

Biographical Sketch:

Jonathan C. Allen

Present Address: Dept. of Food, Bioprocessing, and Nutrition Sciences, North Carolina State University, Raleigh, NC 27695-7624

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1. Education:

University of Georgia, Athens. 1977-1980. Ph.D. (Animal Nutrition) Brown

University, Providence, R.I. 1975-76 (part-time).

Williams College, Williamstown, MA 1970-74. B.A. (Biology, Environ. Stud.) College of the Atlantic, Bar Harbor, ME 1972-73 (exchange).

2. Employment History:

North Carolina State University, Raleigh, NC. Coordinator, Interdepartmental Nutrition Program, 7/94 - 2018

North Carolina State University, Raleigh, NC. Professor, Director of Graduate Programs, Department of Food Science, 7/98 - present

North Carolina State University, Raleigh, NC. Associate Professor, Department of Food Science, 7/93 - 6/98

North Carolina State University, Raleigh, NC. Assistant Professor, Department of Food Science, 2/89 - 6/93

Louisiana State University, Baton Rouge, LA. Assistant Professor, Department of Dairy Science, 9/86-1/89

Dartmouth Medical School, Hanover, N.H. Postdoctoral Fellow, Departments of Anatomy and Physiology, 2/84-8/86

University of Colorado Health Sciences Center, Denver. Course Instructor, Physiology, Child Health Associate Program, Department of Pediatrics 6/83-12/83

University of Colorado Health Sciences Center, Denver. Research Associate, Department of Physiology, 10/80-2/84

University of Georgia, Athens. Graduate Research and Teaching Assistant, Department of Animal and Dairy Science, 9/77-9/80

Brown University, Providence, R.I. Research Assistant II, Department of Physiology 1/75-6/77

3. Awards, honors, etc.

Graduate Teaching and Research Assistantships, Univ. Ga.;

Gamma Sigma Delta, Honor Society of Agriculture, Univ. Ga.;

National Research Service Award (NIH), Dartmouth;

Phi Tau Sigma, NCSU;

Sigma Xi, NCSU (1993);

Certified Nutrition Specialist, 1994-present;

First Food Allergy Award for Food Scientists, ILSI, 1995.

Babcock-Hart Award, Institute of Food Technologists, 2005;

IFT Dairy Foods Division – Chair-Elect 2008-09, Chair 2009-10, Past-Chair 2010-11;

IFT Dairy Foods Division Outstanding Volunteer, 2010;

Gilbert A. Leveille Award, Institute of Food Technologists and American Society of Nutrition, 2012.

Fellow of the American College of Nutrition (FACN) 2016
 IFT Dairy Foods Division, Outstanding Service Award, 2018
 Fellow of the Institute of Food Technologists, 2020
 NCSU Genetic Engineering and Society Faculty Affiliate, 2022

4. Courses Taught (**Current responsibility in Bold**)

ADS 442-642 Milk Secretion. University of Georgia. 1979.
 Physiology. Child Health Associate Program, Univ. Colorado Health Sci. Center, 1983
 DARY 7002 Minerals in Nutrition. LSU. 1987, 1988
 DARY 7094 Seminar in Nutrition. LSU 1987
 DARY 7091 Advanced Dairy Seminar. LSU 1987-88
 DARY 8900 Research Procedure in Dairy Science. LSU 1987
 FS 699 Research in Food Science. NCSU 1989 - present
 FS 400 Principles of Human Nutrition. NCSU 1990 F, 1991 F, 1992 F
 FS/NTR 400 Principles of Human Nutrition. NCSU Fall, 1993 through present
 BCH 493 Special Problems in Biochemistry. NCSU 1992 Fall
 ALS 498H Honors Research I. NCSU 1992 Fall, 1994 F, 2002F, 2005, 2013
 ALS 499H Honors Research II. NCSU 1993 Spring. 2003Sp, 2006, 2014
 NTR 606 Vitamin Metabolism. 16% of Lectures. NCSU 1992
 FS/NTR 495C/ FS 591 Biology of Milk. NCSU 1994 spring, 1994 Fall, 1996 S NTR
 490 Sr. Seminar, Spring 1996 -2004.
 NTR 390 Nutrition Seminar, Spring 2005, - 2013; (via internet) Summer, Fall 2005-2013
 NTR 495 Special Problems, Fall 1994
 NTR 492 External Learning Experiences; NTR 493 On-Campus Learning Experiences; 1995-2005
 NTR/FS 693/695/699/893/895/899 Graduate Research: Course Administrator
 NTR 685/885 Graduate Supervised Teaching: Course Administrator
 NTR 594A, Special Topics: Exercise and Sports Nutrition (3 cr), Spring 1999, 2001
 NTR 594D, Special Topics: Principles of Human Nutrition (via internet) Summer, Fall 2001,
 Spring, Summer, Fall 2002
NTR 500 Principles of Human Nutrition (via internet) Spring, Summer, Fall 2003-8, Summer
 Fall, 2009-2015; Summer 2016-present (4.0)
NTR/FS/ANS 554/ANS454 Lactation, Milk, and Nutrition, Spring 1998, 2000, 2002, 2004,
 2006, 2008-present (internet only in odd years)(3.4)
NTR 555 Exercise Nutrition. Spring 2003, 2005, 2007...present (Internet only in Even
 numbered Years)(3.1)
FS/ANS 324, Milk and Dairy Products, Spring 2008, Fall-2008-present(4.5)
NTR/FS 401-501, Advanced Nutrition and Metabolism, Fall, (Summer) 2009-present (3.9)
 NTR 601/801 Nutrition Seminar Fall & Spring 2012- 2019
NTR 708 Energy Metabolism, Spring 2013, 2015, 2017, 2019, 2021, 2023

