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**EDUCATION**

May 2012 **Doctor of Philosophy in Nutritional Sciences**  University of Illinois, Urbana, IL

May 2009 **Master of Science in Nutritional Sciences** University of Illinois, Urbana, IL

May 2006 **Bachelor of Science in Nutritional Sciences** Louisiana State University, Baton Rouge, LA

**PROFESSIONAL CREDENTIALS**

2009-Present Registration in Dietetics (RD)

University of Illinois, Urbana, IL

**ACADEMIC POSITIONS**

2021-Present Associate Professor, University of Illinois, Urbana, IL

Department of Kinesiology & Community Health

Division of Nutritional Sciences

Affiliate of the Neuroscience Program

Affiliate of the Family Resiliency Center

Affiliate of Beckman Institute of Advanced Science and Techonology

2015-Present Assistant Professor, University of Illinois, Urbana, IL

Department of Kinesiology & Community Health

Division of Nutritional Sciences

Affiliate of the Neuroscience Program

Affiliate of the Family Resiliency Center

2012-2015 Postdoctoral Research Associate, University of Illinois, Urbana, IL

Neurocognitive Kinesiology Laboratory (PI: Charles Hillman, PhD)

Department of Kinesiology & Community Health

2009-2012 Graduate Research Assistant, University of Illinois, Urbana, IL

Extension and Outreach – Interdisciplinary Programs (PI: Robin Orr, PhD)

2009-2011 Graduate Research Assistant, University of Illinois, Urbana, IL

Bone and Body Composition Laboratory (PI: Ellen Evans, PhD)

Department of Kinesiology & Community Health

2006-2009 Graduate Research Assistant, University of Illinois, Urbana, IL

Community Nutrition Laboratory (PI: Karen Chapman-Novakofski, PhD, RD)

Department of Food Science and Human Nutrition

**HONORS & AWARDS**

2020 Excellence in Guiding Undergraduate Research Award, College of Applied Sciences, University of Illinois

2015-2017, 2019 List of Instructors Ranked as Excellent by Their Students, University of Illinois

2017 Dannon Institute Nutrition Leadership Institute, Dannon Nutrition

2014 Hydration for Health (H4H) Initiative Young Researcher Award Winner, Danone Nutricia

2013 Postdoctoral Research Award Finalist, American Society for Nutrition

2011 Margin of Excellence Research, Division of Nutritional Sciences, University of Illinois

2011 William Rose Endowed Award, Division of Nutritional Sciences, University of Illinois

2008 Best Graduate Student Abstract, Nutrition Education, American Society for Nutrition

2008-2011 Margin of Excellence Travel, Division of Nutritional Sciences, University of Illinois

**PUBLICATIONS**

**Peer-Reviewed Journal Articles (in print or accepted)**

*Total citations = 3320, h-index = 27, i10-index = 55 [Google Scholar. (2022, April)].*

