

## GAIT BIBLIOGRAPHY

1. Gui, A., Hollowell, A., Wigdor, E.M. *et al.* Genome-wide association meta-analysis of age at onset of walking in over 70,000 infants of European ancestry. *Nat Hum Behav* (2025). <https://doi.org/10.1038/s41562-025-02145-1>
2. Adhia D., Milosavljevic S., Tumilty S., Bussey J., Innominate movement patterns, rotation trends and range of motion in individuals with low back pain and sacroiliac joint origin, *Manual Therapy* 21 2018 100-108.
3. Yen J., Corkery M., Donohoe A., Grogan M., Wu Y., Feedback and feedforward control during walking in individuals with chronic ankle instability, *JOSPT* 2016;46(9):775-783. Epub 5 Aug 2016. doi:10.2519/jospt.2016.6403.4603, 9, Sept 16 775 – 783.
4. Preece S., Mason D. Bramah C., How do elite endurance runners alter movement of the spine and pelvis as running speeds increases?, *Gait & Posture*, 46 2016 132 – 134.
5. Jenje T., Olivier B., Wood W., Rogers S. Green A, McKinon W., The association between loss of ankle dorsiflexion range of movement and hip adduction and internal rotation during a step-down test, *Manual Therapy* 21 2016 256-261.
6. Smith J., Kulig K., Altered multifidus recruitment during walking in young asymptomatic individuals with a history of LBP, *JOSPT* Vol 46 No. 5 May 2016 Pgs 365 – 374.
7. Hoogenboom B., Voight M., Rolling revisited: using rolling to assess and treat neuromuscular control and coordination of the core and extremities of athletes. *IJSPT* Vol 10 no 6 Nov 2015 Pg 787 – 802.
8. Ertelt T., Walking with chronic non-specific low back pain - A failed strategy: What can we learn from sports? , *Med Hypotheses*. 2014 Feb 23. pii: S0306-9877(14)00078-4. doi: 10.1016/j.mehy.2014.02.018.
9. White DK1, et al.. Can Change in Prolonged Walking Be Inferred from a Short Test of Gait Speed Among Older Adults Who Are Initially Well-Functioning? *Phys Ther*. 2014 May 1
10. Schubert AG1, Kempf J1, Heiderscheit BC2., Influence of stride frequency and length on running mechanics: a systematic review. *Sports Health*. 2014 May;6(3):210-7. doi: 10.1177/1941738113508544.
11. Jo Armour Smith, PT, PhD1, John M. Popovich, Jr., PT, PhD2, Kornelia Kulig, PT, PhD, FAPTA1, The Influence of Hip Strength on Lower-Limb, Pelvis, and Trunk Kinematics and Coordination Patterns During Walking and Hopping in Healthy Women, *J Orthop Sports Phys Ther* 2014;44(7):525–531. Epub 10 May 2014. doi:10.2519/jospt.2014.5028
12. Lorimer AV1, Hume PA., Achilles Tendon Injury Risk Factors Associated with Running. *Sports Med*. 2014 Jun 5.
13. Sung PS., A kinematic analysis for shoulder and pelvis coordination during axial trunk rotation in subjects with and without recurrent low back pain. *Gait Posture*. 2014 Jun 16. pii: S0966-6362(14)00601-8. doi: 10.1016/j.gaitpost.2014.06.001.
14. Nagai K1, Aoyama T, Yamada M, Izeki M, Fujibayashi S, Takemoto M, Nishiguchi S, Tsuboyama T, Neo M., Quantification of changes in gait characteristics associated with intermittent claudication in patients with lumbar spinal stenosis., *J Spinal Disord Tech*. 2014 Jun;27(4):E136-42. doi: 10.1097/BSD.0b013e3182a2656b.
15. Brown SR1, Brughelli M, Hume PA. Knee Mechanics During Planned and Unplanned Sidestepping: A Systematic Review and Meta-Analysis. *Sports Med*. 2014 Jul 12.
16. Teng HL<sup>1</sup>, Powers CM Influence of Trunk Posture on Lower Extremity Energetics during Running. *Med Sci Sports Exerc*. 2014 Jul 7.
17. Maria Constantinou, BPhy, MPhySt (Sports)<sup>1</sup>, Rod Barrett, PhD<sup>1</sup>, Mark Brown, BAppSc (Phy), MHSc

