

HEIDI LYNCH, PhD, RDN

Associate Professor, Kinesiology Department
Point Loma Nazarene University
3900 Lomaland Dr., San Diego, CA 92106
hlynch@pointloma.edu

EDUCATION

Doctor of Philosophy in Physical Activity, Nutrition, and Wellness; Arizona State University (ASU), August 2017

Master of Science in Nutrition, Arizona State University, May 2011

Bachelor of Science in Applied Health Science, Wheaton College, May 2007 (Cum Laude)

ACADEMIC APPOINTMENTS

Associate Professor, Department of Kinesiology, Point Loma Nazarene University, August 2020-present

Assistant Professor, Department of Kinesiology, Point Loma Nazarene University, August 2017-2020

Courses taught:

- *KIN 6026 Sport & Exercise Nutrition for Peak Performance*
- *KIN 6046 Clinical Exercise Physiology*
- *KIN 6050 Seminar in Kinesiology*
- *KIN 6060 Directed Readings*
- *KIN 6088 Internship in Kinesiology*
- *KIN 3040 Physiology of Exercise*
- *KIN 3030 Nutrition for Exercise & Sport Performance*
- *KIN 2030 Lifestyle as Medicine*
- *KIN 2000 Optimal Health*

Teaching Assistant, Department of Nutrition, Arizona State University, August 2014-May 2017

Courses taught:

- *NTR 445 Management of Food Service Systems labs, August 2014-2017*
- *NTR 142 Applied Food Principles labs, August 2014-December 2014*

Adjunct Instructor, Department of Food and Nutrition, Maricopa Community Colleges, Estrella Community College, August 2013-May 2104

Course taught:

- *FON 241 Principles of Human Nutrition (online)*

Adjunct Instructor, Department of Food and Nutrition, Maricopa Community Colleges, Mesa Community College, August 2013-May 2104

Course taught:

- *FON 241LL Principles of Human Nutrition*

Teaching Assistant, Department of Nutrition, Arizona State University, August 2009-May 2011

- *NTR 341 Introduction to Therapeutic Diets, January 2011-May 2011*
- *NTR 444 Medical Nutrition Therapy, January 2011-May 2011*
- *NTR 448 Community Nutrition, August 2009-May 2010*

PEER-REVIEWED PUBLICATIONS

Vento, K. A., Koskan, A., **Lynch, H.**, Kavouras, S., Johnston, C., & Wardenaar, F. C. (2022). Effect of increased water intake on uropathogenic bacterial activity of underhydrated menstruating young adult women: A randomized crossover trial. *Nutrition and Health*, 02601060221129159.

Messina, M., Duncan, A., Messina, V., **Lynch, H.**, Kiel, J., & Erdman, J. (2022). The health effects of soy: A reference guide for health professionals. *Frontiers in Nutrition*, 1837.

Berardy, A., Egan, B., Birchfield, N., Sabaté, J., & **Lynch, H.** (2022). Comparison of Plate Waste between Vegetarian and Meat-Containing Meals in a Hospital Setting: Environmental and Nutritional Considerations. *Nutrients*, 14(6), 1174.

Vento, K. A., Delgado, F., & **Lynch, H.** (2022). Lipid Profiles of College Female Student-Athletes Participating at Different Competition Levels of Organized Sport. *Frontiers in Sports and Active Living*, 4.

Vento, K., Miller, M., Graff, C., Olono, C., Bryant, J., **Lynch, H.** (2021). Quality of Life is Lowest Among Female Athletes at the Community College Compared to University Sport Levels. *Journal of Amateur Sport*, 7(2), 51-66.

Beezhold, E. J., Sawyer, B. J., & **Lynch, H. M.** (2020). Energy expenditure in a Syme's amputee triathlete. *Journal of Kinesiology & Wellness*, 9, 47-55.

Adger, K., & **Lynch, H.** (2020). Exercise in the management of postural orthostatic tachycardia syndrome. *Journal of Kinesiology & Wellness*, 9, 28-37.