1. Cannavale, C.N., Mysonhimer, A.R., Bailey, M.A., Cohen, N. J., Holscher, H.D., & **Khan, N.A.** (in press) Consumption of a fermented dairy beverage improves hippocampal-dependent relational memory in a randomized, controlled crossover trial. *Nutritional Neuroscience*.
2. Willis, N.B., Muñoz, C. X., Mysonhimer, A.R., Edwards, C.G., Wolf, P.G., Hillman, C.H., Burd, N.A., Holscher, H.D., & **Khan, N.A.** (in press). Hydration biomarkers are related to the differential abundance of fecal microbiota and plasma lipopolysaccharide binding protein in adults. *Annals of Nutrition and Metabolism,* 77(4), 37-45.https://doi.org/10.1159/000520478
3. Jeongwoon, K., McKenna, C. F., Salvador, A. F., Scaroni, S. E., Askow, A. T., Cerna, J. C., Cannavale, C. N., Paluska, S. A., De Lisio, M., Petruzello, S. J., Burd, N. A., & **Khan, N. A.** (in press). Cathepsin B and Muscular Strength are Independently Associated with Cognitive Control. *Brain Plasticity*.
4. Brown, M., Reeser, G., Shinn, L., Reeser, G. E., Browning, M., Schwingel, A., **Khan, N.**, & Holscher, H. (2021). Fecal and soil microbiota composition of gardening and non-gardening families. *Scientific Reports*, 12(1), 1-12. DOI: 10.1038/s41598-022-05387-5
5. Raine, L. B., Watrous, J. N., McDonald, K., Logan, N. E., **Khan, N. A.**, Kramer, A. F., & Hillman, C. H. (2022). Aerobic Fitness, B-Vitamins, and Weight Status Are Related to Selective Attention in Children. Nutrients, 14(1), 201. https://doi.org/10.3390/nu14010201
6. Guo, B., Holscher, H.D., Auvil, L.S., Welge, M.E., Bushell, C.B., Novotny, J.A., Baer, D.J., Burd, N.A., **Khan, N.A.** & Zhu, R. (2021). Estimating heterogeneous treatment effect on multivariate responses using random forests. *Statistics in Biosciences*, pp.1-17. https://doi.org/10.1007/s12561-021-09310-w
7. An, R., Li, D., McCaffrey, J., & **Khan, N.** (2021). Whole egg consumption and cognitive function among US older adults. *Journal of Human Nutrition and Dietetics*. https://doi.org/10.1111/jhn.12970
8. **Khan, N.A.,** Edwards, C. G., Thompson, S. V., Hannon, B. A., Burke, S.K., Walk, A.D., Mackenzie, W.A., Reeser, G.E., Fiese, B.H., Burd, N.A., and Holscher, H.D. (2021). Avocado consumption, abdominal adiposity, and oral glucose tolerance among persons with overweight and obesity. *The Journal of Nutrition*, 151(9), 2513-2521. https://doi.org/10.1093/jn/nxab187
9. Cerna, J., Anaraki, N. S., Robbs, C. M., Adamson, B. C., Flemming, I. R., Erdman Jr., J. W., Labriola, L. T., Motl, R. W., & **Khan, N. A.** (2021). Macular xanthophylls and markers of the anterior visual pathway among persons with Multiple Sclerosis. *The Journal of Nutrition*. https://doi.org/10.1093/jn/nxab164
10. Liu, R., Hannon, B. A., Robinson, K. N., Raine, L. B., Hammond, B. R., Renzi-Hammond, L., Cohen, N. J., Kramer, A. F., Hillman, C. H., Teran-Garcia, M., & **Khan, N. A.** (2021). Single Nucleotide Polymorphisms in CD36 are Associated with Macular Pigment among Children. *The Journal of Nutrition.* https://doi.org/10.1093/jn/nxab153
11. Keye, S. A., Walk, A. M., Cannavale, C. N., Iwinski, S., McLoughlin, G. M., Steinberg, L. G., & **Khan, N. A.** (2021). Six-Minute Walking Test Performance Relates to Neurocognitive Abilities in Preschoolers. *Journal of Clinical Medicine*, 10(4), 584. https://doi.org/10.3390/jcm10040584
12. Liu, R., Edwards, C. G., Cannavale, C. N., Flemming, I. R., Chojnacki, M. R., Reeser, G. E., Iwinski, S. J., Renzi-Hammond, L. M., & **Khan, N. A.** (2021). Weight Status and Visceral Adiposity Mediate the Relation between Exclusive Breastfeeding Duration and Skin Carotenoids in Later Childhood. *Current Developments in Nutrition*, *5*(3). https://doi.org/10.1093/cdn/nzab010
13. Kao, S. C., Wang, C. H., Kamijo, K., **Khan, N. A.**, & Hillman, C. (2021). Acute effects of highly intense interval and moderate continuous exercise on the modulation of neural oscillation during working memory. *International Journal of Psychophysiology*, *160*, 10–17. https://doi.org/10.1016/j.ijpsycho.2020.12.003
14. Shinn, L. M., Li, Y., Mansharamani, A., Auvil, L. S., Welge, M. E., Bushell, C., **Khan, N. A.**, Charron, C. S., Novotny, J. A., Baer, D. J., Zhu, R., & Holscher, H. D. (2021). Fecal Bacteria as Biomarkers for Predicting Food Intake in Healthy Adults. *The Journal of Nutrition*, *151*(2), 423–433. https://doi.org/10.1093/jn/nxaa285
15. Logan, N. E., Raine, L. B., Drollette, E. S., Castelli, D. M., **Khan, N. A.**, Kramer, A. F., & Hillman, C. H. (2021). The differential relationship of an afterschool physical activity intervention on brain function and cognition in children with obesity and their normal weight peers. *Pediatric Obesity*, *16*(2), e12708. https://doi.org/10.1111/ijpo.12708
16. Thompson, S. V, Bailey, M. A., Taylor, A. M., Kaczmarek, J. L., Mysonhimer, A. R., Edwards, C. G., Reeser, G. E., Burd, N. A., **Khan, N. A.**, & Holscher, H. D. (2020). Avocado Consumption Alters Gastrointestinal Bacteria Abundance and Microbial Metabolite Concentrations among Adults with Overweight or Obesity: A Randomized Controlled Trial. *The Journal of Nutrition*, *151*(4), 753–762. https://doi.org/10.1093/jn/nxaa219
17. Willis, N., & **Khan, N. A.** (2020). Nutrition Effects on Childhood Executive Control. In *Nestle Nutrition Institute Workshop Series* (Vol. 95, pp. 1–9). S. Karger AG. https://doi.org/10.1159/000511513
18. Hannon, B. A., Edwards, C. G., Thompson, S. V., Reeser, G. E., Burd, N. A., Holscher, H. D., Teran-Garcia, M., & **Khan, N. A.** (2020). Single Nucleotide Polymorphisms Related to Lipoprotein Metabolism Are Associated with Blood Lipid Changes following Regular Avocado Intake in a Randomized Control Trial among Adults with Overweight and Obesity. *Journal of Nutrition*, *150*(6), 1379–1387. https://doi.org/10.1093/jn/nxaa054
19. Hannon, B. A., Edwards, C. G., Thompson, S. V., Burke, S. K., Burd, N. A., Holscher, H. D., Teran-Garcia, M., & **Khan, N. A.** (2020). Genetic Variants in Lipid Metabolism Pathways Interact with Diet to Influence Blood Lipid Concentrations in Adults with Overweight and Obesity. Lifestyle Genomics, 13(6), 155–163. https://doi.org/10.1159/000507021
20. Cannavale, C. N., Bailey, M., Edwards, C. G., Thompson, S. V., Walk, A. M., Burd, N. A., Holscher, H. D., & **Khan, N. A.** (2021). Systemic inflammation mediates the negative relationship between visceral adiposity and cognitive control. *International Journal of Psychophysiology*, 165 (2021): 68-75. https://doi.org/10.1016/j.ijpsycho.2021.03.010
21. Pindus, D. M., Edwards, C. G., Walk, A. M., Reeser, G., Burd, N. A., Holscher, H. D., & **Khan, N. A.** (2021). The relationships between prolonged sedentary time, physical activity, cognitive control, and P3 in adults with overweight and obesity. *International Journal of Obesity*, *45*(4), 746–757. https://doi.org/10.1038/s41366-020-00734-w
22. Edwards, C. G., Walk, A. M., Thompson, S. V., Reeser, G. E., Dilger, R. N., Erdman, J. W., Burd, N. A., Holscher, H. D., & **Khan, N. A.** (2021). Dietary lutein plus zeaxanthin and choline intake is interactively associated with cognitive flexibility in middle-adulthood in adults with overweight and obesity. *Nutritional Neuroscience*. https://doi.org/10.1080/1028415X.2020.1866867
23. McKenna, C. F., Salvador, A. F., Hughes, R. L., Scaroni, S. E., Alamilla, R. A., Askow, A. T., Paluska, S. A., Dilger, A. C., Holscher, H. D., De Lisio, M., **Khan, N. A.**, & Burd, N. A. (2021). Higher protein intake during resistance training does not potentiate strength, but modulates gut microbiota, in middle-aged adults: a randomized control trial. *American Journal of Physiology-Endocrinology and Metabolism*, , 320(5), E900-E913. https://doi.org/10.1152/ajpendo.00574.2020
24. Pindus, D. M., Edwards, C. G., Walk. A. M., Reeser, G. E., Burd, N. A., Holscher, H. D., & **Khan, N. A. (**2021). Sedentary time is related to deficits in response inhibition among adults with overweight and obesity: An accelerometry and ERP study. *Psychophysiology*, 58(8), e13843. https://doi.org/10.1111/psyp.13843
25. Acevedo, M. B., Teran-Garcia, M., Bucholz, K. K., Eagon, J. C., Bartholow, B. D., Burd, N. A., **Khan, N. A.**, Rowitz, B, Pepino, M. Y. (2020). Alcohol sensitivity in women after undergoing bariatric surgery: a cross-sectional study. *Surgery for Obesity and Related Diseases*, 16(4), 536–544. https://doi.org/10.1016/j.soard.2020.01.014
26. Edwards, C. G., Walk, A.D., Thompon, S.V., Reeser, G, Erdman, J.W., Burd, N. A., Holscher, H.D., **Khan, N.A.** (2020).Effects of 12-week avocado consumption on cognitive function among adults with overweight and obesity. *International Journal of Psychophysiology*, *148*, 13-24. https://doi.org/10.1016/j.ijpsycho.2019.12.006
27. **Khan, N. A**, Cannavale, C., Iwinski, S., Liu, R., Mcloughlin, G., Steinberg, L. G., & Walk, A. M. (2019). Visceral adiposity and diet quality are differentially associated with cognitive abilities and early academic skills among Preschool-age Children. *Frontiers in Pediatrics*, *7*, 548. https://doi.org/10.3389/FPED.2019.00548
28. Saint, S. E., Hammond, B. R., **Khan, N. A.,** Hillman, C. H., & Renzi-Hammond, L. M. (2019). Temporal vision is related to cognitive function in preadolescent children. *Applied Neuropsychology: Child*, 1–8. https://doi.org/10.1080/21622965.2019.1699096
29. Phansikar, M., Ashrafi, A.A., **Khan, N.A.,** Massey, W.V., Mullen, S.P. Active commute in relation to cognition and academic achievement in children and adolescents: A systematic review and future recommendations. (2019). *International Journal of Environmental Research and Public Health*, *16* (24), 5103. https://doi.org/10.3390/ijerph16245103
30. Walk, A. M., Raine, L. B., Kramer, A. F., Cohen, N. J., Hillman, C. H., & **Khan, N. A**. (2019). Adiposity is related to neuroelectric indices of motor response preparation in preadolescent children. *International Journal of Psychophysiology*, *147*, 176-183. https://doi.org/10.1016/j.ijpsycho.2019.10.014
31. Niemiro, G.A., Chiarlitti, N.A., **Khan, N.A.**, & De Lisio, M. A carbohydrate beverage reduces circulating monocytes expressing TLR4 in children with overweight/obesity. (2019). *Journal of Nutrition*, *149* (12), 2255-2264. https://doi.org/10.1093/jn/nxz294
32. McLoughlin, G. M., Graber, K. C., Woods, A. M., Templin, T., Metzler, M., & **Khan, N. A.** (2019). The status of physical education within a nationally recognized school health and wellness program. *Journal of Teaching in Physical Education*, *39*, 274-283. https://doi.org/10.1123/jtpe.2019-0052
33. Kondiboyina, V., Raine, L. B., Kramer, A. F., **Khan, N. A.**, Hillman, C. H., & Shefelbine, S. J. (2019). Skeletal effects of nine months of physical activity in obese and healthy-weight children. *Medicine & Science in Sports & Exercise*, *52*, 434-440. https://doi.org/10.1249/mss.0000000000002148
34. **Khan, N. A.**, Westfall, D. R., Jones, A. R., Sinn, M. A., Bottin, J. H., Perrier, E. T., & Hillman, C. H. (2019). A 4-d water intake intervention increases hydration and cognitive flexibility among preadolescent children. *The Journal of Nutrition*, *149*(12), 2255–2264. https://doi.org/10.1093/jn/nxz206
35. Nikolaus, C., Loehmer, E., Jones, A., Ruopeng, A., **Khan, N.,** & McCaffrey, J. (2019). Use of survival analysis to predict attrition among women participating in longitudinal community-based nutrition research. *Journal of Nutrition Education and Behavior*, *51*(9), 1080–1087. Retrieved from https://www.sciencedirect.com/science/article/pii/S1499404619309303
36. Hassevoort, Kelsey M., **Khan, N. A.**, Hillman, C. H., & Cohen, N. J. (2019). Differential development of relational memory and pattern separation. *Hippocampus*, *30*, 210-219. https://doi.org/10.1002/hipo.23146
37. Edwards, C.G., Walk, A.M., Cannavale, C.N., Flemming, I.R., Thompson, S.V., Reeser, G.E., Holscher, H.D., & **Khan, N.A.** (2019). Dietary choline is related to neural efficiency during a selective attention task amongst middle-aged adults with overweight and obesity. *Nutritional Neuroscience*. 1-10. https://doi.org/10.1080/1028415X.2019.1623456
38. An, R., Nickols-Richardson, S. M., **Khan, N.**, Liu, J., Liu, R., & Clarke, C. (2019). Impact of beef and beef product intake on cognition in children and young adults: a systematic review. *Nutrients*, *11*(8), 1797. https://doi.org/10.3390/nu11081797
39. Cannavale, C.N., Hassevoort, K. M., Edwards, C.G., Thompson, S.V., Burd, N. A., Holscher, H.D., Erdman, J.W., & **Khan, N.A.** (2019).Serum lutein is related to relational memory performance. *Nutrients*. 11 (4), 768. https://doi.org/10.3390/nu11040768
40. Westfall, D. R., Logan, N. E., **Khan, N. A.**, & Hillman, C. H. (2019). Cognitive assessments in hydration research involving children: methods and considerations. *Annals of Nutrition and Metabolism*, *74*(Suppl. 3), 19–24. https://doi.org/10.1159/000500341
41. Edwards, C.G., Walk, A.M., Cannavale, C.N., Thompson, S.V., Reeser, G.E., Holscher, H.D., & **Khan, N.A.** (2019). Macular xanthophylls and event-related brain potentials among adults with overweight and obesity. *Molecular Nutrition and Food Research*. 1801059. DOI: 10.1002/mnfr.201801059.
42. School lunch timing and children’s physical activity during recess: an exploratory study. *Journal of Nutrition Education and Behavior*, *51*(5), 616–622. https://doi.org/10.1016/j.jneb.2019.01.006
43. Taylor, A.M., Thompson, S.V., Edwards, C.G., Musaad, S.M., **Khan, N.A.**, & Holscher, H.D. (2019). Associations among diet, the gastrointestinal microbiota, and negative emotional states in adults. *Nutritional Neuroscience*. 1-10. https://doi.org/10.1080/1028415X.2019.15825.
44. Pindus, D. M., Drollette, E. D., Raine L. B., Kao, S., **Khan, N. A.**, Westfall, D., Hamill, M., Shorin, R., Calobrisi, E., John, D., Kramer, A. F., & Hillman, C. H. (2019). Moving fast, thinking fast: The relations of physical activity levels and bouts to neuroelectric indices of inhibitory control in preadolescents. *Journal of Sport and Health Scienc.* https://doi.org/10.1016/j.jshs.2019.02.003.
45. Chojnacki, M.R., Holscher, H.D., Balbinot, A.R., Raine, L.B., Biggan, J.R., Walk, A.M., Kramer, A.F., Cohen, N.J., Hillman, C.H., & **Khan, N.A.** (2018). Relations between mode of birth delivery and timing of developmental milestones and adiposity in preadolescence: a retrospective study. *Early Human Development*, 129 (52-59). https://doi.org/10.1016/j.earlhumdev.2018.12.021.
46. Jones, A.R., Robbs, C.M., Edwards, C., Walk, A., Thompson, S., Reeser, G.E., Holscher, H.D., & **Khan, N.A**. (2018). Retinal morphometric markers of crystallized and fluid intelligence among adults with overweight and obesity. *Frontiers in Psychology*. 9, 2650. https://doi.org/10.3389/fpsyg.2018.02650
