

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2018	Giuseppe Francesco Giancotti , Andrea Fusco , Angelo Rodio , Laura Capranica, Cristina Cortis	Department of Human Sciences, Society and Health, University of Cassino e Lazio Meridionale, Cassino	Adherence energy expenditure and perceived exertion during active video games in relation to player mode and gender	Vol 50 No 1 (2018)	Kinesiology	Article	Computer Games
K4b2	2018	Linda (Miller) Renfrew, Anna C Lord, Angus K McFadyen, Danny Rafferty, Rebecca Hunter, Roy Bowers, Paul Mattison, Owen Moseley, Lorna Paul	Douglas Grant Rehabilitation Unit, Irvine, UK	A comparison of the initial orthotic effects of functional electrical stimulation and ankle-foot orthoses on the speed and oxygen cost of gait in multiple sclerosis	February 2, 2018 Volume: 5	Journal of Rehabilitation and Assistive Technologies	Article	Gait
K4b2	2018	Bradwell AR, Ashdown K, Rue C, Delamere J, Thomas OD, Lucas SJE, Wright AD, Harris SJ, Myers SD; Birmingham Medical Research Expeditionary Society.	Institute of Clinical Sciences, College of Medical and Dental Sciences, University of Birmingham, Birmingham, UK.	Acetazolamide reduces exercise capacity following a 5-day ascent to 4559 m in a randomised study	2018 Jan 23;4(1):e000302	BMJ Open Sport Exerc Med.	Article	Exercise Physiology
K4b2	2018	Vanessa K. S. Lage, Ana Cristina R. Lacerda, Camila D. C. Neves, Maria Gabriela A. Chaves, Aline A. Soares, Liliana P. Lima, Jeanne B. Martins, Mariana A. Matos, Érica L. M. Vieira, Antônio L. Teixeira, Hércules R. Leite, Vinicius Cunha Oliveira, and Vanessa A. Mendonça	Programa Multicêntrico de Pós-Graduação em Ciências Fisiológicas, Sociedade Brasileira de Fisiologia, Universidade Federal dos Vales do Jequitinhonha e Mucuri, Diamantina, MG, Brazil	Acute Effects of Whole-Body Vibration on Inflammatory Markers in People with Chronic Obstructive	Volume 2018, Article ID 5480214, 7 pages	Rehabilitation Research and Practice	Article	Pneumology
K4b2	2018	Mohsen Sheykhlouvand , Scott C. Forbes	Department of Exercise Physiology, Faculty of Physical Education and Sport Sciences, University of Guilan, Rasht, Iran	Aerobic capacities, anaerobic power, and anthropometric characteristics of elite female canoe polo players based on playing position	April 2018, Volume 14, Issue 1, pp 19–24	Sport Sciences for Health	Article	Rowing
K4b2	2018	Valkenborghs SR, Visser MM, Nilsson M, Callister R, van Vliet P	Priority Research Centre for Physical Activity and Nutrition, University of Newcastle, Callaghan, NSW, Australia.	Aerobic exercise prior to task-specific training to improve poststroke motor function: A case series.	2018 Apr;23(2):e1707	Physiother Res Int.	Article	Cardiology
K4b2	2018	Silva de Sousa JC, Torriani-Pasin C, Tosi AB, Fecchio RY, Costa LAR, Forjaz CLM.	Exercise Hemodynamic Laboratory, School of Physical Education and Sport, University of São Paulo, São Paulo, SP, Brazil.	Aerobic Stimulus Induced by Virtual Reality Games in Stroke Survivors	2018 May;99(5):927-933	Arch Phys Med Rehabil.	Article	Computer Games
K4b2	2018	Cagatay Catal, Akhan Akbulut	Information Technology Group, Wageningen University, Wageningen, Netherlands	Automatic energy expenditure measurement for health science	Volume 157, April 2018, Pages 31-37	Computer Methods and Programs in Biomedicine	Article	Clinical Nutrition
K4b2	2018	Kliszczewicz B, Williamson C, Bechke E, McKenzie M, Hoffstetter W	Department of Exercise Science and Sport Management , Kennesaw State University , Kennesaw , GA , USA	Autonomic response to a short and long bout of high-intensity functional training	Aug;36(16):1872-1879.	J Sports Sci. 2018	Article	Exercise Physiology
K4b2	2018	Lee S, Karavas N, Quinlivan BT, Ryan DL, Perry D, Eckert-Erdheim A, Murphy P, Goidy TG, Menard N, Athanassiou M	John A. Paulson School of Engineering and Applied Sciences Harvard Biodesign Lab and Wyss Institute for Biologically Inspired Engineering at Harvard University	Autonomous Multi-Joint Soft Exosuit for Assistance with Walking Overground	May 21-25, 2018	IEEE International Conference on Robotics and Automation (ICRA), Brisbane, Australia, May 21-25, 2018	Article	Public Safety
K4b2	2018	Sangjun Lee, Jinsoo Kim, Lauren Baker, Andrew Long, Nikos Karavas, Nicolas Menard, Ignacio Galiana Conon J. Walsh	1.John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, USA	Autonomous multi-joint soft exosuit with augmentation-power-based control parameter tuning reduces energy cost of loaded walking	201815:66	Journal of NeuroEngineering and Rehabilitation	Article	Ergonomics
K4b2	2018	Michael F. Eilenberg, Ken Endo, and Hugh Herr	Biomechatronics Group, MIT Media Lab, Massachusetts Institute of Technology, Cambridge, MA 02139, USA	Biomechanic and Energetic Effects of a Quasi-Passive Artificial Gastrocnemius on Transtibial Amputee Gait	Volume 2018, Article ID 6756027, 12 pages	Journal of Robotics	Article	Gait
K4b2	2018	Michael F Eilenberg, Hugh Herr	Massachusetts Institute of Technology MIT - MIT Media Laboratory	Biomechanic and Energetic Effects of a Quasi-Passive Artificial Gastrocnemius on Transtibial Amputee Gait	2018(23):1-12 - March 2018 with 144 Reads	Journal of Robotics	Article	Gait
K4b2	2018	Jaehyun Bae, Louis N. Awad, Andrew Long, Kathleen O'Donnell, Katy Hendron, Kenneth G. Holt, Terry D. Ellis, Conon J. Walsh	Paulson School of Engineering and Applied Sciences, Harvard University, 60 Oxford Street, Cambridge, MA, USA	Biomechanical mechanisms underlying exosuit-induced improvements in walking economy after stroke	2018 : job.168815	Journal of Experimental Biology	Article	Cardiology
K4b2	2018	Tudor-Locke C, Schuna JM Jr, Han H, Aguiar EJ, Larrivee S, Hsia DS, Ducharme SW, Barreira TV, Johnson WD	Department of Kinesiology, University of Massachusetts Amherst, 160A Totman Building, Amherst, Massachusetts, 01003, USA	Cadence (steps/min) and intensity during ambulation in 6-20 year olds: the CADENCE-kids study.	2018 Feb 26;15(1):20	Int J Behav Nutr Phys Act.	Article	Paediatric & Children
K4b2	2018	Alessandro Masullo, Tilo Burghardt Dima Damen Sion Hannuna, Victor Ponce-López Majid Mirmehdi	University of Bristol UB	CaloriNet: From silhouettes to calorie estimation in private environments.	June 2018 with 13 Reads	arXiv	Article	Wearables
K4b2	2018	José Vilaça-Alves, Fernanda Muller , Claudio Rosa , Rita Payan-Carreira , Rafael Lund , Filipe Matos , Nuno Garrido , Francisco José Saavedra , Victor Machado Reis	Sport Sciences Department, University of Trás-os-Montes e Alto Douro, Vila Real, Portugal, Research Center in Sports Sciences, Health Sciences and Human Development, CIDESD, Portugal	Cardiorespiratory, enzymatic and hormonal responses during and after walking while fasting	March 1, 2018	PLoS ONE	Article	Exercise Physiology
K4b2	2018	Limonta E, Brighenti A, Rampichini S, Cè E, Schena F, Esposito F.	Department of Biomedical Sciences for Health, University of Milan, Via Colombo 71, 20133, Milan, Italy.	Cardiovascular and metabolic responses during indoor climbing and laboratory cycling exercise in advanced and elite climbers.	2018 Feb;118(2):371-379.	Eur J Appl Physiol.	Article	Climbing
K4b2	2018	Urszula Barbara Szmatlan-Gabrys, Tomasz Gabrys, Arkadiusz Stanula	Institut of Physial Education and Sport State School of Higher Education in Oświęcim, Poland	Character of relationship between somatic coefficients and physiological parameters the 15-17 year old ice-hockey players	May 2018 with 42 Reads	Society, integration, education	Article	Hockey
K4b2	2018	Li Cao, Gerard A. Davis, Sean Gallagher, Mark C. Schall Jr., Richard F. Seseck	Department of Industrial and Systems Engineering, Auburn University, AL 36849-5346, USA	Characterizing posture and associated physiological demand during evacuation	Volume 104, April 2018, Pages 1-9	Safety Science	Article	Ergonomics
K4b2	2018	Cabrera Hernández, Moisés Arturo , Tafur Tascón, Luis Javier , Cohen, Daniel Dylan, García-Corzo, Sergio Andrés, Quiñonez Sánchez, Alexander, Povea Combariza, Camilo, Tejada Rojas, Carmen Ximena	Universidad de Alicante. Área de Educación Física y Deporte	Concordance between the indirect VO2max value estimated through the distance in Yo-Yo intermittent recovery test level 1 and the direct measurement during a treadmill protocol test in elite youth soccer players	2018, 13(Proc2)	Journal of Human Sport and Exercise.	Article	Football
K4b2	2018	Bagot KS, Matthews SA, Mason M, Squeglia LM, Fowler J, Gray K, Hering M, May A, Colrain I, Godino J, Tapert S, Brown S, Patrick K	University of California, San Diego, 9500 Gilman Dr., La Jolla, CA, 92093, USA	Current, future and potential use of mobile and wearable technologies and social media data in the ABCD study to increase understanding of contributors to child health.	2018 Aug;32:121-129.	Dev Cogn Neurosci.	Article	Wearables
K4b2	2018	Gonjo T, McCabe C, Sousa A, Ribeiro J, Fernandes RJ6, Vilas-Boas JP, Sanders R.	Faculty of Health and Sport Sciences, University of Tsukuba, Tsukuba, Ibaraki, Japan.	Differences in kinematics and energy cost between front crawl and backstroke below the anaerobic threshold.	2018 Jun;118(6):1107-1118	Eur J Appl Physiol.	Article	Swimming
K4b2	2018	Gareth Williams, Saiyi Li, Pubudu N. Pathirana	Deakin University, 75 Pigdons Rd, Waurn Ponds, VIC 3216, Australia	Dual Kalman filter for estimating load-free human motion kinematic energy expenditure	Volume 41, March 2018, Pages 40-47	Biomedical Signal Processing and Control	Article	Exercise Physiology

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K4b2	2018	Ye L, Argha A, Yu H, Celler BG, Nguyen HT, Su S.	School of Biomedical Engineering, University of Technology Sydney, 15 Broadway, Sydney, Australia	Dynamic characteristics of oxygen consumption	2018 Apr 23;17(1):44.	Biomed Eng Online.	Article	Exercise Physiology
K4b2	2018	Hellard P, Pla R, Rodríguez FA, Simbana D, Pyne DB	Research Department, French Swimming Federation, Pantin, France.	Dynamics of the Metabolic Response During a Competitive 100-M Freestyle in Elite Male Swimmers	2018 Feb 21:1-28	Int J Sports Physiol Perform.	Article	Swimming