Lynch, H. M., Buman, M. P., Dickinson, J. M., Ransdell, L. B., Johnston, C. S., & Wharton, C. M. (2020). No Significant Differences in Muscle Growth and Strength Development When Consuming Soy and Whey Protein Supplements Matched for Leucine Following a 12 Week Resistance Training Program in Men and Women: A Randomized Trial. *International journal of environmental research and public health*, 17(11), 3871.

Ciuris, C., **Lynch, H. M.**, Wharton, C., & Johnston, C. S. (2019). A comparison of dietary protein digestibility, based on DIAAS scoring, in vegetarian and non-vegetarian athletes. *Nutrients*, 11(12), 3016.

Lynch, H., Johnston, C., & Wharton, C. (2018). Plant-Based Diets: Considerations for Environmental Impact, Protein Quality, and Exercise Performance. *Nutrients*, 10(12), 1841.

Lynch, H., Uchanski, M., Patrick, M., & Wharton, C. (2018). Small Farm Sustainability in the Southwest: Challenges, Opportunities, and Best Practices for Local Farming in Arizona and New Mexico. *Food Studies*.

Messina, M., **Lynch, H.**, Dickinson, J. M., & Reed, K. E. (2018). No Difference Between the Effects of Supplementing With Soy Protein Versus Animal Protein on Gains in Muscle Mass and Strength in Response to Resistance Exercise. *International Journal of Sport Nutrition and Exercise Metabolism*, 1-36.

Lynch, H. M., Wharton, C. M., & Johnston, C. S. (2016). Cardiorespiratory fitness and peak torque differences between vegetarian and omnivore endurance athletes: A cross-sectional study. *Nutrients*, 8(11), 726.

OTHER PUBLICATIONS

Guest, N. & **Lynch, H.** Plant-based diets and athletic performance. (2021). *Aspetar Journal*, 10(22), 12-16.

BOOK CHAPTERS

Lynch H, Berardy A, Wharton C. Food production and dietary patterns. In: Sabate J, ed. *Environmental Nutrition*. United Kingdom: Elsevier Academic Press; 2019: 101-122.

Berardy A, **Lynch H,** Wharton C. Food systems: Descriptions and trends. In: Sabate J, ed. *Environmental Nutrition*. United Kingdom: Elsevier Academic Press; 2019: 27-40.

ACADEMIC PRESENTATIONS

Invited oral presentation: "Plant-based diets for human and planetary health." **Lynch, H.** Presented at the 3rd Global Congress on Climate Change (GCCC), virtual location (recorded presentation) selected (in-person option was in Spain); September 2023.

Invited oral presentation: "The Role of Alternative Protein Sources in Addressing World Hunger." **Lynch, H.** Presented at the American Chemical Society (ACS) fall meeting, San Francisco, CA; August 2023. (presented live virtually due to health)

"Validation and application of the Vegan & Vegetarian Athlete's Plate". **Lynch, H.,** Valarezo, M., Wilhite C., Prien, B., Kave, H., Airi, S., Albert, L., Harris, M., Reguant-Closa, A., Kluge, M.A., Meyer, N. Free communication/poster. Presented at the American College of Sports Medicine (ACSM) annual meeting, Denver, CO; June 2023.

"The validation of the Vegan/Vegetarian Athlete's Plate® as a nutrition education tool." Free communication/poster. Meyer, N.L., Albert, L., Prien, B., Kave, H., Airi, S., Reguant-Closa, A., **Lynch, H.,** and Harris, M. Presented at the ACSM annual meeting, Denver, CO; June 2023.

"Soy protein and muscle growth [voiceover PowerPoint presentation in lieu of in-person oral presentation due to COVID-19]." **Lynch H.** Presented at the Korean Society Food Science & Technology conference, virtual location; June 2021.

"Plant-based diets: what are they, and why should athletes care? [oral presentation as part of multi-presenter symposium]." **Lynch H.** Presented at the Southwest American College of Sports Medicine (SWACSM) annual meeting, Costa Mesa, CA; October 2020.