47. Edwards, C., Walk, A., Thompson, S., Mullen, S., Holscher, H., & **Khan, N.A.** (2018). Disordered eating attitudes and behavioral and neuroelectric indices of cognitive flexibility in individuals with overweight and obesity. *Nutrients*. Vol. 10, Page 1902, 10(12), 1902. https://doi.org/10.3390/NU10121902
48. Hassevoort, K. M., Lin, A. S., **Khan, N. A.,** Hillman, C. H., Cohen, N. J. (2018). Added sugar and dietary fiber consumption are associated with creativity in preadolescent children. *Nutritional Neuroscience*, 1-12. https://doi.org/10.1080/1028415X.2018.1558003
49. Hannon, B. A., Thompson, S. V., Edwards, C. G., Skinner, S. K., Niemiro, G. M., Burd, N. A., Holscher, H. D., Teran-Garcia, M., & **Khan, N. A**. (2018). Dietary fiber is independently related to blood triglycerides among adults with oerweight and obesity. *Current Developments in Nutrition*, https://doi.org/10.1093/cdn/nzy094
50. Hannon, B., **Khan, N. A.,** & Teran-Garcia, M. (2018). Nutrigenetic contributions to dyslipidemia: a focus on physiologically relevant pathways of lipid and lipoprotein metabolism. *Nutrients*, 10(10), 1404. https://doi.org/10.3390/nu10101404
51. Niemiro, G. M., Skinner, S. K., Walk, A. M., Edwards, C. G., De Lisio, M., Holscher, H. D., … **Khan, N. A.** (2018). Oral glucose tolerance is associated with neuroelectric indices of attention among adults with overweight and obesity. *Obesity*. <https://doi.org/10.1002/oby.22276>
52. Hassevoort, K. M., **Khan, N. A.,** Hillman, C. H., Kramer, A. F., & Cohen, N. J. (2018). Relational memory is associated with academic achievement in preadolescent children*. Trends in Neuroscience and Education*. https://doi.org/10.1016/j.tine.2018.09.001
53. **Khan, N. A.**, Walk, A. M., Edwards, C. G., Jones, A. R., Cannavale, C. N., Thompson, S. V., … Holscher, H. D. (2018). Macular xanthophylls are related to intellectual ability among adults with overweight and obesity. *Nutrients*, *10*(4), 396; https://doi:10.3390/nu10040396
54. Kao, S.-C., Drollette, E. S., Ritondale, J. P., **Khan, N.,** & Hillman, C. H. (2018). The acute effects of high-intensity interval training and moderate-intensity continuous exercise on declarative memory and inhibitory control. *Psychology of Sport and Exercise*, *38*, 90–99. https://doi.org/10.1016/J.PSYCHSPORT.2018.05.011
55. Raine, L., Drollette, E., Kao, S.-C., Westfall, D., Chaddock-Heyman, L., Kramer, A. F., **Khan, N.,** Hillman, C. (2018). The associations between adiposity, cognitive function, and achievement in children. *Medicine and Science in Sports and Exercise*, 50(9), 1868–1874. https://doi.org/10.1249/MSS.0000000000001650
56. Saint, S., Renzi-Hammond, L., **Khan, N.**, Hillman, C., Frick, J., & Hammond, B. (2018). The macular carotenoids are associated with cognitive function in preadolescent children. *Nutrients*, 10(2), 193. <https://doi.org/10.3390/nu10020193>
57. Niemiro, G. M., Allen, J. M., Mailing, L. J., **Khan, N. A**., Holscher, H. D., Woods, J. A., & De Lisio, M. (2018). Effects of endurance exercise training on inflammatory circulating progenitor cell content in lean and obese adults. *The Journal of Physiology*, *596* (14), 2811–2822. https://doi.org/10.1113/JP276023
58. Raine, L. B., Kao, S.-C., Pindus, D., Westfall, D. R., Shigeta, T. T., Logan, N., Cadenas-Sanchez, C., Li, J., Drollette, E. S., Pontifex, M. B., **Khan, N.**, Kramer, A. F. Hillman, C. H. (2018). A large-scale reanalysis of childhood fitness and inhibitory control. *Journal of Cognitive Enhancement*, *2*(2), 170-192.
59. Drollette, E. S., Pontifex, M. B., Raine, L. B., Scudder, M. R., Moore, R. D., Kao, S.-C. Westfall, D. R.; Wu, C.-T., Kamijo, K., Castelli, D. M., **Khan, N. A.**, Kramer, A. F. Hillman, C. H. (2018). Effects of the FITKids physical activity randomized controlled trial on conflict monitoring in youth. *Psychophysiology*, 55(3). https://doi.org/10.1111/psyp.13017
60. Chojnacki, M. R., Raine, L. B., Drollette, E. S., Scudder, M. R., Kramer, A. F., Hillman, C. H., & **Khan, N. A.** (2018). The negative influence of adiposity extends to intraindividual variability in cognitive control among preadolescent children. *Obesity*, 26(2). https://doi.org/10.1002/oby.22053
61. Nikolaus, C. J., Loehmer, E., Jones, A., An, R., **Khan, N.,** & McCaffrey, J. (2018). Impact of food assistance program participation on food security patterns: a longitudinal study of women in Illinois. *Journal of Nutrition Education and Behavior*, 50(7), S24. https://doi.org/10.1016/j.jneb.2018.04.065
62. Baumgartner, N. W., Walk, A. M., Edwards, C. G., Covello, A. R., Chojnacki, M. R., Reeser, G. E., … **Khan, N. A.** (2017). Relationship between physical activity, adiposity, and attentional inhibition. *Journal of Physical Activity and Health*, 1–6. https://doi.org/10.1123/jpah.2017-0181
63. Barnett, S. M., **Khan, N. A.**, Walk, A. M., Raine, L. B., Moulton, C., Cohen, N. J., … Hillman, C. H. (2017). Macular pigment optical density is positively associated with academic performance among preadolescent children. *Nutritional Neuroscience*, 1–9. https://doi.org/10.1080/1028415X.2017.1329976
64. Balto, J. M., Ensari, I., Hubbard, E. A., **Khan, N.**, Barnes, J. L., & Motl, R. W. (2017). Co-occurring risk factors in multiple sclerosis. *American Journal of Health Behavior*, 41(1), 76–83. https://doi.org/10.5993/AJHB.41.1.8
65. An, R., Loehmer, E., **Khan, N.**, Scott, M. K., Rindfleisch, K., & McCaffrey, J. (2017). Community partnerships in healthy eating and lifestyle promotion: A network analysis. *Preventive Medicine Reports*, 6, 294–301. https://doi.org/10.1016/j.pmedr.2017.03.007
66. An, R., Liu, G., **Khan, N.**, Yan, H., & Wang, Y. (2017). Dietary habits and cognitive impairment risk among oldest-old Chinese. *The Journals of Gerontology*: Series B. https://doi.org/10.1093/geronb/gbw170
67. An, R., **Khan, N.**, Loehmer, E., & McCaffrey, J. (2017). Assessing the network of agencies in local communities that promote healthy eating and lifestyles among populations with limited resources. *American Journal of Health Behavior*, 41(2), 127–138. https://doi.org/10.5993/AJHB.41.2.3
68. Walk, A. M., Raine, L. B., Kramer, A. F., Cohen, N. J., **Khan, N. A.**, & Hillman, C. H. (2017). Differential effects of carbohydrates on behavioral and neuroelectric indices of selective attention in preadolescent children. *Frontiers in Human Neuroscience*, 11. https://doi.org/10.3389/fnhum.2017.00614
69. Walk, A. M., **Khan, N. A.**, Barnett, S. M., Raine, L. B., Kramer, A. F., Cohen, N. J., … Hillman, C. H. (2017). From neuro-pigments to neural efficiency: The relationship between retinal carotenoids and behavioral and neuroelectric indices of cognitive control in childhood. *International Journal of Psychophysiology*, 118. https://doi.org/10.1016/j.ijpsycho.2017.05.005
70. Walk, A. M., Edwards, C. G., Baumgartner, N. W., Chojnacki, M. R., Covello, A. R., Reeser, G. E., … **Khan, N. A.** (2017). The role of retinal carotenoids and age on neuroelectric indices of attentional control among early to middle-aged adults. *Frontiers in Aging Neuroscience*, 9. https://doi.org/10.3389/fnagi.2017.00183
71. Raine, L. B., **Khan, N. A.**, Drollette, E. S., Pontifex, M. B., Kramer, A. F., & Hillman, C. H. (2017). Obesity, visceral adipose tissue, and cognitive function in childhood. *The Journal of Pediatrics*, 187, 134–140.e3. https://doi.org/10.1016/j.jpeds.2017.05.023
72. Hassevoort, K. M., Khazoum, S. E., Walker, J. A., Barnett, S. M., Raine, L. B., Hammond, B. R., Renzi-Hammond, L. M. Kramer, A. F., **Khan, N. A.**, Hillman, C. H Cohen, N. J. (2017). Macular carotenoids, aerobic fitness, and central adiposity are associated differentially with hippocampal-dependent relational memory in preadolescent children. *Journal of Pediatrics*, 183. https://doi.org/10.1016/j.jpeds.2017.01.016
73. Pindus, D. M., Drollette, E. S., Scudder, M. R., **Khan, N. A.**, Raine, L. B., Sherar, L. B., … Hillman, C. H. (2016). Moderate-to-vigorous physical activity, indices of cognitive control, and academic achievement in preadolescents. *Journal of Pediatrics*, 173, 136–142. https://doi.org/10.1016/j.jpeds.2016.02.045
74. Niemiro, G. M., Raine, L. B., **Khan, N. A.**, Emmons, R., Little, J., Kramer, A. F., … De Lisio, M. (2016). Circulating progenitor cells are positively associated with cognitive function among overweight/obese children. *Brain, Behavior, and Immunity*, 57. https://doi.org/10.1016/j.bbi.2016.03.018
75. Hassevoort, K. M., **Khan, N. A.**, Hillman, C. H., & Cohen, N. J. (2016). Childhood markers of health behavior relate to hippocampal health, memory, and academic performance. *Mind, Brain, and Education*. https://doi.org/10.1111/mbe.12108
76. Balto, J. M., Ensari, I., Hubbard, E. A., **Khan, N.**, Barnes, J. L., & Motl, R. W. (2016). Individual and co-occurring SNAP risk factors: Smoking, nutrition, alcohol consumption, and physical activity in people with multiple sclerosis. *International Journal of MS Care*, 18(6). https://doi.org/10.7224/1537-2073.2016-040
77. An, R., & **Khan, N.** (2016). Salad consumption in relation to daily dietary intake and diet quality among U.S. adults, 2003-2012. *Epidemiology, Biostatistics and Public Health*, 13(2). https://doi.org/10.2427/11791
78. Ziauddeen, H., Alonso-Alonso, M., Hill, J. O., Kelley, M., & **Khan, N. A.** (2015). Obesity and the neurocognitive basis of food reward and the control of intake. *Advances in Nutrition* (Bethesda, Md.), 6(4), 474–86.
79. Scudder, M. R., **Khan, N. A.**, Lambourne, K., Drollette, E. S., Herrmann, S. D., Betts, J. L., … Hillman, C. H. (2015). Cognitive control in preadolescent children with risk factors for metabolic syndrome. *Health Psychology*, 34(3). https://doi.org/10.1037/hea0000114
80. McCorkle, S. M., Raine, L. B., Hammond, B. R., Renzi-Hammond, L., Hillman, C. H., & **Khan, N. A.** (2015). Reliability of heterochromatic flicker photometry in measuring macular pigment optical density among preadolescent children. *Foods*, 4(4), 594–604.
81. **Khan, N. A.**, Raine, L. B., Drollette, E. S., Scudder, M. R., Kramer, A. F., & Hillman, C. H. (2015). Dietary fiber is positively associated with cognitive control among prepubertal. *Journal of Nutrition: Ingestive Behavior and Neurosciences*, 145(1), 143–149.
82. **Khan, N. A.**, Raine, L. B., Drollette, E. S., Scudder, M. R., & Hillman, C. H. (2015). The relation of saturated fats and dietary cholesterol to childhood cognitive flexibility. *Appetite*.
83. **Khan, N. A.**, Raine, L. B., Drollette, E. S., Scudder, M. R., Cohen, N. J., Kramer, A. F., & Hillman, C. H. (2015). The relationship between total water intake and cognitive control among prepubertal children. *Annals of Nutrition and Metabolism*, 66. https://doi.org/10.1159/000381245
84. **Khan, N. A.**, Baym, C. L., Monti, J. M., Raine, L. B., Drollette, E. S., Scudder, M. R., … Cohen, N. J. (2015). Central adiposity is negatively associated with hippocampal-dependent relational memory among overweight and obese children. *Journal of Pediatrics*, 166(2), 302–308.e1. https://doi.org/10.1016/j.jpeds.2014.10.008
85. Hillman, C. H., **Khan, N. A.**, & Kao, S.-C. (2015). The relationship of health behaviors to childhood cognition and brain health. *Annals of Nutrition and Metabolism*, 66(Suppl. 3), 1–4.
86. Pontifex, M. B., Kamijo, K., Scudder, M. R., Raine, L. B., **Khan, N. A.**, Hemrick, B., … Hillman, C. H. (2014). The differential association of adiposity and fitness with cognitive control in preadolescent children. *Monographs of the Society for Research in Child Development*, 79(4), 72–92.
87. **Khan, N. A.**, Raine, L. B., Drollette, E. S., Scudder, M. R., Pontifex, M. B., Castelli, D. M., … Hillman, C. H. (2014). Impact of the FITKids physical activity intervention on adiposity in prepubertal children. *Pediatrics*, 133(4), e875-83. https://doi.org/10.1542/peds.2013-2246
88. **Khan, N. A.**, Raine, L. B., Donovan, S. M., & Hillman, C. H. (2014). The cognitive implications of obesity and nutrition in childhood. *Monographs of the Society for Research in Child Development*, 79(4), 51–71.
89. **Khan, N. A.**, & Hillman, C. H. (2014). The relation of childhood physical activity and aerobic fitness to brain function and cognition: a review. *Pediatric Exercise Science*, 26, 138–146. https://doi.org/10.1123/pes.2013-0125
90. Hill, J. O., Berridge, K., Avena, N. M., Ziauddeen, H., Alonso-Alonso, M., Allison, D. B., **Khan, N. A.**, Kelley, M. (2014). Neurocognition: The food-brain connection. *Advances in Nutrition*, 5(5). https://doi.org/10.3945/an.114.006437
91. Kamijo, K., Pontifex, M. B., **Khan, N. A.**, Raine, L. B., Scudder, M. R., Drollette, E. S., … Hillman, C. H. (2014). The negative association of childhood obesity to cognitive control of action monitoring. *Cerebral Cortex*, 24(3). https://doi.org/10.1093/cercor/bhs349
92. Hillman, C. H., Pontifex, M. B., Castelli, D. M., **Khan, N. A.**, Raine, L. B., Scudder, M. R., … Kamijo, K. (2014). Effects of the fitkids randomized controlled trial on executive control and brain function. *Pediatrics*, 134(4).
93. Baym, C. L., **Khan, N. A.**, Pence, A., Raine, L. B., Hillman, C. H., & Cohen, N. J. (2014). Aerobic fitness predicts relational memory but not item memory performance in healthy young adults. *Journal of Cognitive Neuroscience*, 26(11). https://doi.org/10.1162/jocn\_a\_00667
94. Baym, C. L., **Khan, N. A.**, Monti, J. M., Raine, L. B., Drollette, E. S., Moore, R. D., … Cohen, N. J. (2014). Dietary lipids are differentially associated with hippocampal-dependent relational memory in prepubescent children. *American Journal of Clinical Nutrition*, 99(5). https://doi.org/10.3945/ajcn.113.079624
95. Kamijo, K., Pontifex, M. B., **Khan, N. A.**, Raine, L. B., Scudder, M. R., Drollette, E. S., … Hillman, C. H. (2012). The association of childhood obesity to neuroelectric indices of inhibition. *Psychophysiology*, 49(10), 1361–1371. https://doi.org/10.1111/j.1469-8986.2012.01459.x
96. Kamijo, K., **Khan, N. A.**, Pontifex, M. B., Scudder, M. R., Drollette, E. S., Raine, L. B., … Hillman, C. H. (2012). The relation of adiposity to cognitive control and scholastic achievement in preadolescent children. *Obesity*, 20(12), 2406–2411. https://doi.org/10.1038/oby.2012.112
97. **Khan, N. A.,** Nasti, C. J., Evans, E. M., & Chapman-Novakofski, K. M. (2011). Using a teaching partnership to improve nutrition and exercise in college students. NACTA Journal, 55(1), 2–8. https://doi.org/10.2307/nactajournal.55.1.2
98. **Khan, N. A.**, Nasti, C., Evans, E. M., & Chapman-Novakofski, K. (2009). Peer education, Exercising, and Eating Right (PEER): Training of peers in an undergraduate faculty teaching partnership. *Journal of Nutrition Education and Behavior*, 41(1). https://doi.org/10.1016/j.jneb.2008.03.116