K4b2	2018	Fiona Wixted, Leonard O' Sullivan	Department of Design & Manufacturing Technology, University of Limerick, Ireland	Effect of attention demand on upper trapezius muscle activity – A moderated mediation model	Volume 66, July 2018, Pages 146-156	International Journal of Industrial Ergonomics	Article	Ergonomics
K4b2	2018	Subhojit Chatterjee, Tirthankar Chatterjee, Debojyoti Bhattacharyya, Suranjana Sen, and Madhusudan Pal	Defence Institute of Physiology and Allied Sciences, Defence Research & Development Organisation, Ministry of Defence, Government of India, Lucknow Road, Timarpur, Delhi, 110054 India	Effect of heavy load carriage on cardiorespiratory responses with varying gradients and modes of carriage	2018; 5: 26.	Mil Med Res.	Article	Public Safety
K4b2	2018	Yongsuk Seo, Tyler D Quinn, Jung-Hyun Kim, Jeffrey B Powell, Raymond J Roberge, Aitor Coca	National Personal Protective Technology Laboratory, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, Pittsburgh, Pennsylvania.	Effects of 5-Day Heat Acclimation on Workers Wearing Personal Protective Clothing	2018, Volume 1(Issue 1)	Journal of Exercise and Nutrition	Article	Ergonomics
K4b2	2018	Pla R, Meur YL, Aubry A, Toussaint JF, Hellard P	French Institute of Sport (INSEP), Research Department, Laboratory Sport, Expertise and Performance (EA 7370), University of Paris Descartes, France.	Effects of a 6-Week Period of Polarized or Threshold Training on Performance and Fatigue in Elite Swimmers.	2018 Jul 24:1-22	Int J Sports Physiol Perform.	Article	Swimming
K4b2	2018	González-Ruiz K, Correa-Bautista JE, Izquierdo M, García-Hermoso A, Dominguez-Sanchez MA, Bustos-Cruz RH, García-Prieto JC, Martínez-Vizcaino V, Lobeo F, González-Jiménez E, Prieto-Benavides DH, Tordecilla-Sanders A, Schmidt-RíoValle J, Perez G, Ramírez-Vélez R	Centro de Estudios en Medición de la Actividad Física (CEMA), Escuela de Medicina y Ciencias de la Salud, Universidad del Rosario, Cra. 24 No. 63C - 69, Bogotá, DC, Colombia.	Effects of an exercise program on hepatic metabolism, hepatic fat, and cardiovascular health in overweight/obese adolescents from Bogotá, Colombia (the HEPAFIT study): study protocol for a randomized controlled trial.	2018 Jun 25;19(1):330.	Trials.	Article	Obesity
K4b2	2018	Ho MS, Chow DH	The Nursing Council of Hong Kong, Hung Hom, Hong Kong.	Effects of kneeling posture on chest compression during cardiopulmonary resuscitation in males.	2018 Feb;27(3-4):777-783.	J Clin Nurs.	Article	Ergonomics
K4b2	2018	KENDALL FRAWLEY, GABRIELLE GREENWALD, REBECCA R. ROGERS, JOHN K. PETRELLA, and MALLORY R. MARSHALL	Department of Kinesiology, Samford University, Birmingham, AL, USA	Effects of Prior Fasting on Fat Oxidation during Resistance Exercise	2018; 11(2): 827–833.	Int J Exerc Sci.	Article	Exercise Physiology
K4b2	2018	Abderraouf Ben Abderrahman, Fatma Rhibi, Ayoub Saiedi, Anthony C. Hackney, Hassane ZOUHAL	Institut Supérieur du Sport et de l'Education Physique de Ksar-Said - APS Individuelle.	Effects of Recovery Mode during High Intensity Interval Training on Glucoregulatory Hormones and Glucose Metabolism in Response to Maximal Exercise	April 2018 with 253 Reads	Journal of Athletic Enhancement	Article	Exercise Physiology
K4b2	2018	Sansom JK, Ulrich BD.	Central Michigan University.	Energy Efficiency in Children With Myelomeningocele During Acute Use of Assistive Devices: A Pilot Study.	2018 Jan 1;35(1):57-75	Adapt Phys Activ Q.	Article	Paediatric & Children
K4b2	2018	Santa-Clara H, Melo X, Willi R, Pinto R, Santos V, Almeida JP, Martins R, Clijisen R, Mendes M, Fernhall B.	Faculdade de Motricidade Humana - Universidade de Lisboa, Centro Interdisciplinar de Estudo da Performance Humana, Lisboa, 1499-002, Portugal.	Energy expenditure during an exercise training session for cardiac patients.	2018 Mar;43(3):292-298	Appl Physiol Nutr Metab.	Article	Cardiology
K4b2	2018	Monica Taylor, Elizabeth F Nagle, Fredric L Goss, Elaine N Rubinstein, and Andrew Simonson	Department of Kinesiology, University of the Sciences, Philadelphia, PA, USA	Evaluating Energy Expenditure Estimated by Wearable Technology During Variable Intensity Activity on Female Collegiate Athletes	2018; 11(7): 598–608.	Int J Exerc Sci.	Article	Wearables
K4b2	2018	Xie J, Wen D, Liang L, Jia Y, Gao L, Lei J	Department of Epidemiology and Biostatistics, School of Public Health, Peking University Health Science Center, Beijing, China	Evaluating the Validity of Current Mainstream Wearable Devices in Fitness Tracking Under Various Physical Activities: Comparative Study.	2018 Apr 12;6(4):e94	JMIR Mhealth Uhealth.	Article	Wearables
K4b2	2018	Martinez-Amezcuea P, Matsushita K, Simonsick EM, Ferrucci L, Schrack JA.	Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA; Center on Aging and Health, Johns Hopkins University, Baltimore, MD, USA	Fatigability and functional performance among older adults with low-normal ankle-brachial index: Cross-sectional findings from the Baltimore Longitudinal Study of Aging.	2018 May;272:200-206	Atherosclerosis.	Article	Geriatrics
K4b2	2018	In Cho, Younsun Son, Sejong Song, Yoon Jung Bae, Yoon Nam Kim, Hyoung-Il Kim, Dae Taek Lee, and Woo Jin Hyung	Department of Surgery, Graduate School, Yonsei University College of Medicine, Seoul, Korea.	Feasibility and Effects of a Postoperative Recovery Exercise Program Developed Specifically for Gastric Cancer Patients (PREP-GC) Undergoing Minimally Invasive Gastrectomy	2018 Jun; 18(2): 118–133.	J Gastric Cancer.	Article	Oncology
K4b2	2018	Cindy Gauthier Rachel Brosseau, Audrey L. Hicks, and Dany H. Gagnon	School of Rehabilitation, Université de Montréal, Montreal, QC, Canada	Feasibility, Safety, and Preliminary Effectiveness of a Home-Based Self-Managed High-Intensity Interval Training Program Offered to Long-Term Manual Wheelchair Users	Volume 2018, Article ID 8209360, 15 pages	Rehabilitation Research and Practice	Article	Disabled
K4b2	2018	Afamefuna Victor Egwuonwu, Matthias Goebel, Perpetua Chinenye Obi	Department of Human Kinetics and Ergonomics, Rhodes University, Grahamstown, South Africa	Field Evaluation of Task Requirements of Mining Jobs in Nigerian Quarry Mines: A Pilot Study	26 June 2018 pp 120-131	Advances in Physical Ergonomics & Human Factors	Article	Ergonomics
K4b2	2018	Lim H, Azurdia D, Jeng B, Jung T.	Department of Kinesiology, California State University, Northridge, Northridge, CA, USA.	Influence of water depth on energy expenditure during aquatic walking in people post stroke	2018 Jul;23(3):e1717	Physiother Res Int.	Article	Water based activities
K4b2	2018	Cook AJ, Ng B, Gargiulo GD, Hindmarsh D, Pitney M, Lehmann T, Hamilton TJ.	School of Electrical and Telecommunications Engineering, UNSW Sydney, NSW, Australia.	Instantaneous VO2 from a wearable device	2018 Feb;52:41-48.	Med Eng Phys.	Article	Wearables
K4b2	2018	Zago M, Esposito F, Rausa G, Limonta E, Corrado F, Rampichini S, Sforza C	Dept. of Biomedical Sciences for Health, Università degli Studi di Milano, via Mangiagalli 31, Milano 20133, Italy;	Kinematic algorithm to determine the energy cost of running with changes of direction.	2018 Jun 15	J Biomech.	Article	Exercise Physiology
K4b2	2018	Simonsick EM, Aronson B, Schrack JA, Hicks GE, Jerome GJ, Patel KV, Studenski SA, Ferrucci L	Intramural Research Program, National Institute on Aging, Baltimore, Maryland.	Lumbopelvic Pain and Threats to Walking Ability in Well-Functioning Older Adults: Findings from the Baltimore Longitudinal Study of Aging.	2018 Apr;66(4):714-720	J Am Geriatr Soc.	Article	Geriatrics
K4b2	2018	Looney DP, Santee WR, Karis AJ, Blanchard LA, Rome MN, Carter AJ, Potter AW	United States Army Research Institute of Environmental Medicine (USARIEM), 10 General Greene Avenue, Natick, MA 01760	Metabolic Costs of Military Load Carriage over Complex Terrain.	2018 May 31	Mil Med.	Article	Public Safety
K4b2	2018	Marcelo Marques, Emerson Franchini, José Carlos Ribeiro, Gustavo Silva	Research Centre in Physical Activity, Health and Leisure (CIAFEL), Faculty of Sport, University of Porto (FADEUP), Porto, Portugal	Metabolic indicators and energy expenditure in two models of health club classes: aerobic fitness class vs. strength fitness class	August 2018, Volume 14, Issue 2, pp 339–346	Sport Sciences for Health	Article	Aerobics

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K4b2	2018	Cristian Osgnach , Pietro E. di Prampero	Department of Sport Sciences, Exelio srl, Udine, Italy	Metabolic Power and Oxygen Consumption in Soccer: Facts and Theories	22 February 2018 pp 299-314	Biomechanics of Training and Testing	Article	Football
K4b2	2018	Wagner H, Fuchs P, Fusco A, Fuchs P, Bell WJ, Duvillard SP	Department of Sport Science and Kinesiology, University of Salzburg, Salzburg, Austria	Physical Performance in Elite Male and Female Team Handball Players.	2018 Jun 12:1-24	Int J Sports Physiol Perform.	Article	Handball
K4b2	2018	Wright KE, Furzer BJ, Licari MK, Thornton AL, Dimmock JA, Naylor LH, Reid SL, Kwan SR, Jackson B	School of Human Sciences, The University of Western Australia, WA, Australia	Physiological characteristics, self-perceptions, and parental support of physical activity in children with, or at risk of, developmental coordination disorder.	2018 Jun 16.	Res Dev Disabil.	Article	Paediatric & Children
K4b2	2018	Anna-Liisa Kyhälää, Jyrki Reunamo & Heikki Ruismäki	Faculty of Educational Sciences, University of Helsinki, Finland	Preschool children are more physically active and less sedentary on weekdays compared with weekends	Volume 7 Issue 1 2018, 100-126	Journal of Early Childhood Education Research	Article	Paediatric & Children
K4b2	2018	Rankin KC, O'Brien LC, Gorgey AS	Spinal Cord Injury and Disorders Service , Hunter Holmes McGuire VAMC , Richmond , Virginia , USA.	Quantification of trunk and android lean mass using dual energy x-ray absorptiometry compared to magnetic resonance imaging after spinal cord injury	2018 Feb 20:1-9	J Spinal Cord Med. 2018 Feb 20:1-9	Article	Neurology
K4b2	2018	Krkeljas Z, Moss SJ	Physical Activity, Sport and Recreation Research Focus Area, North-West University	Relationship between gait kinematics and walking energy expenditure during pregnancy in South African women.	2018 Jun 19:10:11	BMC Sports Sci Med Rehabil. .	Article	Gait
