 2010. [Color, Flavor, Texture, and Nutritional Quality of Fresh-Cut Fruits and Vegetables: Desirable Levels, Instrumental and Sensory Measurement, and the Effects of Processing.](#) Critical Reviews in Food Science and Nutrition 50(5):369–389. [PDF](#)
102. Zhu, Y, Pan Z, McHugh, T.H, and D.M. Barrett. March 2010. [Processing and Quality Characteristics of Apple Slices Processed under Simultaneous Infrared Dry-blanching and Dehydration with Intermittent Heating.](#) Journal of Food Engineering 97(1):8-16. [PDF](#)
101. Diaz, J.V., G.E. Anthon, and D.M. Barrett. 2009. [Conformational Changes in Serum Pectins during Industrial Tomato Paste Production.](#) Journal of Agricultural and Food Chemistry 57(18):8453-8458. [PDF](#)
100. Anthon, G.E. , J.V. Diaz and D.M. Barrett. 2009. [Changes in Consistency of Tomato Juice during Concentration.](#) IN: *Proceedings of the Eleventh International Symposium on the Processing Tomato* R. Pitblado and J. Routledge (eds.) Acta. Horticulturae (ISHS) 823:153-156. [PDF](#)
99. Prabhu, S.S., and D.M. Barrett. August 2009. [Effects of storage condition and domestic cooking on the quality and nutrient content of African leafy vegetables \(Cassia tora and Corchorus tridens\).](#) Journal of the Science of Food and Agriculture 89(10):1709-1721. [PDF](#)

98. Kumar, P., Barrett D.M, Delwiche M.J., and Stroeve P. March 2009. [Methods for Pretreatment of Lignocellulosic Biomass for Efficient Hydrolysis and Biofuel Production](#). Industrial & Engineering Chemistry Research 48(8):3713–3729. [PDF](#)
97. Pieper, J.R. and D.M. Barrett. Nov. 2008. [Effects of organic and conventional production systems on quality and nutritional parameters of processing tomatoes](#). Journal of the Science of Food and Agriculture 89(2):177-194. [PDF](#)
96. Anthon, G.E., Diaz J.V., and D.M. Barrett. July 2008. [Changes in pectins and product consistency during the concentration of tomato juice to paste](#). Journal of Agricultural and Food Chemistry 56(16):7100–7105. [PDF](#)
95. Gradziel, T.M., Thorpe M.A., and D.M. Barrett. April 2008. [‘Lilleland’ Peach: A High Case-yield Processing Clingstone Peach for the ‘Halford’ Maturity Period](#). HortScience 43:542-543. [PDF](#)
94. Barrett, D.M. and Anthon, G.E. 2008. [Color quality of tomato products](#). p. 131-139. IN: [Color quality of fresh and processed foods](#). C.A. Culver and R.E. Wrolstad eds. ACS Symposium Series 983. [PDF](#)
93. Anthon, G.E., and Barrett, D.M. 2008. [Combined enzymatic and colorimetric method for determining the uronic acid and methylester content of pectin: Application to tomato products](#). Food Chemistry 10(1):239-247. [PDF](#)
92. de Castro, E, Barrett D.M., Jobling J, and Micham EJ. 2007. [Biochemical Factors Associated with a CO<sub>2</sub>-Induced Flesh Browning Disorder of Pink Lady Apples](#). Postharvest Biology and Technology 48(2):182-191. [PDF](#)
91. Anthon, G. and Barrett, D.M. 2007. [Standardization of a rapid spectrophotometric method for lycopene analysis](#). Acta Horticulturae (ISHS) 758:111-128. [PDF](#)
90. Barrett DM, Weakley C, Diaz JV, and Watnik M 2007 [Qualitative and Nutritional Differences in Processing Tomatoes Grown Under Commercial Organic and Conventional Production Systems](#). Journal of Food Science (IFT), Blackwell Publishing 72(9):441-451. [PDF](#)
