

Ground Reaction Forces References

- 1: Self Davies ZT, Spence AJ, Wilson AM. Ground reaction forces of overground galloping in ridden Thoroughbred racehorses. *J Exp Biol.* 2019 Aug 23;222(Pt 16). pii: jeb204107. doi: 10.1242/jeb.204107. PubMed PMID: 31444280.

- 2: Hobbs SJ, Clayton HM. Collisional mechanics of the diagonal gaits of horses over a range of speeds. *PeerJ.* 2019 Sep 17;7:e7689. doi: 10.7717/peerj.7689. eCollection 2019. PubMed PMID: 31576241; PubMed Central PMCID: PMC6753918.

- 3: Clayton HM, Schamhardt HC, Hobbs SJ. Ground reaction forces of elite dressage horses in collected trot and passage. *Vet J.* 2017 Mar;221:30-33. doi: 10.1016/j.tvjl.2017.01.016. Epub 2017 Jan 30. PubMed PMID: 28283077.

- 4: Gan Z, Wiestner T, Weishaupt MA, Waldern NM, David Remy C. Passive Dynamics Explain Quadrupedal Walking, Trotting, and Tölting. *J Comput Nonlinear Dyn.* 2016 Mar;11(2):0210081-2100812. Epub 2015 Aug 26. PubMed PMID: 27222653; PubMed Central PMCID: PMC4844082.

- 5: Clayton HM, Stubbs NC, Lavagnino M. Stance phase kinematics and kinetics of horses trotting over poles. *Equine Vet J.* 2015 Jan;47(1):113-8. doi: 10.1111/evj.12251. Epub 2014 Apr 7. PubMed PMID: 24580416.

- 6: Hobbs SJ, Clayton HM. Sagittal plane ground reaction forces, centre of pressure and centre of mass in trotting horses. *Vet J.* 2013 Dec;198 Suppl 1:e14-9. doi: 10.1016/j.tvjl.2013.09.027. Epub 2013 Sep 26. PubMed PMID: 24138935.

- 7: Setterbo JJ, Garcia TC, Campbell IP, Reese JL, Morgan JM, Kim SY, Hubbard M, Stover SM. Hoof accelerations and ground reaction forces of Thoroughbred racehorses measured on dirt, synthetic, and turf track surfaces. *Am J Vet Res.* 2009 Oct;70(10):1220-9. doi: 10.2460/ajvr.70.10.1220. PubMed PMID: 19795936.

- 8: Weishaupt MA, Byström A, von Peinen K, Wiestner T, Meyers H, Waldern N, Johnston C, van Weeren R, Roepstorff L. Kinetics and kinematics of the passage. *Equine Vet J*. 2009 Mar;41(3):263-7. PubMed PMID: 19469233.
- 9: Chateau H, Robin D, Simonelli T, Pacquet L, Pourcelot P, Falala S, Denoix JM, Crevier-Denoix N. Design and validation of a dynamometric horseshoe for the measurement of three-dimensional ground reaction force on a moving horse. *J Biomech*. 2009 Feb 9;42(3):336-40. doi: 10.1016/j.jbiomech.2008.11.017. Epub 2009 Jan 10. PubMed PMID: 19136114.
- 10: Biknevicius AR, Mullineaux DR, Clayton HM. Ground reaction forces and limb function in tölting Icelandic horses. *Equine Vet J*. 2004 Dec;36(8):743-7. PubMed PMID: 15656508.
- 11: Gustås P, Johnston C, Roepstorff L, Drevemo S, Lanshammar H. Relationships between fore- and hindlimb ground reaction force and hoof deceleration patterns in trotting horses. *Equine Vet J*. 2004 Dec;36(8):737-42. PubMed PMID: 15656507.
- 12: Dutto DJ, Hoyt DF, Cogger EA, Wickler SJ. Ground reaction forces in horses trotting up an incline and on the level over a range of speeds. *J Exp Biol*. 2004 Sep;207(Pt 20):3507-14. PubMed PMID: 15339946.
- 13: Dutto DJ, Hoyt DF, Clayton HM, Cogger EA, Wickler SJ. Moments and power generated by the horse (*Equus caballus*) hind limb during jumping. *J Exp Biol*. 2004 Feb;207(Pt 4):667-74. PubMed PMID: 14718509.
- 14: Roepstorff L, Johnston C, Drevemo S, Gustås P. Influence of draw reins on ground reaction forces at the trot. *Equine Vet J Suppl*. 2002 Sep;(34):349-52. PubMed PMID: 12405714.