K4b2	2018	Arkadiusz Jaroslaw Stanula, Robert Krzysztof Roczniok, Tomasz Tytus Gabrys, Urszula Barbara Szmatlan-Gabrys, Mariusz Jacek Ozimek	Department of Individual Sports, The Jerzy Kukuczka Academy of Physical Education, Katowice, Poland	Relationships of physical fitness test results and player performance indicators in national-level ice hockey players	Volume IV, May 25th-26th, 2018. 264-273	Society, integration, education	Article	Hockey
K4b2	2018	JEFFREY MONTES, JOHN C. YOUNG, RICHARD TANDY, and JAMES W. NAVALTA	Department of Kinesiology and Nutrition Sciences, University of Nevada, Las Vegas, Las Vegas, NV, USA	Reliability and Validation of the Hexoskin Wearable Bio-Collection Device During Walking Conditions	11(7): 806-816, 2018	International Journal of Exercise Science	Article	Wearables
K4b2	2018	Oueslati F, Berriri A, Boone J, Ahmadi S.	Université de Picardie Jules Verne, Amiens, France; Centre de recherche de l'Institut universitaire de cardiologie et de pneumologie de Québec, Québec, Canada	Respiratory muscle strength is decreased after maximal incremental exercise in trained runners and cyclists	2018 Jan;248:25-30	Respir Physiol Neurobiol.	Article	Exercise Physiology
K4b2	2018	Vincent HK, Zdziarski LA, Fallgatter K, Negron G, Chen C, Leavitt T, Horodyski M, Wasser JG, Vincent KR	University of Florida, Department of Orthopaedics and Rehabilitation, College of Medicine, Gainesville, FL.	Running Mechanics and Metabolic Responses with Water Bottles and Bottle Belt Holders	2018 Jan 18:1-28	Int J Sports Physiol Perform.	Article	Ergonomics
K4b2	2018	Yoav Meckel, Ofer Doron, Eyal Eliakim, Alon Eliakim	The Academic College at Wingate, Wingate Institute, Netanya 4290200, Israel	Seasonal Variations in Physical Fitness and Performance Indices of Elite Soccer Players	2018, 6(1), 14;	Sports	Article	Football
K4b2	2018	Dias MRC, Simão R, Saavedra FJF, Buzzachera CF, Fleck S.	Laboratory of Exercise Physiology and Morphofunctional Assessment, Granbery Methodist College, Juiz de Fora, Brazil.	Self-Selected Training Load and RPE During Resistance and Aerobic Training Among Recreational Exercisers.	2018 Aug;125(4):769-787.	Percept Mot Skills.	Article	Exercise Physiology
K4b2	2018	Hales ME, Johnson JD	Department of Health Promotion and Physical Education, Kennesaw State University, Kennesaw, GA.	Sport Field Properties Influence Muscle Recruitment Patterns and Metabolic Response.	2018 Jun 12:1-26.	Int J Sports Physiol Perform.	Article	Exercise Physiology
K4b2	2018	Sébastien de Maistre, Nicolas Vallée, Sandrine Gaillard, Claude Duchamp & Jean-Eric Blatteau	Service de Médecine Hyperbare et Expertise Plongée, HIA Sainte-Anne, BP600, Toulon, Cedex 9, France	Stimulating fermentation by the prolonged deceleration of gut transit protects against decompression sickness	Volume 8, Article number: 10128 (2018)	Scientific Reports	Article	Diet & Food Supplement
K4b2	2018	Ali Arjmandpanah Eilaki , Mohammad Esmael Afzalpour , Reza Bagheri , Mohammad Mosafeni Ziaaldini	Ferdowsi University of Mashhad	The Effect of Beta-Alanine Supplementation on First and Second Ventilatory Threshold of Male Swimmers	2018, 5(3): 9-14	Nutr Food Sci Res	Article	Swimming
K4b2	2018	Mejuto G, Chalmers S, Gilbert S, Bentley D	University of the Basque Country, ES, Spain.	The effect of ice slurry ingestion on body temperature and cycling performance in competitive athletes.	2018 Feb;72:143-147	J Therm Biol.	Article	Diet & Food Supplement
K4b2	2018	Peter-James Barron, Katherine E Burgess, Kay Cooper, Arthur D Stewart	Robert Gordon University RGU · School of Health Sciences	The effect of pitched and vertical ladder ergometer climbing on cardiorespiratory and psychophysical variables	66:172-176 · January 2018	Applied Ergonomics	Article	Ergonomics
K4b2	2018	Ozge Kucukerdonmez, Neslisah Rakıcıoğlu	Ege University, Faculty of Health Science, Department of Nutrition and Dietetics	The effect of seasonal variations on food consumption, dietary habits, anthropometric measurements and serum vitamin levels of University Students	2018; Vol. 20, N. 2: 165-175	Progress in Nutrition	Article	Diet & Food Supplement
K4b2	2018	Martin Holguera R, Turrión Nieves AI, Rodríguez Torres R, Alonso MC.	Departamento de Cirugía y ciencias médico sociales, Unidad docente de Anatomía y Embriología humanas, Facultad de Medicina, Universidad de Alcalá de Henares, Alcalá de Henares, Madrid, Spain	The effects of truncal adiposity in forced spirometry: Sex differences.	2018 Jan;247:167-173	Respir Physiol Neurobiol.	Article	Pneumology
K4b2	2018	Deepa Ramadurai , Maeveen Riordan , Bridget Graney , Tara Churney , Amy L. Olson , Jeffrey J. Swigris	Department of Medicine, University of Colorado School of Medicine, Aurora, CO, USA	The impact of carrying supplemental oxygen on exercise capacity and dyspnea in patients with interstitial lung disease	Volume 138, May 2018, Pages 32-37	Respiratory Medicine	Article	Pneumology
K4b2	2018	Alexiou Vasileios, Souglis Athanasios, Sotiropoulos Antonios, Gortzis Nikos, Petrakis Giorgos	Faculty of Physical Education and Sport Science, National and Kapodistrian University of Athens, Greece	The increase of VO2 max variation and the specific biochemical parameters in soccer players after a pre-season training program	June 30, 2018 18(2), Art 100, pp. 686 - 694, 2018	Journal of Physical Education and Sport (JPES).	Article	Football
K4b2	2018	Lima RA, Bugge A, Ersbøll AK, Stodden DF, Andersen LB	CAPES Foundation, Ministry of Education of Brazil, Brasília, DF, Brazil; University of Southern Denmark, Institute for Sport Science and Clinical Biomechanics, Center for Research in Childhood Health, Campusvej, Denmark	The longitudinal relationship between motor competence and measures of fatness and fitness from childhood into adolescence.	2018 May 18. pii: S0021-7557(17)31000-8	J Pediatr (Rio J).	Article	Paediatric & Children
K4b2	2018	Chiu-Ping Yeh, Hsien-Cheng Huang, Yajiu Chang, Ming-De Chen, and Miaoju Hsu	Department of Physical Education, National Taiwan Normal University, Taipei, Taiwan	The Reliability and Validity of a Modified Squat Test to Predict Cardiopulmonary Fitness in Healthy Older Men	Volume 2018, Article ID 4863454, 7 pages	BioMed Research International	Article	Geriatrics
K4b2	2018	Feito Y, Moriarty TA, Mangine G, Monahan J.	Department of Exercise Science & Sport Management, Kennesaw State University, Kennesaw, GA, USA	The use of a smart-textile garment during high-intensity functional training. A Pilot Study.	2018 Jul 18	J Sports Med Phys Fitness.	Article	Wearables
K4b2	2018	Saggin, Y, Belaiz, D, Mottet, S, Pla, K, Bakhti, S, Fazilleau, A, Vena, B, Sorli	Institute of Electronics & Systems, Montpellier, 34095 France	Validation of a simple Metabolic-Equivalent-of-Task sensor based on a low-cost NFC RFID wristband	1-1 · July 2018 with 10 Reads	IEEE Sensors Journal PP(99)	Article	Wearables
K4b2	2018	Chandrasekaran Jayaraman, Chaitanya Krishna Mummidisetty, Alannah Mannix-Slobig, Lori McGee Koch, Arun Jayaraman	Shirley Ryan AbilityLab, Center for Bionic Medicine, Chicago, USA	Variables influencing wearable sensor outcome estimates in individuals with stroke and incomplete spinal cord injury: a pilot investigation validating two research grade sensors	2018 15:19	Journal of NeuroEngineering and Rehabilitation	Article	Neurology
K4b2	2018	Andrew Wilcock, Sim Koon, Cathann Manderson, Vicky Taylor, Matthew Maddocks	Department of Clinical Oncology, Nottingham University Hospitals NHS Trust, Nottingham, NG5 1PB, UK	Within and between day repeatability of the incremental shuttle walking test in patients with thoracic cancer	Volume 140, July 2018, Pages 39-41	Respiratory Medicine	Article	Oncology

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K4b2	2018	Andre'e-Anne Parent, Daniel Martin, Daniel Martin, Sandra Morales, Jean Boucher, and Alain-Steve Comtois	University of Quebec in Montreal	XP-Antarctic Expedition: The Effect of a Month-Long Expedition in Antarctica on Physiological Performance	Vol. 14 : Iss. 1 , Article 10.	Journal of Human Performance in Extreme Environments	Article	Space
K4b2	2017	Jorge L. Storniolo, Gaspard Pavei, and Alberto E. Minetti*	Laboratory of Locomotion Physiomechanics, Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy	A "Wearable" Test for Maximum Aerobic Power: Real-Time Analysis of a 60-m Sprint Performance and Heart Rate Off-Kinetics	2017; 8: 868.	Front Physiol.	Article	Wearables
K4b2	2017	Stefano Gobbo, Valentina Bullo, Federica Duregon, Lucia Cugusi, Barbara Vendramin, Danilo S. Bocalini, Piero Benelli, Cristine L. Alberton, Andrea Di Blasio, David Cruz-Diaz, Manuele Bergamo, Andrea Ermolao, Marco Bergamin	Sport and Exercise Medicine Division, Department of Medicine, University of Padova, Via Giustiniani, 2, 35128 Padua, Italy	A comparative analysis between head-out underwater walking and land-based treadmill walking in a group of healthy asymptomatic elderly	26 July 2017	Sport Sci Health	Article	Exercise Physiology
K4b2	2017	Munish Bhatia, Sandeep K. Sood	Guru Nanak Dev University, Regional Campus, Gurdaspur, India	A comprehensive health assessment framework to facilitate IoT-assisted smart workouts: A predictive healthcare perspective	Volumes 92–93, November 2017, Pages 50-66	Computers in Industry	Article	Exercise Physiology
K4b2	2017	Emily S Gardinier, Brian M Kelly, Jeffrey Wensman and Deanna H Gates	School of Kinesiology, University of Michigan, Ann Arbor, MI, USA	A controlled clinical trial of a clinically-tuned powered ankle prosthesis in people with transtibial amputation	2017 Jul 1:269215517723054	Clin Rehabil	Article	Disabled
K4b2	2017	Dalton M. Pessôa Filho, Leandro O.C. Siqueira1, Astor R. Simonato, Mário A.C. Espada, Daniel S. Pestana, Fred J. DiMenna	Institute of Biosciences, São Paulo State University (UNESP)/Rio Claro, Brazil.	A Rapidly-Incremented Tethered-Swimming Test for Defining Domain-Specific Training Zones	2017 Jun; 57: 117–128.	J Hum Kinet	Article	Swimming
