# ZACH CONRAD, PhD, MPH

#### **Associate Professor**

Department of Health Sciences, William & Mary, Williamsburg, VA Faculty Affiliate, Global Research Institute

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Nutritional epidemiologist and food systems scientist evaluating the complex relationships between diet quality, health outcomes, environmental sustainability, and affordability.

 $\label{lem:condition} \textit{Epidemiologic modeling} \cdot \textit{Food system modeling} \cdot \textit{Diet pattern analysis} \cdot \textit{Survival analysis} \cdot \textit{Complex survey data} \\ \textit{analysis} \cdot \textit{Stata} \cdot \textit{ArcGIS}$ 

<b>Current Positions</b>	
Associate Professor – Human Nutrition Department of Health Sciences College of Arts & Sciences	Aug 2025-Present
William & Mary, Williamsburg, VA  Assistant Professor – Human Nutrition Department of Health Sciences College of Arts & Sciences William & Mary Williamsburg, VA	Aug 2019-July 2025
William & Mary, Williamsburg, VA  Faculty Affiliate Global Research Institute William & Mary, Williamsburg, VA	Feb 2021-Present
Education and Training  Postdoctoral Research Scientist  Human Nutrition Research Center, Grand Forks, ND  US Department of Agriculture, Agricultural Research Service Nutritional Epidemiology and Behavioral Sciences	Aug 2016-June 2019
Postdoctoral Scholar Friedman School of Nutrition Science and Policy Tufts University, Boston, MA Nutritional Epidemiology	Aug 2015-July 2016
PhD – Nutrition Friedman School of Nutrition Science and Policy Tufts University, Boston, MA	2015
Master of Science – Food Systems and Public Health Friedman School of Nutrition Science and Policy Tufts University, Boston, MA	2010
Master of Public Health – Nutrition School of Medicine Tufts University, Boston, MA	2010
Bachelor of Arts – Biology and Anthropology (Honors) Food Systems and Human Health Trent University, Peterborough, Ontario, Canada	2007

#### **Peer-reviewed Publications**

69 total, 31 first author (\* indicates current or former student co-author)

- 69. **Conrad, Zach**; Leu, Matthias; Wu, Songze;\* Fulcher, Eli;\* Keam, Brenna;\* Kim, Min;\* Kinsel, Dakota;\* Lozina, Sarah;\* DiStaso, Chloe;\* Kun, Julia;\* Boston, Juan; Peterson, Tomalita; Roach, Beth; Tupponce, Tommy; Phillips, Jessica; Wiipongwii, Troy (2026). First-contact tribal nations in the eastern United States can produce some, but not all, of their food needs in a changing climate: a modelling study. *American Journal of Clinical Nutrition* (in press).
- 68. Drewnowski, Adam; Zavela, Catherine;\* Tran, Vanessa; Mallya, Greeshma; **Conrad, Zach**. (2025). Pulse consumption trends in the US in the context of 2025-30 Dietary Guidelines for Americans: Analyses of NHANES data for 1999-2018. *Frontiers in Nutrition*, 12:1638519.
- 67. Rodríguez-Huerta, Edgar; Bell, Brooke M.; Battaglia, Kyra; Sparks, Jessica L. Decker; Benoit Norris, Catherine; Sofia Marquez, Alejandra; **Conrad, Zach**; Matteson, Julia; Jackson, Bethany; Blackstone, Nicole Tichenor. (2025). Current and recommended diets in the US have embedded forced labour risk. *Nature* Food, 11:1042-1053.
- 66. **Conrad, Zach**; Leu, Matthias; Fulcher, Eli;\* Wu, Songze;\* DiStaso, Chloe;\* Boston, Juan; Peterson, Tomalita; Roach, Beth; Tupponce, Tommy; Phillips, Jessica;. Wiipongwii, Troy. (2025). Exploring the crop suitability of first-contact tribal lands in the eastern United States: impacts of past and near-future climate conditions. *Scientific Reports*, 15:27854.
- 65. Love; David C.; Conrad, Zach; Altema-Johnson, Daphene; Ramsing, Rebecca; Bassarab, Karen; Thorne-Lyman, Andrew L; Williams, D'Ann; Moore, E.R.H.; Nussbaumer, Elizabeth M; Truant Anderson, Patti. (2025). Food substitution and waste reduction can reduce the environmental impacts and food costs of school meal programs in the United States: A 2011-2018 NHANES Analysis. *Journal of the Academy of Nutrition and Dietetics*, 22:S2212-2672.
- 64. **Conrad, Zach**; Repoulis, Vincent;\* Zavela, Catherine.\* (2025). Modeled sustainability impacts of increasing pork consumption among adults in the United States. *Frontiers in Nutrition*, 17:1508601.
- 63. **Conrad, Zach**; Thorne-Lyman, Andrew L.; Wu, Songze;\* DiStaso, Chloe;\* Korol, Madison;\* Love, David C. (2025). Are healthier diets more sustainable? A cross-sectional assessment of 8 diet quality indexes and 7 sustainability metrics. *American Journal of Clinical Nutrition*, 121:315-323.
- 62. **Conrad, Zach**; Korol, Madison;\* DiStaso, Chloe;\* Wu, Songze.\* (2024). Greater adherence to the Mediterranean diet pattern in the United States is associated with sustainability trade-offs. *Nutrition Journal*, 23:159.
- 61. Ilayan, Alaa; Dustin, Dakota; Kowalski, Corina;\* Belury, Martha A; Johnson, LuAnn K; **Conrad, Zach**. (2024). Micronutrient inadequacy differs by intake of fat amount and class among adults that consume a restricted carbohydrate diet: National Health and Nutrition Examination Survey, 2007-2018. *Journal of the Academy of Nutrition and Dietetics*, 7:S2212-2672.
- 60. Blackstone, Nicole Tichenor; Battaglia, Kyra; Rodríguez-Huerta, Edgar; Bell, Brooke M; Decker Sparks, Jessica L; Cash, Sean B; **Conrad, Zach**; Nikkhah, Amin; Jackson, Bethany; Matteson, Julia; Gao, Shijun; Fuller, Kathy; Zhang, Fang Fang; Webb, Patrick. (2024). Diets cannot be sustainable without ensuring the well-being of communities, workers, and animals in food value chains. *Nature Food*, 5:818-824.

- 59. Drewnowski, Adam; **Conrad, Zach**. (2024). Pulse crops: nutrient density, affordability, and environmental impact. *Frontiers in Nutrition*, 11:1438369.
- 58. Kowalski, Corina\*; Dustin, Dakota; Ilayan, Alaa; Johnson, LuAnn K.; Belury, Martha; **Conrad, Zach**. (2024). Are people consuming the diets they say they are? Self-reported versus estimated adherence to low carbohydrate and low fat diets: National Health and Nutrition Examination Survey, 2007-2018. *Journal of the Academy of Nutrition and Dietetics*, 125:239-246.
- 57. **Conrad, Zach**; Wu, Songze;\* Johnson, LuAnn K; Kun, Julia F;\* Roy, Eric D; Gephart, Jessica A; Bezares, Nayla; Wiipongwii, Troy; Blackstone, Nicole Tichenor; Love, David C. (2024). Foodprint 2.0: A computational simulation model that estimates the agricultural resource requirements of diet patterns. *PLOS One*, 19:e0306097.
- 56. **Conrad, Zach**; DiStaso, Chloe;\* Korol, Madison;\* Rose, Donald. (2024). Augmenting the national nutrition data system to promote diet sustainability analyses. *Current Developments in Nutrition*, 8:103793.
- 55. Rowe, Sarah;\* Brady, Catherine;\* Sarang, Rhea;\* Wiipongwii, Troy; Leu, Matthias; Jennings, Lydia; Peterson, Tomalita; Boston, Juan; Roach, Beth; Phillips, Jessica; **Conrad, Zach**. (2024). Improving Indigenous food sovereignty through sustainable food production: a narrative review. *Frontiers in Sustainable Food Systems*, 8:1341146.
- 54. Scherer, Laura; Tichenor Blackstone, Nicole; **Conrad, Zach**; Fulgoni, Victor; Mathers, John; van der Pols, Jolieke; Willett, Walter; Fantke, Peter; Milà i Canals, Llorenç; Pfister, Stephan; Stylianou, Katerina; Weidema, Bo; Jolliet, Olivier. (2024). Accounting for nutrition-related health impacts in food LCA: guidance from an expert workshop. *International Journal of Life Cycle Assessment*, 29:953-966.
- 53. Unger, Allison; Beal, Ty; **Conrad, Zach**; Pikosky, Matthew; Brown, Katie. (2024). Opportunities for consistent and holistic metrics to support food systems transformation: a summary of a symposium presented at Nutrition 2023. *Current Developments in Nutrition*, 8: 102129.
- 52. Angelotti, Austin; Kowalski, Corina;\* Johnson, LuAnn; Belury, Martha; **Conrad, Zach**. (2024). Restricted carbohydrate diets below 45% energy are not associated with risk of mortality in the National Health and Nutrition Examination Survey, 1999-2018. *Frontiers in Nutrition*, 11:1225674.
- 51. Basak Tukun, Avonti; Rowe, Sarah;\* Johnson, LuAnn K; Love, David C; Belury, Martha; **Conrad, Zach**. (2023). Micronutrient intake from three popular diet patterns in the United States: modeled replacement of foods highest in added sugar and sodium using the National Health and Nutrition Examination Survey, 2005-2018. *Frontiers in Nutrition*, 10: 1217774.
- 50. **Conrad, Zach**; Drewnowski, Adam; Love, David C. (2023). Greater adherence to the Dietary Guidelines for Americans is associated with lower diet-related greenhouse gas emissions but higher costs. *Frontiers in Nutrition*, 10: 1220016.
- 49. **Conrad, Zach**; Drewnowski, Adam; Belury, Martha A; Love, David C. (2023). Greenhouse gas emissions, cost, and diet quality of specific diet patterns in the United States. *American Journal of Clinical Nutrition*, 117: 1186-1194.
- 48. Dustin, Dakota; Kowalski, Corina\*; Salesses, Meredith\*; McDowell, Acree\*; Kris-Etherton, Penny; Belury, Martha; Conrad, Zach. (2023). Carbohydrate intakes below recommendations with a high intake of fat are associated with higher prevalence of metabolic syndrome. *Journal of the Academy of Nutrition and Dietetics*, 123: 1022-1032.

