Department of Exercise Science
Research Projects

Current Research

Dose Response Effects of an Exogenous Ketone Supplement on Running and Cognitive Performance
Philip Prins, Andrew Koutnik; Dominic D’Agostino; Christopher Rogers; Jeff Buxton; Dana Ault; Emilia England; Sarah Haley; Samuel Henson

The Effects of a Novel Ground-based Movement Training Program on Functional Movement, Range of Motion, and Muscular Strength and Endurance
Jeff Buxton, Mike Miller, Philip Prins, Anthony Moreno, Adam Atwell, Tirzah Talampas, Gretchen Elsey, Joseph Meola, Caleb Bish

The Effects of Fasting on Anaerobic Power Performance in College Football Players
Jackie Abraham, Nicolette Anton, Rachel Martin, Tyler Rose

Comparing the Acute Durational Effects of Static Stretching and Banded Joint Distraction on Ankle Range of Motion
Ellen Albers, Grace Keibler, Kate Lonergan, Jacob Ross

Acute Effects of Maximal Long Duration Yielding Isometric and Dynamic Training on Brain Activity
John Gould, Jackson Miller, Quinn Walker, Tabitha White

Past Research

Pre-season Changes in Performance in Collegiate Women Tennis Players published in the Journal of Sport and Human Performance
Prins, P., McMillan, J., Joyner, B., Scott, M., Roorda, A., & Rossi, S

The Effect of Lower Body Power Training on the Speed, Strength, and Agility of Amateur Level Fencers
Caleb Thrasher, Baylie Jones, Khalil Ervin, Bowen Dyson and Faith Gregorchik

Comparing the Effects of Self-Myofascial Release and Dynamic Stretching in Collegiate Basketball Players’ Flexibility
Ashley Sealander, Jane Kramer, Christian Locher, Mitch Marmelstein

Effect of Kinesio Taping on Force Production during Isometric Contraction of the Biceps Brachii presented at the American College of Sports Medicine Mid Atlantic Regional Conference
Hannah Arisman, Chris Curran, Cayley McClean, Bethany Nelms

The Effects of Hydration Status on Rating of Perceived Exertion
Richie Kocur, Megan Rowley, Fleming Saunders, Bobby Schmidt

Acute Effects of an Intense Anaerobic Exercise on Cognitive Performance in College-Aged Students as Measured by the Stroop Test
Matthew Jockers; Brandon Miller; Tiffany Yost

The Effects of a Caffeine Deception on RPE, Affect and Time in a Time to Exhaustion Test
Sarah Trisler, Natalie Sorek, and Mark Barakat

The Effects of Chocolate Milk on Bicep Recovery Post Resistance Training
Kaitlin Stewart, Lauren Cassano, Maddie Zajicek, Johnny Hansen, Ausinette Rodriguez

The Acute Effect on Cognitive Function after Light, Moderate, and High Intensity Aerobic Exercise in College-Aged Students
Erica Gmuer, Jocelyn Hinkle, Garret Keibler, and Aaron Putinski
Leg Press Rest Intervals of One, Three, and Five Minutes in Collegiate Basketball Players presented at the American College of Sports Medicine Mid Atlantic Regional Conference
Keegan Reed, Caleb McKusick, Marie Carroll, Ellen Glenn

Effects of Strength-Based Versus Hypertrophy-Based Lower Body Exercise Programs on Vertical Jump and 40 Yard Dash
Robert Rollick, Jake Johnston, Hayden Faust, Jason Glacken

Energy Drinks Improve Five-Kilometer Running Performance in Recreational Endurance Runners published in the Journal of Strength and Conditioning Research
Philip J. Prins, Fredric L. Goss, Elizabeth F. Nagle, Kim Beals, Robert Robertson, Mita Lovalekar, Gary L. Welton

Effects of Caffeine Ingestion on Sport Specific Field Tests of Anaerobic Power
Laura Smith, Josh Hodges, Tyler Campbell, Nate Weiland

Using the Functional Movement Screen to Evaluate the Effectiveness of Different Recreational Training Modalities
Claudia Bennett, Alex Jewell, Joy Weingartner, Adam Shick, Nick Weigle

The Effect of Music Genre on 5-km Running Performance
Jenna Craft, Isaiah Reeves, Kate Albers, Kara Attleson, Alexis Brooks

The Effect of Two Carbohydrate Supplementation Protocols on 5-km Running Performance
Slater Simek, Lukas Toburen, Dave Hall, Chad Knox

The Effects of Fasting vs Non-Fasting in the One Mile
Mary Frank, Jessica Rolando, Ethan Turner

The Effects of HIT (High Intensity Training) on Mood
Grace Majchrowicz, Nikki Enas, Holly Kennell