K4b2	2017	Louis N. Awad, Jaehyun Bae, Kathleen O'Donnell, Stefano M. M. De Rossi, Kathryn Hendron, Lizeth H. Sloot, Pawel Kudzia, Stephen Allen, Kenneth G. Holt, Terry D. Ellis, Conor J. Walsh	Wyss Institute for Biologically Inspired Engineering, Harvard University, 3 Blackfan Circle, Boston, MA 02115, USA	A soft robotic exosuit improves walking in patients after stroke	26 July 2017 Vol. 9, Issue 400,	Awad et al., Sci. Transl. Med.	Article	Robotics
K4b2	2017	Lee HJ, Lee S, Chang WH, Seo K, Shim Y, Choi BO, Ryu GH, Kim YH.	Center for Prevention and Rehabilitation, Heart Vascular and Stroke, Samsung Medical Center, Department of Physical and Rehabilitation Medicine, Sungkyunkwan University School of Medicine, Seoul 06351, South Korea	A Wearable Hip Assist Robot Can Improve Gait Function and Cardiopulmonary Metabolic Efficiency in Elderly Adults	2017 Sep;25(9):1549-1557	IEEE Trans Neural Syst Rehabil Eng.	Article	Gait
K4b2	2017	Xavier Woorons, Patrick Mucci, Julien Aucouturier, Agathe Anthierens, Grégoire P. Millet	UREPSSS, Unité de Recherche Pluridisciplinaire Sport, Santé, Société, Faculté des Sciences du Sport et de l'EP, University of Lille, 9 rue de l'Université, EA-7369, 59790 Ronchin, France	Acute effects of repeated cycling sprints in hypoxia induced by voluntary hypoventilation	5(4): 77-84, 2017	Eur J Appl Physiol	Article	Exercise Physiology
K4b2	2017	Sarah R. Valkenborghs, Milanka M. Visser, Ashlee Dunn, Kirk I. Erickson, Michael Nilsson, Robin Callister, Paulette van Vliet	Priority Research Centre for Physical Activity and Nutrition, University of Newcastle, Callaghan, NSW 2308, Australia	AExaCTT – Aerobic Exercise and Consecutive Task-specific Training for the upper limb after stroke: Protocol for a randomised controlled pilot study	September 2017; Volume 7, Pages 179-185	Contemporary Clinical Trials Communications	Article	Exercise Physiology
K4b2	2017	Brito, J P; Costa, A M; Bento, P; Garrido, N; Reis, V M , Conceicao A.	Sports Sciences Research Laboratory, Sports Sciences School of Rio Maior, Polytechnic Institute of Santarém, PORTUGAL	Air ventilation effects during the stationary roller bicycle test	March 31, 2017 17(1), Art 53, pp. 361 - 366., 2017	Journal of Physical Education and Sport(JPES)	Article	Cycling
K4b2	2017	Shane Malone, Brian Hughes and Kieran D Collins	Gaelic Sports Research Centre, Institute of Technology Tallaght, Dublin, Ireland	Are small-sided games an effective training methodology for improving fitness in hurling players? A comparative study of training methodologies	October 12, 2017	International Journal of Sports Science & Coaching		Exercise Physiology
K4b2	2017	Enhad A. Chowdhury, Max J. Western, Thomas E. Nightingale, Oliver J. Peacock, Dylan Thompson	Department for Health, University of Bath, Bath, United Kingdom	Assessment of laboratory and daily energy expenditure estimates from consumer multisensor physical activity monitors	February 24, 2017 12(2): e0171720.	PLoS ONE	Article	Wearables
K4b2	2017	B. T. Quinlivan, S. Lee, P. Malcolm, D. M. Rossi, M. Grimmer, C. Sivi, N. Karavas, D. Wagner, A. Asbeck, I. Galiana, C. J. Walsh	John A. Paulson School of Engineering and Applied Sciences, Harvard University, M Cambridge, MA 02138, USA	Assistance magnitude versus metabolic cost reductions for a tethered multiarticular soft exosuit	18 January 2017	Science Robotics vol. 2, Issue 2, eaah4416	Article	Ergonomics
K4b2	2017	Ye Ding, Ignacio Galiana, Alan T. Asbeck, Stefano Marco Maria De Rossi, Jaehyun Bae, Thiago Ribeiro Teles Santos, Vanessa Lara Araujo, Sangjun Lee, Kenneth G. Holt, Conor Walsh	School of Engineering and Applied Science, Harvard University, Cambridge, MA 02138 USA	Biomechanical and Physiological Evaluation of Multi-joint Assistance with Soft Exosuits	2017 Feb; 25(2):119-130.	IEEE Trans Neural Syst Rehabil Eng.	Article	Biomechanics
K4b2	2017	Elizabeth Russell Esposito, Harmony S. Choi, Benjamin J. Darter, Jason M. Wilken	Center for the Intrepid, Brooke Army Medical Center, JBSA, Ft. Sam Houston, Texas, United States of America.	Can real-time visual feedback during gait retraining reduce metabolic demand for individuals with transtibial amputation?	2017 Feb 9;12(2):e0171786	PLoS One.	Article	Disabled
K4b2	2017	Robles P, Araujo T, Brooks D, Zabjek K, Janaudis-Ferreira T, Marzolini S, Goldstein R, Mathur S.	Respiratory Medicine, West Park Healthcare Centre, Toronto, Ontario, Canada	Cardiorespiratory Responses to Short Bouts of Resistance Training Exercises in Individuals With Chronic Obstructive Pulmonary Disease	2017 Sep;37(5):356-362	J Cardiopulm Rehabil Prev	Article	Pneumology
K4b2	2017	Ane Katrine Skielboe, Thomas Quaade Bandholm, Stine Hakmann, Malene Mourier, Thomas Kallelose, Ulrik Dixen	Department of Cardiology, Copenhagen University Hospital Amager & Hvidovre, Hvidovre, Denmark	Cardiovascular exercise and burden of arrhythmia in patients with atrial fibrillation - A randomized controlled trial	12(2): e0170060.	PLoS ONE	Article	Cardiology
K4b2	2017	Jos Hendrikk, MSc; Loes S Ruijs, Lieke GE , Paul MC Lemmens, Erik GP Schuijers, MSc; Annelies HC Goris	Innovation Site Eindhoven, Philips, Eindhoven, Netherlands	Clinical Evaluation of the Measurement Performance of the Philips Health Watch: A Within-Person Comparative Study	2017; 5(2):e10	JMIR Mhealth Uhealth	Article	Wearables
K4b2	2017	Manolis Adamakis	Department of Physical Education and Sport Science, National and Kapodistrian University of Athens, Greece	Comparing the Validity of a GPS Monitor and a Smartphone Application to Measure Physical Activity	6:2–28–38, 2017	Journal MTM	Article	Wearables
K4b2	2017	Rodrigo Zacca, Rui Azevedo, Ricardo Peterson Silveira, João Paulo Vilas-Boas, David B. Pyne, Flávio A. de S. Castro, Ricardo J. Fernandes	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport, University of Porto, Porto, Portugal	Comparison of incremental intermittent and time trial testing in age-group swimmers	2017 Jun 22	Journal of Strength and Conditioning Research	Article	Swimming
K4b2	2017	Brehm MA, Verduijn S, Bon J, Bredt N, Nollet F.	Department of Rehabilitation , Academic Medical Center, University of Amsterdam, PO 22660, 1100 DD Amsterdam, The Netherlands.	Comparison of two 6-minute walk tests to assess walking capacity in polio survivors.	2017 Nov 21;49(9):732-737	J Rehabil Med.	Article	Pneumology

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K4b2	2017	Tadashi Ito	Three-dimensional motion analysis room, Aichi Prefecture Mikawa Aoitri Medical and Rehabilitation Center for Developmental Disabilities, Okazaki-shi, Aichi, Japan	Comprehensive Physical Function Assessment in Elderly People	2017	Clinical Physical Therapy	Article	Geriatrics
K4b2	2017	Luana F. de Oliveira, Guilherme Yamaguchi, Victor de S. Painelli, Rafael P da Silva, Livia S. Gonçalves, Bruno Gualano1 and Bryan Saunders	University of Sao Paulo, Sao Paulo, Brazil.	Comprehensive reliability analysis of a workbased (-420 kJ) cycling time-trial in recreationally-trained individuals	2 Feb 2017 Vol. 6(1), 11-17	J Sci Cycling.	Article	Exercise Physiology
K4b2	2017	Tagliente Irene, Trieste Leopoldo, Petrassi Valerio, De Balsi Vincenzo Mario and Bella Sergio	Scientific Direction, Research Area of Clinical-Healthcare and Management Innovations, Pediatric Hospital Bambino Gesù, Rome, Italy	Consideration on the Accuracy of Watch for Physical Activity Tracker	2017, 5:1	Irene et al., Gen Med (Los Angeles)	Article	Wearables
K4b2	2017	Lúcia Oliveira, Saulo Oliveira, Fernando Guimarães, Manoel Costa	Universidade de Pernambuco, Recife, Brasil. Escola Superior de Educação Física, ESEF, Brasil	Contributions of body fat, fat free mass and arm muscle area in athletic performance of wheelchair basketball players	2017, vol. 13, n. 2, pp. 36-48	Journal Motricidade	Article	Basketball
K4b2	2017	Mariusz Ozimek, Urszula Szmatlan-Gabrys, Tomasz Gabrys, Arkadiusz Stanula, Lidia Stanisz, Barbara Grabacka-Pietruszka, Jacek Majka, Wojciech Eliasz-Radzikowski	Wydział Wychowania Fizycznego i Sportu, Akademia Wychowania Fizycznego im. Bronisława Czecha w Krakowie, Polska	Control in competitive sport as exemplified by a women basketball team in the Polish First League	Vol 11, No 1 (2017),	Journals Muni	Article	Basketball
K4b2	2017	Sung, Bong-ju , Ko, Byoung-goo	Korea Institute of Sport Science, Korea	Differences of Physique and Physical Fitness among Male South Korean Elite National Track and Field Athletes	2017 Vol. 5(2), pp. 17 - 26	International Journal of Human Movement and Sports Sciences	Article	Exercise Physiology
K4b2	2017	Marcos Gonçalves Santana, Giselle Soares Passos, Rita Aurélio Boscolo, Marco Túlio de Mello	Universidade Federal de Goiás UFG, Unidade Acadêmica de Ciências da Saúde	Does Obstructive Sleep Apnea Impact the Sleep Quality, Physical Capacity, Mood and Quality of Life of Elderly Lean Men?	November 21, 2017	Sleep Medicine and Disorders: International Journal	Article	Sleep study
K4b2	2017	Chethan C R, D. Anantha Krishnan	ICAR-Directorate of Weed Research, Jabalpur 482 004, India	Dynamic push-pull strength data generation for agricultural workers to develop manual dryland weeders	10/25/2017, Vol. 113 Issue 8, p1601-1605. 5p.	Current Science (00113891) .	Article	Ergonomics
K4b2	2017	Feng-Hua Sun, Gang-Yan Si	Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China	Effect of carbohydrate and protein solutions consumed during a moderate intensity exercise on post-exercise appetite	179 (2017) 510–515	Physiology & Behavior	Article	Diet & Food Supplement
K4b2	2017	Ragami Chaves Alves, Lúcio Follador, Sandro dos Santos Ferreira, Sergio Gregório da Silva	Universidade Federal do Paraná UFPR · Departamento de Educação Física	Effect of combined training on ratings of perceived exertion and sensation of pleasure/displeasure in obese women	19(6):696-709 · December 2017 with 15 Reads	Revista Brasileira de Cineantropometria e Desempenho Humano	Article	Obesity
K4b2	2017	Poly Ghosh, Sukriti Kumari	Senior Professional Trainee, Department of Prosthetics & Orthotics	Effectiveness of Gel Seat Cushion on Pressure Ulcer and Metabolic Cost in Traumatic Paraplegic Person Using Manual Wheelchair- A Case Report	March 2017 Vol.7; Issue: 3	International Journal of Health Sciences & Research	Article	Disabled