- 47. Love, David C.; Asche, Frank; Gephart, Jessica A; Zhu, Jiafeng; Garlock, Taryn; Stoll, Joshua S.; Anderson, James; Conrad, Zach; Nussbaumer, Elizabeth M; Thorne-Lyman, Andrew L; Bloem, Martin W. (2023). Identifying opportunities for aligning production and consumption in United States fisheries by considering seasonality. Reviews in Fisheries Science and Aquaculture, 31: 259-273.
- 46. Kowalski, Corina\*; Dustin, Dakota; Johnson, LuAnn K.; Belury, Martha; **Conrad, Zach**. (2022). Fat intake modifies the association between restricted carbohydrate diets and prevalent cardiometabolic diseases among adults in the United States: National Health and Nutrition Examination Survey, 1999-2018. *Current Developments in Nutrition*, 7: 100019.
- 45. Rowe, Sarah\*; Tukun, Avonti Basak; Johnson, LuAnn K.; Love, David C; Belury, Martha A; **Conrad, Zach**. (2022). Consumption of key food groups by individuals consuming popular diet patterns: mixed effects of replacing foods high in added sugar, sodium, saturated fat, and refined grains. *Nutrients*, 14: 5226.
- 44. **Conrad, Zach**; Kowalski, Corina\*; Dustin, Dakota; Johnson, LuAnn K; McDowell, Acree\*; Salesses, Meredith\*; Nance, Julie; Belury, Martha A. (2022). Quality of popular diet patterns in the United States: evaluating the effect of substitutions for foods high in added sugar, sodium, saturated fat, and refined grains. *Current Developments in Nutrition*, 6: nzac119.
- 43. **Conrad, Zach**; Cyril, Ashley\*; Kowalski, Corina\*; Jackson, Erin; Hendrickx, Brittany\*; Lan, Jessie Jie; McDowell, Acree\*; Salesses, Meredith\*; Love, David C; Wiipongwii, Troy; Zhang, Fang Fang; Blackstone, Nicole Tichenor. (2022). Diet sustainability analyses can be improved with updates to the Food Commodity Intake Database. *Frontiers in Nutrition*, 9: 868485.
- 42. Love, David C; Thorne-Lyman, Andrew L; **Conrad, Zach**; Gephart, Jessica A; Asche, Frank; Godo-Solo, Dakoury; McDowell, Acree\*; Nussbaumer, Elizabeth M; Bloem, Martin W (2022). Affordability influences nutritional quality of seafood consumption among income and race/ethnicity groups in the United States. *American Journal of Clinical Nutrition*, 4: 415-425.
- 41. Belury, Martha; Raatz, Susan; **Conrad, Zach**. (2022). Modeled substitution of traditional oils with high oleic acid oils decreases essential fatty acid intake in children. *American Journal of Clinical Nutrition*, 115: 1180-1188.
- 40. Love, David C; Ashe, Frank; Young, Ruth; Nussbaumer, Elizabeth M.; Anderson, James L.; Botta, Robert; **Conrad, Zach**; Froehlich, Halley E.; Garlock, Taryn M.; Gephart, Jessica A.; Ropicki, Andrew; Stoll, Joshua S.; Thorne-Lyman, Andrew L. (2022). An overview of retail sales of seafood in the United States, 2017-2019. *Reviews in Fisheries Science and Aquaculture*, 30: 259-270.
- 39. **Conrad, Zach**; Stern, Alexandra; Love, David C; Salesses, Meredith\*; Cyril, Ashley\*; McDowell, Acree\*; Blackstone, Nicole Tichenor Blackstone. (2021). Data integration for diet sustainability analyses. *Sustainability*, 13: 8082.
- 38. **Conrad, Zach**; Reinhardt, Sarah; Boehm, Rebecca; McDowell, Acree\*. (2021). Higher diet quality is associated with higher diet costs when eating at home and away from home: National Health and Nutrition Examination Survey, 2005-2016. *Public Health Nutrition*, 24: 5047-5057.
- 37. **Conrad, Zach**; Hatfield, Daniel P.; Hennessy, Erin; Maneval, Elizabeth\*; Ty, Esther\*; Pankey, Christopher. (2021). Evaluating moderation of parent-teen overweight/obesity relationship by household socioeconomic status. *Current Developments in Nutrition*, 5: nzab030.

- 36. **Conrad, Zach**; Blackstone, Nicole Tichenor. (2021). Identifying the links between consumer food waste, nutrition, and environmental sustainability: a narrative review. *Nutrition Reviews*, 79: 301-314. (Invited review).
- 35. **Conrad, Zach**; Reinhardt, Sarah; McDowell, Acree\*; Nance, Julie. (2021). Reducing food waste and saving money: a guide for nutritionists. *Nutrition Today*, 56: 33-38.
- 34. **Conrad, Zach**; Blackstone, Nicole Tichenor; Roy, Eric. (2020). Healthy diets can create environmental tradeoffs, depending on how diet quality is measured. *Nutrition Journal*, 19: 117.
- 33. Love, David C.; Asche, Frank; **Conrad, Zach**; Young, Ruth; Harding, Jamie; Neff, Roni. (2020). Food sources and expenditures for seafood in the United States. *Nutrients*, 12: 1810.
- 32. Casperson, Shanon; **Conrad, Zach**; Raatz, Susan; Jahns, Lisa; Roemmich, James N.; Picklo, Matthew J. (2020). Impact of beef consumption on saturated fat intake in the United States adult population: insights from modeling the influence of bovine genetics and nutrition. *Meat Science*, 169: 108225.
- 31. **Conrad, Zach**. (2020). Daily cost of consumer food waste, inedible portions, and consumed food in the United States, 2001-2016. *Nutrition Journal*, 19:35.
- 30. Blackstone, Nicole Tichenor; **Conrad, Zach**. (2020). Comparing the recommended eating patterns from the EAT-Lancet commission and Dietary Guidelines for Americans: implications for food system analyses and sustainable nutrition. *Current Developments in Nutrition*, 4:1-5.
- 29. **Conrad, Zach**. (2020). Food waste, healthy diets, and environmental sustainability: a guide for nutritionists. *Nutrition Today*, 55:5-10 (cover article, invited review).
- 28. Jahns, Lisa; Johnson, LuAnn K.; **Conrad, Zach**; Bukowski, Michael; Raatz, Susan; Jilcott Pitts, Stephanie; Wang; Youfa; Eermakov, Igor; Gellermann, Werner. (2019). Concurrent validity of skin carotenoid status as a concentration biomarker of vegetable and fruit intake compared to multiple 24-hour recalls and plasma carotenoid concentrations across one year: a cohort study. *Nutrition Journal*, 18:78-76.
- 27. **Conrad, Zach**; Johnson, LuAnn K.; Jahns, Lisa; Roemmich, James N. (2019). Food price elasticity by status of participation in federal food assistance programs: a laboratory-based grocery store study. *Current Developments in Nutrition*, 2:4.
- 26. Finley, John W.; Jaacks, Lindsay, M.; Peters, Christian J.; Ort, Donald R.; Aimone, Ashley M.; **Conrad, Zach**. Raiten, Daniel J. (2019). Understanding the intersection of climate/environmental change, health, agriculture, and improved nutrition a case study: Type 2 diabetes. *Advances in Nutrition*, 10:731-738.
- 25. **Conrad, Zach**; Thomson, Jessica; Jahns, Lisa. (2018). Prospective analysis of vegetable amount and variety on the risk of all-cause and cause-specific mortality among US adults from 1999-2011. *Nutrients*, 10:1377.
- 24. **Conrad, Zach**; Raatz, Susan; Jahns, Lisa. (2018). Greater vegetable variety and amount are associated with lower prevalence of coronary heart disease: National Health and Nutrition Examination Survey, 1999-2014. *Nutrition Journal*, 17:67-79.