89. Lana, M.M., Tijskens L.M.M., De Theije A., Dekker M., and Barrett D.M. 2007. [Measurement of firmness of fresh-cut sliced tomato using puncture tests - studies on sample size, probe size and direction of puncture](#). Journal of Texture Studies 38(5):601-618. [PDF](#)
88. Tomassen, M.M.M., D.M.Barrett, H.C.P.M. van der Valk and E.J. Woltering. 2007. [Isolation and characterization of a tomato non-specific lipid transfer protein involved in polygalacturonase-mediated pectin degradation](#). Journal of Experimental Botany 58(5):1151-1160. [PDF](#)
87. Barrett, D.M. 2007. [Maximizing the nutritional value of fruits and vegetables](#). Food Technology 61(4):40-44. [PDF](#)



86. Diaz, J.V., G.E. Anthon and D.M. Barrett. 2007. [Nonenzymatic degradation of citrus pectin and pectate during prolonged heating: Effects of pH, temperature, and degree of methyl esterification](#). Journal of Agricultural and Food Chemistry 55:5131-5136. [PDF](#)
85. Mitchell, A.E. , Y-J. Hong, E. Koh, D.M. Barrett, D.E. Bryant, R.F. Denison and S.R. Kaffka. 2007. [Ten year comparison of the influence of organic and conventional crop management practices on the content of flavonoids in tomatoes](#). Journal of Agricultural and Food Chemistry 55:6154-6159. [PDF](#)
84. Thongsook, T., Whitaker, J.R., Smith, G.M. and D.M. Barrett. 2007. [Reactivation of broccoli peroxidases: Structural changes of partially denatured isoenzymes](#). Journal of Agricultural and Food Chemistry. 55(3):1009-1018. [PDF](#)
83. Rickman, J.C., C.M. Bruhn and D.M. Barrett. 2007. [Nutritional comparison of fresh, frozen and canned fruits and vegetables. Part 2](#). Vitamin A and carotenoids, vitamin E, minerals and fiber. Journal of the Science of Food and Agriculture 87:1185-1196. [PDF](#)
82. Rickman, J.C., D.M. Barrett and C.M. Bruhn. 2007. [Nutritional comparison of fresh, frozen and canned fruits and vegetables. Part 1](#). Vitamins B and C and phenolic compounds. Journal of the Science of Food and Agriculture 87: 930-944. [PDF](#)
81. Anthon, G.E. and D.M.Barrett. 2006. [Potential and limitations for determining lycopene in tomatoes by optical methods](#). Acta Horticulturae 724:243-248. [PDF](#)
80. Oerlemans, K., D.M. Barrett, C.B. Suades, R. Verkerk and M. Dekker. March 2006. [Thermal degradation of glucosinolates in red cabbage](#). Food Chemistry 95(1):19-29. [PDF](#)
79. Garcia E., and D.M. Barrett. Feb. 2006. [Evaluation of Processing Tomatoes from Two Consecutive Growing Seasons: Quality Attributes, Peelability and Yield](#). Journal of Food Processing and Preservation 30(1):20-36. [PDF](#)
78. Garcia E., and D.M. Barrett. Feb. 2006. [Peelability and Yield of Processing Tomatoes by Steam or Lye](#). Journal of Food Processing and Preservation 30(1):3-14. [PDF](#)
77. Barrett, D.M., E. Garcia, and G. Miyao. Feb. 2006. [Defects and Peelability of Processing Tomatoes](#). Journal of Food Processing and Preservation 30(1):37-45. [PDF](#)
76. Garcia E., M. Watnik, and D.M. Barrett. Feb. 2006. [Can We Predict Peeling Performance of Processing Tomatoes?](#) Journal of Food Processing and Preservation 30(1):46-55. [PDF](#)
75. Garcia, E., and D. M. Barrett. Feb. 2006. [Assessing Lycopene Content in California Processing Tomatoes](#). Journal of Food Processing and Preservation 30(1):56-70. [PDF](#)
74. Anthon, G.E. and D.M. Barrett. Jan. 2006. [Characterization of the temperature activation of pectin methylesterase in green beans and tomatoes](#). Journal of Agricultural and Food Chemistry 54(1):204-211. [PDF](#)