K4b2	2017	Sang-Hoon Kim, Ho-Jung An, Jung-Hyun Choi, Yong-Youn Kim	Department of Medical Science, Korea Paralympic Committee, Republic of Korea	Effects of 2-week intermittent training in hypobaric hypoxia on the aerobic energy metabolism and performance of cycling athletes with disabilities	2017; 29: 1116–1120,	J. Phys. Ther. Sci.	Article	Cycling
K4b2	2017	Taylor W. Rowley, Jennifer L. Espinoza, Jeremy D. Akers, David L. Wenos, and Elizabeth S. Edwards	College of Health and Behavioral Sciences, Department of Kinesiology, James Madison University, 800 South Main Street, Harrisonburg, VA 22807, USA	Effects of run sprint interval training on healthy, inactive, overweight/obese women: A pilot study	2017 ; 2: 53–67	FACETS	Article	Obesity
K4b2	2017	Ashraf S Gorgey, Refka E Khalil, Ranjodh Gill, Laura C O'Brien, Timothy Lavis, Teodoro Castillo, David X Cifu, Jeannie Savas, Rehan Khan, Christopher Cardozo, Edward J Lesnfsky, David R Gater, Robert A Adler	Spinal Cord Injury and Disorders Center, Hunter Holmes McGuire VAMC, Richmond, Virginia, USA.	Effects of Testosterone and Evoked Resistance Exercise after Spinal Cord Injury (TEREX-SCI): study protocol for a randomised controlled trial	2017;7:e014125	BMJ Open	Article	Disabled
K4b2	2017	Pompano LM, Haas JD	Division of Nutritional Sciences, Cornell University, Ithaca, NY	Efficacy of iron supplementation may be misinterpreted using conventional measures of iron status in iron-depleted, nonanemic women undergoing aerobic exercise training.	2017 Dec;106(6):1529-1538	Am J Clin Nutr.	Article	Diet & Food Supplement
K4b2	2017	Richard M. Kesler, Alexandra E. KliegerMorgan K., BoesElizabeth T., Hsiao-Wecksler, Rachel E. Klaren ,Yvonne Learmonth, Robert W. Motl, Gavin P. Horn	Fire Service Institute, University of Illinois, Urbana-Champaign, MC-675, 11 Gerty Drive, Champaign, IL 61820, USA	Egress Efficacy of Persons with Multiple Sclerosis During Simulated Evacuations	2017	Fire Technology	Article	Neurology
K4b2	2017	Ulrike M. Mueller, MD; Claudia Walther, MD; Jennifer Adam; Kati Fikenzler, MD; Sandra Erbs, MD; Meinhard Mende, PhD; Volker Adams, PhD; Axel Linke, MD; Gerhard Schuler, MD	Department of Internal Medicine/Cardiology, University Leipzig - Heart Center.	Endothelial Function in Children and Adolescents Is Mainly Influenced by Age, Sex and Physical Activity - An Analysis of Reactive Hyperemic Peripheral Artery Tonometry.	2017 Apr 25;81(5):717-725.	Circ J.	Article	Paediatric & Children
K4b2	2017	K.A. Pfeiffer, K.B. Watson, R.G. McMurray, D.R. Bassett, N.F. Butte, S.E. Crouter, S.D. Hermann, S. G. Trost, B.E. Ainsworth, J.E. Fulton, and D. Berrigan	Department of Kinesiology, Michigan State University, East Lansing, MI.	Energy Cost Expression for a Youth Compendium of Physical Activities: Rationale for Using Age Groups	2017 Aug 8: 1-22.	Pediatr Exerc Sci.	Article	Paediatric & Children
K4b2	2017	Victor Machado Reis, Nuno Domingos Garrido, Jeferson Vianna, Ana Catarina Sousa, JoséÁ VilacEa Alves, MaÁrio Cardoso Marques	Research Center in Sports Sciences, Health Sciences & Human Development, CIDESD, Vila Real, Portugal.	Energy cost of isolated resistance exercises across low- to high-intensities	2017 Jul 24; 12(7):e0181311	PLoS One.	Article	Exercise Physiology
K4b2	2017	Javier Monedero, Enda E. Murphy, Donal J. O'Gorman	School of Health and Human Performance, Faculty of Science and Health, Dublin City University, Dublin, Ireland	Energy expenditure and affect responses to different types of active video game and exercise	12(5): e0176213.	PLoS ONE	Article	Computer Games
K4b2	2017	Alessandra de Carvalho Bastone , Eduardo Ferrioli , Karina Pfrimer , N. Bruno de Souza Moreira, Juliano Bergamaschine Mata Diz, João Marcos Domingues Dias , Rosângela Corrêa Dias	Department of Physical Therapy-Federal University of Jequitinhonha and Mucuri Valleys, Diamantina, Minas Gerais, Brazil.	Energy Expenditure in Older Adults Who Are Frail: A Doubly Labeled Water Study.	2017 Aug 3	J Geriatr Phys Ther	Article	Geriatrics
K4b2	2017	Choi, Yeon-jung, Ju, Mun-jeong, Park, Jung-hye, Park, Jong-hoon, Kim, Eun-kyung	Department of Food and Nutrition, Gangneung-Wonju National University, Gangneung 25457, Korea	Energy expenditure of physical activity in Korean adults and assessment of accelerometer accuracy by gender	2017; 50(6): 552 - 564	J Nutr Health	Article	Wearables

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K4b2	2017	Nasstasia Y, Baker AL, Halpin SA, Hides L, Lewin TJ, Kelly BJ, Callister R	School of Psychology, University of Newcastle, Callaghan, NSW 2308, Australia	Evaluating the efficacy of an integrated motivational interviewing and multi-modal exercise intervention for youth with major depression: Healthy Body, Healthy Mind randomised controlled trial protocol.	2017 Nov 24;9:13-22.	Contemp Clin Trials Commun.	Article	Exercise Physiology
K4b2	2017	Toshitake Araie, Uichi Nishizawa, Tomozumi Ikeda, Akira Kakimoto, and Shigeki Toyama	Polytechnic University of Japan	Evaluation of Labor Burden Reduction Achieved through Wearing an Agricultural Power Assist Suit	August 2017 Vol. 7, No. 4,	International Journal of Modeling and Optimization,	Article	Ergonomics
K4b2	2017	Stanley Sai-Chuen Hui, Yao Jie Xie, Ron Chi-Wai Kwok, Eric Wing-Cheung Tam, Winnie Wing Sze Mak, Phoenix Kit-Han Mo	Department of Sports Science and Physical Education, The Chinese University of Hong Kong, Shatin, Hong Kong, China	Follow Your Virtual Trainer (FYVT): a randomised controlled trial protocol of IT-based lifestyle intervention programme to promote physical activity and health among middle-aged Hong Kong Chinese	2017-017908	bmjopen	Article	Exercise Physiology
K4b2	2017	Kristian Karstoft & Margaret A. Clark & Ida Jakobsen & Sine H. Knudsen & Gerit van Hall & Bente K. Pedersen & Thomas P. J. Solomon	The Centre of Inflammation and Metabolism and the Centre for Physical Activity Research, University of Copenhagen, Rigshospitalet, Section M7641, Blegdamsvej 9, DK-2100, Copenhagen, Denmark	Glucose effectiveness, but not insulin sensitivity, is improved after short-term interval training in individuals with type 2 diabetes mellitus: a controlled, randomised, crossover trial.	2017 Aug 25.	Diabetologia	Article	Diabetology
K4b2	2017	Alain Boussoles , Pascal Rossi, Laurent Poirette and Olivier Gavarry	UMR MD2, Aix Marseille University (AMU), Marseille	Heart rate recovery improves after exercise in water when compared with on land	2017 Aug 10	Clin Physiol Funct Imaging	Article	Exercise Physiology
K4b2	2017	Ian Rice, Ryan T Pohlig, Jennifer Dysterheft and Robert Motl	Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, USA	How does Vector Magnitude Obtained from Wrist Worn Actigraphy Relate to Kinetic and Spatiotemporal Measures of Wheelchair Propulsion Technique at Different Speeds	2017, Volume 2 ,Issue 1 , Article 1013	Sports Medicine and Rehabilitation Journal	Article	Wearables
K4b2	2017	Jeans KA, Lovejoy JF, Karol LA, McClung AM.	Texas Scottish Rite Hospital for Children, 2222 Welborn St, Dallas, TX 75219, USA	How Is Pulmonary Function and Exercise Tolerance Affected in Patients With AIS Who Have Undergone Spinal Fusion?	2017 Nov;5(6):416-423.	Spine Deform.	Article	Pneumology
K4b2	2017	Kim M, Ding Y, Malcolm P, Speeckaert J, Siviuy CJ, Walsh CJ, Kuindersma S	John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, United States of America	Human-in-the-loop Bayesian optimization of wearable device parameters.	2017 Sep 19;12(9):e0184054	PLoS One.	Article	Wearables
K4b2	2017	Mauricio Garzon, Mathieu Gayda , Anil Nigam, Alain-Steve Comtois, Martin Juneau	Cardiovascular Prevention and Rehabilitation Centre (EPIC), Montreal Heart Institute and University of Montreal, Montreal, Quebec, Canada H1T 1N6	Immersible ergocycle prescription as a function of relative exercise intensity	Volume 6, Issue 2, June 2017, Pages 219-224	Journal of Sport and Health Science	Article	Exercise Physiology
K4b2	2017	Kommi Kalpana, Doddipalli Lakshmi Kusuma, Priti Rishi Lal, Gulshan Lal Khanna	Department of Nutrition, St.Francis College for Women, India	Impact of Spirulina on Exercise Induced Oxidative Stress and Post Exercise Recovery Heart Rate of Athletes in Comparison to a Commercial Antioxidant	12 July, 2017	Kalpana K, et al. Food Nutr J	Article	Diet & Food Supplement
K4b2	2017	Julie E. Taylor, Camille Thomas, Jacob W. Manning	College of Education and Human Development, Southern Utah University, United States	Impact of Wheel Size on Energy Expenditure during Mountain Bike Trail Riding	5(4): 77-84, 2017	International Journal of Human Movement and Sports Sciences	Article	Cycling
K4b2	2017	Ashlee Dunn, Dianne L. Marsden, Paulette Van Vliet, Neil J. Spratt & Robin Callister	A Priority Research Centre for Physical Activity and Nutrition , University of Newcastle , Callaghan , New South Wales, Australia	Independently ambulant, community-dwelling stroke survivors have reduced cardiorespiratory fitness, mobility and knee strength compared to an age- and gender-matched cohort.	2017 Apr; 24(3):163-169	Top Stroke Rehabil	Article	Cardiology
K4b2	2017	Ernest Baiget, Xavier Iglesias, Ferran A. Rodríguez	Sport Performance Analysis Research Group, University of Vic-Central University of Catalonia, Barcelona, Spain	Maximal Aerobic Frequency of Ball Hitting: A New Training Load Parameter in Tennis.	2017 Jan; 31(1):106-114	Journal of Strength and Conditioning Research	Article	Tennis
K4b2	2017	Tom E Nightingale, Peter C Rouse, Dylan Thompson and James LJ Bilzon	Department for Health, University of Bath, Bath, BA2 7AY, UK	Measurement of Physical Activity and Energy Expenditure in Wheelchair Users: Methods, Considerations and Future Directions	2017 Dec; 3(1):10	Sports Med Open	Article	Disabled
K4b2	2017	Brian Kliszczewicz, Robert Buresh, Emily Bechke, Cassie Williamson	Department of Exercise Science and Sport Management, Kennesaw State University, United States	Metabolic biomarkers following a short and long bout of high-intensity functional training in recreationally trained men	2017 ISSUE 3 VOLUME 12 710-718	Journal of Human Sport and Exercise	Article	Exercise Physiology