- 23. Griffin, Timothy; Peters, Christian; Fleisher, David; Conard, Michael; Conrad, Zach; Tichenor, Nicole. (2018). Baselines, trajectories, and scenarios: exploring agricultural production in the Northeast US. *Journal of Agriculture, Food Systems, and Community Development*, 8:23-37.
- 22. Jahns, Lisa; **Conrad, Zach**; Kranz, Sybil; Raatz, Susan. (2018). Recognition of federal dietary guidance is associated with higher diet quality. *Journal of the Academy of Nutrition and Dietetics*, 118:2120-2127.
- 21. **Conrad, Zach**; Jahns, Lisa; Roemmich, James N. (2018). Study design for a laboratory-based grocery store trial to examine food price elasticity among participants in federal food assistance programs. *Contemporary Clinical Trials Communications*, 10:154-160.
- 20. Raatz, Susan; Conrad, Zach; Jahns, Lisa; Belury, Martha; Picklo, Matt. (2018). Modeled replacement of traditional soybean and canola oil with high oleic varieties increases MUFA and reduces both SFA and PUFA intake in the US adult population. *American Journal of Clinical Nutrition*, 108:1-9.
- 19. Raatz, Susan; Conrad, Zach; Jahns, Lisa. (2018). Trends in linoleic acid intake in the United States adult population: NHANES, 1999-2014. *Prostaglandins, Leukotrienes, and Essential Fatty Acids*, 133:23-28.
- 18. **Conrad, Zach**; Johnson, LuAnn K.; Juan, WenYen; Roemmich, James N.; Jahns, Lisa. (2018). Nutrient intake disparities in the US: modeling the effect of food substitutions. *Nutrition Journal*, 17:53.
- 17. Wilde, Park; **Conrad, Zach**; Rehm, Colin; Cudhea, Fred; Mozaffarian, Dariush. (2018). Reductions in national cardiometabolic mortality achievable by food price changes according to Supplemental Nutrition Assistance Program (SNAP) eligibility and participation. *Journal of Epidemiology and Community Health*, 72:817-824.
- Conrad, Zach; Niles, Meredith; Neher, Deb; Roy, Eric; Tichenor, Nicole; Jahns, Lisa. (2018).
   Relationship between diet quality, food waste, and environmental sustainability. PLOS ONE, 13:e0195405.
- 15. Jahns, Lisa; **Conrad, Zach**; Johnson, LuAnn; Wingham, Leah; Wu, Dayong; Claycombe-Larson, Kate. (2018). A diet high in carotenoid-rich vegetables and fruits modifies plasma IFN-α2, MIP-1α, and TNF-α in healthy individuals. *Nutrition Research*, 52:98-104.
- 14. **Conrad, Zach**; Peters, Christian; Johnson, LuAnn; Jahns, Lisa. (2018). Capacity of the US food system to accommodate improved diet quality: a biophysical model projecting to 2030. *Current Developments in Nutrition*, 2:4.
- 13. Jahns, Lisa; Davis-Shaw, Wendy; Lichtenstein, Alice; Murphy, Suzanne; **Conrad, Zach**; Nielsen, Forrest. (2018). The history and future of dietary guidance in America. *Advances in Nutrition*, 9:136-147.
- 12. Clancy, Kate; Bonnano, Alessandro; Canning, Pat; Cleary, Rebecca; **Conrad, Zach**; Fleisher, David; Gomez, Miguel; Griffin, Timothy; Lee, Ryan; Kane, Daniel; Palmer, Anne; Park, Kristen; Peters, Christian; Tichenor, Nicole. (2017). Using a market basket to explore regional food systems. *Journal of Agriculture, Food Systems, and Community Development*, 7:163-178.
- 11. **Conrad, Zach**; Chui, Kenneth; Peters, Christian; Jahns, Lisa; Griffin, Timothy. (2017). Characterizing fruit and vegetable consumption in the US by self-report and by disappearance data, 2001-2014. *Public Health Nutrition*, 20:3045-3050.

- 10. **Conrad, Zach**; Peters, Christian; Chui, Kenneth; Jahns, Lisa; Griffin, Timothy. (2017). Agricultural capacity to increase the production of fruits and vegetables in the US: a geospatial modeling analysis. *International Journal of Environmental Research and Public Health*, 14:1106.
- Pearson-Stuttard, Jonathan; Bandosz, Piotr; Rehm, Colin; Penalvo, Jose; Whitsel, Laurie; Gaziano, Tom; Conrad, Zach; Wilde, Parke; Micha, Renata; Lloyd-Williams, Ffion; Capewell, Simon; Mozaffarian, Dariush; O'Flaherty, Martin. (2017). Reducing US cardiovascular disease burden and disparities through national and targeted dietary policies: a modelling study. PLOS Medicine,14(6): e1002311.
- 8. Raatz, Susan; **Conrad, Zach**; Johnson, LuAnn; Picklo, Matthew; Jahns, Lisa. (2017). Relationship of the intake of dietary fats to body weight in US adults. *Nutrients*, 9:438.
- 7. **Conrad, Zach**; Johnson, LuAnn; Roemmich, James; Juan, WenYen; Jahns, Lisa. (2017). Time trends and patterns of egg consumption in the US by sociodemographic characteristics. *Nutrients*, 9:333.
- Conrad, Zach; Karlsen, Micaela; Chiu, Kenneth; Jahns, Lisa. (2017). Diet quality on meatless days: National Health and Nutrition Examination Survey (NHANES), 2007-2012. *Public Health Nutrition*, 20:1564-1573.
- 5. Jahns, Lisa; **Conrad, Zach**; Johnson, LuAnn; Scheett, Angi; Stote, K; Raatz, Susan. (2017). Diet quality is lower and energy intake higher on weekends compared to weekdays in midlife women: a one-year cohort study. *Journal of the Academy of Nutrition and Dietetics*, 117:1080-1086.
- 4. **Conrad, Zach**; Rehm, Colin D.; Wilde, Parke; Mozaffarian, Dariush. (2017). Cardiometabolic mortality by Supplemental Nutrition Assistance Program (SNAP) participation and eligibility in the United States. *American Journal of Public Health*, 107:466-74.
- 3. **Conrad, Zach**; Tichenor, Nicole; Peters, Christian; Griffin, Timothy. (2016). Regional self-reliance for livestock feed, meat, dairy, and eggs in the Northeast US. *Renewable Agriculture and Food Systems*, 32:145-156.
- 2. Tichenor, Nicole; **Conrad, Zach**. (2015). Inter- and independent effects of region and race/ethnicity on variety of fruit and vegetable consumption in the USA: Behavioral Risk Factor Surveillance System. *Public Health Nutrition*, 19:104-113.
- 1. Griffin, Timothy; **Conrad, Zach**; Peters, Christian; Ridberg, Ronit; Tyler, Ellen Parry. (2014). Regional self-reliance of the Northeast food system. *Renewable Agriculture and Food Systems*, 30:349-363.