73. Latapi, G. and D.M. Barrett. Jan. 2006. [Influence of Pre-drying Treatments on Quality and Safety of Sun-dried Tomatoes. Part II: Effects of Storage on Nutritional and Sensory Quality of Sun-dried Tomatoes Pretreated with Sulfur, Sodium Metabisulfite, or Salt.](#) Journal of Food Science 71(1):S32-S37. [PDF](#)
72. Latapi, G. and D. M. Barrett. Jan. 2006. [Influence of Pre-drying Treatments on Quality and Safety of Sun-dried Tomatoes. Part I: Use of Steam Blanching, Boiling Brine Blanching, and Dips in Salt or Sodium Metabisulfite](#) Journal of Food Science 71(1):S24-S31. [PDF](#)
71. Kader, A.A. and D.M. Barrett. 2005. [Classification, composition of fruits and postharvest maintenance of quality.](#) p. 3-22. IN: Barrett, Diane M., Somogyi, Laszlo, Ramaswamy, Hosahalli (eds.) [Processing Fruits: Second Edition: Science and Technology](#) . CRC Press, Boca Raton, FL. [PDF](#)
70. Garcia, E. and D.M. Barrett. 2005. [Fresh-Cut Fruits.](#) p. 53-72. IN: Barrett, D.M., L. Somogyi, H. Ramaswamy, (eds.) [Processing Fruits: Second Edition: Science and Technology](#). CRC Press, Boca Raton, FL. [PDF](#)
69. Baker, R.A., N. Berry, Y.H. Hui, and D.M. Barrett. 2005. [Fruit Preserves and Jams.](#) p. 113-125. IN: Barrett, D.M., L. Somogyi, H. Ramaswamy. (eds.) [Processing Fruits: Second Edition: Science and Technology](#). CRC Press, Boca Raton, FL. [PDF](#)
68. Root, W.H. and D.M. Barrett. 2005. [Apples and apple processing.](#) In: Barrett, D.M., L. Somogyi and H. Ramaswamy (eds), [Processing Fruits: Second Edition: Science and Technology](#). CRC Press, Boca Raton, FL. [PDF](#)
67. Reid, D.S. and D.M. Barrett. 2005. [Fruit freezing.](#) In: Barrett, D.M., L. Somogyi and H. Ramaswamy (eds), [Processing Fruits: Second Edition: Science and Technology](#), CRC Press, Boca Raton, FL. [PDF](#)
66. Barrett, D.M., L. Somogyi, and H. Ramaswamy. 2005. [Processing Fruits, Second Edition: Science and Technology](#). CRC Press, Boca Raton, FL. [PDF](#)
65. Thongsook, T. and D.M. Barrett. 2005. [Heat inactivation and reactivation of broccoli peroxidase.](#) Journal of Agricultural and Food Chemistry. 53(8):3215-3222. [PDF](#)
64. Thongsook, T. and D.M. Barrett. 2005. [Purification and partial characterization of broccoli \(Brassica oleracea var. Italica\) peroxidases.](#) Journal of Agricultural and Food Chemistry 53(8):3206-3214. [PDF](#)
63. Anthon, G.E., L. Blot and D.M. Barrett. 2005. [Improved firmness in calcified diced tomatoes by temperature activation of pectin methylesterase.](#) Journal of Food Science 70(5):C342-C347. [PDF](#)
62. Li-Ni, Lin, D. and Barrett, D.M. April 2005. [Pectin methylesterase catalyzed firming effects on low temperature blanched vegetables.](#) Journal of Food Engineering 70(4):546-556. [PDF](#)



61. Luh, B.S., L. Ferguson, A. Kader and D.M. Barrett. 2004. [Processing California Olives](#). p. 145-155. IN: Louise Ferguson G. Steven Sibbett (eds.) [Olive Production Manual](#). Division of Agriculture and Natural Resources University of California. Publication 3353. [PDF](#)
60. Anthon, G.E. and D.M. Barrett. June 2004. [Comparison of three colorimetric reagents in the determination of methanol with alcohol oxidase. Application to the assay of pectin methylesterase](#). Journal of Agricultural and Food Chemistry 52(12) 3749-3753. [PDF](#)