The Effects of Powerlifting on Vertical Jump in Basketball and Volleyball Players
Luke Brancato, Jeremy Kim, Josh Walter

Observer Estimation of OMNI Scale RPE during Fire Suppression Using Video-Graphic Analysis published in the Journal of Sport and Human Performance
Philip Prins, Gary Welton, Fredric Goss

Reliability and Accuracy of a Standardized Shallow Water Running Test to Determine Cardiorespiratory Fitness
Nagle, EF, Sanders, ME, Gibbs, BB, Franklin, BA, Nagle, JA, Prins, PJ, Johnson, CD, and Robertson, RJ

Effects of Energy Drink Functional Ingredients on Running Performance published in the Journal of Exercise and Nutrition
Philip J. Prins, Gary L. Welton, Edward J. Ryan, Catherine G. Majchrowicz, Jessica C. Althausen, Julie A. Fijal, Natalie X. Sorek, and Teresa M. Dallatore, Dana L. Ault

The Effect of Differing Fluid Replacement Strategies on Running Performance presented at the American College of Sports Medicine Mid Atlantic Regional Conference
Jake Gordon, Meghann Healey, Erin Koehler, Marisa Tonkovich, and Stef Wendelschaefer

The Effects of Various Self Myofascial Release Modalities on Anaerobic Sports Performance and Functional Movement in NCAA Division III Soccer Players presented at the American College of Sports Medicine Mid Atlantic Regional Conference
Jessica Althausen, Teresa Dallatore, Julie Fijal, Kara Heckman, Lydia Keiper

Examining the Relationship between Dietary Behaviors and Cardiorespiratory Fitness on Body Composition and Metabolic Syndrome among NCAA Division III Football Players
Kristen Broadt, Charity Gibbs, Rachel Kenney, Kelly McCosby, and Joanna Schwab

Effects of Dynamic Stretching and Proprioceptive Neuromuscular Facilitation on Lower Body Performance
Linowski, H., Niehaus H., Nunkovich N., Rogalski J., Zajicek M.

Effects of Different Exercise Modalities, and a Comparison of Gender, on Executive Cognition Function presented at the American College of Sports Medicine Mid Atlantic Regional Conference
*Dana Ault, Ph.D., Philip J. Prins, Ph.D., Kris Homan, Ph.D., Erin Koehler, Rachel Kenney, Ethan Turner, Stefani Wendelschaefer, Nathanael Sprunk, Jessica Rolando*

Effects of an Exogenous Ketone Supplement on Running Performance presented at the American College of Sports Medicine Mid Atlantic Regional Conference and in review in the Journal of Strength and Conditioning Research
*Philip Prins, Andrew Koutnik, Dominic D’Agostino, Christopher Rogers, Jacob Seibert, Jillian Breckenridge, Daniel Jackson*

**The Effect of Caffeine Alone or as Part of a Multi-ingredient Pre-workout Supplement on Muscular Endurance in Recreationally Active College Males** published in the Journal of Exercise and Nutrition
*Phillip J. Prins, Edward J. Ryan, Nathanael J. Sprunk, Erin M. Green, David M. Jeffries, Jeffrey D. Buxton*

The Effect of a Three-Week 16/8 Time-Restricted Feeding Protocol on Executive Functioning, Body Composition, and Cardiometabolic Health in Apparently Healthy Normal Weight Individuals presented at the American College of Sports Medicine Mid Atlantic Regional Conference
*Lauren Hughes, Mary Shannon, Christy Zimmerman*

Association between Macronutrient Intake, Cardiometabolic Profile, and Telomere Length among Overweight and Obese Adults
*Philip Prins, Ph.D., Dana Ault, Ph.D., Heather Barton, Ph.D., Gary Welton, Ph.D., Daniel Jackson, Nicholas Ninkovich, Kate Albers, Jake Gordon, Christy Zimmerman, Kara Heckman, Joanna Schwab, Lauren Hughes, Meghann Healy, Erin Koehler*

The Effects of a Low Carbohydrate Ketogenic Diet versus a High Carbohydrate Diet on Physical Performance, Exercise Metabolism, Cardiometabolic Health, and Cognitive Function in Male Recreational Endurance Runners in review at the British Journal of Sports Medicine
*Philip Prins, Ph.D., Timothy Noakes, MBChB, MD, DSc, PhD, FACSM, FFSEM; Dana Ault, Ph.D.; Jeff Buxton, MS, NASM, PES, ACE, CPT, FMS; Gary Welton, Ph.D.; Amy Raabe, MS, RDN, LDN; Ellen Albers; John Gould; Katharine Lonergan; Rachel Martin; Mary Shannon; Joshua McElrone*