### Reports and Other Publications

- 2. Wiipongwii, Troy; Jennings, Lydia; Fritton, Ben; Rocchi, Joe; Kun, Julia; Nikonha, Powhatan Wané; Leu, Matthias; **Conrad, Zach**. (2024). IndigiFoodDB: A Database of Indigenous Foods, their Flavors, Nutrition, and Environmental Impact. Available at: <a href="http://dx.doi.org/10.2139/ssrn.4694691">http://dx.doi.org/10.2139/ssrn.4694691</a>.
- 1. Gustafson, Dave; Finley, John; **Conrad, Zach**; +25 co-authors. (2018). Sustainable and equitable increases in fruit and vegetable productivity and consumption are needed to achieve global nutrition security. Aspen Global Change Institute, Basalt, CO. Available at: https://www.agci.org/lib/18s3/sustainable-and-equitable-increases-fruit-and-vegetable-productivity-and-consumption-are.

# Funding (approved)

(Total: \$2,028,764; External: \$1,7804,590; Internal: \$212,171)

Environmental sustainability and affordability of pork-modified food menus in randomized controlled trials. 2026-2027. (Independent Contractor). \$24,750.

The role of dairy in healthy and sustainable diets. 2025-2027. (PI). National Dairy Council. \$421,711.

The role of pistachios in supporting sleep quality among adults in the United States. 2025-2026. (PI). American Pistachio Growers. \$77,590.

Protein food substitutions for improved diet quality, environmental sustainability, and affordability. 2024-2025. (PI). National Pork Board, PR-005830. \$65,678.

Impacts of pulse consumption on human health, diet cost, and environmental sustainability. 2023-2026. (PI). United States Department of Agriculture 58-3060-3-050. \$559,426 (includes \$133,271 institutional match).

Diet sustainability analyses for policy action. 2023. (PI). William & Mary, Office of the Vice Provost, \$5,000.

Developing a decision-support tool for achieving food sovereignty on Native American tribal lands in Virginia. 2022-2025. (PI). Jeffress Trust Awards Program in Research Advancing Health Equity. \$599,970.

Association between low carbohydrate diets and cardiometabolic disease. 2022-2023. (Mentor). Charles Center Summer Research Fellowship, \$3,000. (Awarded to student investigator, Corina Kowalski).

Development of a computational biophysical model to evaluate diet sustainability. 2022-2024. (PI). William & Mary, Office of the Vice Provost, \$4,000.

Margaret S. Glauber Faculty Fellowship. 2022-2024. (Fellow). Roy R. Charles Center, William & Mary. \$30,000.

Research and policy internship for undergraduate students. 2021. (PI). Feed the Truth. \$2,000. (Approved but cancelled due to COVID-19.)

Evaluating food system adaptation to achieve long-term environmental sustainability through integrated research and teaching. 2021-2022. (PI). Commonwealth Center for Energy and the Environment. \$25,000.

Macronutrient intakes and diet quality for contemporary consumer diets. 2021-2023. (PI). Institute for the Advancement of Food and Nutrition Sciences. \$85,736.

Cardiometabolic effects of low carbohydrate/healthy fat diets. 2021-2023. (PI). Institute for the Advancement of Food and Nutrition Sciences. \$85,736.

Cardiometabolic effects of low carbohydrate/healthy fat diets. 2021. (Mentor). Charles Center Summer Research Fellowship, \$3,000. (Awarded to student investigator, Meredith Salesses).

Diet quality and cost of popular weight-loss diets in the US. 2020. (Mentor). Charles Center Summer Research Fellowship, \$3,000. (Awarded to student investigator, Meredith Salesses).

Dyadic relationships between mother and child: Eating behavior, physical activity, and obesity from the Family Life, Activity, Sun, Health, and Eating (FLASHE) study. 2020. (Mentor). Charles Center Summer Research Fellowship, \$3,000. (Awarded to student investigator, Ellen Harrell).

School Health Initiative Program (SHIP) teacher survey design. 2020. (PI). Williamsburg Health Foundation, \$1,379.

School Health Initiative Program (SHIP) teacher survey fielding and analysis. 2020. (PI). Williamsburg Health Foundation, \$13,885. (Approved but cancelled due to COVID-19.)

Dyadic relationships between mother and child: Eating behavior, physical activity, and obesity. 2019. (PI). William & Mary, Office of the Vice Provost, \$4,300.

Food price elasticity among federal food assistance program participants: An experimental grocery store study. 2018-2019. (PI). US Department of Agriculture, Agricultural Research Service (internal funding), \$8,600.

Relationship between income, obesity, and food purchasing using an experimental grocery store study. 2017-2018. (PI). US Department of Agriculture, Agricultural Research Service (internal funding), \$2,000.

Honors and Awards	
17. <b>Distinguished Alumni Award</b> Alumni Engagement & Services, Trent University	2025
16. Most Influential to the Education of a Member of the Class of 2024 at William & Mary	2025
Office of Career Development and Professional Engagement, William & Mary	
<ol> <li>University Professor for Research Excellence Award (Finalist)</li> <li>William &amp; Mary</li> </ol>	2025
14. Alumni Fellowship Award for Excellence in Teaching William & Mary Alumni Association	2025
<ol> <li>Virginia Outstanding Faculty Award – Rising Star (Nominee)</li> <li>State Council of Higher Education for Virginia. William &amp; Mary's only nominee.</li> </ol>	2025
12. Most Influential to the Education of a Member of the Class of 2023 at William & Mary Office of Career Development and Professional Engagement, William & Mary	2024
9.8.	
11. <b>Rising Star Award</b> Alumni Association, Friedman School of Nutrition Science and Policy, Tufts University	2024
10. Virginia Outstanding Faculty Award – Rising Star (State finalist) State Council of Higher Education for Virginia. William & Mary's only nominee, and finalist at the state level.	2023
9. Most Influential to the Education of a Member of the Class of 2021 at William & Mary Cohen Career Center, William & Mary	2022
8. Margaret S. Glauber Faculty Research Fellowship, 2022-2024 Supports two faculty-student research teams with demonstrated potential for successful scholarship, plus need-based student financial aid Roy R. Charles Center, William & Mary	2021

7. Outstanding Reviewer Recognition Award Recognizes five top reviewers who were selected by the Editor-in-Chief and Editorial Staff based on overall review quality, timeliness, and mentorship through their peer review to researchers in their scientific writing  Journal of the Academy of Nutrition and Dietetics	2021
6. Most Influential to the Education of a Member of the Class of 2020 at William & Mary Cohen Career Center, William & Mary	2021
5. Emerging Leaders in Nutrition Science Poster Competition (Finalist) "A laboratory-based grocery store study to evaluate food price elasticity by status of participation in federal food assistance programs" American Society for Nutrition, Nutrition 2019	2019
4. Emerging Leaders in Nutrition Science Poster Competition "Relationship between diet quality, food waste, and environmental sustainability" American Society for Nutrition, Nutrition 2018	2018
3. Emerging Leaders in Nutrition Science Poster Competition (Finalist) "Nutrient inadequacy among nutritionally vulnerable populations in the US" American Society for Nutrition, Experimental Biology	2017
2. Award for Excellence in Research Addressing Cardiovascular Health Equity (Winner) "Supplemental Nutrition Assistance Program (SNAP) participants exhibit higher rates of cardiometabolic mortality compared to SNAP eligible non-participants and SNAP ineligible Americans"  American Heart Association, Epi Lifestyles	2016
<ol> <li>Emerging Leaders in Nutrition Science Poster Competition (Finalist)     "Comparability of dietary data collection programs for US adults, 2007-2011"     American Society for Nutrition, Experimental Biology</li> </ol>	2015
Invited Presentations and Workshops	
25. Sustainability of pulse foods: nutrient density, affordability, and environmental	June 9, 2025
benefits Society for Nutrition Education and Behavior annual conference, Indianapolis, IN	
24. How healthy is your dinner? W&M Strategic Cultural Partnerships, Indigenous Foodways Workshop and Feast	Nov 3, 2024
23. Novel applications and tools for using NHANES dietary data American Society for Nutrition, NHANES Webinar Series (virtual)	Oct 10, 2024
22. A data science approach to diet sustainability analyses Pennsylvania State University and University of Pennsylvania, Fall 2024 Colloquium Series (virtual)	Oct 7, 2024
21. Impact of food waste: environmental and economic insights Western Growers Association (virtual)	July 30, 2024