59. Hong, Y.-J., D.M. Barrett, and A.E. Mitchell. April 2004. [Liquid Chromatography/Mass Spectrometry Investigation of the Impact of Thermal Processing and Storage on Peach Procyanidins](#). Journal of Agricultural and Food Chemistry 52(8)2366-2371. [PDF](#)
58. Mitchell, A.E. and D.M. Barrett. Jan. 2004. [Rebuttal on comparison of the total phenolic and ascorbic acid content of freeze-dried and air-dried marionberry, strawberry, and corn grown using conventional, organic, and sustainable agricultural practices](#). (refereed letter). Journal of Agricultural and Food Chemistry 52(1):150-152. [PDF](#)
57. Sekine Y., T. Wakayama and D.M. Barrett. September 2003. [Thermal inactivation of pectin methylesterase in tomato homogenate](#). Acta Horticulturae 613:385-390. [PDF](#)
56. Latapi, G. and D.M. Barrett. September 2003. [Use of salt and sodium metabisulfite dips prior to sun-drying tomatoes](#). Acta Horticulturae 613:391-397. [PDF](#)
55. Anthon, G.E. and D.M. Barrett. May 2003. [Thermal inactivation of lipoxygenase and hydroperoxytrienoic lyase in tomatoes](#). Food Chemistry 81(2):275-279. [PDF](#)
54. Anthon, G.E. and D.M. Barrett. July 2003. [Modified method for the determination of pyruvic acid with dinitrophenylhydrazine in the assessment of onion pungency](#). Journal of the Science of Food and Agriculture. 83:1210-1213. [PDF](#)
53. Asami, D.K., Y.-J. Hong, D.M. Barrett and A.E. Mitchell. Feb. 2003. [Comparison of the total phenolic and ascorbic acid content of freeze-dried and air-dried marionberry, strawberry, and corn grown using conventional, organic, and sustainable agricultural practices](#). Journal of Agricultural and Food Chemistry 51(5):1237-1241. [PDF](#)
52. Asami, D.K., Y.-J. Hong, D.M. Barrett and A.E. Mitchell. Jan. 2003. [Processing-induced changes in total phenolics and procyanidins in clingstone peaches](#). Journal of the Science of Food and Agriculture 83:56-63. [PDF](#)
51. Anthon, G.E., Y. Sekine, N. Watanabe and D.M. Barrett. Oct. 2002. [Thermal inactivation of pectin methylesterase, polygalacturonase, and peroxidase in tomato juice](#). Journal of Agricultural and Food Chemistry 50(21):6153-6159. [PDF](#)
50. Anthon, G.E. and D.M. Barrett. June 2002. [Determination of reducing sugars with 3-methyl-2-benzothiazolinonehydrazone](#). Analytical Biochemistry 305(2):287-289. [PDF](#)

49. Anthon, G.E. and D.M. Barrett. July 2002. [Kinetic parameters for the thermal inactivation of quality-related enzymes in carrots and potatoes](#). Journal of Agricultural and Food Chemistry 50(14):4119-4125. [PDF](#)
48. Ma, W.H. and D.M. Barrett. June 2002. [Effects of maturity and processing variables on heat penetration times, firmness, and drained weight of diced tomatoes \(Halley Bos 3155 cv\)](#). Journal of Food Processing and Preservation 26(2):75-89. [PDF](#)
47. Garcia, E., M. Alviar-Agnew and D.M. Barrett. April 2002. [Residual pectinesterase activity in dehydrated onion and garlic products](#). Journal of Food Processing and Preservation 26(1):11-26. [PDF](#)
46. Garcia, E. and D.M. Barrett. 2002. [Preservative treatments for fresh-cut fruits and vegetables](#). p. 267-303. IN: Olusola Lamikanra (ed.), **Fresh-cut Fruits and Vegetables**, CRC Press, Boca Raton, FL. [PDF](#)
45. Barrett, D.M. 2002. [Processing of horticultural crops](#). p. 465-480. IN: Kader, Adel A. (ed.), **Postharvest Technology of Horticultural Crops**, Publication 3311, University of California Division of Agriculture and Natural Resources Press. [PDF](#)
