

Matthew J. Barenie, PhD, RD

EDUCATION

Doctor of Philosophy, *Human Performance - Exercise Physiology*, Individualized Minor:
Nutritional Physiology, 2022

Indiana University, Department of Kinesiology, Bloomington, IN

Master of Science, *Nutrition and Dietetics - Nutrition and Physical Performance*, 2016
Saint Louis University, Doisy College of Health Science, St. Louis, MO

Bachelor of Science, *Dietetics*, Minor in Psychology, 2015
Indiana University, Department of Applied Health Science, Bloomington, IN

Purdue University Calumet, School of Business, Hammond, IN, 2010 - 2012

PROFESSIONAL EXPERIENCE

Assistant Professor of Exercise Science (August 2024 - Present)
Department of Health, Kinesiology, and Sport
University of South Alabama, Mobile, AL

Post-Doctoral Fellow (January 2023 - August 2024)
Center for the Study of Obesity
Fay W. Boozman College of Public Health
University of Arkansas for Medical Sciences, Little Rock, AR
Mentor: Michael R. Thomsen, PhD

Associate Instructor and Graduate Student Appointee (2017 - 2022)
Department of Kinesiology
Indiana University, Bloomington, IN

Clinical Dietitian (2017 - 2018)
Franciscan Senior Health and Wellness, Dyer, IN

Clinical Dietitian (2016 - 2017)
Community Hospital, Munster, IN

PUBLICATIONS

Murphy, C. M., Howie, E. K., **Barenie, M. J.**, Weber, K. A., & Thomsen, M. R. (2025). Examining relationships between U.S. children's physical activity levels during recess, school days, and weekend days. *Preventive Medicine Reports*, 55, 103120. <https://doi.org/10.1016/j.pmedr.2025.103120>

Barenie, M. J., Howie, E. K., Murphy, C. M., Thakur, D., Jenkins, C., Lopez-Neyman, S. M., Kaufman, A. R., Thomsen, M. R., & Weber, K. A. (2025). Playing Alone: Recess Physical Activity and Social Interactions of Children with and Without Obesity and Severe Obesity. *Childhood Obesity (Print)*. <https://doi.org/10.1089/chi.2024.0426>

Barenie, M. J., Escalera, A., Grange, H. E., Schlader, Z. J., Fly, A. D., Mickleborough, T. D., & Carter, S. J. (2024). Concerns over the Utility of Phase Angle and its Association with Muscle Function: Commentary. *Research Directs in Strength and Performance*, 4(1). <https://doi.org/10.53520/rdsp2024.105123>

Barenie, M. J., Howie, E. K., Weber, K. A., Thakur, D., Murphy, C. M., & Thomsen, M. R. (2024). Where the children play: Gender gaps in recess physical activity by age and playground area. *Preventive Medicine Reports*, 41, 102699. <https://doi.org/10.1016/j.pmedr.2024.102699>

Barenie, M. J., Escalera, A., Carter, S. J., Grange, H. E., Paris, H. L., Krinsky, D., Sogard, A. S., Schlader, Z. J., Fly, A. D., & Mickleborough, T. D. (2023). Grass-Fed and Non-Grass-Fed Whey Protein Consumption Do Not Attenuate Exercise-Induced Muscle Damage and Soreness in Resistance-Trained Individuals: A Randomized, Placebo-Controlled Trial. *Journal of Dietary Supplements*, 1–30. <https://doi.org/10.1080/19390211.2023.2282470>

Barenie, M. J., Howie, E. K., Weber, K. A., & Thomsen, M. R. (2023). Evaluation of the Little Rock Green Schoolyard initiative: A quasi-experimental study protocol. *BMC Public Health*, 23(1), 1022. <https://doi.org/10.1186/s12889-023-15891-6>

Barenie, M. J., Domenick, J. T., Bennett, J. E., Schweitzer, G. G., Shetty, P., & Weiss, E. P. (2020b). Short Term High-Repetition Back Squat Protocol Does Not Improve 5-km Run Performance. *International Journal of Exercise Science*, 13(7), 1770–1782. <https://doi.org/10.70252/PDMX2564>