20. Modeling the road ahead: gaps and opportunities in developing robust sustainability measurement tools for evidence-based decision making American Society for Nutrition annal conference, Boston, MA	July 23, 2023
19. How sugar reduction strategies can double as sustainability strategies Center for Science in the Public Interest, 2023 Sugar Reduction Summit (virtual)	Apr 25, 2023
18. How to use NHANES for diet sustainability analyses Research and Data Symposium for Food and Nutrition, Tufts University Friedman School of Nutrition Science and Policy (virtual)	Mar 9, 2023
17. Indigenous food sovereignty: developing a decision-support tool for tribal communities in MD, VA, and NC Maryland Commission on Indian Affairs, Maryland Governor's Office (virtual)	Feb 6, 2023
16. Indigenous food sovereignty: developing a decision-support tool for tribal communities in MD, VA, and NC Virginia Tribal Education Consortium Conference	Nov 5, 2022
15. Environmental impacts of increasing alternative protein intake in the diet National Academies of Sciences, Engineering, and Medicine. Food forum: Balancing food innovation, sustainability, nutrition, and health (virtual)	Aug 17, 2022
14. Food waste: what we know and what we don't Cornell College of Agriculture and Life Sciences, and USDA Northeast Climate Hub (virtual)	May 10, 2022
13. A data science approach to food system analyses Brown bag presentation to the Anthropology Department and wider William & Mary community (virtual)	Mar 23, 2022
12. Food waste: what we know and what we don't Nutrition seminar series, Ohio State University, Columbus, OH (virtual)	Sept 24, 2021
11. Aligning agricultural production with national public health nutrition goals: Challenges and opportunities from a food systems perspective Improving the nutritional value of our food crops from seeds and soils to society 2019 Tri-Societies Annual Meeting, Crop Soil Sciences of America San Antonio, TX.	Nov 12, 2019
10. The relationship between food waste, diet quality, and environmental sustainability in the US and globally Applying new technologies and paradigms in nutrition and food safety 2019 International Life Sciences Institute (ILSI) Arlington, VA	June 24, 2019
9. Using food systems science to address issues at the nexus of nutrition and agriculture USDA Grand Forks Human Nutrition Research Center and Northern Great Plains Research Laboratory, Grand Forks and Mandan, ND	Nov 20, 2018
8. Transforming the future of food systems: Linking public health nutrition with environmental sustainability	Nov 13, 2018

7. Meeting consumer demand for fruits and vegetables: Challenges and opportunities from a food systems perspective Innovating global fruit and vegetable food systems to help bring sustainable nutrition	July 30, 2018
security Aspen Global Change Institute, Keystone Policy Center, Keystone, CO	
6. How to get started in food systems science: A brief guide for students and others	June 9, 2018
Understanding the intersection of climate/environmental change, health, agriculture, and improved nutrition	
Nutrition 2018 annual conference, American Society for Nutrition, Boston, MA	
5. Meeting nutritional needs with US agricultural production Aligning the Food System to Meet Dietary Needs: Fruit and Vegetables University of California, Davis; World Food Center, Davis, CA	June 2, 2017
4. Reducing health disparities in the United States: The importance of merging public health nutrition with sustainable food systems Keynote Speaker, Mary J. Berg Women's Public Health Lecture Series North Dakota State University, School of Public Health, Fargo, ND	Apr 3, 2017
3. Organic foods and agriculture	Mar 11, 2014
Brighton Community Center, Boston, MA	
2. Local food systems in the United States Brighton Community Center, Boston, MA	Nov 18, 2014
<ol> <li>Climate change and US food production         National Pesticide Forum, Critiquing Solutions to the Climate Crisis</li></ol>	Mar 15, 2008
Conference and Other Presentations	
18. Quality of popular diets in the United States (ePoster) Nutrition 2022 annual conference, American Society for Nutrition	June 14-16, 2022
17. Daily cost of consumer food waste, inedible portions, and consumed food in the United States, 2001-2016 (ePoster) Nutrition 2020 annual conference, American Society for Nutrition.	June 1-4, 2020
16. Diet quality and environmental sustainability are linked, but in unexpected ways (ePoster)  Nutrition 2020 annual conference, American Society for Nutrition.	June 1-4, 2020
15. A laboratory-based grocery store study to evaluate food price elasticity by status of participation in federal food assistance programs (oral and poster) Nutrition 2019 annual conference, American Society for Nutrition, Baltimore, MD	June 8, 2019
14. Relationship between food waste, diet quality, and environmental sustainability (oral and poster) Nutrition 2018 annual conference, American Society for Nutrition, Boston, MA	June 9 & 12, 2018

13. A novel food pricing tool to examine the cost of making healthier food choices among low-income Americans (poster) Nutrition 2018 annual conference, American Society for Nutrition, Boston, MA	June 6, 2018
12. Using US government data to conduct research on nutrition and food systems at the local, regional, and national levels (oral) USDA Human Nutrition Research Centers (broadcast nationwide)	Nov 17, 2017
11. The capacity of the US food system to accommodate improved diet quality: Projections to 2030 (poster) Experimental Biology, American Society for Nutrition, Scientific Sessions, Boston, MA	Apr 23, 2017
10. Diet quality on meatless days: National Health and Nutrition Examination Survey (NHANES), 2007-2012 (poster)	Apr 23, 2017
Experimental Biology, American Society for Nutrition, Scientific Sessions, Boston, MA	
9. Nutrient inadequacy among nutritionally vulnerable populations in the US (oral and poster)	Apr 22 & 25, 2017
Experimental Biology, American Society for Nutrition, Scientific Sessions, Boston, MA	
8. Supplemental Nutrition Assistance Program (SNAP) participants exhibit higher rates of cardiometabolic mortality compared to SNAP eligible non-participants and SNAP ineligible Americans (oral) American Heart Association, Epi-Lifestyle Scientific Sessions, Phoenix, AZ	Mar 2, 2016
7. Modeling the effect of population interventions to improve diet and reduce cardiovascular disease in the US (oral) Friedman School Seminar	Dec 2, 2015
Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA	
6. Comparability of dietary data collection programs for US adults, 2007-2011 (poster)	Sept 24, 2015
Postdoctoral Scholar Poster Competition Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA	
5. Can the Dietary Approaches to Stop Hypertension (DASH) diet be more achievable?	
Graduate Student Research Conference (poster) Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA	Apr 11, 2015
Doctoral Student Seminar (oral) Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA	Apr 9, 2015
4. Comparability of dietary data collection programs for US adults, 2007-2011 Experimental Biology (oral and poster) American Society for Nutrition, Scientific Sessions, Boston, MA	Mar 28 & 29, 2015

3. Aligning US agricultural land use with national public health nutrition goals (oral)

Oct 17, 2014

Doctoral Student Seminar

Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA

2. Can the Northeast region feed itself? (oral)

Feb 28, 2013

Doctoral Student Seminar

Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA

1. Agricultural policy and public health: Strategic application of economic incentives to promote fruit and vegetable production and consumption (oral)

May 30, 2009

Agriculture, Food, and Human Values Society Conference Pennsylvania State University, State College, PA

#### **Abstracts**

(\* indicates current or former student co-author)