5. Grants and Contracts.(klast 5 years)

BORLAUG HIGHER EDUCATION for AGRICULTURAL RESEARCH and
 DEVELOPMENT – Malawi – 2015. Food Science and Nutrition. 8/1/2016 to 7/31/2020.
 \$241,283.

Glycemic responses to sweet potato products (fries, chips, and flours). North Carolina Sweet
 Potato Commission. 5/1/2016-4/30/2017. \$49420. (Year 2 – 3/1/17 to 2/28/18, \$49375)

Baked Sweet Potato Chip Nutrition and Processing. North Carolina Agricultural Foundation. 7/1/2018-6/30/2021. \$100,851.

Milk and Dairy Products Course Revision. FBNS DE Grants Program, 2019. \$5000.

Influence of Cannellini Bean Protein on human postprandial glucose response. Mellitas Health Foods. 2/1/2019 – 9/15/2019, \$25000

Video Captioning Grant for NTR 401/501. Grant number 215. NCSU DELTA program. \$3402. 8/3/2020-1/11/2021.

Opportunities and Threats to Consumer Perceptions of Sweet Potato Products and Processes. NC Sweet Potato Commission, \$12365. 3/1/2022-8/31/2023.

6. Publications.

Papers in Books and Journals

1. Renfro, J.L., B. Schmidt-Neilsen, D. Miller, D. Benos and J. Allen. Methylmercury, and inorganic mercury uptake, distribution, and effect on osmoregulatory mechanisms of fishes. *Pollution and Physiology of Marine Organisms*. Academic Press, New York. 1974.
2. Jackson, D.C., J. Allen and P.K. Strupp. The contribution of non-pulmonary surfaces to CO₂ loss in 6 species of turtles at 20 °C. *Comp. Biochem. Phys.* 55A:243-246. 1976.
3. Neathery, M.W., D.G. Pugh, W.J. Miller, R.H. Whitlock and J.C. Allen. Potassium toxicity and acid-base balance from large oral doses of potassium to young calves. *J. Dairy Sci.* 62:1758-1765. 1979.
4. Burkhalter, D.L., M.W. Neathery, W.J. Miller, R.H. Whitlock, J.C. Allen and R.P. Gentry. Influence of a low chloride practical diet on acid-base balance and other blood parameters in young dairy calves. *J. Dairy Sci.* 63:269-276. 1980.
5. Burkhalter, D.L., M.W. Neathery, W.J. Miller, R.H. Whitlock, J.C. Allen. Effects of low chloride intake on performance, clinical characteristics and chloride, sodium, potassium and nitrogen metabolism in dairy calves. *J. Dairy Sci.* 62:1895-1901. 1979.
6. Allen, J.C. and W.J. Miller. Selenium binding and distribution in goat and cow milk. *J. Dairy Sci.* 63:526-531. 1980.
7. Allen, J.C. and W.J. Miller. Secretion of minerals into milk: mechanisms and nutritional implications. *Proc. Ga. Nutr. Conf. for the Feed Industry*. pp. 125-136. 1980.
8. Allen, J.C. and W.J. Miller. Transfer of selenium from blood to milk in goats and noninterference of copper in selenium metabolism. *J. Dairy Sci.* 64:814-821. 1981.
9. Neathery, M.W., D.M. Blackmon, W.J. Miller, S. Heinmiller, S. McGuire, J.M. Tarabula, R.P. Gentry and J.C. Allen. Chloride deficiency in Holstein calves from a low chloride diet and removal of abomasal contents. *J. Dairy Sci.* 64:2220-2233. 1981.
10. Neville, M.C., J.C. Allen and C.D. Watters. Mechanisms of milk secretion. IN: Neville, M.C. (Ed.) *Human Lactation: Physiology, Nutrition and Breast-Feeding*. Plenum, New York. 1983. pp. 49-102.
11. Allen, J.C. and M.C. Neville. Ionized calcium in human milk determined with a calcium selective electrode. *Clin. Chem.* 29(5):858-861. 1983.
12. Allen, J.C. Effect of vitamin D deficiency on mouse mammary gland and milk. *J. Nutr.* 114:24-31. 1984.

