

## Publikationsliste

Veröffentlichungen in internationalen, begutachteten Zeitschriften in chronologischer Reihenfolge

### Originalarbeiten - Erst- / Seniorautorenschaften

1. **Krieg A**, Meyer T, Clas S, Kindermann W. Characteristics of inline speedskating - incremental tests and effect of drafting. *Int J Sports Med*, 2006;27(10):818-23.
2. **Krieg A**, Scharhag J, Albers T, Kindermann W, Urhausen A. Cardiac tissue Doppler in steroid users. *Int J Sports Med*, 2007;28(8):638-43.
3. **Hecksteden A**, Grutters T, Meyer T. Associations between Acute and Chronic Effects of Exercise on Indicators of Metabolic Health: A Pilot Training Trial. *PLoS One*, 2013;8(11):e81181.
4. **Hecksteden A**, Grutters T, Meyer T. Association between postexercise hypotension and long-term training-induced blood pressure reduction: a pilot study. *Clin J Sport Med*, 2013;23(1):58-63.
5. **Hecksteden A**, Wegmann M, Steffen A, Kraushaar J, Morsch A, Ruppenthal S, Kaestner L, Meyer T. Irisin and exercise training in humans –Results from a randomized controlled training trial. *BMC Med*, 2013;11(1):235.
6. Backes C, Leidinger P, Keller A, Hart M, Meyer T, Meese E, **Hecksteden A**. Blood Born miRNAs Signatures that Can Serve as Disease Specific Biomarkers Are Not Significantly Affected by Overall Fitness and Exercise. *PLoS One*, 2014;9(7):e102183. (geteilte Seniorautorenschaft)
7. Egger F, Meyer T, Such U, **Hecksteden A**. Effects of Sodium Bicarbonate on High-Intensity Endurance Performance in Cyclists: A Double-Blind, Randomized Cross-Over Trial. *PLoS One*, 2014;9(12):e114729.
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9. **Hecksteden A**, Heinze T, Faude O, Kindermann W, Meyer T. Validity of Lactate Thresholds in Inline Speed Skating. *J Strength Cond Res*, 2015;29(9):2497-502.
10. Egger F, Meyer T, **Hecksteden A**. Interindividual Variation in the Relationship of Different Intensity Markers-A Challenge for Targeted Training Prescriptions. *PLoS One*, 2016;11(10):e0165010.
11. **Hecksteden A**, Leidinger P, Backes C, Rheinheimer S, Pfeiffer M, Ferrauti A, Kellmann M, Sedaghat Hamedani F, Meder B, Meese E, Meyer T, Keller A. miRNAs and sports: tracking training status and potentially confounding. *J Transl Med*, 2016;14(219) <https://doi.org/10.1186/s12967-016-0974-x>
12. **Hecksteden A**, Skorski S, Schwindling S, Hammes D, Pfeiffer M, Kellmann M, Ferrauti A, Meyer T. Blood-Borne Markers of Fatigue in Competitive Athletes - Results from Simulated Training Camps. *PLoS One*, 2016;11(2):e0148810.
13. Makhro A, Haider T, Wang J, Bogdanov N, Steffen P, Wagner C, Meyer T, Gassmann M, **Hecksteden A**, Kaestner L, Bogdanova A. Comparing the impact of an acute exercise bout on plasma amino acid composition, intraerythrocytic Ca<sup>2+</sup> handling, and red cell function in athletes and untrained subjects. *Cell Calcium*, 2016 24;60(4):235-44. (geteilte Seniorautorenschaft)
14. **Hecksteden A**, Pitsch W, Pfeiffer M, Kellmann M, Ferrauti A, Meyer A. A new method to individualize monitoring of muscle recovery in athletes *Int J Sports Physiol Perform*, 2017 ;12(9):1137-1142
15. Beaudouin F, Joerg F, Hilpert A, Meyer T, **Hecksteden A**. Carbohydrate intake and training efficacy – a randomized cross-over study. *J Sports Sci*, 2017 28:1-7
16. Julian R, Meyer T, Fullagar HH, Skorski S, Pfeiffer M, Kellmann M, Ferrauti A, **Hecksteden A**. Individual Patterns in Blood-Borne Indicators of Fatigue Trait or Chance. *J Strength Cond Res*, 2017;31(3):60819.
17. **Hecksteden A**, Pitsch W, Scharhag F, Meyer T. Repeated testing for the assessment of individual response to exercise training. *J Appl Physiol*, 2018;124(6):1567-79.
18. Werner C, **Hecksteden A**, Morsch A, Zundler J, Wegmann M, Kratzsch J, Thiery J, Hohl M, Bittenbring