- 35. Kamalakantha; Tara;\* Zavela, Catherine;\* Drewnowski, Adam; Caligiuri, Stephanie; **Conrad, Zach**. (2024). Greater intake of pulses is associated with lower risk of all-cause mortality in a nationally representative sample of US adults. Nutrition 2025 annual conference, American Society for Nutrition, May 31-June 3, 2025, Orlando, FL.
- 34. Zavela, Catherine;\* Vincent, Repoulis;\* Conrad, Zach. (2024). Modeled sustainability impacts of increasing pork consumption among adults in the United States. Nutrition 2025 annual conference, American Society for Nutrition, May 31-June 3, 2025, Orlando, FL.
- 33. Blackstone, Nicole Tichenor; Bell, Brooke M.; Cudhea, Frederick; Wang, Lu; Gu, Zhengye; **Conrad, Zach**; Luo, Hanqi; Battaglia, Kyra; Marquez, Alejandra Sofia; Webb, Patrick; Cash, Sean B; Zhang, Fang Fang. (2024). Nutrition-related health and environmental impacts of shifting to recommended diets in the US. 14th International Conference on Life Cycle Assessment of Food, Barcelona, Spain.
- 32. Bell, Brooke M.; Rodgriguez-Huerta, Edgar; Battaglia, Kyra; Decker Sparks, Jessica L.; Sofia Marquez, Alejandra; Benoit Norris, Catherine; **Conrad, Zach**; Matteson, Julia: Jackson, Bethany; Blackstone, Nicole Tichenor. (2024). Forced labor risk in current and recommended US dietary patterns. Agriculture, Food, and Human Values Society Conference, Syracuse, New York.
- 31. Bell, Brooke M.; Rodgriguez-Huerta, Edgar; Battaglia, Kyra; Decker Sparks, Jessica L.; Sofia Marquez, Alejandra; Benoit Norris, Catherine; **Conrad, Zach**; Matteson, Julia: Jackson, Bethany; Blackstone, Nicole Tichenor. (2024). Forced labor risk in current and recommended US dietary patterns. Social-Life Cycle Analysis (S-LCA) Conference, Curitiba, Brazil.
- 30. Love, David C; Thorne-Lyman, Andrew L; **Conrad, Zach**; Gephart, Jessica A; Asche, Frank; Godo-Solo, Dakoury; McDowell, Acree\*; Nussbaumer, Elizabeth M; Bloem, Martin W (2022). Affordability influences nutritional quality of seafood consumption among income and race/ethnicity groups in the United States. Aquaculture America 2023 annual conference, February 23-26, New Orleans, LA.
- 28. Kowalski, Corina\*; Dakota, Dustin; Belury, Martha; Johnson, LuAnn K; **Conrad, Zach**. Association between restricted carbohydrate diets and cardiometabolic disease. Nutrition 2022 annual conference, American Society for Nutrition, June 14-16, 2022. Virtual.
- 27. Dustin, Dakota; Kowalski, Corina\*; Salesses, Meredith\*; McDowell, Acree\*; Ilayan, Alaa; Kris-Etherton, Penny; Belury, Martha; Johnson, LuAnn K; **Conrad, Zach**. Restricted carbohydrate diets high in fat associated with increased likelihood of prevalent metabolic syndrome. Nutrition 2022

- annual conference, American Society for Nutrition, June 14-16, 2022. Virtual.
- 26. **Conrad, Zach**; Kowalski, Corina\*; Dustin, Dakota; Johnson, LuAnn K; McDowell, Acree\*; Salesses, Meredith\*; Nance, Julie; Belury, Martha. Quality of Popular Diets in the United States. Nutrition 2022 annual conference, American Society for Nutrition, June 14-16, 2022. Virtual.
- 25. Belury, Martha; Conrad, Zach; Raatz, Susan. Modeling the impact of high oleic acid oils on essential fatty acid intake in children. American Oil Chemists' Society Annual Meeting, May 3-14, 2021. Virtual.
- 24. Kubiak, Janice; Conrad, Zach; Pankey, Christopher. Dyadic relationships between parent and teen: eating behavior, physical activity, and BMI relationships from the Family, Life, Activity, Sun, Health, and Eating (FLASHE) study. West Virginia Osteopathic Medical Association Annual Meeting, October 1-4, 2020. Virtual.
- 23. Jahns, Lisa; Osowski, Danyelle; **Conrad, Zach**; Roemmich, James. The own-price elasticity of vegetable purchases varies by federal food assistance program participation during a laboratory-based grocery shopping task. Nutrition 2020, May 30-June 2, Seattle, WA.
- 22. **Conrad, Zach**; Blackstone, Nicole Tichenor; Roy, Eric. Diet quality and environmental sustainability are linked, but in unexpected ways. Nutrition 2020, May 30-June 2, Seattle, WA.
- 21. **Conrad, Zach.** Daily cost of consumer food waste, inedible portions, and consumed food in the United States, 2001-2016. Nutrition 2020, May 30-June 2, Seattle, WA.
- 20. Casperson, Shanon L.; **Conrad, Zach**; Raatz, Susan K.; Derner, Justin; Roemmich, James N.; Jahns, Lisa; Picklo, Matthew J. Impact of beef consumption on saturated fat intake in the United States adult population: insights from modeling the influences of bovine genetics and nutrition. Nutrition 2020, May 30-June 2, Seattle, WA.
- 19. El-Abbadi, Naglaa; Blackstone, Nicole; Conrad, Zach; Griffin, Timothy; Peters, Christian; Nelson, Miriam; Jacques, Paul. (2019). Application of the Dietary Environmental Index for evaluation of the nutritional quality, environmental impacts, and consumer purchase costs of observed versus modeled food intake patterns reported in NHANES 2007-2008. Planetary Health Annual Meeting, September 4-6, Stanford, CA.
- 18. **Conrad, Zach**; Johnson, LuAnn; Jahns, Lisa; Roemmich, James N. (2019). A laboratory-based grocery store study to evaluate food price elasticity by status of participation in federal food assistance programs. Nutrition 2019, June 8-12, Baltimore, MD.
- 17. **Conrad, Zach**; Carlson, Andrea; Roemmich, James N.; Jahns, Lisa. (2018). A novel food pricing tool to examine the cost of making healthier food choices among low-income Americans. Nutrition 2018, June 9-12, Boston, MA.
- Conrad, Zach; Niles, Meredith; Neher, Deborah A.; Roy, Eric D.; Tichenor, Nicole E.; Jahns, Lisa.
   (2018). Relationship between food waste, diet quality, and environmental sustainability. Nutrition 2018, June 9-12, Boston, MA.
- 15. Jahns, Lisa; **Conrad, Zach**; Johnson, LuAnn; Roemmich, James. (2018). Skin carotenoid status is an effective tool to measure compliance with an intervention to increase vegetable intake among overweight and obese adults. Nutrition 2018, June 9-12, Boston, MA.

- 14. Raatz, Susan; **Conrad, Zach**; Johnson, LuAnn; Picklo, Matt; Jahns, Lisa. (2017). Association of fatty acid intake with weight status in the US population. American Oil Chemists Society Annual Conference, May 3, Orlando, FL.
- 13. Raatz, Susan; **Conrad, Zach**; Jahns, Lisa; Belury, Martha; Picklo, Matt. (2017). Modeling the effects of high oleic oil replacement on fatty acid intake in the American diet. Northern Great Plains Lipids Conference, June 11-12, Winnipeg, Manitoba, Canada.
- 12. **Conrad, Zach**; Johnson, LuAnn; Juan, WenYen; Roemmich, James; Jahns, Lisa. (2017). Nutrient inadequacy among nutritionally vulnerable populations in the US. Experimental Biology, April 21-26, Chicago, IL. *FASEB Journal*, 31:445.1.
- 11. **Conrad, Zach**; Peters, Christian; Johnson, LuAnn; Jahns, Lisa. (2017). The capacity of the US food system to accommodate improved diet quality: projections to 2030. Experimental Biology, April 21-26, Chicago, IL. *FASEB Journal*, 31:651.13.
- 10. Conrad, Zach; Karlsen, Micaela; Chui, Kenneth; Jahns, Lisa. (2017). What do people eat when they don't eat meat? An evaluation of dietary quality using the National Health and Nutrition Examination Survey (NHANES), 2007-2012. Experimental Biology, April 21-26, Chicago, IL. FASEB Journal, 31:648.10.
- 9. Jahns, Lisa; **Conrad, Zach**; Johnson, LuAnn; Roemmich, James; Juan, WenYen. (2017). Time trends and patterns of reported egg consumption in the US by sociodemographic characteristics. Experimental Biology, April 21-26, Chicago, IL. *FASEB Journal*, 31:648.1.
- 8. Jahns, Lisa; **Conrad, Zach**; Johnson, LuAnn; Temple, Jennifer; Keim, Nancy; Roemmich, James. (2017). Substitution or addition? How overweight and obese adults incorporate vegetables into their diet during a randomized controlled vegetable feeding trial. Experimental Biology, April 21-26, Chicago, IL. *FASEB Journal*, 31:749.9.
- 7. Pearson-Stuttard, Jonathan; Bandosz, Piotr; Rehm, Colin; Penalvo, Jose; Whitsel, Laurie; Gaziano, Tom; **Conrad, Zach**; Wilde, Parke; Micha, Renata; Lloyd-Williams, Ffion; Capewell, Simon; Mozaffarian, Dariush; O'Flaherty, Martin. (2017). Reducing US cardiovascular disease disparities through dietary policy. American Heart Association Annual Conference, March 7-10, Portland, OR.
- 6. Pearson-Stuttard, Jonathan; Bandosz, Piotr; Rehm, Colin; Penalvo, Jose; Whitsel, Laurie; Gaziano, Tom; **Conrad, Zach**; Wilde, Parke; Micha, Renata; Lloyd-Williams, Ffion; Capewell, Simon; Mozaffarian, Dariush; O'Flaherty, Martin. (2017). Reduction of cardiovascular disease inequalities in the USA through dietary policy. Public Health Science Conference (Lancet), November 25, Cardiff, UK.
- 5. **Conrad, Zach**; Rehm, Colin; Wilde, Parke; Mozaffarian, Dariush. (2016). Supplemental Nutrition Assistance Program (SNAP) participants exhibit higher rates of cardiometabolic mortality compared to SNAP eligible non-participants and SNAP ineligible Americans. American Heart Association Annual Conference, March 1-4, Phoenix, AZ.
- 4. **Conrad, Zach**; Chui, Kenneth; Peters, Christian; Griffin, Timothy. (2015). Comparability of dietary data collection programs for US adults, 2007-2011. Experimental Biology, March 28-April 1, Boston, MA. *FASEB Journal*, 31:648.10.
- 3. **Conrad, Zach**; Chui, Kenneth; Peters, Christian; Griffin, Timothy. (2015). Can the Dietary Approaches to Stop Hypertension (DASH) diet be more achievable? Graduate Student Research Conference, Friedman School of Nutrition Science and Policy, Tufts University, April 11, Boston, MA.