**Abstracts (in print or accepted)**

1. Brown, M., Reeser, G., Shinn, L., Browning, M., Schwingel, A., **Khan, N.**, & Holscher, H. (2021). Environmental Influences on the Human Gut Microbiota: A Longitudinal Pilot Study. Current Developments in Nutrition, 5(Supplement\_2), 1151–1151. https://doi.org/10.1093/CDN/NZAB054\_006
2. Dinsmoor, A., Arthur, A., Fiese, B., **Khan, N.**, Donovan, S., & Fiese, B. H. (2020). Early Life Factors Predictive of Weight Status in 2 Year-Olds. Current Developments in Nutrition, 4(Supplement\_2), 977–977. https://doi.org/10.1093/CDN/NZAA054\_049
3. Keye, S.A., Edwards, C.G., Cannavale, C.N., Iwinski, S.J., Reeser, G.E., Walk, A.D., Mazzoli, E., Barnett, L.M. and **Khan, N.A.** (2020). Relationships Between Adiposity and Parent's Perceptions of Their Children's Fundamental Movement Skills and Coordination. Journal of Sport & Exercise Psychology, pp.S17-S17.
4. Kashi, M., Edwards, C., Thompson, S., Erdman Jr., J., Burd, N., Holscher, H., & **Khan, N.** (2020). Differential Relationships Between Serum Xanthophylls and Macular Pigment and Retinal Morphology. Current Developments in Nutrition, 4(Supplement\_2), 114–114. https://doi.org/10.1093/CDN/NZAA041\_018
5. **Khan, N.**, Edwards, C., Thompson, S., Burke, S., Walk, A., Reeser, G., Burd, N., & Holscher, H. (2019). Effects of Avocado Consumption on Abdominal Adiposity and Glucose Tolerance: Findings from the Persea Americana for Total Health (PATH) Randomized Controlled Trial (P21-005-19). Current Developments in Nutrition, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ041.P21-005-19
6. Kim, J., McKenna, C. F., Salvador, A. F., Scaroni, S. E., Cerna, J., Cannavale, C. N., Paluska, S. A., de Lisio, M., Burd, N. A., & **Khan, N. A.** (2020). Relationships Between Muscular Strength, Cognitive Control, And Hippocampal Dependent Relational Memory Function. Medicine & Science in Sports & Exercise, 52(7S), 837–837. https://doi.org/10.1249/01.MSS.0000684548.57159.BD
7. Krug, A., Cannavale, C., **Khan, N.**, & Holscher, H. (2020). Prebiotics Affect the Fecal Microbiota and Gastrointestinal Health of Adults Participating in a Randomized, Double-Blind, Placebo-Controlled, Crossover Trial. Current Developments in Nutrition, 4(Supplement\_2), 1570–1570. https://doi.org/10.1093/CDN/NZAA062\_027
8. McKenna, C., Salvador, A., Askow, A., Paulussen, K. J. M., Keeble, A., Paluska, S., De Lisio, M., **Khan, N.**, & Burd, N. (2021). Higher Protein Intake Does Not Potentiate Skeletal Muscle Vitamin D Receptor. Current Developments in Nutrition, 5(Supplement\_2), 512–512. https://doi.org/10.1093/CDN/NZAB041\_027
9. McMath, A., Donovan, S. M., & **Khan, N.** (2021). Meeting Nutrition and Physical Activity Guidelines at 24-Months-of-Age Is Associated With Executive Function. Current Developments in Nutrition, 5(Supplement\_2), 783–783. https://doi.org/10.1093/CDN/NZAB046\_080
10. Mysonhimer, A., Cannavale, C., **Khan, N.**, & Holscher, H. (2021). Comparison of Microbiota Analytic Techniques. Current Developments in Nutrition, 5(Supplement\_2), 1172–1172. https://doi.org/10.1093/CDN/NZAB054\_027
11. Pindus, D. M., Edwards, C. G., Walk, A. D., Thompson, S. V., Reeser, G., Burd, N. A., Holscher, H. D., & **Khan, N. A.** (2020). Accelerometer-measured Sedentary Patterns Are Related To Poorer Inhibitory Control In Obese-middle-aged Adults. Medicine & Science in Sports & Exercise, 52(7S), 959–959. https://doi.org/10.1249/01.MSS.0000685984.21261.D9
12. Thompson, S., Pan, Z., Edwards, C., Reeser, G., **Khan, N.**, & Holscher, H. (2020). The Impact of Fresh Hass Avocado on the Fecal Metabolome Among Adults with Overweight and Obesity: A Randomized, Controlled Trial. Current Developments in Nutrition, 4(Supplement\_2), 1593–1593. https://doi.org/10.1093/CDN/NZAA062\_050
13. Cannavale, C., Bailey, M., Edwards, C., Walk, A., Thompson, S., Burd, N., … **Khan, N.** (2019). Interplay between systemic inflammation, visceral fat, and cognitive control in people with excess fat mass (OR32-06-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ052.OR32-06-19
14. Cerna, J., Athari, N., Robbs, C., Walk, A., Edwards, C., Adamson, B., … **Khan, N.** (2019). Macular carotenoids, retinal morphometry, and cognitive function in multiple sclerosis (OR05-07-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ029.OR05-07-19
15. Cheng, C., Thompson, S., Edwards, C., **Khan, N.**, & Holscher, H. (2019). Dietary patterns and metabolic syndrome among adults with overweight and obesity (FS18-03-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ041.FS18-03-19
16. Dinsmoor, A., Thompson, S., Edwards, C., Burd, N., **Khan, N.**, Erdman, J., & Holscher, H. (2019). Associations between serum lutein and human gut microbiota (P02-004-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ029.P02-004-19
17. Edwards, C., Cannavale, C., Flemming, I., Iwinski, S., Walk, A., Renzi-Hammond, L., & **Khan, N.** (2019). Skin and macular carotenoids and their implications for cognitive control and achievement in children (OR05-08-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ029.OR05-08-19
18. Golden, R., Hassevoort, K., Cannavale, C., Edwards, C., Thompson, S., Burd, N., … **Khan, N.** (2019). Lean body mass, but not fat mass, is associated with hippocampal memory performance (P14-011-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ052.P14-011-19
19. Hannon, B., Edwards, C., Thompson, S., Burd, N., Holscher, H., Teran-Garcia, M., & **Khan, N.** (2019). Genetic variants in lipid metabolism pathways interact with diet to influence blood lipid concentrations in adults with overweight and obesity (P15-015-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ037.P15-015-19
20. Iwinski, S., Cannavale, C., Walk, A., Liu, R., McLoughlin, G., & **Khan, N.** (2019). Interrelationships between household chaos, children’s adhd tendencies, and diet quality (P11-113-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ048.P11-113-19
21. **Khan, N.**, Edwards, C., Thompson, S., Burke, S., Walk, A., Reeser, G., … Holscher, H. (2019). Effects of avocado consumption on abdominal adiposity and glucose tolerance: findings from the persea americana for total health (path) randomized controlled trial (P21-005-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ041.P21-005-19
22. **Khan, N.**, Westfall, D., Jones, A., Sinn, M., Bottin, J., Perrier, E., & Hillman, C. (2019). The effect of hydration on cognition in children: the witikids randomized controlled crossover trial (OR32-08-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ052.OR32-08-19
23. Krug, A., Cannavale, C., **Khan, N.**, & Holscher, H. (2019). The effect of prebiotic consumption on the gastrointestinal microbiota of healthy adults: a randomized, controlled, crossover trial (P20-015-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ040.P20-015-19
24. Liu, R., Hannon, B., Robinson, K., Raine, L., Hammond, B., Renzi-Hammond, L., … **Khan, N.** (2019). Single nucleotide polymorphisms in BCO1 and CD36 are related to macular pigment among children (OR05-04-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ029.OR05-04-19
25. Logan, N. E., Raine, L. B., Shorin, R. J., **Khan, N. A.**, Kramer, A. F., & Hillman, C. H. (2019). The differential relationships between physical activity and adiposity with cognitive function in preadolescent children. *Medicine & Science in Sports & Exercise*, 51(Supplement), 549. https://doi.org/10.1249/01.mss.0000562150.23688.a1
26. McKenna, C., Salvador, A., Alamilla, R., Scaroni, S., Shaffer, A., Ulanov, A., … Burd, N. (2019). Effect of ingested beef quantity on daily muscle protein synthesis during resistance training in middle-aged adults (P08-068-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ044.P08-068-19
27. Shinn, L., Li, Y., Zhu, R., Mansharamani, A., Auvil, L., Welge, M., … Holscher, H. (2019). Applying machine-learning to human gastrointestinal microbial species to predict dietary intake (P20-040-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ040.P20-040-19
28. Thompson, S., Edwards, C., Reeser, G., **Khan, N**., & Holscher, H. (2019). Effects of avocado consumption on gastrointestinal microbial metabolite concentrations and taxa abundances: a randomized, controlled trial (OR23-07-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ040.OR23-07-19
29. Thompson, S. V., Han, A., Edwards, C. G., Erdman, J. W., O’Brien, W. D., **Khan, N. A.**, & Holscher, H. D. (2019). Relationships among quantitative ultrasound-assessed hepatic health status, gut microbiota, and bile acids among adults with overweight or obesity. *The Journal of the Acoustical Society of America*, 146(4), 2863–2864. https://doi.org/10.1121/1.5136935
30. Willis, N., Krug, A., Cannavale, C., Holscher, H., & **Khan, N**. (2019). Relationship between urine hydration indices and 24 hour urinary cortisol concentration (P24-006-19). *Current Developments in Nutrition*, 3(Supplement\_1). https://doi.org/10.1093/CDN/NZZ044.P24-006-19
31. Niemiro, G. M., Walk, A. M., Edwards, C. G., Bailey, M. A., Skinner, S. K., De Lisio, M., … **Khan, N**. (2018). Chronic systemic inflammation moderates the relationship between adiposity and behavioral and neuroelectric indices of attention. *Medicine & Science in Sports & Exercise*, 50, 756. <https://doi.org/10.1249/01.mss.0000538493.70447.c>9
32. Westfall, D. R., Barnett, S., Covello, A. R., Bottin, J. H., Perrier, E. T., **Khan, N. A.**, & Hillman, C. H. (2017). The influence of hydration on childhood cognitive control. *Medicine & Science in Sports & Exercise*, 49(5S), 304.
33. Westfall, D., Hassevoort, K., Barnett, S., Covello, A., Bottin, J., Perrier, E., … **Khan, N.** (2017). Effects of hydration on relational memory among preadolescent children. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), 636–637.
34. Walk, A., Chojnacki, M., Drollette, E., Raine, L., Balbinot, A., Biggan, J., … **Khan, N.A.** (2017). Influence of birth-weight-for-gestational-age on neuroelectric function in preadolescence*. Journal of the Academy of Nutrition and Dietetics,* 117(9), A89.
35. Thompson, S. V., Berndt, J. W., Edwards, C. G., Erdman, J. W., **Khan, N. A.**, O’Brien, W. D., & Holscher, H. D. (2017). Bacterial fermentation end-products are related to hepatic steatosis among overweight and obese adults. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), 138.6-138.6.
36. Taylor, A. M., Edwards, C. G., **Khan, N. A.**, & Holscher, H. D. (2017). Gastrointestinal microbiota and cognitive function in adult females. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), 965.34-965.34.
37. Shigeta, T. T., Raine, L., Drollete, E., Kao, S.-C., Westfall, D., Scudder, M., … Hillman, C. (2017). Visceral Adipose Tissue Is Negatively And Selectively Associated With Cognition Among Obese Children. *Medicine & Science in Sports & Exercise*, 49(5S), 303.
38. Nikolaus, C. J., Loehmer, E., Laurent, E., An, R., **Khan, N.**, & McCaffrey, J. (2017). Nutrition Environment Food Pantry Assessment Tool (NEFPAT): Development and Evaluation. *Journal of Nutrition Education and Behavior*, 49(7), S15–S16.
39. McLoughlin, G. M., Woods, A. M., Graber, K. C., & **Khan, N. A.** (2017). Effects of Recess Timing on Physical Activity and Nutritional Intake. *Research Quarterly for Exercise and Sport*, 88, A78–A79.
40. McLoughlin, G. M., Covello, A., Edwards, C., Baumgartner, N., Curran, M., Burkhalter, T., … **Khan, N.** (2017). The Influence Of Contextual Factors On Recess Physical Activity Among Elementary School Children. *Medicine & Science in Sports & Exercise*, 49(5S), 883.