- J, Neumann F et al. Differential effects of endurance, interval and resistance training on telomerase activity and telomere length in a randomized, controlled study. *Eur Heart J*, 2019;40(1):34-46. (geteilte Erstautorenschaft)
19. Barth V, Kasbauer H, Ferrauti A, Kellmann M, Pfeiffer M, **Hecksteden A**, Meyer T. Individualized Monitoring of Muscle Recovery in Elite Badminton. *Front Physiol* 2019; 10: 10.3389/fphys.2019.00778 (geteilte Seniorautorenschaft)
  20. Ludwig N, **Hecksteden A**, Kahraman M, Fehlmann T, Laufer T, Kern F, Meyer T, Meese E, Keller A, Backes C: Spring is in the air: seasonal profiles indicate vernal change of miRNA activity. *RNA Biol*, 2019;16(8):1034-1043. (geteilte Erstautorenschaft)
  21. **Hecksteden A**, Meyer T. Blood-borne fatigue markers during major international football tournaments a retrospective analysis of data from the FIFA World Championships and UEFA European Championships 2006 – 2016. *Sci Med Football*, 2020;4(2):135-141.
  22. **Hecksteden A**, Skorski S, Egger F, Buder F, Kellner R, Meyer T. Dwarfs on the shoulders of giants: Bayesian analysis with informative priors in elite sports research and decision making. *Frontiers in Sports and Active Living*. 2022(4): doi: 10.3389/fspor.2022.793603
  23. **Hecksteden A**, Schmartz G, Egyptien Y, aus der Fünten K, Keller A, Meyer T: Forecasting football injuries by combining screening, monitoring and machine learning. *Sci Med Football*. 2022. Epub ahead of print. doi: 10.1080/24733938.2022.2095006 (geteilte Erstautorenschaft)
  24. **Hecksteden A**, Hoppstadter J, Bizjak DA, et al. Effects of acute exercise and training status on glucocorticoid-induced leucine zipper (GILZ) expression in human skeletal muscle. *Journal of Science and Medicine in Sport*. 2023; in press.

#### Originalarbeiten - Co-Autorenschaften

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2. Backes M, Berrang P, **Hecksteden A**, Humbert M, Keller A, Meyer T. On Epigenomic Privacy: Tracking Personal MicroRNA Expression Profiles over Time. *UEOP 2016*; affiliated with NDSS Vol 16 2016.
3. Bohm P, **Hecksteden A**, Meyer T. Impact of a Short-Term Water Abstinence on Airway Hyperresponsiveness in Elite Swimmers. *Clin J Sport Med*, 2017 ;27(4):344-8.
4. Freis T, **Hecksteden A**, Such U, Meyer T. Effect of sodium bicarbonate on prolonged running performance: A randomized, double-blind, cross-over study. *PLoS One*, 2017;12(8):e0182158.
5. Julian R, **Hecksteden A**, Fullagar HH, Meyer T. The effects of menstrual cycle phase on physical performance in female soccer players. *PLoS One*, 2017;12(3):e0173951.
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7. Kern F, Ludwig N, Backes C, Maldener E, Fehlmann T, Suleymanov A, Meese E, **Hecksteden A**, Keller A, Meyer T: Systematic Assessment of Blood-Borne MicroRNAs Highlights Molecular Profiles of Endurance Sport and Carbohydrate Uptake. *Cells* 2019, 8(9).
8. Fehlmann T, Kahraman M, Ludwig N, Backes C, Galata V, Keller V, Geffers L, Mercaldo N, Hornung D, Weis T, Kayvanpour E, Abu-Halima M, Deuschle C, Schulte C, Suenkel U, von Thaler A, Maetzler W, Herr C, Fahndrich S, Vogelmeier C, Guimaraes P, **Hecksteden A**, Meyer T, Metzger F, Diener C, Deutscher S, Abdul-Khaliq H, Stehle I, Haeusler S, Meiser A, Groesdonk H, Volk T, Lenhof H, Katus H, Balling R, Meder B, Kruger R, Huwer H, Bals R, Meese E, Keller A. Evaluating the Use of Circulating