13. Allen, J.C., M.C. Neville, J.M. Seacat, C.E. Casey and M.R. Neifert. Amino acids in milk in cystinuria. *New Eng. J. Med.* 310:1332. 1984.
14. Neville, M.C., R.P. Keller, J. Seacat, C.E. Casey, J.C. Allen and P. Archer. Studies on human lactation: I. Within-feed and between-breast variation in selected components of human milk. *Amer. J. Clin. Nutr.* 40:635-646. 1984.
15. Hitzig, B.M., J.C. Allen and D.C. Jackson. Central chemical control of ventilation and response of turtles to inspired CO₂. *Amer. J. Physiol. (Regulatory, Integrative and Comp. Physiol. 18):* R323-R328. 1985.
16. Allen, J.C., A.K. Coffey and J.W. Mills. Involvement of cytoskeletal organization and Na/H exchange in dibutyryl cyclic AMP induced alterations of MDCK cell volume. IN: Alvarado, F. and C.H. van Os (eds.), *Ion Gradient-Coupled Transport. INSERM Symp. No. 26*, Elsevier Science Publishers B.V., Amsterdam. 1986. pp. 415-419.
17. Neville, M.C., J.C. Allen and C.E. Casey. Regulation of the rate of lactose production. IN: Hamosh, M. and A. S. Goldman (eds.) *Human Lactation 2: Effects of Maternal and Environmental Factors*. Plenum. 1986. pp.241-251.
18. Allen, J.C. Sodium and potassium content and viability of mouse mammary gland tissue and acini. *J. Dairy Sci.* 71:633-642. 1988.
19. Neville, M.C., R. Keller, J. Seacat, V. Lutes, M. Neifert, C. Casey, J. Allen, P. Archer. Studies in human lactation: milk volumes in lactating women during the onset of lactation and full lactation. *Amer. J. Clin. Nutr.* 48:1375-1386. 1988.
20. Allen, J.C., and J.W. Mills. Effects of verapamil on calcium flux, cyclic adenosine monophosphate, volume and ion content in MDCK epithelial cells. *In Vitro Cell. Devel. Biol.* 24:588-592. 1988.
21. Allen, J. C. Milk synthesis and secretion rates in cows with milk composition changed by oxytocin. *J. Dairy Sci.* 73:975-984. 1990.
22. Velez, S.A., J.C. Allen, C.M. Keery, and R.W. Adkinson. Evaluation of crab and crawfish waste meals as protein sources for growing dairy heifers. *J. Dairy Sci.* 74 (1):234-242. 1991.
23. Keery, C.M., J.C. Allen, and W.A. Nipper. The effect of ensiling on the digestibility and utilization of whole oilseeds by ruminants. *J. Dairy Sci.* 74(2):518-525. 1991.
24. Allen, J.C., R.P. Keller, and M. C. Neville. Studies in human lactation. Milk composition and daily secretion rates of macronutrients in the first year of lactation. *Am. J. Clin. Nutr.* 54: 69-80. 1991.
25. Neville, M.C, J. C. Allen, P. C. Archer, C. E. Casey, J. Seacat, R. P. Keller, V. Lutes, J. Oliva-Rasbach, and M. R. Neifert. Studies in human lactation. Milk volume and nutrient composition during weaning and lactogenesis. *Am. J. Clin. Nutr.* 54: 81-92. 1991.
26. Vaillancourt, S.J. and J. C. Allen. Glucocorticoid effects on zinc transport into colostrum and milk of lactating cows. *Biol. Trace Element Res.* 30:185-196. 1991.
27. Allen, J. C. New terminology to replace the U.S. RDA. *Dairy Food Environ. Sanitation.* 12(12):746-751. 1992.
28. Allen, J. C., S.J. Vaillancourt and L. H. Haedrich. Glucocorticoid and polyamine involvement in zinc uptake by COMMA-1D mammary epithelial cells. *Biol. Trace Elem. Res.* 39:229-243. 1993.
29. Anderson, J.J.B., and J.C. Allen. Nutrition of macrominerals and trace elements. In: Goldberg, I. (ed.) *Functional Foods*, Chapman & Hall, Chapter 19. pp. 323-354. 1994.
30. Neville, M.C., R. P. Keller, C. E. Casey and J. C. Allen. Calcium partitioning in human and bovine milk. *J. Dairy Sci.* 77:1964-1975. 1994.
31. Jeyarajah, S., and J. C. Allen. Calcium binding and salt-induced structural changes of native and pre-heated β -lactoglobulin. *J. Agric. Food Chem.* 42:80-85. 1994.