44. Chopda, C.A. and D.M. Barrett. Dec. 2001. [Optimization of guava juice and powder production](#). Journal of Food Processing and Preservation 25(6):411-430. [PDF](#)
43. Barrett, D.M. and G. Anthon. Aug. 2001. [Lycopene content of California-grown tomato varieties](#). Acta Horticulturae 542:165-173. [PDF](#)
42. Barrett, D.M. Aug. 2001. [Tomato attributes and their correlation to peelability and product yield](#). Acta Horticulturae 542:65-73. [PDF](#)
41. Ma, W.H. and D.M. Barrett. May 2001. [Effects of raw materials and process variables on the heat penetration times, firmness, and pectic enzyme activity of diced tomatoes \(Halley Bos 3155 cv\)](#). Journal of Food Processing and Preservation 25(2):123-136. [PDF](#)
40. Anthon, G.E. and D.M. Barrett. Jan. 2001. [Colorimetric method for the determination of lipoxygenase activity](#). Journal of Agricultural and Food Chemistry 49(1):32-37. [PDF](#)
39. Barrett, D.M., E.L. Garcia, G.F. Russell, E. Ramirez and A. Shirazi. June 2000. [Blanch time and cultivar effects on quality of frozen and stored corn and broccoli](#). Journal of Food Science 65(3):534-540. [PDF](#)
38. Luna-Guzman, I., and D.M. Barrett. May 2000. [Comparison of calcium chloride and calcium lactate effectiveness in maintaining shelf stability and quality of fresh-cut cantaloupes](#). Postharvest Biology and Technology 19(1):61-72. [PDF](#)

37. Chang, S., C. Tan, E.N. Frankel and D.M. Barrett. Feb. 2000. [Low-density lipoprotein antioxidant activity of phenolic compounds and polyphenol oxidase activity in selected clingstone peach cultivars](#). *Journal of Agricultural and Food Chemistry* 48(2):147-151. [PDF](#)
36. Luna-Guzmán, I., M. Cantwell and D.M. Barrett. Nov. 1999. [Fresh-cut cantaloupe: Effects of CaCl<sub>2</sub> dips and heat treatments on firmness and metabolic activity](#). *Postharvest Biology and Technology* 17(3):201-213. [PDF](#)
35. Lee, S.-Y., I. Luna-Guzmán, S. Chang, D.M. Barrett and J.-X. Guinard. Nov. 1999. [Relating descriptive analysis and instrumental texture data of processed diced tomatoes](#). *Food Quality and Preference* 10(6):447-455. [PDF](#)
34. Barrett, D.M., E. Cubero, I. Luna-Guzman, C. Wee and J.-X. Guinard. 1999. Sensory properties of fruits and vegetables. p. 517-527. IN: John R. Whitaker, Norman F. Haard, Charles F. Shoemaker and R. Paul Singh (eds.), *Food for Health in the Pacific Rim*, 3rd International Conference of Food Science and Technology, Food & Nutrition Press, Trumbull, Connecticut.
33. Tourjee, K.R., D.M. Barrett, M.V. Romero and T.M. Gradziel. 1998. [Measuring flesh color variability among processing clingstone peach genotypes differing in carotenoid composition](#). *Journal of the American Society for Horticultural Science* 123(3):433-437. [PDF](#)
32. Barrett, D.M., E. Garcia and J.E. Wayne. 1998. [Textural modification of processing tomatoes](#). *CRC Critical Reviews in Food Science and Nutrition* 38(3):173-258. [PDF](#)
31. Romero, M.V. and D.M. Barrett. Aug. 1997. [Rapid methods for lipoxygenase assay in sweet corn](#). *Journal of Food Science* 62(4):696-700. [PDF](#)
30. Somogyi, L.P., D.M. Barrett and Y.H. Hui (eds.) 1996. **Processing Fruits: Science and Technology, Vol. 2: Major Processed Products**, Technomic Publishing Co., Inc., Lancaster, Pennsylvania, 545 pp.