## GAIT BIBLIOGRAPHY

- (Sports Phyt)<sup>1,2</sup>, Peter Mills, PhD<sup>1</sup> Spatial-Temporal Gait Characteristics in Individuals with Hip Osteoarthritis: A Systematic Literature Review and Meta-analysis, *Journal of Orthopaedic & Sports Physical Therapy*, 2014, Volume: 44 Issue: 4 Pages: 291- B7 doi:10.2519/jospt.2014.4634
18. Marcum ZA, et al., Correlates of gait speed in advanced knee osteoarthritis Pain Medicine, 07/10/2014
  19. Gehring D, Mornieux G, Fleischmann J, Gollhofer A., Knee and Hip Joint Biomechanics are Gender-specific in Runners with High Running Mileage., *Int J Sports Med*. 2014 Feb;35(2):153-8. doi: 10.1055/s-0033-1343406. Epub 2013 Jul 18.
  20. Duffell LD1, Southgate DF2, Gulati V3, McGregor AH3. , Balance and gait adaptations in patients with early knee osteoarthritis., *Gait Posture*. 2014 Jan 19. pii: S0966- 6362(14)00021-6. doi: 10.1016/j.gaitpost.2014.01.005.
  21. Breine B1, Malcolm P, Frederick EC, De Clercq D., Relationship between Running Speed and Initial Foot Contact Patterns., *Med Sci Sports Exerc*. 2014 Feb 5.
  22. Stearne SM, et al., Joint kinetics in rearfoot versus forefoot running: implications of switching technique Medicine and Science in Sports and Exercise, 02/06/2014
  23. Wearing SC, et al., Running shoes increase Achilles tendon load in walking: an acoustic propagation study Medicine and Science in Sports and Exercise, 02/06/2014
  24. Ota S1, Ueda M2, Aimoto K3, Suzuki Y3, Sigward SM4., Acute influence of restricted ankle dorsiflexion angle on knee joint mechanics during gait. , *Knee*. 2014 Jan 30. pii: S0968-0160(14)00009-X. doi: 10.1016/j.knee.2014.01.006. Nam SJ1, Kim MJ2, Yim SJ3, Oh DW4, Park HJ5, Kim CY6., Influence of walking speed on electromyographic activity of the rectus abdominis and erector spinae during high-heeled walking.,
  25. Lugade V1, Kaufman K2., Center of pressure trajectory during gait: A comparison of four foot positions., *Gait Posture*. 2013 Dec 27. pii: S0966-6362(13)00718-2. doi: 10.1016/j.gaitpost.2013.12.023.
  26. J BackBonacci J, Vicenzino B, Spratford W, Collins P Musculoskelet Rehabil. 2014 Feb 20. Take your shoes off to reduce patellofemoral joint stress during running. *Br J Sports Med*. 2013 Jul 13. doi: 10.1136/bjsports-2013-092160.
  27. Lenhart RL, Thelen DG, Wille CM, Chumanov ES, Heiderscheit BC. Increasing Running Step Rate Reduces Patellofemoral Joint Forces. *Med Sci Sports Exerc*. 2013 Aug 2.
  28. *Gait Posture*. 2013 May;38(1):125-31. doi: 10.1016/j.gaitpost.2012.10.022. Epub 2012 Dec 8.
  29. Van Caekenberghe I1, Segers V, Willems P, Gosseye T, Aerts P, De Clercq D., Mechanics of overground accelerated running vs. running on an accelerated treadmill., *Gait Posture*. 2013 May;38(1):125-31. doi: 10.1016/j.gaitpost.2012.10.022. Epub 2012 Dec 8.
  30. van Poppel D, Scholten-Peeters GG, van Middelkoop M, Verhagen AP. Prevalence, incidence and course of lower extremity injuries in runners during a 12-month follow-up period., *Scand J Med Sci Sports*. 2013 Aug 19. doi: 10.1111/sms.12110.
  31. Hof AL, Duysens J. Responses of human hip abductor muscles to lateral balance perturbations during walking. *Exp Brain Res*. 2013 Aug 10.
  32. Donald Lee Goss, PT, PhD, OCS, ATC , A Comparison of Negative Joint Work and Vertical Ground Reaction Force Loading Rates in Chi Runners and Rearfoot-Striking Runners, *J Orthop Sports Phys Ther* 2013;43(10):685–692. Epub 9 September 2013. doi:10.2519/jospt.2013.4542
  33. McCarthy C, Fleming N, Donne B, Blanksby B. 12 Weeks of Simulated Barefoot Running Changes Foot-Strike Patterns in Female Runners. *Int J Sports Med*. 2013 Sep 18.
  34. Rooney BD, Derrick TR. Joint contact loading in forefoot and rearfoot strike patterns during running. *J Biomech*. 2013 Sep 3;46(13):2201-6. doi: 10.1016/j.jbiomech.2013.06.022. Epub