- MicroRNA Profiles for Lung Cancer Detection in Symptomatic Patients. *JAMA Oncol* 2020; 10.1001/jamaoncol.2020.0001
9. Hoppstadter J, Valbuena Perez J, Linnenberger R, Dahlem C, Legroux T, **Hecksteden A**, Tse W, Flamini S, Andreas A, Herrmann J, Herr C, Muller R, Meyer T, Bals R, Riccardi C, Bruscoli S, Kiemer A. The glucocorticoid-induced leucine zipper mediates statin-induced muscle damage. *FASEB J* 2020;34(3):4684-4701.
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  11. Ruf L, Cumming S, Härtel S, **Hecksteden A**, Drust B, Meyer T. Construct validity of percentage of predicted adult height and BAUS skeletal age to assess biological maturity in academy soccer. *Annals of Human Biology*. 2020;48(2):101-9. doi: 10.1080/03014460.2021.1913224.
  12. Held S, **Hecksteden A**, Meyer T, Donath L. Improved strength and recovery after velocity-based training: A randomized controlled trial. *Int J Sports Physiol Perform*, 2021 Aug 1;16(8):1185–1193.
  13. Poppendieck W, Wegmann M, **Hecksteden A**, Darup A, Schimpchen J, Skorski S, Ferrauti A, Kellmann M, Pfeiffer M, Meyer T. Does Cold-Water Immersion After Strength Training Attenuate Training Adaptation? *Int J Sports Physiol Perform*. 2021 Feb 1;16(2):304-310.
  14. Neuloh J, Skorski S, Mauger L, **Hecksteden A**, Meyer T. Analysis of end-spurt behaviour in elite 800-m and 1500-m freestyle swimming. *Eur J Sport Sci*. 2021;21(12):1628-1636
  15. Julian R, Skorski S, **Hecksteden A**, Pfeifer C, Bradley PS, Schulze E, et al. Menstrual cycle phase and elite female soccer match-play: influence on various physical performance outputs. *Sci Med Football*. 2021;5(2):97-104.
  16. Jaques M, Landen S, Alvarez Romero J, Yan X, Garnham AP, Hiam D, Siegwald M, Mercier E, **Hecksteden A**, Eynon N, Voisin S. Individual physiological and mitochondrial responses during 12 weeks of intensified exercise. *Physiological reports*. 2021;9(15):e14962. doi: 10.14814/phy2.14962.
  17. Ruf L, Drust B, Ehmann P, Forster S, **Hecksteden A**, Meyer T. Poor Reliability of Measurement Instruments to Assess Acute Responses to Load in Soccer Players Irrespective of Biological Maturity Status. *Pediatr Exerc Sci*. 2022:1-10. Epub 2022/01/20. doi: 10.1123/pes.2021-0070.
  18. Herold M, Radke D, Goes F, Nopp S, **Hecksteden A**, Meyer T, Kempe M: Off-Ball Behavior in Association Football: A Data-Driven Model to Measure Changes in Individual Defensive Pressure. *J Sports Sci*. epub ahead of print. doi: 10.1080/02640414.2022.2081405
  19. Reuter M, Rosenberger F, Barz A, Venhorst A, Blanz L, **Hecksteden A**, Meyer T. Does higher intensity increase the rate of responders to endurance training when total energy expenditure remains constant? A randomized controlled trial. *Sports Med Open*. 2023;9(1). doi: 10.1186/s40798-023-00579-3.
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  21. Wiesenthal AA, Legroux TM, Richter C, Junker B, **Hecksteden A**, Kessler S, Hoppstadter J, Kiemer A. Endotoxin tolerance acquisition and altered hepatic fatty acid profile in aged mice. *Biology*. 2023;12(4). doi: 10.3390/biology12040530

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3. **Hecksteden A**, Kraushaar J, Scharhag-Rosenberger F, Theisen D, Senn S, Meyer T. Individual response to exercise training - a statistical perspective. *J Appl Physiol*, 2015;118(12):1450-9.
4. **Hecksteden A**, Theisen D. Editorial based on the article: "Skeletal Muscle Signature of a Champion Sprint Runner" by Scott Trappe and colleagues. *J Appl Physiol*, 2015;118(12):1447-8.
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6. **Hecksteden A**, Faude O, Meyer T, Donath L: How to Construct, Conduct and Analyze an Exercise Training Study? *Front Physiol* 2018;9:1007. (shared first authorship)
7. **Hecksteden A**, Meyer T: Personalized Sports Medicine – Principles and Tailored Implementations in Preventive and Competitive Sports. *Dtsch Z Sportmed*, 2018; 69:73-80.
8. **Hecksteden A**, Kellner R, Donath L. Dealing with small samples in football research. *Sci Med Footb*. 2022; 6(3):389-397; epub ahead of print 2021; DOI: 10.1080/24733938.2021.1978106.
9. Skorski S, **Hecksteden A**. Coping With the "Small Sample-Small Relevant Effects" Dilemma in Elite Sport Research. *Int J Sports Physiol Perform*. 2021. 16(1):1559-1560.
10. **Hecksteden A**, Keller N, Zhang G, et al. Why Humble Farmers May in Fact Grow Bigger Potatoes: A Call for Street-Smart Decision-Making in Sport. *Sports Medicine - Open*. 2023 2023/10/14;9(1):94. DOI: 10.1186/s40798-023-00641-0

#### Bücher / Buchkapitel

aus der Fünten, K., Faude, O., **Hecksteden, A.**, Such, U., Hornberger, W., Meyer, T. (2013). Anatomie und Physiologie von Körper und Bewegung. In: Güllich, A., Krüger, M. (eds) Sport. Bachelor. Springer Spektrum, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-37546-0\\_5](https://doi.org/10.1007/978-3-642-37546-0_5)

**Hecksteden A**, Kellner R. Expertise "Wissenschaftlicher Umgang mit kleinen Fallzahlen bis hin zu Single Subject Designs". Schriftenreihe des BISp. ebook verfügbar via:  
<https://www.yumpu.com/de/document/read/65909249/bisp-202102-wissenschaftlicher-umgang-mit-den-kleinen-fallzahlen-in-der-spitzensportforschung>