- 2. Tichenor, Nicole; Griffin, Timothy; Peters, Christian; **Conrad, Zach**; Hill, Elaine; Gomez, Miguel; Norris G; Thoma, G; He, X. (2015). Modeling approaches to explore food system regionalization as a sustainability strategy. Society of Environmental Toxicology and Chemistry North America 36th Annual Meeting. Nov 1-5, Salt Lake City, UT.
- 1. **Conrad, Zach**. (2015). Agricultural policy and public health: Strategic application of economic incentives to promote fruit and vegetable production and consumption. Agriculture, Food, and Human Values Society Conference. Pennsylvania State University, State College, PA.

### Teaching and Academic Advising

Assistant Professor, William & Mary, Williamsburg, VA (student evaluations out of	of 5.00)
Population Nutrition, Policy, and Programs (4.71, 4.83, 4.72, 4.32, 4.76)	Spring 2021, 2022, 2023,
Sustainable Food Systems and Diets (4.57, 4.72, 4.58)	2024; Fall 2024 Fall 2020, 2021, 2022, 2023
Nutrition in Health and Disease (4.63, 4.78, 4.75, 4.66)	Spring 2020, 2021, 2022, 2023
rutified in Fredict and Disease (1.03, 1.70, 1.73, 1.00)	2023
Science of Nutrition (4.68, 4.61, 4.72, 4.83, 4.63, 4.71, 4.79)	Spring 2020, 2025; Fall 2019,
	2020, 2021, 2022, 2023
Nutrition Across the Lifespan (4.84)	Fall 2019
Guest Lecturer	
Linking National Databases to Evaluate Diet-Related Health Outcomes,	Nov 12, 2025
Affordability, and Environmental Sustainability (virtual, synchronous,	
graduate). Friedman School of Nutrition Science and Policy, Tufts University,	
Boston, MA.	
Are Healthier Diets More Sustainable? (virtual, synchronous, graduate). Texas	Oct 22, 2025
Women's University. Denton, TX.	NI 11 2024
Linking National Databases to Evaluate Diet-Related Health Outcomes, Affordability, and Environmental Sustainability (virtual, synchronous,	Nov 11, 2024
graduate). Friedman School of Nutrition Science and Policy, Tufts University,	
Boston, MA.	
Linking National Databases to Evaluate Diet-Related Health Outcomes,	Nov 15, 2023
Affordability, and Environmental Sustainability (virtual, synchronous,	,
graduate). Friedman School of Nutrition Science and Policy, Tufts University,	
Boston, MA.	
Modeling Sustainable Diets (virtual, synchronous, graduate)	Feb 25, 2021
University of Vermont, Burlington, VT	0
Sustainability Modeling Methods (virtual, synchronous, graduate)	Oct 27, 2020
Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA	
Genetically Engineered Foods: Impacts on Human Health and the Environment	Oct 10, 2019
College of Arts & Sciences, William & Mary, Williamsburg, VA	Oct 10, 2017
(undergraduate)	
Food Waste and Environmental Impact (virtual, asynchronous, graduate)	Oct 7, 2019
University of New England, Biddeford, ME	
Ethical Considerations in Nutrition Research (undergraduate)	Oct 26, 2018
College of Nursing and Professional Disciplines, University of North Dakota,	
Grand Forks, ND	
Bias and Confounding in Epidemiologic Research (undergraduate)	Apr 3, 2017
School of Public Health, North Dakota State University, Fargo, ND	0-47 2015
Diet Pattern Modeling in Nutritional Epidemiology (graduate)	Oct 6, 2015

Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA

# Co-Instructor/Course Developer

Nov 2013-Dec 2015

Sustainable Agriculture and Food Systems (online)

Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA

## Instructor and Course Developer

Dec 2014-Jan 2015

Research Practicum: Modeling Nutrient Intake

Sackler School of Graduate Biomedical Sciences, Tufts University, Boston, MA

## **Undergraduate Honors Thesis Committee**

2023

Madson Korol, Mediterranean diet and mental health

Elizabeth Maneval, linguistic mechanisms among patients with schizophrenia (non-major committee member)

2021

## **Undergraduate Academic Advising**

2019-Present

Health Sciences (24) Pre-major (20)

## **Student Research Activity**

(89 student-semesters)

#### Research Assistants and Fellows

Summer 2025	3 students
Spring 2025	7 students
Fall 2024	7 students
Summer 2024	2 students
Spring 2024	8 students
Fall 2023	8 students
Summer 2023	5 students
Spring 2023	8 students
Fall 2022	4 students
Summer 2022	5 students
Spring 2022	7 students
Fall 2021	6 students
Summer 2021	4 students
Spring 2021	4 students
Fall 2020	5 students
Summer 2020	3 students
Spring 2020	3 students

#### **Professional Activities and Service**

#### Editorship

— <del></del>	
Guest Editor, Journal of the Academy of Nutrition and Dietetics (IF=6.524), Specia	d Issue: Nov 2023-Dec 2024
"Diet Quality and Sustainability: Synergies and Trade-offs"	
Editorial Board, Journal of the Academy of Nutrition and Dietetics (IF=6.524)	July 2020-April 2025
Editorial Board, Nutrition Journal (IF=5.797)	Oct 2020-Sept 2024
Associate Editor, Nutrition Journal (IF=5.797)	Mar 2019-Sept 2020
Guest Editor, Nutrients (IF=5.719), Special Issue: "Diet diversity and diet qua	ality" Jan-May 2019

Curriculum Committee, Department of Health Sciences	Sept 2023-Present
Glauber Fellowship Committee, College of Arts & Sciences	Oct 2023-Present
Faculty Search Committee, Assistant Professor in Human Nutrition, Department of	Sept 2022-Feb 2023

Health Sciences
Faculty Search Committee, Visiting Assistant Professor in Human Nutrition,

April-June 2022
Department of Health Sciences

Committee on Faculty Research Standards, Department of Health Sciences

Undergraduate Research Committee, Monroe Scholarship, College of Arts & Sciences

Undergraduate Research Committee, Goldwater Scholarship, College of Arts &

July 2020-Nov 2023

Sciences

Sept-Dec 2019

Mar 2021-Mar 2022

Committee on Computing in the Classroom, Department of Health Sciences

#### Committee membership, professional

Technical Working Group Member, US Department of Agriculture (USDA), Food	Jan 2024-Present
and Nutrition Service: Ground Truthing the Cost of the Thrifty Food Plan	

Co-Chair, National Institutes of Health, Working Group 4: Measures and Metrics for
Evaluating Diet Sustainability. Agriculture & Diet: Value Added for Nutrition,
Translation, & Adaptation in a Global Ecology (ADVANTAGE) Project

Advisory Board, Soil to Society: Optimizing Human Health and Nutrition. \$10M Feb 2022-Present research grant to Washington State University.

Executive Board Member, Early Career Representative; American Society for Nutrition; Climate, Health, and Improved Nutrition (CHAIN) Research Interest Section

History of Nutrition Committee, American Society for Nutrition Oct 2018-Oct 2021

# Conference and Workshop Organization

Co-Chair, workshop on "Measures and Metrics for Evaluating Diet Sustainability".	May 11, 2023
National Institutes of Health.	