"The Effects of High Intensity Interval Training Versus Moderate Intensity Continuous Training on Energy Compensation [voiceover PowerPoint presentation in lieu of in-person oral presentation due to COVID-19]." Pattison K, Dowden E, Beaver B, Barragan J, **Lynch H,** Sawyer B. Presented at the American College of Sports Medicine (ACSM) annual meeting, virtual location; June 2020.

"An Evaluation of Physical Health, Dietary Habits, Nutrition Knowledge, and Quality of Life in Female Collegiate Soccer Players [poster presentation]." Graff C, Bryant J, **Lynch H.** Presented at the SWACSM annual meeting, Newport Beach, CA; October 2019.

"Energy Expenditure in Para-Athletes during Exercise and Rest [poster presentation]." Beezhold E, Sawyer B, **Lynch H.** Presented at the SWACSM annual meeting, Newport Beach, CA; October 2019.

“Plant-based diets and athletic performance: the current state of the evidence [oral presentation].” **Lynch H.** Presented at the Functional Foods Conference, San Diego, CA; May 2019.

“Physical Health, Nutrition Knowledge, Food Consumption, and Quality of Life of Female Collegiate Runners [poster presentation].” Miller M, Alvar B, Ganz S, **Lynch H.** Presented at the Sports, Cardiovascular, and Wellness Nutrition (SCAN) Symposium, Phoenix, AZ; April 2019.

“Changes in energy and macronutrient intake after exercise interventions: Is there a compensatory drive to eat? [oral presentation, part of 3-person symposium called “Energy Compensation and Exercise”].” Schubert M, **Lynch H,** Sawyer B. Presented at the SWACSM annual meeting, Costa Mesa, CA; October 2018.

“High-Intensity Interval Training and Moderate-Intensity Continuous Training Effects on Energy Intake among Compensators [poster presentation].” Beaver B, Pattison K, Dowden E, Sawyer B, Aguinaldo A, **Lynch H.** Presented at the SWACSM annual meeting, Costa Mesa, CA; October 2018.

“Muscle growth and strength development following a 12-week resistance training program are similar between young men and women consuming soy or whey protein supplements matched for leucine content [poster presentation].” **Lynch H,** Johnston C, Dickinson J, Buman M, Ransdell L, Swan P, Wharton C. Presented at the SWACSM annual meeting, Long Beach, CA; October 2017.

“Nutrient intake differences between vegetarian and omnivore endurance athletes [poster presentation].” **Lynch H,** Johnston C, Wharton C. Presented at the SWACSM annual meeting, Costa Mesa, CA; October 2016.

“Diet and performance: a comparison between vegetarian and omnivore endurance athletes [poster presentation].” **Lynch H,** Johnston C, Wharton C. Presented at the SCAN Symposium, Portland, OR; April 2016.

“Food system sustainability in the southwest: Developing a regional action plan to enhance resilience, livelihoods, and food security across New Mexico and Arizona [oral presentation].” Uchanski M, **Lynch H.** Presented at the Agriculture, Food, and Human Values Society (AFHVS) annual meeting, Chatham University, PA, June 2015.

“Salivary cortisol response to familiar and unfamiliar exercise at the same intensity for the same duration [poster presentation]” Dooyema K, **Lynch H,** Davies M, Ianuzzo D. Presented at the Midwest ACSM annual meeting, Ball State University, IN, September 2005.

OTHER PRESENTATIONS

“Basketball nutrition.” Presented to women’s basketball team, October 20221.

“Plant-based eating for anyone.” Presented at a Lunch N Learn for faculty and staff at Point Loma Nazarene University (PLNU), September 2018.

“Effects of a plant-based dietary intervention on cardiovascular health biomarkers [oral presentation].” Presented at PLNU faculty development/scholarship day, August 2018.

“Introduction to Sports Nutrition.” Presented to 100 visiting coaches from China at Arizona State University, September 2016.

“Fitness and strength: a comparison between vegetarian and omnivore endurance athletes.” Presented

to 100 visiting coaches from China at Arizona State University, November 2016.