41. McLoughlin, G., Edwards, C., Covello, A., Baumgartner, N., Curran, M., Graber, K., … **Khan, N.** (2017). School Lunch and Physical Activity During Recess: Interactive Effects of Health Behaviors in the School Setting. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), 149.1-149.1.
42. Hou, A. Y., Kaczmarek, J. L., **Khan, N. A.**, & Holscher, H. D. (2017). Dietary Fiber and the Human Gastrointestinal Microbiota as Predictors of Bone Health. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), lb322-lb322.
43. Edwards, C., Walk, A., Thompson, S., Mullen, S., Holscher, H., & **Khan, N.** (2017). Domain-specific relationships between cognitive control and disordered eating attitudes. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), 150.3-150.3.
44. Edwards, C., Walk, A., Baumgartner, N., Chojnacki, M., Covello, A., Evensen, J., … **Khan, N.** (2017). Relationship between whole grain consumption and selective attention: a behavioral and neuroelectric approach. *Journal of the Academy of Nutrition and Dietetics*, 117(9), A93.
45. Dietrich, J. R., Kaczmarek, J. L., Reeser, G. E., **Khan, N. A.**, & Holscher, H. D. (2017). Assessment of dietary intervention compliance of subjects participating in an ongoing randomized controlled trial. *The Federation of American Societies for Experimental Biology Journal* (Vol. 31, p. lb366-lb366).
46. Covello, A. R., Nikolaus, C. J., Curran, M. R., Edwards, C. G., Baumgartner, N. W., Liu, R. H., … **Khan, N. A.** (2017). Examining the role of habitual physical activity in the food insecurity-obesity paradox. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), 726–791.
47. Chojnacki, M., Edwards, C., Baumgartner, N., Walk, A., Covello, A., Reeser, G., … **Khan, N.** (2017). Weight status and visceral adiposity are related to intraindividual variability in cognitive function *Journal of the Academy of Nutrition and Dietetics*, 117(9), A38.
48. Baumgartner, N. W., Walk, A. M., Edwards, C. G., Curran, M. R., Covello, A. R., Reeser, G. E., & **Khan, N. A.** (2017). Sedentary Time is Inversely Related to Behavioral and Neuroelectric Indices of Cognitive Control. *The Federation of American Societies for Experimental Biology Journal*, 31(1 Supplement), 1014–1076.
49. Baumgartner, N. W., Walk, A. M., Edwards, C. G., Covello, A. R., Curran, M. R., Reeser, G. E., … **Khan, N. A.** (2017). Habitual Physical Activity Moderates the Negative Influence of Adiposity on Cognitive Control. *Medicine & Science in Sports & Exercise*, 49(5S), 213.
50. Balbinot, A., Chojnacki, M., Drollette, E., Raine, L., Walk, A., Biggan, J., … **Khan, N.** (2017). Differences In Timing of Developmental Milestones Across Vaginally vs. Cesarean-section Delivered Infants: A Retrospective Study *Journal of the Academy of Nutrition and Dietetics*, 117(9), A85.
51. Curran, M. R., Raine, L. B., Pontifex, M. B., Castelli, D. M., Hillman, C. H., & **Khan, N. A.** (2016). Accumulation of Fat Mass During the School Year is Associated with Lower Gains in Math Achievement and Cognitive Control among Preadolescent Children. *The Federation of American Societies for Experimental Biology Journal*, 30(1 Supplement), lb320-lb320.
52. Covello, A. R., Baumgartner, N. W., Curran, M. R., Reeser, G. E., Cohen, N. J., Kramer, A. F., … **Khan, N. A.** (2016). The Sexual Dimorphic Relationship Between Dietary Fiber Intake and Visceral Adipose Tissue. *The Federation of American Societies for Experimental Biology Journal*, 30(1 Supplement), lb228-lb228.
53. Baumgartner, N. W., Covello, A. R., Reeser, G. E., Cohen, N. J., Kramer, A. F., Barbey, A. K., … **Khan, N. A.** (2016). Moderate To Vigorous Physical Activity Influences Aerobic Capacity Independent Of Body Composition. *Medicine & Science in Sports & Exercise*, 48(5S), 204.
54. Walk, A., Raine, L., Moulton, C., Kuchan, M., Cohen, N., Kramer, A., … **Khan, N.** (2016). Macular Carotenoids Are Positively Related to Academic Achievement In Pre-Adolescent Children. *Clinical Nutrition*, 35, S255–S256.
55. Walk, A. M., Raine, L. B., Cohen, N. J., Kramer, A. F., Hillman, C. H., & **Khan, N. A.** (2016). High-fit Children Exhibit Greater Resilience to the Transient Effects of Sucralose on Cognitive Control. *Medicine & Science in Sports & Exercise*, 48(5S), 1050.
56. Walk, A., **Khan, N.**, McCorkle, S., Drollette, E., Raine, L., Kramer, A., … Hillman, C. (2016). The Role of Macular Pigment Optical Density in Children’s Attentional Control and Academic Achievement. *Psychophysiology*, 53, S89–S89.
57. Raine, L., Cohen, N., Kramer, A., Hillman, C., & **Khan, N.** (2016b). From visceral fat to brain function: The selectively negative influence of central adiposity on neuroelectric indices in preadolescent children. *The Federation of American Societies for Experimental Biology Journal*, 30(1 Supplement), 679.1-679.1.
58. Raine, L., Cohen, N., Kramer, A., Hillman, C., & **Khan, N.** (2016a). Carbohydrates differentially influence children’s efficiency during cognitive control tasks. *The Federation of American Societies for Experimental Biology Journal*, 30(1 Supplement), 679.2-679.2.
59. **Khan, N.**, Raine, L., Drollette, E., Scudder, M., Kramer, A., Donovan, S., & Hillman, C. (2015). Gestational Deficits have Selectively Negative Long-Term Effects on Cognitive Control among Female Preadolescents. *The Federation of American Societies for Experimental Biology Journal*, 29(1 Supplement), 900.18.
60. **Khan, N.**, Raine, L., Winter, A., Cohen, N., & Kramer, A. (2015). Differential Effects of Carbohydrates on Changes in Acute Childhood Cognitive Control. *The Federation of American Societies for Experimental Biology Journal*, 29(Supplement), 392.3.
61. Drollette, E. S., Raine, L. B., Scudder, M. R., Pontifex, M. B., Moore, R. D., Kao, S.-C., … Hillman, C. H. (2015). Dimorphic sex differences in conflict monitoring and the flexible modulation of cognitive control in young children: an ERP investigation. *Psychophysiology*, 52, S50–S50.
62. Scudder, M. R., Drollette, E. S., Raine, L. B., Pontifex, M. B., Moore, R. D., Kao, S.-C., … Hillman, C. H. (2015). The influence of socioeconomic factors on neuroelectric, cognitive, and academic achievement in preadolescent children. *Psychophysiology*, 52, S50–S50.
63. Raine, L. B., Pontifex, M. B., **Khan, N. A.**, Scudder, M. R., Drollette, E. S., Moore, R. D., … Hillman, C. H. (2014). The fitkids randomized controlled trial: effects of physical activity on cognitive and brain health in children. *Psychophysiology*, 51, S18–S18.
64. Lynch, B., Verstynen, T., Weinstein, A. M., **Khan, N. A.**, Raine, L. B., Scudder, M. R., … Erickson, K. I. (2014). Dissociable effects of lean mass versus fat mass on neuromorphology in children. *American Psychosomatic Society*.
65. **Khan, N.**, Raine, L., Drollette, E., Scudder, M., Pontifex, M., & Hillman, C. (2014). Differences in cognitive flexibility between healthy weight and obese children: an ERP study (629.6). *The Federation of American Societies for Experimental Biology Journal*, 28(1 Supplement), 629.6.
66. **Khan, N.**, Raine, L., Drollette, E., Scudder, M., Cohen, N., Kramer, A., & Hillman, C. (2014). Associations between diet quality and cognitive control in childhood (124.1). *The Federation of American Societies for Experimental Biology Journal*, 28(1 Supplement).
67. Drollette, E. S., **Khan, N. A.**, Raine, L. B., Scudder, M. R., Moore, R. D., Komisarz, C. E., … Hillman, C. H. (2014). The sexual dimorphic pattern of central adiposity on ERPs in 8-to 10-year-old children. *Psychophysiology*, 51, S18–S18.
68. Scudder, M. R., **Khan, N. A.**, Lambourne, K., Herrmann, S., Drollette, E. S., Washburn, R., … Hillman, C. H. (2013). Aerobic Fitness And Hdl Cholesterol are Independently Associated with Children’s Cognitive Performance. *Medicine & Science in Sports & Exercise*, 45(5), 121.
69. Raine, L. B., **Khan, N. A.**, Drollette, E. S., Scudder, M. R., Cohen, N. J., Kramer, A. F., & Hillman, C. H. (2013). Towards a better understanding of the negative relationship between adiposity and cognitive health in prepubertal children. *The Federation of American Societies for Experimental Biology Journal*, 27(MeetingAbstracts), 852.5.
70. **Khan, N. A.**, Baym, C. L., Raine, L. B., Drollette, E. S., Scudder, M. R., Kramer, A. F., … Hillman, C. H. (2013). Central adiposity predicts hippocampal-dependent relational memory in prepubertal children. *The Federation of American Societies for Experimental Biology Journal*, 27.
71. Pontifex, M. B., Kamijo, K., Scudder, M. R., Raine, L. B., **Khan, N. A.**, Evans, E. M., … Hillman, C. H. (2012). The differential association between adiposity, fitness, and cognitive control in preadolescent children. *Psychophysiology*, 49, S100–S100.
72. **Khan, N. A.**, Raine, L. B., Drollette, E., Scudder, M., Pontifex, M., Castelli, D. M., … Evans, E. M. (2012). Television viewing and intake of added sugars related to increased central adiposity in prepubertal children. *The Federation of American Societies for Experimental Biology Journal*, 26(Meeting Abstracts), 369.5.
73. Kamijo, K., Pontifex, M. B., **Khan, N. A.**, Raine, L. B., Scudder, M. R., Drollette, E. S., … Hillman, C. H. (2012). Childhood obesity and action monitoring. *Psychophysiology*, 49, S89–S89.
74. Nasti, C. J., **Khan, N. A.**, Evans, E. M., & Chapman-Novakofski, K. . (2011). Using a Teaching Partnership to Improve Nutrition and Exercise in College Students. *NACTA Journal*.
75. **Khan, N.**, Richey, A., Drollette, E., Scudder, M., Pontifex, M., Castelli, D., … Evans, E. (2011). Maternal Level of Education Is Negatively Related to Television Watching and Adiposity in Prepubertal Children. *Journal of Nutrition Education and Behavior*, 43(4), S33.
76. **Khan, N. A.**, Richey, A. L., Drollette, E., Scudder, M., Pontifex, M., Castelli, D. M., … Evans, E. M. (2011). Gender and race differences in bone mineral density, fat, and lean mass among black and white prepubertal children. *The Federation of American Societies for Experimental Biology Journal*, 25(Meeting Abstracts), 332.3.
77. Kamijo, K., Pontifex, M. B., Scudder, M. R., Drollette, E. S., **Khan, N. A.**, Castelli, D. M., … Hillman, C. H. (2011). Body mass and inhibitory control in preadolescent children. *Psychophysiology*, 48, S56–S56.
78. **Khan, N.**, Nasti, C., Evans, E., & Chapman-Novakofski, K. (2008). Peer education, exercising and eating right (PEER): determining changes in student self-efficacy and outcome expectations in a teaching partnership*. The Federation of American Societies for Experimental Biology Journal*, 22(1 Supplement), 684.
79. **Khan, N. A.**, Nasti, C., Evans, E. M., & Chapman-Novakofski, K. (2008). Implementing a Peer Delivered Self-Efficacy Based Undergraduate Course in Nutrition and Kinesiology. *Journal of the American Dietetic Association*, 108(9), A95.
80. **Khan, N.**, Nasti, C., Evans, E., & Chapman-Novakofski, K. (2007b). Peer education, exercising and eating right (PEER): training of peer educators in an undergraduate teaching partnership. *The Federation of American Societies for Experimental Biology Journal*, 21(6), LB50-LB50.
81. **Khan, N.**, Nasti, C., Evans, E., & Chapman-Novakofski, K. (2007a). Peer Education, Exercising and Eating Right (PEER): an Undergraduate Faculty Teaching Partnership. *Journal of Nutrition Education and Behavior*, 39(4), S90.
82. Davis, N., **Khan, N. A.**, Toston, T., Zanovec, M., Vidrine, K., Tuuri, G., & Loftin, M. J. (2006). Fracture risk assessment in African-American women using quantitative ultrasound of the os calcis. *Medicine & Science in Sports & Exercise*.

