



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

Phillip 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