K4b2	2017	Madhusudan Pal, Tirthankar Chatterjee, Debojyoti Bhattacharyya	Scientist-F, Ergonomics Lab, Defence Institute of Physiology and Allied Sciences Defence Research & Development organisation, Min. of Defence, Govt. of India, Lucknow Road, Delhi-110054, India	Metabolic Cost of Soldiers During Load Carriage at Self-selected Walking Speed in Different Gradient	Jan. 2017. v. 2, n. 4, p. 3-4,	Asian Journal of Bio-Medical Research	Article	Public Safety
K4b2	2017	Duane B. Corbett, Amal A. Wanigatunga, Vincenzo Valiani, Eileen M. Handberg, Thomas W. Buford, Babette Brumback, Ramon Casanova, Christopher M. Janelle, Todd M. Manini	Department of Aging and Geriatric Research, Gainesville, FL 32611	Metabolic costs of daily activity in older adults (Chores XL) study: Design and methods	2017	Contemporary Clinical Trials Communications	Article	Geriatrics
K4b2	2017	Terun Desai and Lindsay Bottoms	School of Health, Sport and Bioscience, University of East London, Stratford, London E15 4LZ, UK	Neck Cooling Improves Table Tennis Performance amongst Young National Level Players	2017, 5, 19;	Sports	Article	Table tennis
K4b2	2017	Lucas Dantas Maia Forte, Fúlvia Barros Manchado-Gobatto, Roberta Cunha Matheus Rodrigues, Maria Cecilia Gallani, Claudio Alexandre Gobatto	School of Applied Science, University of Campinas, São Paulo 13484-350 Brazil.	Non-exhaustive double effort test is reliable and estimates the first ventilatory threshold intensity in running exercise	pii S2095-546(17)30025-X	Journal of Sport and Health Science	Article	Running
K4b2	2017	Edwards RB, Tofari PJ, Cormack SJ, Whyte DG.	School of Exercise Science, Australian Catholic University, Melbourne, VIC, Australia.	Non-motorized Treadmill Running Is Associated with Higher Cardiometabolic Demands Compared with Overground and Motorized Treadmill Running.	Front Physiol.	2017 Nov 14;8:914.	Article	Ergonomics
K4b2	2017	Anthony M J Sanchez, Olivier Girard	Université de Perpignan UPVD - Faculty of Sports Science	Occurrence of a VO2 slow component during intermittent exercises performed at VO2 peak	October 2017 with 106 Reads	Science & Sports	Article	Exercise Physiology
K4b2	2017	Jailton Gregório Pelarigo , Leandro Machado , Ricardo Jorge, Fernandes , Camila Coelho Greco , João Paulo Vilas-Boas	University Catholic Center of Quixadá-UNICATOLICA, Quixadá, Ceará, Brazil, Metropolitan College of Grande Fortaleza	Oxygen uptake kinetics and energy system's contribution around maximal lactate steady state swimming intensity	February 28, 2017	PLoS ONE	Article	Swimming
K4b2	2017	Ana Sousa, Fabio Borrani , Ferran A. Rodríguez and Grégoire P. Millet	Research Center for Sports, Exercise and Human Development, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal,	Oxygen Uptake Kinetics Is Slower in Swimming Than Arm Cranking and Cycling during Heavy Intensity	August 2017 ; Volume 8, Article 639	Frontiers in Physiology	Article	Swimming
K4b2	2017	Miha Dežman, Tadej Debevec, Jan Babič, Andrej Gams	Department of Automatics, Biocybernetics and Robotics, Jožef Stefan Institute, Ljubljana, Slovenia	Passive Ankle Exoskeleton: Design and Practical Evaluation	2017		Article	Robotics

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K4b2	2017	Jun-tian Zhang, Qingguo Li	Queen's University, Kingston, ON, Canada Department of Mechanical and Materials Engineering	Passive inter-joint gait assisting exoskeleton suit	2017	Dynamic Walking Conference	Article	Gait
K4b2	2017	Francisco de Assis Manoel, Danilo F. da Silva, Jorge Roberto Perroud de Lima, Fabiana Andrade Machado	Department of Physical Education, State University of Maringá, Maringá-PR, Brazil	Peak velocity and its time limit are as good as the velocity associated with VO2max for training prescription in runners	2017; 1: E8-E15	Sports Medicine International Open	Article	Running
K4b2	2017	Anne P.Starling, John L.Adgate, Richard F.Hamman, Katerina Kechris, Antonia M.Calafat,Xiaoyun Ye and Dana Dabelea	Department of Epidemiology, Colorado School of Public Health , Aurora, Colorado, USA.	Perfluoroalkyl Substances during Pregnancy and Offspring Weight and Adiposity at Birth: Examining Mediation by Maternal Fasting Glucose in the Healthy Start Study.	2017 Jun 26;125(6):067016	Environ Health Perspect.	Article	Pregnancy
K4b2	2017	MATTHEW C. MILLER , PAUL W. MACDERMID, PHIL W. FINK, & STEPHEN R. STANNARD	School of Sport & Exercise, Massey University, Palmerston North, New Zealand	Performance and physiological effects of different descending strategies for cross-country mountain biking	2017 Apr; 17(3):279-285	Eur J Sport Sci...	Article	Cycling
K4b2	2017	Lars-Kristian Lunde, Øivind Skare Hans C. D. Aass, Asgeir Mamen, Elin Einarsdóttir, Bente Ulvestad ,Marit Skogstad	Department of Occupational Medicine and Epidemiology, National Institute of Occupational Health, Box 8149 Dep.,0033 Oslo, Norway	Physical activity initiated by employer induces improvements in a novel set of biomarkers of inflammation: an 8-week follow-up study	2017 Mar; 117(3):521-532	Eur J Appl Physiol	Article	Exercise Physiology
K4b2	2017	Oonagh M. Giggins, Ieuan Clay, Lorcan Walsh	Insight Centre for Data Analytics, University College Dublin, O'Brien Centre for Science, Science Centre East, Belfield, Dublin, Ireland;	Physical Activity Monitoring in Patients with Neurological Disorders: A Review of Novel Body-Worn Devices	June 12, 2017	Digit Biomark	Article	Neurology
K4b2	2017	Raichlen DA, Pontzer H, Harris JA, Mabulla AZ, Marlowe FW, Josh Snodgrass J, Eick G, Colette Berbesque J, Sancilio A, Wood BM.	School of Anthropology, University of Arizona, Tucson, AZ, 85721.	Physical activity patterns and biomarkers of cardiovascular disease risk in hunter-gatherers.	Am J Hum Biol.	2017 Mar;29(2).	Article	Exercise Physiology
K4b2	2017	Pooya Soltani, Pedro Figueiredo, João Ribeiro, Ricardo J. Fernandes & João Paulo Vilas-Boas	Centre of Research, Education, Innovation and Intervention in Sport (CIFIZD), Faculty of sport, University of Porto, Rua Dr Plácido Costa, 91, 4200-450, Porto, Portugal	Physiological demands of a swimming-based video game: Influence of gender, swimming background, and exergame experience	2017; 7: 5247	Scientific Reports	Article	Computer Games
K4b2	2017	Seema Malhotra, Kiran Preet, Arvind Tomar, Shweta Rawat, Sayar Singh, Inderjeet Singh, L. Robert Varte,Tirthankar Chatterjee, M. S. Pal and Soma Sarkar	Defence Institute of Physiology and Allied Sciences (DIPAS), Ministry of Defence. Government of India, Lucknow Road, Delhi 110054, India.	Polygenic study of endurance-associated genetic markers ACE I/D, ACTN3 Arg(R)577Ter(X), CKMM A/G Ncol and eNOS Glu(G)298Asp(T) in male Gorkha soldiers	2017 Dec; 3(1):17.	Sports Med Open.	Article	Public Safety
K4b2	2017	Niels F J Waterval, Frans Nollet, Jaap Harlaar, Merel-Anne Brehm	Department of Rehabilitation,Academic Medical Center,University of Amsterdam, Amsterdam MovementSciences, Amsterdam, The Netherlands	Precision orthotics: optimising ankle foot orthoses to improve gait in patients with neuromuscular diseases; protocol of the PROOF-AFO study, a prospective intervention study	2017; 7:e013342	BMJ Open	Article	Gait
K4b2	2017	Stamatis Agiovlasisitis, Goncalo V. Mendonca, Jeffrey A. McCubbinm,Bo Fernhall	Department of Kinesiology, Mississippi State University, Mississippi State, MS, USA	Prediction of energy expenditure during walking in adults with down syndrome	25 July 2017	J Appl Res Intellect Disabil.	Article	Down syndrome
K4b2	2017	T. Beltrame R. Amelard, A. Won & R. L. Hughson	Faculty of Applied Health Sciences, University of Waterloo, Waterloo, Ontario, Canada	Prediction of oxygen uptake dynamics by machine learning analysis of wearable sensors during activities of daily living	7:45738	Scientific Reports	Article	Wearables
K4b2	2017	Ralph Maddison, Luke Gemming, Javier Monedero, Linda Bolge, Sarahjane Belton,Johann Issartel, Samantha Marsh, Artur Direito, Madeleine Solenhil, Jinfeng Zhao, Daniel John Exeter,Harshvardhan athsangam,Jonathan Charles Rawstorn.	Institute for Physical Activity and Nutrition, School of Exercise and Nutrition Sciences, Deakin University, Burwood, Australia	Quantifying Human Movement Using the Movn Smartphone App: Validation and Field Study.	2017 Aug; 17;5(8):e122.	JMIR Mhealth Uhealth.	Article	Wearables
K4b2	2017	Simone R. Caljouw , Rutger de Vries, Bob Withagen	University of Groningen, University Medical Centre Groningen, Center for Human Movement Sciences, A. Deusinglaan 1, Groningen, The Netherlands	RAAAF's office landscape The End of Sitting: Energy expenditure and temporary comfort when working in non-sitting postures	November 10, 2017	PLoS ONE 12(11): e0187529	Article	Ergonomics
K4b2	2017	S. R. Wurdeman, P. C. Raffalt & N. Stergiou	Department of Clinical and Scientific Affairs, Hanger Clinic, 11155S, Main St., Houston, TX, 77025, USA	Reduced vertical displacement of the center of mass is not accompanied by reduced oxygen uptake during walking	volume 7, 17182 (2017)	Scientific Reports	Article	Ergonomics
K4b2	2017	Aslankeser Z, Balci ŞŞ	Faculty of Sports Science, Selçuk University, Konya, Turkey	Re-examination of the contribution of substrates to energy expenditure during high-intensity intermittent exercise in endurance athletes.	2017 Sep 6;5:e3769	PeerJ.	Article	Exercise Physiology
K4b2	2017	Joana F. Reis, Gregoire P. Millet, Paula M. Bruno, Veronica Vleck, Francisco B.Alves	Faculty of Human Kinetics - University of Lisbon, Portugal	Sex and exercise intensity do not influence oxygen uptake kinetics in submaximal swimming	2017; 8: 72.	Front Physiol.	Article	Swimming
K4b2	2017	O'Brien LC, Chen Q, Savas J, Lesnfsky EJ, Gorgey AS	Spinal Cord Injury Research, Spinal Cord Injury and Disorders Service, Hunter Holmes McGuire VA Medical Center, 1201 Broad Rock Blvd, Richmond, VA, 23249, USA	Skeletal muscle mitochondrial mass is linked to lipid and metabolic profile in individuals with spinal cord injury.	2017 Nov;117(11):2137-2147	Eur J Appl Physiol.	Article	Neurology
K4b2	2017	Viktor Mishchenko, Stanislaw Sawczyn, Agnieszka Cybulska, Marcin Pasek	Gdansk University of Physical Education and Sport, Gdansk, Poland	Special training of inspiratory muscles in fitness activities and exercise capacity in young women	31 Oct 2017 Volume/Issue: Volume 18: Issue 3	Human Movement	Article	Exercise Physiology