## GAIT BIBLIOGRAPHY

- 2013 Jul 30.
35. Williams PT. Effects of running and walking on osteoarthritis and hip replacement risk. *Med Sci Sports Exerc.* 2013 Jul;45(7):1292-7. doi: 10.1249/MSS.0b013e3182885f26.
  36. Boyer ER, Rooney BD, Derrick TR. Rearfoot and Midfoot/Forefoot Impacts in Habitually Shod Runners. *Med Sci Sports Exerc.* 2013 Dec 2.
  37. Nikolajsen H, Gait pattern in 9-11-year-old children with generalized joint hypermobility compared with controls; a cross-sectional study., *BMC Musculoskelet Disord.* 2013 Dec 5;14(1):341.
  38. Sureeporn Uthaihpun The effects of head movement and walking speed on gait parameters in patients with chronic neck pain☆ *Manual Therapy*, 11/05/2013
  39. Louw M, Deary C. The biomechanical variables involved in the aetiology of iliotibial band syndrome in distance runners - A systematic review of the literature *Phys Ther Sport.* 2013 Aug 15. pii: S1466-853X(13)00066-7. doi: 10.1016/j.ptsp.2013.07.002.
  40. Engström P, Tedroff K. The prevalence and course of idiopathic toe-walking in 5-year-old children. *Pediatrics.* 2012 Aug;130(2):279-84. doi: 10.1542/peds.2012-0225. Epub 2012 Jul 23.
  41. Michael Ryan Examining injury risk and pain perception in runners using minimalist footwear *Br J Sports Med* doi:10.1136/bjsports-2012-092061
  42. Kuo A.D., Donelan, J.M.; *Dynamic Principles of Gait and Their Clinical Implications. Physical Therapy* 2010; Volume 90: 157.
  43. Malouin, F., Richards, C.J.; *Mental Practice for Relearning Locomotor Skills.* *Physical Therapy* 2010; Volume 90: 240.
  44. Whittle M.W.; *Gait Analysis: An Introduction.* 4th edition Oxford, England: Butterworth-Heinemann; 2007.
  45. Levangie P.K., Norkin C.C.; Gait. In: *Joint Structure and Function: A Comprehensive Analysis.* 4th edition Philadelphia, PA: F.A. Davis Company; 2005: 435-482.
  46. Houck JR<sup>1</sup>, Duncan A, De Haven KE., Comparison of frontal plane trunk kinematics and hip and knee moments during anticipated and unanticipated walking and side step cutting tasks. , *Gait Posture.* 2006 Nov;24(3):314-22. Epub 2005 Nov 15.
  47. Simoneau G.G.; *Kinesiology of Walking.* In: Neumann DA. *Kinesiology of the Musculoskeletal System: Foundations for Physical Rehabilitation.* St Louis, Mo: Mosby Inc; 2002: 523-569. SECTION FIVE
  48. Medved V.; *Measurement of Human Locomotion.* Lewis Publishers Inc; 2000.
  49. Kirkwood R.N., Culham E.G., Costigan P.; Hip movements during level walking, stair climbing, and exercise in individuals aged 55 years or older. *Physical Therapy* 1999; 79: 360-370.
  50. Sekiya N., Nagasaki H., Ito H. Furuna T.; *Optimal walking in terms of variability in step length.* *J Orthop Sports Physical Therapy* 1997; 26: 266-272.
  51. Lee D.; Instability of the sacroiliac joint and the consequences to gait. *J Manual Manipulative Ther.* 1996; 4:22-29.
  52. Craik R.L.; Oatis CA. *Gait Analysis: Theory and Application.* St Louis, Mo: Mosby Inc; 1995.
  1. Yekutieli M.P.; *The role of vertebral move movement in gait: implications for manual therapy.* *J Manual Manipulative Ther.* 1994; 2:22-27.
  2. Perry J.; *Gait Analysis: Normal and Pathological Function.* Slack Inc; 1992.
  3. Krebs D.E., Wong D., Jevsevar D., O Riley P., Hodge W.A.; Trunk kinematics during locomotor

## GAIT BIBLIOGRAPHY

activities. *Physical Therapy* 1992; 72: 505-514.

4. Duncan C.E.; A gait training suggestion for lengthening gastrocnemius-soleus muscles: suggestion from the field. *Physical Therapy* 1989;69: 773-776.
5. Gundersen L.A., Valle D.R., Barr A.E., Danoff J.V., Stanhope S.J., Snyder-Mackler L.; Bilateral analysis of the knee and ankle during gait: an examination of the relationship between lateral dominance and symmetry. *Physical Therapy* 1989; 69:640- 650.
6. Brown L.P., Yavorsky P.; Locomotor biomechanics and pathomechanics: a review. *J Orthop Sports Physical Therapy* 1987; 9:3-10
7. Donatelli R.; Abnormal biomechanics of the foot and ankle. *J Orthop Sports Physical Therapy* 1987; 9:11-16.
8. Thurston A.J., Harris J.D.; *Normal kinematics of the lumbar spine and pelvis*. Spine. 1983; 8: 199-205.
9. Delacerda F.G., Wikoff O.D.; Effect of lower extremity asymmetry on the kinematics of gait. *J Orthop Sports Physical Therapy* 1982; 3:105-107.
10. Smidt G.L.; *Hip motion and related factors in walking*. *Physical Therapy* 1971;51:9-21.
11. Inman V.T.; Human Locomotion. *Can Med Assoc J*. 1966; 94: 1047-1054.