15: Khumsap S, Clayton HM, Lanovaz JL, Bouchey M. Effect of walking velocity on forelimb kinematics and kinetics. *Equine Vet J Suppl.* 2002 Sep;(34):325-9. PubMed PMID: 12405709.

16: Weishaupt MA, Hogg HP, Wiestner T, Denoth J, Stüssi E, Auer JA. Instrumented treadmill for measuring vertical ground reaction forces in horses. *Am J Vet Res.* 2002 Apr;63(4):520-7. PubMed PMID: 11939313.

17: Khumsap S, Clayton HM, Lanovaz JL. Effect of walking velocity on ground reaction force variables in the hind limb of clinically normal horses. *Am J Vet Res.* 2001 Jun;62(6):901-6. PubMed PMID: 11400848.

18: Hodson E, Clayton HM, Lanovaz JL. The hindlimb in walking horses: 1. Kinematics and ground reaction forces. *Equine Vet J.* 2001 Jan;33(1):38-43. PubMed PMID: 11191608.

19: Hodson E, Clayton HM, Lanovaz JL. The forelimb in walking horses: 1. Kinematics and ground reaction forces. *Equine Vet J.* 2000 Jul;32(4):287-94. PubMed PMID: 10952376.

20: Kai M, Aoki O, Hiraga A, Oki H, Tokuriki M. Use of an instrument sandwiched between the hoof and shoe to measure vertical ground reaction forces and three-dimensional acceleration at the walk, trot, and canter in horses. *Am J Vet Res.* 2000 Aug;61(8):979-85. PubMed PMID: 10951994.

21: Clayton HM, Lanovaz JL, Schamhardt HC, van Wessum R. The effects of a rider's mass on ground reaction forces and fetlock kinematics at the trot. *Equine Vet J Suppl.* 1999 Jul;(30):218-21. PubMed PMID: 10659255.

22: Savelberg HH, Van Loon T, Schamhardt HC. Ground reaction forces in horses, assessed from hoof wall deformation using artificial neural networks. *Equine Vet J Suppl.* 1997 May;(23):6-8. PubMed PMID: 9354277.

23: McLaughlin RM Jr, Gaughan EM, Roush JK, Skaggs CL. Effects of subject velocity on ground reaction force measurements and stance times in clinically normal horses at the walk and trot. *Am J Vet Res.* 1996 Jan;57(1):7-11. PubMed PMID: 8720231.

24: Barr AR, Dow SM, Goodship AE. Parameters of forelimb ground reaction force in 48 normal ponies. *Vet Rec.* 1995 Mar 25;136(12):283-6. PubMed PMID: 7793033.

25: Merkens HW, Schamhardt HC, Van Osch GJ, Van den Bogert AJ. Ground reaction force patterns of Dutch warmblood horses at normal trot. *Equine Vet J.* 1993 Mar;25(2):134-7. PubMed PMID: 8467772.

26: Roepstorff L, Drevemo S. Concept of a force-measuring horseshoe. *Acta Anat (Basel).* 1993;146(2-3):114-9. PubMed PMID: 8470452.

27: Merkens HW. [Force plate measurements for a quantitative assessment of the equine gait]. *Tijdschr Diergeneeskd.* 1990 Dec 15;115(24):1182-9. Dutch. PubMed PMID: 2264030.

28: Merkens HW, Schamhardt HC. Distribution of ground reaction forces of the concurrently loaded limbs of the Dutch Warmblood horse at the normal walk. *Equine Vet J.* 1988 May;20(3):209-13. PubMed PMID: 3402418.

29: Merkens HW, Schamhardt HC, Hartman W, Kersjes AW. Ground reaction force patterns of Dutch Warmblood horses at normal walk. *Equine Vet J.* 1986 May;18(3):207-14. PubMed PMID: 3732241.