**Symposia Chaired & Symposia Presentations**

**Symposia Chaired**

1. Nutritional Implications for Brain and Cognition, Nutrition 2019, Baltimore, MD
2. Nutritional Implications for Brain and Cognition, Nutrition 2018, Boston, MA
3. Nutrition across the Lifespan: Nutrition, Neurobiology, Mood and Behavior, Experimental Biology 2017, Chicago, IL
4. Translation of Nutritional Science and Food Science and Technology in Nutrition, Experimental Biology 2017, Chicago, IL
5. Nutrition across the Lifespan: Nutrition, Neurobiology, Mood and Behavior, Experimental Biology 2016, San Diego, CA
6. Neurocognition: The Food-Brain Connection, Experimental Biology 2014, San Diego, CA

**Invited Lectures and Symposia (International)**

1. **Khan, N.A.** “The Role of Avocados in Promoting Cognitive Health”. World Avocado Congress, Medellin, Colombia, September 2019.
2. **Khan, N.A.** “Retinal Carotenoids and Childhood Cognitive Function and Achievement”. Brain and Ocular Nutrition Conference. Downing College, Cambridge University, UK, July 2018.
3. **Khan, N.A.** “The Influence of Diet and Obesity on Cognitive Function”. Hydration for Health Conference, Danone Nutricia, Évian-les-Bains, France, June 2018.
4. **Khan, N.A.** “The Relation of Total Water Intake to Cognitive Function among Prepubertal Children”. Hydration for Health Conference, Danone Nutricia, Évian-les-Bains, France, June 2014.
5. **Khan, N.A.** “Lutein & Brain: Early Development to Childhood”. Kemin Nutrition Webinar, November, 2020.

**Invited Lectures and Symposia (National)**

1. **Khan, N.A.** “Carotenoids and Cognitive Function across the Lifespan”. University of Georgia
2. **Khan, N.A.** “Nutrition Effects on Brain and Cognition in Children”. Nestle Nutrition Institute Webinar, August 2020.
3. **Khan, N.A.** “Obesity, Health Behaviors, and Childhood Cognitive Health”. International Life Sciences Institute North America Webinar, September 2020.
4. **Khan, N.A.** “Effects of 12-Week Avocado Consumption on Cognitive Function among Adults with Overweight and Obesity”. Hass Avocado Board Webinar, September 2020.
5. **Khan, N.A.** “Childhood Health Behaviors, Obesity, and Cognitive Function”. OSF Healthcare Webinar, April 2021.
6. **Khan, N.A.** “Physiological Mechanisms by which Nutrients Influence Mental Function”. Science and Consumer Perceptions of Brain Health Ingredients Summit, Bayer Consumer HealthCare. Whippany, NJ, September 2019.
7. **Khan, N.A.** “Brain Health and Kids: Lutein & Zeaxanthin’s Role in Cognitive Control and Academic Skills”. Kemin Nutrition, September 2019.
8. **Khan, N.A.** “The Influence of Diet and Obesity on Cognitive Function”. Eastern Illinois Academy of Nutrition and Dietetics Webinar, January 2018.
9. **Khan, N.A.** “Diet and Physical Activity: Implications for Attention and Memory in Childhood”. Children’s Nutrition Research Center, Baylor College of Medicine. Houston, TX, January 2018.
10. **Khan, N.A.** “The Influence of Diet and Obesity on Cognitive Function”. Diabetes and Obesity Research Institute (DORI) Annual Symposium, University of Southern California. Los Angeles, CA, February 2018.
11. **Khan, N.A.** “Diet and Obesity Implications for Attention and Memory in Childhood”. Symposium at the International Conference on Learning and Memory at University of California. Irvine, CA, April 2018.
12. **Khan, N.A.** “The Gut-Brain Highway: Can Traffic be regulated by Diet?”. Symposium at the Food and Nutrition Conference and Expo, Academy of Nutrition and Dietetics. Boston, MA, October 2016.
13. **Khan, N.A.** “The Influence of Diet and Adiposity on Childhood Neurocognitive Function”. Presidential Invited Symposium: Juvenile Obesity, Brain, and Cognition at the Eastern Psychological Association’s Annual Meeting. New York, NY, March 2016.
14. **Khan, N.A.** “Pediatric Neurocognitive Development: Emerging Insights and Applications in Nutrition”. Symposium at Experimental Biology Conference. Boston, MA, April 2015.
15. **Khan, N.A.** “Nutrition, Hydration and Cognition: New Frontier”. Satellite Lecture at American College of Sports Medicine Annual Meeting. San Diego, CA, April 2015.
16. **Khan, N.A.** “The Influence of Adiposity and Diet on Childhood Cognitive Control and Relational Memory”. Symposium on Childhood Obesity and Cognition. American University, Washington, DC, October 2014.