32. Pilkington, D. H. and J. C. Allen. Substitution of potassium chloride for sodium chloride in commercially-produced dry-cured hams. *J. Food Protection*. 57(9):792-795, 801. 1994.
33. Neville, M.C., P. Zhang, and J. C. Allen. Minerals, Ions and Trace Elements in Milk: Ionic interactions in milk. In: Jenson, R. G. (ed) *The Handbook of Milk Composition*. Academic Press. 1995. pp. 577-592.
34. Zhang, P. and J. C. Allen. Free zinc concentration in bovine milk measured by analytical affinity chromatography with immobilized metallothionein. *Biol. Trace Elem. Res.*50:135-148. 1995.
35. Zhang, P, and J. C. Allen. A novel dialysis procedure measuring free Zn^{2+} in bovine milk and plasma. *J. Nutr.* 125: 1904-1910. 1995.
36. Wang, Q., J. C. Allen, and H. E. Swaisgood. Binding of retinoids to β -lactoglobulin isolated with bioselective adsorption. *J. Dairy Sci.*80:1047-1053. 1997.
37. Wang, Q., J. C. Allen, and H. E. Swaisgood. Binding of Vitamin D and cholesterol to β -lactoglobulin. *J. Dairy Sci.*80:1054-1059. 1997.
38. Heddleson, R. A., J. C. Allen, Q. Wang and H.E. Swaisgood. Purity and yield of β -lactoglobulin isolated by an all-trans-retinal bioaffinity column. *J. Agric. Food Chem.*, 45(7):2369-72. 1997.
39. Heddleson, R.A, and J. C. Allen. Relative immunogenicity of beta-lactoglobulin, bovine serum albumin, and a model acid whey product. *Nutr. Res.* 17(3):505-514. 1997.
40. Heddleson, R. A., O. Park, and J. C. Allen. Immunogenicity of casein phosphopeptides derived from tryptic hydrolysis of β -casein. *J. Dairy Sci.*, 80(9): 1971-1976. 1997.
41. Chen, H. Y., D. H. Pilkington, and J.C. Allen. Developing a dry-cured ham nutritional database. *J. Food Composition Anal.* 10: 190-204. 1997.
42. Wang, Q., J. C. Allen, and H.E. Swaisgood. Protein concentration dependence of palmitate binding to β -lactoglobulin. *J. Dairy Sci.*, 81: 76-81. 1998.
43. Alston-Mills, B., J. C. Allen, C.D. Hepler, L. Sternhagen. The effects of whey-milk proteins on Caco-2 and HT-29 intestinal cell lines. *Live Stock Prod. Sci.* 50:147-148. 1997
44. Park, O., H. E. Swaisgood and J. C. Allen. Calcium binding of phosphopeptides derived from hydrolysis of α_s -casein or β -casein using immobilized trypsin. *J. Dairy Sci.* 81:2850-2857, 1998.
45. Park, O., and J. C. Allen. Preparation of phosphopeptides from α_s -casein or β -casein using immobilized glutamic acid-specific endopeptidase and characterization of their calcium binding. *J. Dairy Sci.* 81:2858-2865, 1998.
46. Wang, Q., J. C. Allen, and H.E. Swaisgood. Binding of lipophilic nutrients to β -lactoglobulin prepared by bioselective adsorption. *J. Dairy Sci.* 82:257-264, 1999.
47. Alston-Mills, B., C. Hepler, L. Sternhagen, J. C. Allen, K. A. Meshaw. α -Lactalbumin as a modulator of mammary cellular activity. *In Vitro Cell and Developmental Biology - Animal* 34:747-750. 1999.
48. Park, O, and J. C. Allen. Antigenicity of casein phosphopeptides prepared with immobilized glutamic acid-specific endopeptidase or trypsin. *Nutrition Research*, 20 (3): 359-370. 2000.
49. Adcox, C, L. Boyd, L. Oehrl, J. Allen and G. Fenner. Comparative effect of phytosterol oxides and cholesterol oxides in cultured macrophage derived cell lines. *J. Agric. Food Chem.* 49: 2090-2095, 2001.
50. Sternhagen, L. G., and J. C. Allen. Growth rates of a human colon adenocarcinoma cell line are regulated by the milk protein alpha-lactalbumin. In: Newberg, D. (ed.) *Bioactive Components of Human Milk*. Adv. Exper. Med. Biol. 501:115-120. Kluwer Academic/Plenum Publishers, New York, 2001.