29. Lopez, A. (ed.) 1996. **A Complete Course in Canning and Related Processes**, The Canning Trade, Inc., Baltimore, Maryland. [D.M. Barrett updated and revised all [tomato product sections \(e.g. Chapter 12 \(p.479-519\)\)](#) of the 13th edition of Book III. In addition she wrote new sections on diced tomatoes and tomato juice (Chapter 12). [PDF](#)
28. Kader, A.A. and D.M. Barrett. 1996. [Classification, composition of fruits, and postharvest maintenance of quality](#). p. 1-24, IN: Laszlo P. Somogyi, Hosahalli S. Ramaswamy and Y.H. Hui (eds.), **Processing Fruits: Science and Technology, Vol. 1: Biology, Principles, and Applications**, Technomic Publishing Co., Inc., Lancaster, Pennsylvania. [PDF](#)
27. Barrett, D.M., and I. Luna-Guzman. 1996. Fresh cut melons: Use of refrigeration and postharvest treatments to extend shelf life. p. 285-289, IN: *New Developments in Refrigeration of Food Safety and Quality. Proceedings of the International Institute of Refrigeration Meeting of Commission C2, with Commissions B2, D1, and D2-3*, Paris, France.

26. Barrett, D.M. 1996. Replacement of peroxidase with lipoxygenase as an indicator of blanching adequacy. p. 82-88, IN: *New Developments in Refrigeration of Food Safety and Quality. Proceedings of the International Institute of Refrigeration Meeting of Commission C2, with Commissions B2, D1, and D2-3*, Paris, France.
25. Slaughter, D.C., D. Barrett and M. Boersig. Aug. 1996. [Nondestructive determination of soluble solids in tomatoes using near infrared spectroscopy](#). *Journal of Food Science* 61(4):695-697. [PDF](#)
24. Simandjuntak, V., D.M. Barrett and R.E. Wrolstad. July 1996. [Cultivar and frozen storage effects on muskmelon \(\*Cucumis melo\*\) colour, texture and cell wall polysaccharide composition](#). *Journal of the Science of Food and Agriculture* 71(3):291-296. [PDF](#)
23. Simandjuntak, V., D.M. Barrett and R.E. Wrolstad. July 1996. [Cultivar and maturity effects on muskmelon \(\*Cucumis melo\*\) colour, texture and cell wall polysaccharide composition](#). *Journal of the Science of Food and Agriculture* 71(3):282-290. [PDF](#)
22. Rodriguez-Saona, L.E., D.M. Barrett and D.P. Selivonchick. Oct. 1995. [Peroxidase and lipoxygenase influence on stability of polyunsaturated fatty acids in sweet corn \(\*Zea mays\* L.\) during frozen storage](#). *Journal of Food Science* 60(5):1041-1044. [PDF](#)
21. Theerakulkait, C., D.M. Barrett and M.R. McDaniel. Oct. 1995. [Sweet corn germ enzymes affect odor formation](#). *Journal of Food Science* 60(5):1034-1040. [PDF](#)
20. Theerakulkait, C. and D.M. Barrett. Oct. 1995. [Lipoxygenase in sweet corn germ: Isolation and physicochemical properties](#). *Journal of Food Science* 60(5):1029-1033, 1040. [PDF](#)
19. Theerakulkait, C. and D.M. Barrett. 1995. [Partial purification and characterization of sweet corn germ lipoxygenase](#). *Journal of Food Biochemistry* 18(5):355-372. [PDF](#)
18. Barrett, D.M. and C. Theerakulkait. Jan. 1995. [Quality indicators in blanched, frozen, stored vegetables](#). *Food Technology* 49(1):62, 64-65. [PDF](#)
17. Barrett, D.M., and C. Gonzalez. June 1994. [Activity of softening enzymes during cherry maturation](#). *Journal of Food Science* 59(3):574-577. [PDF](#)
16. Barrett, D.M. 1994. [Vegetable blanching--How long is long enough?](#) *American Vegetable Grower* 42(1):46-47. [PDF](#)
15. Lozano-de-Gonzalez, P.G., D.M. Barrett, R.E. Wrolstad and R.W. Durst. April 1993. [Enzymatic browning inhibited in fresh and dried apple rings by pineapple juice](#). *Journal of Food Science* 58(2):399-404. [PDF](#)
14. Barrett, D.M. 1993. Pickling. p.3591-3594, IN: D. Atkins and S. Robertson (eds.), **Encyclopaedia of Food Science, Food Technology and Nutrition, Vol. 6**, Academic Press, New York.