GRANTS RECEIVED

\$3,000 Wesleyan Center grant, Spring 2020

6-unit course release from the Wesleyan Center grant, Spring 2019

\$2,000 RASP grant, Spring 2019

\$2,000 RASP grant, Spring 2018

\$950 GPSA Individual Travel Grant, Fall 2016

\$3,500 Graduate and Professional Student Association (GPSA) Athletics Research Grant (Terminal Research), Spring 2016

\$950 GPSA Individual Travel Grant, Spring 2016

\$2,500 SCAN Graduate Student Research Grant, Spring 2016

\$850 GPSA Individual Travel Grant, Spring 2015

\$1,500 GPSA Athletics Research Grant (Independent Research), Spring 2015

\$5,000 Outward Focused Grant, Redemption Church, Spring 2015

\$500 GPSA Jumpstart Award, Fall 2014

CONSULTING WORK

Content expert on nutrition and sustainability hired by Farrelly & Mitchell for writing white paper for NEOM, January-May 2022.

Speaker for 2021 Korean Society Food Science & Technology conference, sponsored by US Soybean Export Council

HONORS AND AWARDS

ASU School of Nutrition and Health Promotion Charles Corbin Award, 2017

Recognizes excellence in research, teaching, and service among graduates from the Physical Activity, Nutrition and Wellness (now Exercise and Nutrition Sciences) PhD program at ASU

ASU GPSA Teaching Excellence Award, 2016

Recognizes excellence in graduate student teaching across all disciplines on all of ASU's campuses

Vegetarian Nutrition Dietetics Practice Group (VN DPG) Cindi Reeser State Coordinator of the Year Award, 2016

Recognizes an individual who has demonstrated outstanding leadership and service as a state coordinator for the VN DPG and who has made exceptional contributions toward the promotion of vegetarian nutrition throughout the year

ASU SunAward, 2015

Granted by Ms. Jacquelyn Ries for assisting with ASU event “More to Explore” for accepted applicants considering ASU’s School of Nutrition and Health Promotion

Wheaton College LaVern Bjorklund Wellness Award, 2007

Given by the Applied Health Science (AHS) Department at Wheaton College to an AHS senior who demonstrates notable leadership in developing healthy lifestyle habits in both self and others and shows excellent promise in contributing to society in the area of wellness.

SERVICE

Departmental:

- Department chapel planning committee, 2022-present
- Assessment committee, 2018-2022
- Search committee for department tenure-track positions, 2017-2018

University:

- Faculty development committee, 2020-2023
 - Past chair, academic year 2022-2023
 - Chair, academic year 2021-2022
 - Chair elect, academic year 2020-2021
- Faculty governance committee, 2019-2020
- Faculty ethos committee, 2018-2019
- Lunch N Learn presentation, “Plant-based eating for anyone”, September 2018.
- PLNU faculty development/scholarship day presentation, “Effects of a plant-based dietary intervention on cardiovascular health biomarkers [oral presentation],” August 2018.
- Have met with PLNU student athletes individually about developing a personal nutrition plan for sport performance.

External Service:

- Guest co-editor of topical collection for *Nutrients* on “Plant-Based Diets in Sports Nutrition and Performance”, May 2023-present
- Reviewer for chapter 16 (vegetarian athletes) in the Academy of Nutrition and Dietetics’ textbook *Sport Nutrition (7th ed)* (March 2023)
- Review Editor on the Editorial board of Sport and Exercise Nutrition (specialty section of *Frontiers in Nutrition* and *Frontiers in Sports and Active Living*, 2020-present.
- **Manuscript reviewer for peer-reviewed journals**, 2017-present
 - *Journal of Nutrition*
 - *Nutrients*
 - *Sustainability*
 - *Trends in Food Science & Technology*
 - *International Journal of Environmental Research and Public Health*
 - *Sports Health: A Multidisciplinary Approach*
 - *BMC Nutrition*
 - *European Journal of Clinical Nutrition*

Media presence:

- Email interview by Jacob Sanders for WalletHub.com about vegetarian and vegan nutrition, 9/9/2022
- Phone interview by Catherine Guthrie for *Experience Life* (magazine for Lifetime Fitness) about plant-based protein and athletic performance, 1/31/2022

- Radio interview with Dr. Ira on SiriusXM110 about vegetarian diets and athletic performance, 12/12/2017

Church Service:

- Nursery volunteer, 2022-present
- Elder (served on “Session”) at Covenant Church, April 2020-December 2021.
- Greeter at Covenant Church (<https://www.covenantsd.org/>), 2018-2020
- Presented on September 22, 2019 about sustainability and environmental nutrition and how these topics relate to Christianity

Previous Service:

- Professionals in Nutrition for Exercise & Sport (PINES) Board Member, Education Subcommittee, January 2020-December 2021
- SCAN DPG Symposium Planning Committee, February 2018-May 2019
- Vegetarian Nutrition (VN) Dietetics Practice Group (DPG) Public Policy Committee Member, August 2019-February 2021
- Arizona’s VN DPG State Coordinator, January 2015-2017
- Member of Physical Activity, Nutrition, and Wellness Graduate Club, 2014-2017
Attend monthly meetings and participate in service activities
- Volunteer for ASU’s GPSA, 2015-2016
- Member of GPSA’s Wellness Team, 2015-2016
- Sun Devil Fitness Research Grant Reviewer, February 2015
- Member of Active@ASU, 2015-2016

PLNU GRADUATE AND UNDERGRADUATE MENTORSHIP

Graduate Committee Chair: Theses for MS in Kinesiology

- Lucia Gutierrez, 2021-2022, title TBD but related to dietary compensation after different types of exercise
- Kristen Lifter, 2017-2020, “Plant-based Dietary Intervention Effects on Cardiovascular Risk Factors, The Lipid Profile”
- Breanna Beaver, 2017-2018, “Comparing the Effects of High-Intensity Interval Training with Moderate-Intensity Continuous Training on Energy Intake among Compensators”
- Rachel Miller, 2017-2018, “Effects of 12-week plant-based diet intervention on blood pressure and glycemia”

Graduate Committee Member: Theses for MS in Kinesiology

- Sophie Mirth, 2021-2022, title TBD but related to physiological responses to different types of exercise
- Brendan Weir, 2021-2022, title TBD but related to firefighter health and fitness
- Michaela Banyi, 2020-2021, “Perception of Depression, Anxiety, and Stress in Student-Athletes Before and After Return to Campus Following COVID-19 Induced Social Isolation”
- Kirsten Thornhill, 2018-2019, “Reliability of a Submaximal Cycle Ergometer Verification Phase to Confirm VO2max”
- Jacob Castano, 2017-2019, “The Effects of High-Intensity Interval Exercise on Post-Exercise Hypotension”
- Kai Pattison, 2017-2018, “The effects of high intensity interval training versus continuous moderate intensity exercise on energy compensation”

Graduate Capstone Project Mentor for MS in Kinesiology

- Lauren Yowell, 2022-2023, “Nourishing Minds: Exploring Impacts of Food Security on College

Students”