**Invited Lectures and Symposia (Local)**

1. **Khan, N.A.** “Macular Xanthophylls and Cognitive Function”. Neuroscience Program Seminar Series. University of Illinois, March 2020
2. **Khan, N.A.** “Retinal Carotenoids: A Nutritional Window into Brain and Cognition”. Division of Nutritional Sciences Symposium. University of Illinois, April 2019.
3. **Khan, N.A.** “Retinal Carotenoids and Cognitive Health among Persons with Multiple Sclerosis”. Inaugural Illinois Multiple Sclerosis Research Day. University of Illinois, April 2019.
4. **Khan, N.A.** “Health Behaviors, Adiposity, and Childhood Cognitive Function”. First 1000 Days Symposium. University of Illinois, September 2018.

**Grants**

**Funded External Grants**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Investigators | Funding Agency | Title | Year(s) | Funding |
| PI: NA Khan  Co-Is: S Mullen, CH Hillman, NJ Cohen, L Renzi-Hammond | Eunice Kennedy Shriver National Institute of Child Health and Human Development (RO1) | Enhancing Children's Cognitive Function and Achievement through Carotenoid Consumption | 2021-2026 | $2,921,907 |
| PI: NA Khan  Co-I: AM Walk | Egg Nutrition Center | Influence of Egg Consumption on Cognitive and Visual Function in Early Childhood | 2020-2023 | $210,721 |
| PI: NA Khan  Co-I: HD Holscher | Tate and Lyle Ingredients | Effects of Soluble Corn Fiber Consumption on Cognitive Function and Gastrointestinal Microbiota | 2021-2023 | $548,911 |
| PI: KA Richards  Co-I: NA Khan | Illinois State Board of Education | Illinois Physical Activity and Life Skills (iPALS) Wellness Program: Summer (Elementary) | 2021 | $169,225 |
| PI: S Aguinaga  Co-I: NA Khan | University of Illinois at Chicago | OCEAN: Optimizing Cognition via Exercise and Nutrition | 2021-2022 | $75,371 |
| PI: S Donovan  Co-I: NA Khan | National Institutes of Health (RO1) | Dietary and microbial predictors of childhood obesity risk | 7/1/17-6/30/22 | $2,779,941 |
| PI: NA Khan  Co-Is: R Motl, B Adamson | National Institutes of Health – Rehabilitation Research Resource to Enhance Clinical Trials | Lutein and multiple sclerosis experimental study (LuMES): A randomized pilot trial | 7/1/19-6/30/20 | $63,394 |
| PI: HD Holscher  Co-Is: NA Khan, NA Burd | Almond Board of California | Effect of almond consumption on the gastrointestinal microbiota and postprandial glucose handling in overweight & obese adults | 11/04/19-11/30/21 | $409,086 |
| PI: HD Holscher  Co-Is: NA Khan, M Miller | National Honey Board | Daily yogurt plus honey helps support digestive health, regularity, and comfort | 09/22/19- 09/21/21 | $250,000 |
| PI: NA Burd  Co-Is: NA Khan, M Delisio | National Dairy Council | Dairy food consumption and its effects on inflammation and the postprandial regulation of muscle protein synthesis | 06/01/19- 05/31/21 | $460,293 |
| PI: AK Richards  Co-I: NA Khan | Illinois State Board of Education | Fostering a comprehensive approach to wellness through a summer learning initiative | 05/23/19- 06/30/20 | $87,784 |
| PI: N Khan  Co-Is: A Walk | National Dairy Council | Cross-sectional and longitudinal predictors of cognitive control and early academic abilities among preschool children | 05/01/2018-04/30/2022 | $671,805 |
| PI: N Burd  Co-Is: N Khan, S Petruzzello | National Cattlemen’s Beef Association | The role of beef ingestion in supporting exercise-derived benefits for the muscle-brain interconnect | 2018-2019 | $74,187 |
| PI: NA Khan  Co-PI: HD Holscher, L Renzi-Hammond | Egg Nutrition Center | Correlational and intervention effects of egg consumption on macular carotenoids, cognition, and achievement | 08/01/17- 07/31/19 | $219,631 |
| PI: N Khan  Co-Is: R Motl, L Labriola | National Multiple Sclerosis Society | Retinal lutein and visual health in multiple sclerosis | 3/1/17-2/28/19 | $43,051 |
| PI: R An  Co-Is: N Khan, S Nickols-Richardson | National Cattlemen’s Beef Association | Beef consumption in relation to cognitive function across the life course: a systematic review | 02/01/2019- 08/31/2019 | $34,909 |
| PI: N Burd  Co-Is: N Khan, S Petruzzello | National Cattlemen’s Beef Association | The role of beef ingestion in supporting exercise-derived benefits for the muscle-brain interconnect | 07/01/18 - 06/30/19 | $74,187 |
| PI: NA Khan  Co-PI: HD Holscher  Co-Is: N Burd, B Fiese | Hass Avocado Board | Investigating the effects of avocado intake on metabolic and cognitive health: a systems approach | 12/1/15-12/31/18 | $887,221 |
| PI: N Burd  Co-Is: N Khan, M DeLisio | National Cattlemen’s Beef Association | The influence of regular beef consumption and protein density of the diet on training induced gains in muscle strength and performance in healthy adults | 7/1/16-6/30/18 | $253,626 |
| PI: N Khan  Co-Is: A Walk | National Dairy Council | Diet quality and cognitive control function in early childhood: a pilot study | 8/1/16-6/30/18 | $143,487 |
| PI: J McCaffrey  Co-Is: N Khan, R An | USDA North Central Nutrition Education Center for Excellence | Evaluating the a multi-modal community nutrition education modal within SNAP-Ed and EFNEP (phase 2) | 2/1/16-8/31/18 | $56,200 |
| PI: NA Khan Co-Is: NJ Cohen, CH Hillman, AF Kramer | Abbott Laboratories | The effects of fortified nutritional supplementation on cognition, memory, and achievement | 5/16/12-12/31/18 | $2,261,636 |
| PI: NA Khan Co-I: CH Hillman | Danone Nutricia | The effects of hydration on brain, cognition, memory & achievement in childhood | 6/1/14-12/31/18 | $718,990 |
| PI: NA Khan Co-Is: J Biggan, HD Holscher, NJ Cohen, CH Hillman, AF Kramer | Abbott Laboratories | Retrospectively studying the effects of early life nutrient intake on cognitive function and brain health in preadolescent children | 8/16/15-12/31/17 | $179,433 |
| PI: J McCaffrey  Co-Is: N Khan, R An | USDA North Central Nutrition Education Center for Excellence | Evaluating a multi-modal community nutrition education modal within SNAP-Ed and EFNEP | 9/1/15-9/1/17 | $50,000 |

**Funded Internal Grants**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Investigators | Funding Agency | Title | Funding Year(s) | Total Funding |
| PI: NA Khan  Co-I: J. Erdman, Jr. | Division of Nutritional Sciences | Lutein Supplementation for Cognitive Function in Multiple Sclerosis: A Pilot Study | 2020-2022 | $20,000 |
| PI: NA Khan | UIUC Research Board | Acute Exercise and Cognitive Function: Examining the Role of Weight Status and Exercise-Induced Myokines | 2020-2022 | $29,960 |
| PI: NA Khan  Co-Is: S Donovan, Aditi Das, B Sutton, W O’Brien | Division of Nutritional Sciences (50th Anniversary) | Role of hepatic steatosis and lipid metabolites in childhood cognition and brain health | 2019-2020 | $49,980 |
| PI: NA Khan  Co-Is: S Donovan, B Meline | Division of Nutritional Sciences (Vision 20/20) | Examining prenatal and postpartum weight gain and retention as contributors to maternal carotenoid status | 10/18-10/20 | $20,000 |
| PI: NA Khan  Co-Is: M Browning, A Schwingel, HD Holscher | Christopher Family Foundation Food & Family Program Seed Grant | Gardening and family health: elucidating the role of the human and environmental microbiota | 04/17-04/19 | $50,000 |
| PI: HD Holscher  Co-Is: NA Khan, K. Wilund, B O’Brien | Division of Nutritional Sciences (Vision 20/20) | Hepatic steatosis as a novel target for a dietary fiber intervention in overweight and obese adults | 10/16-10/18 | $20,000 |
| PI: NA Khan  Co-Is: HD Holscher, J Biggan, M DeLisio | Division of Nutritional Sciences (Vision 20/20) | The effects of probiotics and prebiotics on behavioral and biological markers of cognition and stress | 9/15-9/18 | $20,000 |
| PI: M DeLisio Co-Is: NA Khan | Division of Nutritional Sciences (Vision 20/20) | The effects of overweight/obesity and acute dietary protein ingestion on muscle stem cell function | 10/14-10/16 | $20,000 |

**Teaching Experience**

**Undergraduate and Graduate Courses (Primary Instructor)**

*University of Illinois, Urbana, IL*

Health Behaviors and Cognition (KIN 494, KIN 342) 2021-Present

Physical Activity and Cognition (KIN 543) 2017-Present

Health Behaviors and Obesity (KIN 494, KIN 341) 2015-Present

Foods, Health, and Wellness (KIN 494) 2015-Present

Nutritional Neuroscience (KIN 494) 2016

*Parkland College, Champaign, IL*

Fundamentals of Nutrition (BIO 120) 2010-2014

**Invited Lectures**

Sedentary Behavior & Health (KIN 594) 2020

Interdisciplinary Approaches to Neuroscience I (NEUR 542) 2018-2019

Survey of Interdisciplinary Health (IHLT 102) 2017-Present

Clinical and Applied Exercise Physiology (KIN 452) 2019-Present

**Mentorship**

***Postdoctoral Scholars***

|  |  |  |
| --- | --- | --- |
| Name | Years | Current Position |
| Anne McClure Walk,  PhD in Experimental Psychology,  Saint Louis University | 2015-2018 | Assistant Professor, Eastern Illinois University |
| Corinne Cannavale, PhD in Neuroscience, University of Illinois | 2021-Present | Postdoctoral Research Associate, University of Illinois |
| Shivani Sethi, PhD in Physiology – Neuroendocrinology, University of Otago | 2022-Present | Postdoctoral Research Associate, University of Illinois |

***Doctoral Students (Director)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student | Program | Thesis Title/Topic Area | Completion Date | Current Position |
| Grace Niemiro | Kinesiology | *Lifestyle and Exercise Effects on Circulating Progenitor Cells in Children and Adults* | 05/2018 | Senior Scientist, Abbott Nutrition, OH |
| Caitlyn Edwards | Nutritional Sciences | *The Independent and Interactive Influence of Lutein and Choline on Cognitive Control* | 05/2020 | Clinical Research and Reporting Lead, Vida Health, CA |
| Bridget Hannon Esteves | Nutritional Sciences | *Independent and Interacting Effects Of Diet And Genetic Risk On Obesity-Related Comorbidities* | 05/2020 | Nutrition Scientist, The Kraft Heinz Company, OH |
| Corinne Cannavale | Neuroscience | *Dietary and Adiposity Influences on Relational Memory and Attentional Inhibition* | 05/2022 | Postdoctoral Research Associate, University of Illinois |
| Nathaniel Willis | Nutritional Sciences | *Effect of Hydration Status on Childhood Cognitive Health* | 05/2023 | N/A |
| Shelby Keye | Kinesiology | *Childhood motor function and cognitive abilities* | 05/2023 | N/A |
| Arden McMath | Nutritional Sciences | *Childhood obesity, cognitive function, and gastrointestinal microbiome* | 05/2023 | N/A |
| John Kim | Kinesiology | *Influence of Exercise on Cognitive Function* | 05/2023 | N/A |
| Laura Rosok | Neuroscience | *Lutein Status as a Predictor of Childhood Cognitive Function* | 05/2025 | N/A |
| Shelby Martell | Neuroscience | *Neurocognitive Function and Influence of Diet among Persons with Multiple Sclerosis* | 05/2025 | N/A |
| Tori Kusiak | Nutritional Sciences | *Dietary Patterns and Cognitive Function* | 05/2025 | N/A |