51. Chen, H.-Y., and J. C. Allen. Human milk antibacterial factors: The effect of temperature on defense systems. In: Newberg, D. (ed.) *Bioactive Components of Human Milk*. Adv. Exper. Med. Biol. 501:341-348. Kluwer Academic/Plenum Publishers, New York, 2001.
52. Allen, H.G., J.C. Allen, L.C. Boyd, and B.P. Alston-Mills. Can anthropometric measurements and diet analysis serve as useful tools to determine risk factors for insulin resistant diabetes type II among Caucasians and African Americans? *Nutrition*, 19:584-588. 2003.
53. Banini, A.E., J.C. Allen, H.G. Allen, L.C. Boyd, and A. Lartey. Fatty acids, diet, and body indices of type II diabetic Caucasians, African Americans and Ghanaians. *Nutrition*, 19:722-726. 2003.
54. Sauls, D. L., Boyd, L. C., Allen, J. C., Hoffman, M. Differences in the metabolic response to exogenous homocysteine in juvenile and adult rabbits.
"http://databases.lib.ncsu.edu/NCSUauthors/search4.cfm?JourID=3265" *Journal of Nutritional Biochemistry* 15 (2): 96-102. 2004.
55. Zakir, S., Sarwar, M., Allen, J., Butt, M.S. Allen, H. Effect of sweet potato on insulin efficiency of normal and diabetics subjects in Pakistan. *Eur. J. Scientific Res.* 10 (1): 87-97. 2005.
56. Allen, H. G., Allen, J. C., Boyd, L.C., Alston-Mills, B.P., Fenner, G.P. Determination of membrane lipid differences on insulin resistant diabetes mellitus type II in whites and blacks. *Nutrition* 22: 1096-1102. 2006.
57. Banini, A E., Boyd, L. C., Allen J. C., Allen, H. G., Sauls, D. L. and Hoffman, M. Muscadine grape products intake, diet and blood constituents of non-diabetic and type II diabetic subjects. *Nutrition*. 22 (11-12) 1137-1145. 2006.
58. Zakir, S., M. Sarwar, J. Allen, M.S. Butt and J. McClelland. Impact of sweet potatoes cultivars on postprandial blood glucose level in normal and diabetics subjects: Empirical test of hypotheses on Pakistani data *Eur. J. Scientific Res.* 11(2):171-184. 2005.
[http://www.eurojournals.com/EJSR.htm]
59. Zakir, S. M. Sarwar, J. Allen, M.N. Khan, and M.S. Butt. Variation in physio-chemical characteristics of some cultivars of sweet potato. *Pak. J. Bot.* 38(2): 283-291. 2006.
60. Viazis S., B. E. Farkas*, and J. C. Allen. Effects of high pressure processing on total immunoglobulin A and lysozyme activity in human milk. *J. Human Lactation.* 23(3): 253-261. 2007.
61. Sauls, D. L., C. W. Bell, E. K. Arnold, J. C. Allen, M. Hoffman. Pro-thrombotic and pro-oxidant effects of diet-induced hyperhomocysteinemia. *Thrombosis Research.* 120: 117-126. 2007.
62. Allen, J. C. and R. Watkins. In vitro digestibility of polyol hydrogenated starch hydrolysates. *International Journal of Food Science Technology and Nutrition.* 1(2): 199-212. 2007.
63. Asghar, A., Anjum, F. M, Allen, J. C. and Daubert, C. R. Effect of modified whey protein concentrates on empirical and fundamental dynamic mechanical properties of frozen dough. *Food Hydrocolloids.* 23(7): 1687-1692. 2009.
64. Asghar, A., Anjum, F. M, Allen, J. C., Rasool, G., and Sheikh, M.A. Effect of modified whey protein concentrates on instrumental texture analysis of frozen dough. *Pakistan Journal of Nutrition* 8 (2): 189-193. 2009.
65. Asghar, A., Anjum, F.M., and Allen, J.C. (2011) 'Utilization of dairy byproduct proteins, surfactants, and enzymes in frozen dough', *Critical Reviews in Food Science and Nutrition*, 51: 4, 374 — 382. To link to this Article: DOI: 10.1080/10408391003605482. URL: <http://dx.doi.org/10.1080/10408391003605482>
66. Allen JC, Corbitt AD, Maloney KP, Butt MS, Truong VD. Glycemic index of sweet potato as affected by cooking methods. *The Open Nutrition Journal*, 6: 1-11. 2012.
<http://benthamopen.com/tonutrj/openaccess2.htm>