- Jason Pena, 2022-2023, “Education About Interval Training for Cardiac Rehabilitation Patients”
- Alli Kim, 2022-2023, “A Guide to Implementing an Exercise Is Medicine Program at a Small, Private University”
- Carol Kim, 2021-2022, “The American College of Sports Medicine Exercise is Medicine on Campus, Health Initiative at Point Loma Nazarene University”
- Danielle Delgado, 2020-2021, “Patient Ethnicity and Language: Referral Bias in Cardiac Rehabilitation”
- Kiara Edwards, 2020-2021, “Atrial Fibrillation and the Endurance Athlete”
- Rachel Jensen, 2020-2021, “The Effect of Virtual Plant-Based Nutrition Education on Consumption of Fruits, Vegetables, Whole Grains, and Plant Protein in Elementary School Students”
- Brianna Lee, 2019-2020, “Effect of a Self-Reported Walking Regimen to Improve Fasting Blood Glucose in Men: A Retrospective Cohort Study”
- Lawrence Rosales, 2019-2020, “Blood Flow Restriction Training and Its Effects on the Quadriceps Muscle Function Post Anterior Cruciate Ligament Reconstructive Surgery: A Systematic Review”
- Jessica Chaney, 2019-2020, “Factors Linked to Stress Related Injuries in Female Collegiate Cross-Country Runners”
- Carly Graff, 2018-2019, “An Evaluation of Physical Health, Nutrition Knowledge, Dietary Habits, and Quality of Life in Collegiate Athletes”
- Erin Beezhold, 2018-2019, “A Field Observation of Energy Expenditure in a Physically Disabled Athlete at Rest and During Exercise: A Case Study”
- Cassandra Adger, 2018-2019, “Exercise in the Management of Postural Orthostatic Tachycardia Syndrome”
- Christine Ngo, 2018-2019, “Changes in Lipid Profiles among Patients in Phase Two of Cardiac Rehabilitation”
- Gabby Abalos, 2018-2019, “Sodium and Potassium Intake and Changes in Blood Pressure in Cardiac Rehabilitation Patients”

Undergraduate Honors Committee Chair

- Lucas Mar, 2022-2023, “The Role of the Healthcare Practitioner in the Promotion of Physical Activity”
- Cailey Olono, 2020-2021, “Creation of an Educational Tool for the Vegetarian and Vegan Athlete’s Plates”
- Crisel Magyawi, 2020 “Knowledge and Beliefs About Vegetarian and Vegan Diets Among Undergraduate Students At PLNU”
- Megan Miller, 2018-2019, “Physical Health, Nutrition Knowledge, Food Consumption, and Quality of Life in Female Collegiate Runners”

Undergraduate Honors Committee Member

- Jacob Barragan, 2018-2019, “The Effects of High-Intensity Interval Training versus Moderate-Intensity Continuous Training on Maximal Oxygen Uptake in Sedentary Adults”

EXTERNAL GRADUATE STUDENT MENTORSHIP

Dissertation committee member for Kaila Vento. Dissertation title, “Urinary Tract Health Biomarkers: Effects of Increased Water Consumption of Underhydrated Menstruating ROTC Cadets”. Arizona State University. PhD advisor: Dr. Floris Wardenaar. Anticipated graduation: Spring 2022.

Dissertation reader for Alba Reguant Closa. Dissertation title, “The Integration of Environmental

Sustainability in the Athlete's Plate Nutrition Educational Tool." University of Andorra. PhD advisor: Dr. Nanna Meyer (University of Colorado Colorado Springs). Spring 2020

MS thesis reader for Krista Reed. Thesis title, "Are there differences between strength-trained women following plant-based versus omnivorous diets? A pilot study examining anaerobic fitness, strength, body composition, and physical activity." Thesis advisor: Dr. Matthew Schubert California State University San Marcos. Spring 2019.

TRAINING EXPERIENCE

National Institutes of Health (NIH) Office of Dietary Supplements (ODS) Mary Frances Picciano Dietary Supplement Research Practicum attendee, June 7-9, 2016

PROFESSIONAL EXPERIENCE

Registered Dietitian, Uhling Consulting, June 2013-August 2014

Dietetic Internship, Arizona State University, August 2012 – April 2013

Physical Therapy Technician, The Orthopedic Clinic Association (TOCA) Physical Therapy, August 2011-August 2012

PROFESSIONAL MEMBERSHIPS AND CERTIFICATIONS

- Member, Professionals in Nutrition for Exercise and Sport (PINES), 2017-present
 - Educational officer, January 2020-December 2021
- Member, ACSM, 2006-present
 - Member, Southwest ACSM, 2015-present
- Member, Academy of Nutrition and Dietetics (AND), Registration ID Number 86030072, 2012-present
 - Member, AND VN DPG, 2014-present
 - Member, AND SHPN (Sports & Human Performance Nutrition) DPG (formerly SCAN), 2013-present