***Doctoral Students (Committee Member)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student | Program | Thesis Title/Topic Area | Completion Date | Current Position |
| Lauren Raine | Kinesiology | *Obesity, visceral adipose tissue, and cognition in childhood* | 05/2016 | Research Assistant Professor, Northeastern University, MA |
| Shih-Chun (Alvin) Kao | Kinesiology | *The effects of single bouts of moderate-intensity continuous exercise and high-intensity interval exercise on the modulations of inhibitory control, working memory, and long-term memory* | 05/2017 | Assistant Professor, Purdue University, IN |
| Kelsey Hassevoort | Neuroscience | *The impact of lifestyle factors and development on relational Memory* | 05/2018 | Research Development Specialist, Interdisciplinary Health Sciences Institute, UIUC |
| Gabriella McLoughlin | Kinesiology | *The role of physical education within a comprehensive school health program* | 08/2018 | Research Fellow, Implementation Science Center for Cancer Control, Washington University in St. Louis, MO |
| Liliana Aguayo | Community Health | *Influences of Maternal Acculturation on Early Childhood Obesity Risk: from Countries to Chromosomes* | 08/2018 | Assistant Professor, Emory University |
| Steve Douglas | Nutrition Science, Purdue University | *Novel school-based strategies to improve participation in the school breakfast program, diet quality, and cognitive performance in adolescents* | 05/2019 | Postdoctoral Researcher, University of Tennessee, TN |
| Stephen Fleming | Neuroscience | *A Multivariate Approach to Identify Nutritional Predictors of Cognitive Performance* | 08/2019 | President and Co-Founder of Traverse Science, IL |
| Tiffany Yang | Psychology | *Sex differences in exercise-mediated changes in diet preference and its associated metabolic and cognitive outcomes* | 05/2021 | Scientist, San Francisco, CA |
| Joanne Fill | Neuroscience | *Evaluation of pig brain developmental patterns and comparative analysis to human infant neurodevelopment* | 08/2021 | Clinical Data Research Associate, Abbott Nutrition, OH |
| Christopher Kinder | Kinesiology | *Influence of social-emotional learning on youth physical activity*  *and cognitive health* | 07/2022 | N/A |
| Shelby Ison | Kinesiology | *Basic psychological needs, affect, and motivation (bam) among elementary students in a physical activity-based wellness program* | 05/2022 | TBD |
| Colleen McKenna | Nutritional Sciences | *Regulation of aging-related*  *skeletal muscle strength adaptations*  *by dietary protein and resistance training* | 05/2022 | Postdoctoral Research Associate, University of Colorado |
| Sharon Thompson | Nutritional Sciences | *Dietary modulation of the human gastrointestinal microbiota* | 05/2022 | N/A |
| Annemarie Krug | Food Science and Human Nutrition | *Gastrointestinal microbiome and emotional regulation* | 05/2022 | N/A |
| Alex Baldeon | Nutritional Sciences | *TBD* | 05/2024 | N/A |

***Masters Students (Director)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student | Program | Thesis Title/Topic Area | Completion Date | Current Position |
| Nicholas Baumgartner | Kinesiology | *The Influence of Physical Activity, Sedentary Time, and Adiposity on Behavioral and Neurolectric Measures of Attentional Inhibition* | 05/2017 | Doctoral Student, Purdue University, IN |
| Morgan Curran | Nutritional Sciences | *The Negative Influence of Adiposity extends to Intraindividual Variability in Cognitive Control among Preadolescent Children* | 05/2018 | Dietitian, Seattle, WA |
| Alicia Covello | Kinesiology | *Retinal Morphometric Markers of Crystallized and Fluid Intelligence among Adults with Overweight and Obesity* | 05/2018 | Doctoral Student, UIUC |
| Ruyu Liu | Nutritional Sciences | *Genetic Predictors of Macular Xanthophylls* | 05/2020 | Doctoral Student  Cornell University, NY |
| Susan Mantell | Nutritional Sciences | *Non-Thesis MS* | 05/2020 | Physician, Philo, IL |
| Monica Kashi | Nutritional Sciences | *Non-Thesis MS* | 05/2021 | Dietitian, Boston, MA |
| Jonathan Cerna | Nutritional Sciences | *Influence of Macular Xanthophylls on Cognitive Function among Persons with MS* | 05/2021 | Doctoral Student, UIUC |
| Andrew Dinsmoor | Nutritional Sciences | *Impact of Diet Quality on Gut Microbiome in Early Life* | 05/2021 | Dietitian, NE |
| Rhea Sarma | Kinesiology | *TBD* | 05/2023 | N/A |
| Sarah Ragab | Kinesiology | *TBD* | 05/2023 | N/A |
| Trisha Yen | Nutritional Sciences | *TBD* | 05/2023 | N/A |

***Masters Students (Committee Member)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student | Program | Thesis Title/Topic Area | Completion Date | Current Position |
| Sasha McCorkle | Nutritional Sciences | *Macular pigment optical density and academic achievement among preadolescent children* | 05/2016 | Sensory Scientist at Hill's Pet Nutrition, Lawrence, KS |
| Julia Balto | Kinesiology | *The case for multiple health behavior change interventions in*  *Multiple sclerosis* | 05/2016 | Health and Mindset Coach, CA |
| Joanna Manero | Nutritional Sciences | *Influence of seasoning and preparation of vegetables on consumer choice, consumption, and liking* | 05/2018 | Clinical Dietitian, U.S. Department of Veterans Affairs |
| Andrew Taylor | Food Science and Human Nutrition | *The gut-microbiota-brain axis: influence of diet and the gastrointestinal microbiota on stress and anxiety in adults* | 08/2018 | Not Known |
| Melisa Bailey | Nutritional Sciences | *Dietary fats, the gastrointestinal microbiome, and inflammation* | 08/2018 | Regulatory Affairs Coordinator, University of Minnesota-Twin Cities, MN |
| Marina Brown | Food Science and Human Nutrition | *Habitual gardening and the human gut microbiota* | 07/2021 | Laboratory Technician, University of Illinois |
| Jade Hamann | Nutritional Sciences | *Relationship between diet quality and*  *molecular mediators of muscle health* | 05/2022 | TBD |
| Susannah Scaroni | Nutritional Sciences | *TBD* | 12/2022 | N/A |

***Undergraduate Students***

|  |  |  |
| --- | --- | --- |
| **Name** | **Terms** | **Presentation/Poster (Activity)** |
| Jackson Evensen | 2015-2017 | Experimental Biology, 2017 |
| Jessica Park | 2015-2017 | Undergraduate Research Symposium, 2017 |
| Alaina Balbinot | 2016-Present | Undergraduate Research Symposium, 2017 |
| Food and Nutrition Conference and Expo, 2017 |
| Payton Walters |  | Undergraduate Research Symposium, 2017 |
| Patricia Ebersold |  | Undergraduate Research Symposium, 2018 |
| Marc Sleiman | 2017-2020 | Undergraduate Research Symposium, 2018 |
| Madi Podjasek | 2017-2020 | Undergraduate Research Symposium, 2018 |
| Justin Lee | 2017-2020 | Undergraduate Research Symposium, 2018 |
| Chanyoung Choi | 2017-2020 | Undergraduate Research Symposium, 2018 |
| Nitesh Kumar | 2017-2020 | Undergraduate Research Symposium, 2018 |
| Abigail Rich | 2019-2021 | Undergraduate Research Symposium, 2021 |
| Carolyn Francart | 2019-2021 | Undergraduate Research Symposium, 2021 |
| Meghan Vanasco | 2020-2021 | Undergraduate Research Symposium, 2021 |
| Mariam J. Ouzidane | 2021-2022 | Undergraduate Research Symposium, 2022 |

**Society Memberships**

American Society for Nutrition

American College of Sports Medicine

**Service**

Grant Panels

2020 Diet, Nutrition and the Prevention of Chronic Diseases panel, Agriculture and Food Research Initiative (AFRI), United States Department of Agriculture

National Committees

2019 Core Neuropsychological Measures for Obesity and Diabetes Trials Workshop, NIH

2016-2017 Nutrition and Health Committee for Planning and Guidance, USDA, NIFA

Advisory Boards

2015-2019 Nutrition Translation Research Interest Section, American Society for Nutrition

Journal Editorial Boards

2019-Present *Nutrients*

*Ad hoc* Journal Reviewer

*Journal of Nutrition Education and Behavior (Statistical Reviewer)*

*Journal of Nutrition*

*Nutritional Neuroscience*

*Appetite*

*British Journal of Nutrition*

*American Journal of Clinical Nutrition*

*Psychophysiology*

*Obesity*

*Contemporary Clinical Trials*

*Obesity Reviews*

*Preventative Medicine*

*Frontiers Psychology*

*JAMA Pediatrics*

*Developmental Cognitive Neuroscience*

University of Illinois at Urbana-Champaign

Campus Service

Campus Research Board *Ad Hoc* Grant reviewer

Family Resiliency Center *Ad Hoc* Grant reviewer

College of Applied Health Sciences

College Education Policy Committee, 2019-Present

*Ad Hoc* Committee to Develop Visiting Student Policy, 2020

Executive Committee, 2020-Present

Department of Kinesiology and Community Health

Graduate Student Conference Travel Grant Review Committee, 2016-2017

Assistant or Associate Professor in Children’s Physical Activity Search Committee, 2016-2017

Assistant or Associate Professor in Children’s Physical Activity Search Committee, 2017-2018

Grievance Committee, 2020-Present

*Ad Hoc* Kinesiology Minor Development Committee, Chair, 2017-2018

Assistant Professor in Exercise Physiology Search Committee, 2019-2020

Assistant Professor in Epidemiology Search Committee, 2020-Present

Kinesiology and Community Health Strategic Planning and Future Directions Committee, 2021-Present

Kinesiology and Community Health Exercise Psychology, Area Coordinator, 2020-Present

Kinesiology and Community Health Restructuring Taskforce, Chair, 2022

Kinesiology and Community Health Strategic Plan Implementation Taskforce, Member, 2022

Kinesiology and Community Health, Undergraduate Curriculum Taskforce, Member, 2022

Kinesiology and Community Health, Advisory Committee, Member, 2021-Present

Division of Nutritional Sciences Service

Annual Student Review Committee, 2015-2018

Executive Committee Member, 2017-Present