67. Maloney, K. P., Truong, V.-D., Allen, J.C. Chemical optimization of protein extraction from sweetpotato (*Ipomoea batatas*) peel. *Journal of Food Science*. 2012. 77(11):E308-E312.
68. Fogleman, A. D., R. S. Cohen, P. Sakamoto, J. C. Allen. Effect of added calcium, phosphorus, and infant formula on calcium and phosphorus bioaccessibility in preterm donor human milk. *Journal of Pediatric Gastroenterology and Nutrition*. 55(4):390-397, 2012. doi: 10.1097/MPG.0b013e318254ec07
69. Fogleman, A. D., R. S. Cohen, P. Sakamoto, J. C. Allen. Addition of calcium and phosphorus to preterm donor human milk and the impact on protein, fat, and calcium digestibility in-vitro. *Infant, Child and Adolescent Nutrition*, 2012. 4(4):199-206
70. Liu, Y., J.-J. Shaw, H. E. Swaisgood and J. C. Allen. "Bioavailability of Oil-Based and β -Lactoglobulin-Complexed Vitamin A in a Rat Model," *ISRN Nutrition*, vol. 2013, Article ID 270580, 8 pages, 2013. doi:10.5402/2013/270580 (<http://dx.doi.org/10.5402/2013/270580>)
71. Perrin, M. T., Fogleman, A. D., Allen J.C. The nutritive and immunoprotective quality of human milk beyond 1 year postpartum: Are lactation-duration based donor exclusions justified? *Journal of Human Lactation*, 2013, 29(3): 341-349. DOI 10.1177/0890334413487432.
<http://jhl.sagepub.com/cgi/content/abstract/0890334413487432v1>
72. Maloney, K. P., V-D, Truong, and J. C. Allen. Susceptibility of sweetpotato (*Ipomoea batatas*) peel proteins to digestive enzymes. *Food Science and Nutrition*, 2014. 2(4): 351/360. DOI - 10.1002/fsn3.110. <http://onlinelibrary.wiley.com/doi/10.1002/fsn3.110/full>.
73. Perrin, M., Goodell, L. S., Allen, J.C., Fogleman, A. A mixed-methods observational study of human milk sharing communities on Facebook. *Breastfeeding Medicine*. (2014) 9(3): 128-134. DOI: 10.1089/bfm.2013.0114
<http://online.liebertpub.com/prox.lib.ncsu.edu/doi/pdfplus/10.1089/bfm.2013.0114>.
74. Allen JC, Issa JY and Cai W (2014) Calcium content, in vitro digestibility, and bioaccessibility in leaves of spinach (*Spinacia oleracea*), sweet potato (*Ipomea batatas*), and drumstick tree (*Moringa oleifera*) [v1; ref status: approved with reservations 3, <http://f1000r.es/2pz>] *F1000Research* 2014, 3:65
75. Allen JC, Issa JY and Cai W (2014) Calcium content, in vitro digestibility, and bioaccessibility in leaves of spinach (*Spinacia oleracea*), sweet potato (*Ipomea batatas*), and drumstick tree (*Moringa oleifera*) [v1; ref status: approved with reservations 3, <http://f1000r.es/2pz>] *F1000Research* 2014, 3:65 (doi: 10.12688/f1000research.3527) - See more at: <http://f1000research.com/articles/3-65/v1#sthash.qYF0c5M8.dpuf>
76. Lovett MD, Allen JC. Calcium chloride and vitamin D bioavailability from fortified sports drinks in Wistar rats. *International Journal of Food and Nutritional Science*. 1(1):1-7. 2014. <http://www.ommegaonline.com/form/issues/Calcium-Chloride-and-Vitamin-D.php>
77. Manavi KR, Alston-Mills B, Thompson, MP, and Allen JC. 2015. Effect of serum cotinine on vitamin D serum concentrations among American females with different ethnic backgrounds. *Anticancer Research*. 35(2): 1211-1218.
<http://ar.iarjournals.org/content/35/2/1211.abstract?sid=135ab318-eeea-48b5-b645-bf45deeacda3>
78. Perrin, MT, Fogleman AD, Newburg D, Allen, JC. A longitudinal study of human milk composition in the second year postpartum: Implications for human milk banking. *Maternal & Child Nutrition* (2017), 13, e12239. doi: 10.1111/mcn.12239.
79. Meng T, Perrin MT, Allen JC, Osborne J, Jones F, Fogleman AD, Storage of unfed and leftover pasteurized human milk. *Breastfeeding Medicine*. (2016). 11(10): 538-543. <https://doi.org/10.1089/bfm.2016.0139>
80. Fogleman AD, Meng T, Osborne J., Perrin MT, Jones F, Allen JC. Storage of unfed and leftover mothers' own milk. *Breastfeeding Medicine*. (2018). 13(1): 42-49

81. Feng S, Whitfield S, Ward T, Hamilton L, Nelson C, Hass M, Allen JC. Analysis of a mass produced dried ready-to-use therapeutic food ingredient. *Internat J Gastronomy and Food Sci.* In preparation.
82. Chilungo S, Muzhingi T, Mbogo D, Truong VD and Allen JC. (2019) Effect of storage and packaging materials on color and carotenoid content of orange-fleshed sweetpotato flours. *International Journal of Innovative Science and Research Technology* (ISSN No:-2456-2165). 4(9):362-369. <https://bit.ly/2mfS56X>.
83. Chizonda, S, Fellner V, Allen JC. *In vitro* fermentation of *Moringa oleifera* leaves. *J Dairy Sci.* In preparation.
84. Chilungo S, Muzhingi T, Truong VD, Allen JC. Effect of processing and oil type on carotene bioaccessibility in traditional foods prepared with flour and puree from orange-fleshed sweetpotatoes. *International Journal of Food Science and Technology.* 2019. 54(6): 2055-2063 DOI: 10.1111/ijfs.14106
85. Christman LM, Dean LL, Allen JC, Godinez SF, Toomer OT (2019) Peanut skin phenolic extract attenuates hyperglycemic responses *in vivo* and *in vitro*. *PLoS ONE* 14(3): e0214591. <https://doi.org/10.1371/journal.pone.0214591>
86. Sha ZHANG; George A. Cavender; Jonathan C. Allen. (2019) "Max Bloc™ carb Blocker from Phaseolus Vulgaris with Ultra-high α -Amylase Inhibitory Activity for Glycemic Control and Weight Management". *J Nutr Food Sci* 3: 011
87. Sha ZHANG; George A. Cavender; Jonathan C. Allen "Bean Protein from Phaseolus Vulgaris with Ultra-high α -Amylase Inhibitory Activity for Glycemic Control and Weight Management". *Plant Foods for Human Nutrition.* Submitted.
88. Kaufman AA, Jordan DL, Reberg-Horton C, Dean LL, Shew BB, Brandenburg RL, Anco D, Mehl H, Taylor S, Balota M, Goodell LS, Allen J. (2020) Identifying Interest, Risks, and Impressions of Organic Peanut Production: A Survey of Conventional Farmers in the Virginia-Carolina Region. [Crop, Forage & Turfgrass Management](#). 6(1): e20042 **DOI:10.1002/cft2.20042**
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Abstracts and Presentations. Last 5 years