Co-chair, "The role of vegetables and fruits in psychological well-being".

Conference session at Nutrition 2018: American Society for Nutrition annual conference

#### Mentorship

Science and Policy Fellowship, American Society for Nutrition, Mentor for PhD

June 2024-Present student

#### Professional affiliations

American Society for Nutrition	2013-Present
American Public Health Association	2013-2017
Massachusetts Public Health Association	2013-2016
American Heart Association	2015-2016

## **Journal reviewer** (>80 reviews for 33 journals)

American Journal of Clinical Nutrition (3) · Applied Economics Perspectives and Policy (1) · Applied Physiology, Nutrition, and Metabolism (1) · British Journal of Nutrition (2) · Current Developments in Nutrition (1) · Data (1) · Diseases (1) · European Journal of Nutrition (1) · Food and Nutrition Research (1) · Food Security (1) · Global Public Health (1) · Health Affairs (1) · International Journal of Behavioral Nutrition and Physical Activity (1) · International Journal of Environmental Research and Public Health (3) · International Journal of Obesity (1) · Journal of the Academy of Nutrition and Dietetics (25) · Journal of Cleaner Production (1) · Journal of Food Science (1) · Journal of Human Nutrition and Food Science (1) · Journal of Medical Internet Research (1) · Journal of Nutrition (4) · Lancet Planetary Health (3) · Lipids (1) ·

Nature Food (2) · Nutrition (12) · Nutrition Journal (7) · Nutrition Reviews (1) · Nutrition Research Reviews (1) · Nutrition Today (1) · Obesity (1) · Public Health Nutrition (4) · Preventive Medicine (4) · Preventive Medicine Reports (1) · Renewable Agriculture and Food Systems (1) · Sustainability (1)

#### Grant reviewer

American Egg Board, Egg Nutrition Center, 2017 American Egg Board, Egg Nutrition Center, 2025

#### Abstract reviewer

American Society for Nutrition, Nutrition 2021 Annual Conference

Topics: Nutritional Epidemiology and Sustainability

American Society for Nutrition, Nutrition 2020 Annual Conference

Topics: Nutritional Epidemiology and Sustainability

American Society for Nutrition, Nutrition 2019 Annual Conference

Topics: Nutritional Epidemiology and Sustainability

American Society for Nutrition, Experimental Biology Annual Conference 2017

Topics: Nutritional Epidemiology and Sustainability

American Public Health Association Annual Conference 2017

Topics: Food and Nutrition

Media and Public Engagement	
Television, print, and podcast interviews	
With Good Reason, Virginia Humanities. "Revolutionary Feasts".	Dec 8, 2023
https://www.withgoodreasonradio.org/episode/cravings/	· · · · · · · · · · · · · · · · · · ·
U.S.News. "Research suggests most popular diets have poor diet quality"	Nov 7, 2022
https://health.usnews.com/health-news/blogs/eat-run/articles/research-suggests-	,
most-popular-diets-have-poor-diet-quality	
The Keri Report (podcast). "There's more than one way to eat an unhealthy diet"	Oct 18, 2022
Available on Spotify, Apple Podcasts, Stitcher, and Libsyn.	
Nutrition Reviews: Conversations with the Authors (podcast). Hosted by Douglas	Feb 10, 2021
Taren, Editor-in-Chief of Nutrition Reviews scientific journal. Available on Spotify.	
Women's Running magazine, "Reduce your food waste and save money in three steps".	Jan 13, 2021
https://www.womensrunning.com/health/food/reduce-food-waste/	
WTKR NewsChanel 3, "Have Christmas leftovers? Don't waste them! Helpful hints	Dec 26, 2020
from a nutrition expert". wtkr.com/news/have-christmas-leftovers-dont-waste-	
them-helpful-hints-from-a-nutrition-expert	
WVEC 13News Now, "Healthy eating during coronavirus"	April 6, 2020
WTKR NewsChanel 3, "An expert's guide to reducing food waste"	Dec 11, 2019
wtkr.com/2019/12/10/throwing-away-holiday-leftovers-a-local-experts-guide-to-	
reducing-food-waste/	
Major print/online news coverage and invited quotes	E 1 0 2025
The Atlantic – What an 'America First' diet would really look like	Feb 8, 2025
https://www.theatlantic.com/health/archive/2025/02/tariffs-food-america-	
agriculture/681620/	1 11 2024
LA Times – Will a diet that's good for the planet also help you live longer? Here's the	June 11, 2024
evidence	
https://www.latimes.com/environment/story/2024-06-10/will-a-diet-thats-good-	
for-the-planet-help-you-live-longer	Nov. 20, 2022
The Atlantic – Expiration dates are meaningless	Nov 30, 2022

www.theatlantic.com/health/archive/2022/11/expiration-dates-food-waste-	
safety/672311/ WeightWatchers – Does this look like garbage to you?	Nov 30, 2021
https://www.weightwatchers.com/us/blog/health/food-waste	1,0,7,50,2021
International Confederation of Dietetic Associations – Sustainability Toolkit icdasustainability.org/	May 10, 2021
Forbes – Seaspiracy: a call to action or a vehicle of misinformation? https://www.forbes.com/sites/allenelizabeth/2021/04/10/seaspiracy-a-call-to-action-or-a-vehicle-of-misinformation/?sh=491e5fadc23a	April 10, 2021
LA Times – How to stop food waste, an environmental and economic crisis www.latimes.com/business/story/2021-03-23/column-food-waste	March 23, 2021
Popular Science – 11 percent of food waste comes from our homes	March 9, 2021
www.popsci.com/story/environment/food-waste-environment/ The Washington Post - A third of all food in the US gets wasted. Fixing that could help fight climate change. https://www.washingtonpost.com/climate-solutions/2021/02/25/climate-curious-food-waste/	Feb 25, 2021
Frontiers in Ecology and the Environment - Reducing food waste: a child could do it www.esajournals.onlinelibrary.wiley.com/doi/10.1002/fee.2153	Feb 3, 2020
Newsweek, USA Today, LA Times, The Washington Post, New York Post, The Guardian, Discover Magazine, US News, Forbes, NBC News, CBS News	Prior to 2020
Website interviews, William & Mary, News and Media	L L 2 2022
W&M researchers earn grant to improve Indigenous food sovereignty in Virginia. <a href="https://news.wm.edu/2022/07/25/william-mary-professors-earn-grant-to-improve-indigenous food sovereignty in virginia/">https://news.wm.edu/2022/07/25/william-mary-professors-earn-grant-to-improve-indigenous food sovereignty in virginia/</a>	July 2, 2022
indigenous-food-sovereignty-in-virginia/ Study calculates true cost of food waste in America https://www.wm.edu/news/stories/2020/study-calculates-true-cost-of-food-waste-in-america.php	Apr 20, 2020
Grocery shopping tips for the age of coronavirus	
wm.edu/news/stories/2020/grocery-shopping-tips-for-the-age-of-coronavirus.php	Mar 3, 2020
Season's eatings: An expert's guide to reducing food waste wm.edu/news/stories/2019/seasons-eatings-an-experts-guide-to-reducing-food-waste.php	Nov 22, 2019
Student interviews	
Kia Morawetz and Deena Hamandi (with MindVersity). Faculty efforts to improve mental health outcomes among BIPOC students	Oct 14, 2022
Lila Powell, William & Mary	Mar 7 and 10, 2022
Professional development and career trajectory	
Hana Chaudhri, William & Mary Professional development and career trajectory	Mar 24, 2021
Morgaine Elena Azama Mcilhargey, Syracuse University	Dec 9, 2020
Food waste and environmental sustainability	D 10 2010
W&M student radio, WCWM 90.9 FM The state of nutrition science (not archived)	Dec 10, 2019
Emily McManus, William & Mary	Nov 22, 2019
Personal and professional development (healthadultdevelopment.weebly.com)	

Funding (not approved)
Innovation at the nexus of diet quality, food waste, and sustainability. 2020. (Co-I). Foundation for Food and Agriculture Research, \$499,823.

Computational simulation modeling to optimize ecological sustainability and human nutrition. 2020. (PI). Jeffress Trust Awards Program in Interdisciplinary Research, \$42,043.

Compost solutions for food waste: tradeoffs of dietary shifts, energy and water. 2018. (Co-I). National Science Foundation, Innovations at the Nexus of Food, Energy and Water Systems. \$2,664,338