13. Barrett, D.M. Sept. 1992. Opportunities in developing countries for young food scientists. *Food Technology* 46(9):104,106,108,110.
12. Baggett, J.R., D. Kean, G.W. Varseveld, D.M. Barrett and B.M. Yorgey. Jan. 1992. [Oregon 54 green bean released](#). Proceedings of the Oregon Horticultural Society (106th Annual Meeting, Portland, Oregon) 83:161-167. [PDF](#)
11. Barrett, D.M., C.Y. Lee and F.W. Liu. Dec. 1991. [Changes in 'Delicious' apple browning and softening during controlled atmosphere storage](#). *Journal of Food Quality* 14(6):443-453. [PDF](#)
10. Barrett, D.M., C.Y. Lee and F.W. Liu. 1991. [Changes in the activity and subcellular distribution of PPO in 'Delicious' apples during controlled atmosphere storage](#). *Journal of Food Biochemistry* 15(3):185-199. [PDF](#)
9. Barrett, D.M. March 1991. Sanitation in food processing facilities. p. 44-45. IN: *Proceedings of the 7th Annual Washington Tree Fruit Postharvest Conference*, Wenatchee, Washington.
8. Baggett, J.R., and D.M. Barrett. Jan. 1991. New green bean lines evaluated. *Proceedings of the Oregon Horticultural Society* (105th Annual Meeting, Portland, Oregon) 82:160-161.
7. Baggett, J.R., N.S. Mansour, G.W. Varseveld and D.M. Barrett. Jan. 1990. [Supersweet corn varieties evaluated at multiple harvest dates](#). *Proceedings of the Oregon Horticultural Society* (104th Annual Meeting, Portland, Oregon) 81:145-148. [PDF](#)
6. Barrett, D.M., and D.B. Lund. Feb. 1989. [Effect of oxygen on thermal degradation of 5-methyl-5,6,7,8-tetrahydrofolic acid](#). *Journal of Food Science* 54(1):146-149. [PDF](#)
5. Barrett, D.M., and D.S. Darmadjati. 1987. [Peningkatan mutu hasil ubikayu di Indonesia](#). IN: J. Wargiono and D.M. Barrett, **Budidaya Ubikayu**, P.T. Gramedia Publishers, Jakarta, Indonesia. [PDF](#)
4. Wargiono, J., and D.M. Barrett (eds.). 1987. **Budidaya Ubikayu**, P.T. Gramedia Publishers, Jakarta, Indonesia.
3. Darmadjati, D.S., and D.M. Barrett. 1986. Improving and maintenance of rice quality in Indonesia. *Indonesian Agricultural Research and Development Journal* 8(2):45-50.
2. Barrett, D.M. (ed.). 1986. **Cassava Utilization in Indonesia**, P.T. Gramedia Publishers, Jakarta, Indonesia.
1. Barrett, D.M. 1985. [Postharvest research priorities for cassava in Asia](#). IN: *Proceedings of a Workshop on the Future Potential of Cassava in Asia*, Central Research Institute for Food Crops, Boror, Indonesia. [PDF](#)