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- Feng S, Allen JC. Glycemic index of products derived of sweet potato: chips, fries, flour and juice; compared to their analog white potato products. National Sweet Potato Collaborators Meeting Progress Report. p. 16. Oral Presentation, Wilmington NC Jan 20, 2018.
- Allen JC. Agriculture, Nutrition, and Metabolism: What is the quest? Invited Seminar, University of New Hampshire, 2/18/2018.
- Feng S, Allen JC. Glycemic index of products derived of sweet potato: chips, fries, flour and juice; compared to their analog white potato product. IFT18 Annual Meeting, Chicago, July 15-18, 2018..

- Ulus HZ, Chizonda S, Fellner V, Allen JC. Lower Methane and Greater Glucogenic Volatile Fatty Acid Produced from *Moringa oleifera* than Alfalfa During In Vitro Fermentation in Rumen Fluid. 2018 American Society of Nutrition Annual Meeting, Boston, MA, 6/10/2018
- Siyame EWP, Goodell LS, and Allen JC. Dietary practices of patients attending hypertensive clinics in Malawi. Choose Food Symposium, Baltimore , MD Nov 5-8, 2018
- Almohmadi W, Allen JC. Glucose regulatory hormones in camel, cow, goat, and human milk. Nutrition2019, Baltimore June 8-11, 2019. *Current Developments in Nutrition*, 3(Suppl 1) doi:10.1093/cdn/nzz031.P06-034-19
- Ulus HZ, Allen JC. Applying evaporated milk processing technology to human milk to increase nutrient density. IFT19 in New Orleans, LA, USA on June 2 - 5, 2019.
- Feng S, Allen JC. Postprandial changes in metabolic hormones in response to the consumption of products derived from sweetpotato and white potato. IFT19 in New Orleans, LA, USA on June 2 - 5, 2019
- Allen JC, Patel M, Feng Godinez S. Influence of proprietary white kidney bean protein on human postprandial glucose response. Poster. Presented at Personalized Nutrition 2019. Annual meeting of American College of Nutrition and American Nutrition Association, San Diego CA. November 13-15, 2019.
- Allen JC, Chilungo S, Truong VD. Optimization of products and processing for vitamin A yield from orange-fleshed sweet potato products in Africa. IFT20 in Chicago IL, USA online July 13, 2020 through 2021. Poster Session 7 - Nutrition.
- Ulus HZ, Allen JC. Nutrient degradation in Baked or Air-fried sweet potato chips. Nutrition Live Online 2020 ASN Annual Meeting Abstract. 6/1-6/4, 2020. *Curr Devel Nutr* 4(Suppl 2):783. https://doi.org/10.1093/cdn/nzaa052_052
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- Almohmadi W, Allen JC. The Effect of In Vitro-digestion on Mammalian Milks' Insulin and IGF-1 (P06-002-20). Nutrition Live Online 2020 ASN Annual Meeting Abstract. 6/1-6/4, 2020. *Curr Devel Nutr* 4(Suppl 2):369. https://doi.org/10.1093/cdn/nzaa045_002
- Allen JC Almohmadi W, Glucoregulatory hormone profile in raw and pasteurized donor human milk. ISRHML 2021 Live Online. 18 August, 2021.
<https://www.trippus.se/web/presentation/web.aspx?evid=wVik+OMEwp93p0eTzC0ZrA==&ecid=+n9OedsD2TJIP8yaYnP+qg==&ln=eng&emid=3/xyecVkJQ3Cmcv6daeYJ2g==&view=infopage&template=desktoph>
- Ulus HZ, Allen JC. Effect of different cooking methods on acrylamide content in sweet potato chips. IFT FIRST Annual Meeting. July 2022.
https://iftfirst.org/library/search/ift_pp_effectofdifferent_166

7. Theses/Dissertations

Completed as Committee Chair (last 5 years)

- Feng, Sofia PhD FS (PhD – May 2018) Chemical and Nutritional Analyses of Products Derived from Sweet Potato
- Singletary, Nicola PhD NTR (May 2018) Exploring Teachers' Attitudes Towards Breastfeeding Education and Infant Feeding Education Practices in North Carolina Family and Consumer Sciences Classrooms (Under the direction of April Fogleman). (Co chair)
- LIMA, HOPE KATHERINE. (PhD, Nutrition, May 2019) Optimizing Medical Nutrition for Exclusively Human Milk Fed Infants (Under the direction of April D. Fogleman and Jonathan C. Allen).
- James, Brittany Nutrition MR Professional Science Master-DE (May 2018)