K4b2	2017	Schleppenbach LN, Ezer AB, Gronemus SA, Widenski KR, Braun SI, Janot JM	Department of Kinesiology, University of Wisconsin-Eau Claire, Eau Claire, WI, USA.	Speed- and Circuit-Based High-Intensity Interval Training on Recovery Oxygen Consumption.	2017 Nov 1;10(7):942-953. eCollection 2017.	Int J Exerc Sci.	Article	Exercise Physiology
K4b2	2017	Şükrü Serdar Balci, Zübeyde Aslankeser	Selçuk University, Faculty of Sports Science, Turkey	Substrate Oxidation rates during incremental exercise in trained and untrained young adults	Cilt 11, Sayı 1, 2017	Niğde Üniversitesi Beden Eğitimi Ve Spor Bilimleri Dergisi	Article	Exercise Physiology
K4b2	2017	Stuart Goodall, Kevin Thomas, Liam David Harper, Robert Hunter, Paul Parker, Emma Stevenson, Daniel West, Mark Russell, Glyn Howatson,	Department of Sport, Exercise and Rehabilitation, Faculty of Health and Life Sciences, Northumbria University, Newcastle upon Tyne NE1 8ST, UK	The assessment of neuromuscular fatigue during 120 min of simulated soccer exercise	1 Apr 2017; 117(4):687-697.	Eur J Appl Physiol	Article	Football
K4b2	2017	Wall-Scheffler CM, Myers MJ	Department of Anthropology, University of Washington, Seattle, Washington	The Biomechanical and Energetic Advantages of a Mediolaterally Wide Pelvis in Women	2017 Apr; 300(4):764-775	Anat Rec (Hoboken).	Article	Gait

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K4b2	2017	Christopher R Harnish, Roy T Sabo, Jonathan A Daniels and Deborah Caruso	Department of Exercise Science, Shenandoah University, USA	The Effects of Two Weeks of Arm Crank Sprint Interval Training in Men with Chronic Spinal Cord Injury	2017, 3:059	Harnish et al. Int J Sports Exerc Med	Article	Disabled
K4b2	2017	Lanfranco F, Pollastri L, Corna G, Bartesaghi M, Novarina M, Ferri A, Miserocchi GA	1 Laboratory of Clinical Physiology and Sport Medicine, School of Medicine and Surgery, University of Milano-Bicocca, Monza, Italy	The Elusive Path of Brain Tissue Oxygenation and Cerebral Perfusion in Harness Hang Syncope in Mountain Climbers.	2017 Dec;18(4):363-371	High Alt Med Biol.	Article	Climbing
K4b2	2017	Piras A, Raffi M, Atmazidis C, Merri F, Di Michele R.	Department of Biomedical and Neuromotor Sciences, University of Bologna, Bologna, Italy.	The Energy Cost of Running with the Ball in Soccer.	2017 Nov;38(12):877-822.	nt J Sports Med.	Article	Football
K4b2	2017	Per Morten Fredriksen, Ole Petter Hjelle, Asgeir Mamen, Trine J. Meza and Ane C. Westerberg	Kristiania University College - Department of Health Sciences, PB 1195 Sentrum, 0107 Oslo, Oslo, Norway	The health Oriented pedagogical project (HOPP) - a controlled longitudinal school-based physical activity intervention program	2017; 17:370	Fredriksen et al. BMC Public Health	Article	Research
K4b2	2017	Müller IA, Wedell-Neergaard AS, Solomon TPJ, Karstoft K	The Centre of Inflammation and Metabolism and the Centre for Physical Activity Research, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark	The impact of acute bouts of interval and continuous walking on energy-intake and appetite regulation in subjects with type 2 diabetes	2017 Dec;5(23).	Physiol Rep.	Article	Diabetology
K4b2	2017	Mandy Lucinda Gault and Mark Elisabeth Theodorius Willems	Department of Sport and Exercise Sciences, University of Chichester, College Lane, Chichester, UK	The metabolic equivalents of one-mile walking by older adults; implications for health promotion	2017; 7(4): 216-222.	Health Promot Perspect.	Article	Geriatrics
K4b2	2017	Marco Bergamin, Stefano Gobbo, Valentin aBullo Federica Duregon, Barbara Vendramin, Cristine Lima Alberton, Lucia Cugusi, Tobia Zanutto, Danilo Sales Bocalini, Andrea Di Blasio, Manuel Bergamo, Marco Zaccaria, Andrea Ermolao	Sport and Exercise Medicine Division, Department of Medicine, University of Padova, Italy	Under water Walking Intensity is Modified by a New and Untested Device that Increased the Lower Limb Surface of Movement	2017 September 12.	Asian J Sports Med.	Article	Water based activities
K4b2	2017	Tatiana Piucco, Fernando Diefenthaler, Rogério Soares, Juan M. Murias, and Guillaume Y. Mille	Faculty of Kinesiology, University of Calgary, Calgary, AB, Canada.	Validation of a Maximal Incremental Skating Test Performed on a Slide Board: Comparison With Treadmill Skating.	2017 Mar 24:1-25.	Int J Sports Physiol Perform.	Article	Skating
K4b2	2017	Ferran A. Rodríguez, Diego Chaverri, Xavier Iglesias, Thorsten Schuller, Uwe Hoffmann	INEFC-Barcelona Sport Sciences Research Group, Institut Nacional d'Eduació Física de Catalunya, Universitat de Barcelona, Universitat de Barcelona, Barcelona, Spain	Validity of Postexercise Measurements to Estimate Peak VO ₂ in 200-m and 400-m Maximal Swims.	2017 Jun; 38(6):426-438.	Int J Sports Med.	Article	Swimming
K4b2	2017	Phillipe Malcolm, Sangjun Lee, Simona Crea, Christopher Sivi, Fabricio Saucedo, Ignacio Galiana, Fausto A. Panizzolo, Kenneth G. Holt and Conor J. Walsh	School of Engineering and Applied Sciences, Harvard University, 29 Oxford Street, Cambridge, MA 02138, USA.	Varying negative work assistance at the ankle with a soft exosuit during loaded walking	2017; 14:62	Malcolm et al. Journal of NeuroEngineering and Rehabilitation	Article	Ergonomics
K4b2	2016	Anna Książek, Aleksandra Zagrodna, Wioletta Dziubek, Bogdan Pietraszewski, Bartosz Ochmann, Małgorzata Słowńska – Lisowska	Department of the Biological Basis of Sport, University School of Physical Education, Wrocław	25(OH)D ₃ Levels Relative to Muscle Strength and Maximum Oxygen Uptake in Athletes	2016 Apr 13;50:71-77.	J Hum Kinet	Article	Exercise Physiology
K4b2	2016	Francesco Sartor, Matteo Bonato, Gabriele Papini, Andrea Bosio, Rahil A. Mohammed, Alberto G. Bonomi, Jonathan P. Moore, Giampiero Merati, Antonio La Torre, Hans-Peter Kubis	Personal Health, Philips Research, Eindhoven, The Netherlands	A 45-Second Self-Test for Cardiorespiratory Fitness: Heart Rate-Based Estimation in Healthy Individuals	2016 11(12): e0168154.	PLoS ONE	Article	Exercise Physiology
K4b2	2016	Thomas Stöggel, Christoph Schwarzl, Edith E. Müller, Masaru Nagasaki, Julia Stöggel, Pe-ter Scheiber, Martin Schönfelder and Josef Niebauer	Department of Sport Science and Kinesiology, University of Salzburg, Hallein/Rif, Austria.	A Comparison between Alpine Skiing, Cross-Country Skiing and Indoor Cycling on Cardiorespiratory and Metabolic Response	2016 Feb 23; 15(1):184-95	J Sports Sci Med.	Article	Skiing
K4b2	2016	Dianne Lesley Marsden, MAppMngt Ashlee Dunn, Robin Callister, BPharm, Patrick McElduff, BMath, Christopher Royce Levi, FRACP, FAHMS, Neil James Spratt	School of Medicine and Public Health and Priority Research Centre for Stroke and Brain Injury, University of Newcastle, Callaghan, New South Wales, Australia	A Home- and Community-Based Physical Activity Program Can Improve the Cardiorespiratory Fitness and Walking Capacity of Stroke Survivors.	Dis. 2016 Oct;25(10):2386-98	J Stroke Cerebrovasc	Article	Cardiology
K4b2	2016	Diego Chaverri Jové	Programa de Doctorat "Activitat Física, Educació Física i Esport" Institut Nacional d'Eduació Física de Catalunya (INEFC)	A New Model for Estimating Peak Oxygen Uptake Based on Postexercise Measurements in Swimming	2016 May; 11(4):419-24	Int J Sports Physiol Perform.	Article	Swimming
K4b2	2016	Schuller T., Hoffmann U., Iglesias X., Chaverri D, Rodríguez F. A.	INEFC-Barcelona Sport Sciences Research Group, University of Barcelona, Barcelona, Spain.	A New Model for Estimating Peak Oxygen Uptake Based on Postexercise Measurements in Swimming.	2016 May; 11(4):419-24.	Int J Sports Physiol Perform.	Article	Swimming
K4b2	2016	Chaverri D, Schuller T, Iglesias X, Hoffmann U, Rodríguez FA.	INEFC-Barcelona Sport Sciences Research Group, University of Barcelona, Barcelona, Spain.	A New Model for Estimating Peak Oxygen Uptake Based on Postexercise Measurements in Swimming	Vol. 41, 2016	NRC Research Press	Article	Swimming
K4b2	2016	Chaverri D, Schuller T, Iglesias X, Hoffmann U, Rodríguez FA.	INEFC-Barcelona Sport Sciences Research Group, University of Barcelona, Barcelona, Spain.	A New Model for Estimating Peak Oxygen Uptake Based on Postexercise Measurements in Swimming	2016 May; 11(4):419-24.	International Journal of Sports Physiology and Performance	Article	Swimming
K4b2	2016	Marko D. Stojanovic, Julio Calleja-Gonzalez, Mladen Mikic and Dejan M. Madic, Patrik Drđid, Igor Vuckovic, Sergej M. Ostojic	University of Novi Sad, Faculty of Sport and Physical Education, Lovcenska 16, 21000 Novi Sad, Serbia	Accuracy and Criterion-Related Validity of the 20-M Shuttle Run Test in Well-Trained Young Basketball Players	5 (2016) 2: 5-10	Montenegrin Journal of Sports Science and Medicine	Article	Basketball
K4b2	2016	Fernando Matzenbacher, Bruno Natale Pasquarelli, Felipe Nunes Rabelo, Antônio Carlos Dourado, Julia Zoccolaro Durigan, Hélcio Gonçalves Rossi, Luiz Cláudio Reeberg Stanganelli	University of Passo Fundo. Passo Fundo, RS, Brazil.	Adaptations in the physical capacities of U-18 futsal athletes during a competitive season	Apr 27, 2016 18(1):50-61	Rev Bras Cineantropom Hum		Football
K4b2	2016	Javier Botella, Jose Manuel Sarabia, Silvia Guillén, Raúl López-Gruoso, Keijo Häkkinen, Rafael Sabido	Centro de Investigación del Deporte, Universidad Miguel Hernández, Elche, Spain.	Addition of strength training to off-road cyclists training. A pilot study	2016; 5 (3), 3-10	Journal of Science and Cycling	Article	Cycling
K4b2	2016	Baiget E, Iglesias X, Rodríguez FA	Universitat de Vic - Universitat Central de Catalunya, Sport Performance Research Group, Vic, Spain	Aerobic Fitness and Technical Efficiency at High Intensity Discriminate between Elite and Subelite Tennis Players.	2016 Oct; 37(11):848-54.	Int J Sports Med.	Article	Tennis
K4b2	2016	Olga Kyselovičová, Jana Labudová, Erika Zemková, Dušana Čierna, Michal Jeleň	Comenius University in Bratislava, Slovakia, Faculty of Physical Education and Sport, 2Slovak	Anthropometric and cardiovascular variables of elite athletes	2016 Vol. 56 No. 2	De Gruyter Open	Article	Exercise Physiology