Barenie M. J., Freemas Ms, J. A., Baranauskas PhD, M. N., Goss Msk, C. S., Freeman Ms, K. L., Chen Ms, X., Dickinson Ms, S. L., Fly PhD Cfs, A. D., Kawata PhD, K., Chapman PhD Facsm, R. F., & Mickleborough PhD, T. D. (2022). Effectiveness of a combined New Zealand green-lipped mussel and Antarctic krill oil supplement on markers of exercise-induced muscle damage and inflammation in untrained men. *Journal of Dietary Supplements*, 19(2), 184–211. <https://doi.org/10.1080/19390211.2020.1853649>

Adamic, E. M., Shei, R. J., Freemas, J. A., **Barenie, M.J.,** Barton, J., Yeager, Z., ... & Mickleborough, T. D. (2018). Commentary on viewpoint: Use aerobic energy expenditure instead of oxygen uptake to quantify exercise intensity and predict endurance performance. *Journal of Applied Physiology*, 125(2), 682-682.

UNDER REVIEW

Barenie, M.J., Carter, S.J., Escalera, A., Grange, H.E., Schlader, Z.J., Fly, A.D., Mickleborough, T.D. Arterial Stiffness and systemic hemodynamics following exercise-induced muscle damage are not modified by grass-fed and non-grass-fed whey protein supplementation in resistance-trained individuals.

ABSTRACTS

Barenie, M.J., Carter, S.J., Escalera, A., Grange, H.E., Schlader, Z.J., Fly, A.D., Mickleborough, T.D. Whey Protein Supplementation does not affect vascular measures following eccentric-induced muscle damage in resistance-trained individuals. American College of Sports Medicine. May 2025.

Murphy, C.M., Howie, E.K., Weber, K.A., **Barenie, M.J.**, Thomsen, M.R. Resting less: Associations between weight status and sleeping behaviors among elementary school children. Central States American College of Sports Medicine, February 2025.

Barenie, M.J., Carter, S.J., Escalera, A., Grange, H.E., Schlader, Z.J., Fly, A.D., Mickleborough, T.D. Whey Protein Supplementation does not affect vascular measures following eccentric-induced muscle damage in resistance-trained individuals. Southeast Chapter American College of Sports Medicine. February 2025.

Howie, E.K., **Barenie, M.J.**, Weber, K.A., Murphy, C., Thomsen, M.R. Scheduling of recess during elementary school and the effect on physical activity: considering timing and temperature. International Society for Physical Activity and Health Congress, October 2024.

Weber, K.A., Howie, E.K., **Barenie, M.J.**, Murphy, C., Thomsen, M.R. Assessing the Impact of Air Quality and Heat on Recess Physical Activity in School Children. International Society for Environmental Epidemiology, August 2024.

Yousef, D.Z., **Barenie, M.J.** Minorities Medical Literacy & Access to Healthcare as a Result: An Extensive Look Into the Effects of Taboos and Those Directly Affected. 17th Health Disparities Conference, Xavier University of Louisiana, April 2024.

Murphy, C.M., Howie, E.K., Weber, K.A., **Barenie, M.J.**, Thakur, D., Thomsen, M.R. Accessing Autonomy: Comparing Children's Physical Activity Levels in "Unstructured" Settings. Central States American College of Sports Medicine, March 2024.

Barenie, M.J., Howie, E.K., Weber, K.A., Thakur, D., Murphy, C., Thomsen, M.R. (2023) Physical Activity During Recess: Data from a Green Schoolyard Evaluation in Little Rock, Arkansas. The Obesity Society, Poster-168, October 2023.

Barenie, M. J., Freemas, J. A., Freeman, K. L., Baranauskas, M. N., Goss, C. S., & Mickleborough, T. D. (2020). Effectiveness Of Two Different Forms Of Marine Oil On Muscle Soreness Following Eccentric Exercise: 2757 Board# 218 May 29 9: 30 AM-11: 00 AM. Medicine & Science in Sports & Exercise, 52(7S), 761-762.

Barenie, M.J., Domenick, J.T., Schweitzer, G.G., Bennett, J.E., Shetty, P., & Weiss, E.P. (2019). Short-Term Back Squat Protocol Effect on 5km Run Performance: 3421 Board# 109 June 1 8: 00 AM- 9: 30 AM. Medicine & Science in Sports & Exercise, 51(6S), 938.