Hedgecock, Caroline Whitley Food Sci-MR (May 2018)
 Moreno, Carlos Rodrigo Food Sci-MR (May 2018)
 Woiciechowska, Elena Food Sci-MR (May 2018)
 Hawkins, Kenan Miles Food Sci-MR (May 2018)
 Lamonaca, Leigh Montana Nutrition MR Professional Science Master-DE (May 2018)
 Deal, Christine Amy Nutrition, -MR Professional Science Master-DE (May 2018)
 Glenn, Lindsey Inez Nutrition, -MR Professional Science Master-DE (May 2018)
 Sheng, Peiwen - Nutrition MR (May 2018)
 Jiang, Yixuan Food Sci-MR (May 2018)
 RONGHUI, WANG. Amination, a New Metabolic Pathway of Myricetin and Baicalein. (Under the direction of Dr. Shengmin Sang and Jonathan C. Allen) MS Food Science Cox, Kathryn Medved Nutrition, -MR Professional Science Masters (May 2108)
 Russell, Donna E - Nutrition, Food Science-MR Professional Science Master-DE (May 2018)
 Coates, Stephanie Genese MR NTR (Summer 2018)
 Rowe, William R. – Master of Nutrition (December 2018)
 Smith, Mallory Elyse Nutrition, MR Professional Science Master-DE (Dec 2018)
 Siyame, Edwin WP, PhD, NTR Dietary Practices of Hypertensive Patients Attending Hypertensive Clinics in Malawi. [Under the direction of Dr. Jonathan C. Allen and Dr. L. Suzanne Goodell] (December 2018)
 Patel, Misha Food Sci-MR (December 2018)
 Stephanie Coates – Nutrition-MR (December 2018)
 William Rowe– Nutrition-MR (December 2018)
 Abigail Sanders– Nutrition-MR (December 2018)
 Mallory Smith– Nutrition-MR (December 2018)
 Chilungo, Sarah Food Sci-PHD (co-chair) (May 2019) Bioaccessibility of Beta Carotene in Processed Products from Orange Fleshed Sweetpotatoes (Under the direction of Dr. Van Den Truong and Dr. Jonathan C. Allen, co-chairs).
 Blair, Geoffrey, Food Sci-MR (May 2019)
 Cosolito, Christopher, Food Sci-MR (May 2019)
 Liu, Danni, Food Sci-MR (May 2019)
 Lu, LiHeng, Food Sci-MR (May 2019)
 Mody, Rishi, Food Sci-MR (May 2019)
 Lawrence, Elizabeth Grace, Nutrition-MR (May 2019)
 Metzler, Kristin Myers, Nutrition-MR (May 2019)
 Wilson, Amelia Brynne, Nutrition-MR (May 2019)
 WAGNER-GILLESPIE, MONTANA KATHERINE. Nutrition-MS, (May 2019) Heterogeneous Holder Pasteurization Methods: Implications on the Quality of Banked Human Milk. (Under the direction of Dr. April Fogleman and Dr. Jonathan Allen).
 Foster IV, Lester Anderson Food Sci-MR (2019)
 Ellison, Kristin Nutrition, Food Science-MR Professional Science Master-DE (2020)
 Calvert, Martha Dianne - Food Sci-MR (May 2020)
 Aryal, Shuvechhya - Food Sci-MR (August 2020)
 Almohmadi, Wafa PhD NTR (December 2020) “Camel Milk as an Antidiabetic Agent: A Review of the Impact of *In Vitro* Digestion and Pasteurization on Glucose Regulatory Hormones”
 Manavi, Kiano – Nutrition PhD – (Dec 2020) “Effect of Blood Serum Cotinine Concentration on Blood Serum Vitamin D Concentration Among Women with Different Ethnic Backgrounds in the United States.” (Under the direction of Dr. Brenda Alston-Mills and Dr. Jonathan C. Allen).

Overall, John. Nutrition – MS (May 2021) Anthocyanin Structural Diversity and Gut Microbiota Interactions Contribute to Divergent Metabolic Health Outcomes after Berry Nutritional Interventions in Diet-Induced Obesity.

Gore, Nikhilesh Sunil - Food Sci-MR (May 2021)

Ang, Zachary - Food Sci-MR (May 2021)

Lloyd, Michael L. – Food Science PhD (December 2021) Carotenoid Processing: The Effects of Microwave-assisted Processing on Carotenoid Ingredients

Hine, Kristin Ashley– Nutrition-MR (Dec 2021)

Pan, Han - Food Science, MR (May 2022)

Elham Kensarah - Food Science, MR (May 2022)

O'Briant, Jason - PhD NTR (August 2022) Engaging Students in Healthcare to Impact Effects of Food Insecurity on Patients with Type 2 Diabetes and Measure the Effects of High Intensity Exercise on Blood Glucose

Ulus, Hande Zeynep, PhD. Nutrition, Food Science- [PhD December 2022] - Baked Sweet Potato Chip Nutrition and Processing.