TEACHING EXPERIENCE

University of South Alabama, Department of Health, Kinesiology, and Sport
KIN363: Sports Nutrition
Fall 2025 (enrollment: 22)

University of South Alabama, Department of Health, Kinesiology, and Sport
HS362: Drug Education
Summer 2025 (enrollment: 18)

University of South Alabama, Department of Health, Kinesiology, and Sport
KIN484: Apps in Sports Conditioning
Spring 2025 (enrollment:41)

University of South Alabama, Department of Health, Kinesiology, and Sport
KIN479: Fitness Assessment and Exercise Prescription
Fall 2025 (enrollment: 39)
Summer 2025 (enrollment: 8)
Spring 2025 (enrollment: 50)
Fall 2024 (enrollment: 40)

Indiana University, Department of Kinesiology
K409: Basic Physiology of Exercise Laboratory Instructor
Spring 2018, Fall 2018, Spring 2019, Fall 2019 x 3, Spring 2020 x 2, Fall 2020,
Spring 2021, Fall 2021 x 2, Spring 2022 x 2 (total enrollment: 180)

Indiana University, Department of Kinesiology
K409: Basic Physiology of Exercise Laboratory Coordinator
Spring 2020 (enrollment: 126)

Indiana University, Department of Kinesiology
K409: Basic Physiology of Exercise Lecture Teaching Assistant
Fall 2017 (enrollment: 75)

Indiana University, Department of Kinesiology
I133: Fitness and Jogging I
Fall 2017, Spring 2018, Fall 2018 (total enrollment: 79)

Indiana University, Department of Kinesiology
I187: Weight Training
Fall 2018 x 2, Fall 2021 (total enrollment: 67)

Indiana University, Department of Kinesiology
K212: Introduction to Exercise Science – Associate Instructor Fall 2019
(enrollment: 51), Spring 2020 (enrollment: 180), Spring 2022 (enrollment: 142)

Indiana University, Department of Kinesiology
K638: Biochemical Adaptations to Exercise –Teaching Assistant (graduate course)
Spring 2021 (enrollment: 4)

GUEST LECTURE EXPERIENCE

University of South Alabama, Department of Health, Kinesiology, and Sport
K201: Orientation to Kinesiology (Fall 2024, Spring 2025)

Indiana University, Department of Kinesiology

K409: Basic Physiology of Exercise
K212: Introduction to Exercise Science
K636: Cardio-Pulmonary Assessment Laboratory (graduate course)

FUNDING ACTIVITY

Research and Scholarly Development Grant 2024: \$25,000 (Unfunded)

Title: The Effect of Timed Restricted Eating with or without Intermittent Energy Restriction on Measures of Body Composition, Resting Energy Expenditure, and Blood Biomarkers Over 12 Weeks.
Role: Co-Principal Investigator

National Institute on Minority Health and Health Disparities of the National Institutes of Health: \$389,847 (January 2023 - July 2024)

Title: The Little Rock Green Schoolyard Initiative: Changing Community Norms and Improving Opportunities for Physical Activity. 1R01MD018192-01. Role: Key study personnel

Pharmalink: \$89,000 (January 2019 - July 2019)

Title: Effectiveness of a combined New Zealand green-lipped mussel and Antarctic krill oil supplement on markers of exercise-induced muscle damage and inflammation in untrained men. Role: Co-student investigator

CREDENTIALS

Registered Dietitian Nutritionist (RDN), Commission on Dietetic Registration, 2016 - Present
Licensed Dietitian Nutritionist (LDN), Medical Licensing Board of Indiana, 2016 - Present

SERVICE

Mentor: UAMS S.U.P.E.R Project, 2023 - 2024

Ad hoc reviewer: *International Journal of Exercise Science, Environment and Behavior, Journal of Dietary Supplements, PLOS One, American Journal of Physiology-Regulatory, Integrative and Comparative Physiology, Journal of School Health, Nutrients, Journal of the International Society of Sports Nutrition*

AWARDS, HONORS, and CERTIFICATIONS

Certified Personal Trainer – American College of Sports Medicine (2016 - 2019)
National Registry Food Safety Manager (2014 - 2019)
Opal G. Conrad Nutrition Scholarship Recipient – Indiana University (2014 - 2015)
Founders Scholar – Indiana University (2013 - 2016)
Academic Achievement Scholar Scholarship Recipient – Purdue University Calumet (2010 -2012)
CCAC All-Academic Selection Men's Golf Team Member – Purdue University Calumet (2011 - 2012)