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K4b2	2016	Richard Page, Kelly Marrin PhD, Chris Brogden, Matt Greig PhD	Department of Sport & Physical Activity, Edge Hill University, St.Helens Road, Ormskirk, Lancashire, L39 4QP, United Kingdom	Biomechanical and Physiological Response to a Contemporary Soccer Match-Play Simulation.	2015 Oct; 29(10):2860-6	J Strength Cond Res	Article	Football
K4b2	2016	Lili Tao, Tilo Burghardt, Majid Mirmehdi, Dima Damen, Ashley Cooper, Sion Hannuna, Massimo Camplani, Adeline Paiement, Ian Craddock	Faculty of Engineering, University of Bristol	Calorie Counter: RGB-Depth Visual Estimation of Energy Expenditure at Home	volume 10116	LNCS	Article	Household
K4b2	2016	Xi Lu, Christina Wan-Ying Hui-Chan., William Wai-Nam Tsang	Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, China; Department of Rehabilitation Medicine, China-Japan Friendship Hospital, China	Changes of heart rate variability and prefrontal oxygenation during Tai Chi practice versus arm ergometer cycling.	2016 Nov; 28(11):3243-3248.	J Phys Ther Sci.	Article	Combat Sports
K4b2	2016	Sébastien de Maistre, Nicolas Vallée, Emmanuel Gempp, Kate Lambrechts, Pierre Louge, Claude Duchamp & Jean-Eric Blatteau	Service de Médecine Hyperbare et Expertise Plongée, HIA Sainte-Anne, BP600, Toulon Cedex 9, France.	Colonic Fermentation Promotes Decompression sickness in Rats.	2016 Feb 8;6:20379.	Sci Rep.	Article	Research
K4b2	2016	Manolis Adamakis	Department of Physical Education and Sport Science, National and Kapodistrian University of Athens, Greece	Comparing the validity of a GPS monitor and a smartphone application to measure physical activity	Dec 2016	JMTM	Article	Wearables
K4b2	2016	Gökhan İpekoğlu, Şukrü Serdar Balcı	This work was produced from the master thesis. -Gazi University, Faculty of Sports Science, Turkey	Comparison between continuous and intermittent submaximal exercise at the intensity of maximal fat oxidation	2016 Volume: 13 Issue: 3	Journal of Human Sciences	Article	Exercise Physiology
K4b2	2016	Gamze ERIKOĞLU ÖRER, Alpan CINEMRE,Zambak ŞAHİN,Mehmet PENSE	Faculty of Health Sciences Department of Sport Sciences,ANKARA Yıldırım Beyazıt University	Comparison of the Physiological Responses of Modified 100 m Circular and 20 m Shuttle Run Tests at Women Basketball Players	2016: 11(1)	CBU Journal of Physical Education and Sport Sciences	Article	Basketball
K4b2	2016	Matteo Zago, Giulia Rausa, Susanna Rampichini, Eloisa Limonta, Fabio Esposito and Chiarella Sforza	Department of Biomedical Sciences for Health, University of Milan, Italy	Deceleration counts: estimating the energy cost of shuttle running from mechanical work	Dec 20, 2016	Conference: International Society of Sports Biomechanics, At Tsukuba	Article	Exercise Physiology
K4b2	2016	Fernando P.S. Rocha, Hugo Louro, Ricardo Matias, João Brito, Aldo M. Costa	Department of Sports Sciences, University of Beira Interior, Portugal	Determination of Aerobic Power Through a Specific Test for Taekwondo - A Predictive Equation Model	Vol. 53/2016 in September 2016.	Journal of Human Kinetics	Article	Combat Sports
K4b2	2016	Laura Pomportes, Jeanick Brisswalter, Arnaud Hays and Karen Davranche	Université Cote d'Azur, Laboratoire Motricité Humaine Expertise Sport Santé, Nice 06205, France;	Effect of Carbohydrate Intake on Maximal Power Output and Cognitive Performances	9 October 2016 4, 49;	Sports	Article	Diet & Food Supplement
K4b2	2016	Silva AC,Dos Santos Ferreira S, Alves RC, Follador L, DA Silva SG	Department of Physical Education from Federal University of Paraná, Curitiba, Paraná, Brazil	Effect of Music Tempo on Attentional Focus and Perceived Exertion during Self-selected Paced Walking	2016 Oct; 1:9(4):536-544. eCollection 2016.	Int J Exerc Sci	Article	Exercise Physiology
K4b2	2016	Victor Hugo Arboleda Serna Elkin Fernando Arango Vélez, Rubén Darío Gómez Arias and Yuri Feito	Department of Exercise Science & Sport Management, Kennesaw State University, 520 Parliament Garden Way, NW, MD 4104 Kennesaw, GA, USA	Effects of a high-intensity interval training program versus a moderate-intensity continuous training program on maximal oxygen uptake and blood pressure in healthy adults: study protocol for a randomized controlled trial	2016; 17:413	Trials	Article	Exercise Physiology
K4b2	2016	Wang Yafei, Guo Lan,Zhang Xiaoshen	Dept. of Rehabilitation Medicine, the First Affiliated Hospital, Sun Yatsen University,Guangzhou, 510080	Effects of atrial fibrillation on static pulmonary function and exercise endurance in minimally invasive mitral valve surgery patients	2016, 31(4): 405—410	Chinese Journal of Rehabilitation Medicine,	Article	Cardiology
K4b2	2016	Thomas Stöggj , Christoph Schwarzl , Edith E. Müller , Masaru Nagasaki , Julia Stöggj , Peter Scheiber , Martin Schönfelder, Josef Niebauer	Department of Sport Science and Kinesiology, University of Salzburg, Schlossallee 49, 5400 Hallein/Rif, Austria.	Effects of skiing on cardiorespiratory and metabolic responses in middle-aged subjects with increased cardiovascular risk.	2016 Jan 15; 203:618-20	Int J Cardiol.	Article	Skiing
K4b2	2016	Sancassani, Andrei	UNESP: Câmpus de Rio Claro - Instituto de Biotécnicas	Energy expenditure during Kendō practice and a specific protocol as proposal to the assessment of practitioner's aerobic condition	2016	dissertation	Article	Combat Sports
K4b2	2016	Thomas W.J. Janssen, Kirsten Raaijmakers, Iris van Oost, Sonja de Groot, Christof A.J. Smit	Amsterdam Rehabilitation Research Center Reade, The Netherlands	Energy expenditure during rest and ADL increased by electrical stimulation-induced leg muscle activation	206 P. 14	IFESS - International Functional Electrical Stimulation Society	Article	Exercise Physiology
K4b2	2016	Kye Hee Cho, Woojin Song, MS, Jungsoo Kim, Eun Ji Jung, Joonyoung Jang, Sang Hee Im , MinYoung Kim	Department of Rehabilitation Medicine, CHA Bundang Medical Center, CHA University, Seongnam	Energy Expenditures for Activities of Daily Living in Korean Young Adults: A Preliminary Study	2016;40(4):725-733	Ann Rehabil Med	Article	Household
K4b2	2016	P. Tamilselvi and D. Anantha Krishnan	Department of Farm Machinery, Tamil Nadu Agricultural University, Coimbatore-641 003, India.	Ergonomic evaluation of conventional agricultural sprayers with respect to human performance	36 (3) 2016: 179-184	Agric. Sci. Digest	Article	Ergonomics
K4b2	2016	Wioletta Dziubek, Katarzyna Bulińska, Mariusz Kuszal, Joanna Kowalska, Łukasz Rogowski, Agnieszka Zembroń-Łacny, Tomasz Golebiowski, Bartosz Ochmann, Weronika Pawlaczyk, Marian Klinger and Marek Woźniowski	Department of Physiotherapy, University School of Physical Education, Wrocław, Poland	Evaluation of exercise tolerance in dialysis patients performing Tai Chi training – preliminary study	2016:5672580	Evid Based Complement Alternat Med	Article	Combat Sports
K4b2	2016	Vagner Rasol, Sandra Marcela Mahecha Matsudo, Marcos Gonçalves de Santana Rita Aurélio Boscolo, Valtter Antônio Rocha Viana, Viviane Grassmann, Sergio Tufiki, Marco Túlio de Mello	Universidade de São Paulo, Faculdade de Medicina, Instituto de Ortopedia e Traumatologia Laboratório de Estudos do Movimento (LEM-IOT-HCFMUSP), São Paulo, Brazil	Exercise and non-exercise aerobic power prediction models using six-minute walk test	2 May 2016	MedicalExpress	Article	Exercise Physiology
K4b2	2016	Anne-Fleur Gaston, Fabienne Durand, Emma Roca, Grégory Doucende, Ilona Hapková, Enric Subirats	Laboratoire Européen Performance Santé Altitude—EA4604, Université de Perpignan Via Domitia, Font-Romeu, France	Exercise-Induced Hypoxaemia Developed at Sea-Level Influences Responses to Exercise at Moderate Altitude	2016; 11(9): e0161819.	PLoS One.	Article	Altitude
K4b2	2016	Jožef Šimenko, Branko Škof, Vedran Hadžić, Radoje Milić, Bojan Zorec, Milan Žvan, Janez Vodičar, Milan Čoh	University of Ljubljana, Faculty of Sport, Slovenia	General and Specific Physical Abilities of the Members of a Special Police Unit	Vol. 14, No 1, 2016 - pp. 83-98	Physical Education and Sport	Article	Public Safety
K4b2	2016	Racil G, Coquart JB, Elmontassar W, Haddad M, Goebel R,Chaouachi A,Amri M,Chamaï K.	Department of Biological Sciences, Faculty of Science of Tunis, University Tunis El Manar, Tunis, Tunisia	Greater effects of high- compared with moderate-intensity interval training on cardio-metabolic variables, blood leptin concentration and ratings of perceived exertion in obese adolescent females	2016; 33:145-152	Biol. Sport .	Article	Obesity

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K4b2	2016	P.M. Leprêtre, P. Lopes, Koralzstein, V. Billat	Université de Picardie-Jules-Verne, laboratoire de recherche « adaptations physiologiques à l'exercice et réadaptation à l'effort », EA-3300, UFR-STAPS, allée Paschal-Grousset, 80025 Amiens cedex, France	Heavy cycling exercise at fixed heart rate prevent the decline of stroke volume and delay time to exhaustion in trained adolescents	Dis. 18 July 2016 3044 1—7	Sci sports (Science & Sports - Journal - Elsevier)	Article	Cycling
K4b2	2016	Jared Markowitz, Hugh Herr	MIT Media Lab, Massachusetts Institute of Technology, Cambridge, Massachusetts, United States of America	Human Leg Model Predicts Muscle Forces, States, and Energetics during Walking	May 13, 2016 12(5): e1004912.	PLoS Comput Biol	Article	Gait
K4b2	2016	Ye Ding, Ignacio Galiana, Christopher Sivi, Fausto A. Panizzolo, Conor Walsh	Institute for Biologically Inspired Engineering and the School of Engineering and Applied Sciences at Harvard University	IMU-based Iterative Control for Hip Extension Assistance with a Soft Exosuit	26 May 2016, pp. 3501-3508.	IEEE International Conference on Robotics and Automation (ICRA)	Article	Robotics
K4b2	2016	Victor Machado REIS, Diogo Roberto OLIVEIRA, André Luiz CARNEIRO, Hélder Miguel FERNANDES, Christopher SCOTT	Research Center in Sports Sciences, Health Sciences & Human Development, Vila Real, Portugal.	Inclusion of blood lactate O2 equivalent in the VO2-intensity regression at level and 10.5% grade running	Apr/Jun 2016: vol.30 no.2; 30(2):263-69_ 263	Rev. bras. educ. fis. esporte	Article	Exercise Physiology
K4b2	2016	Monica C Serra, Margarita S Treuth, Charlene E Hafer-Macko and Alice S Ryan	Baltimore VA Research Service, USA	Increased Energy Cost of Mobility in Chronic Stroke	2016 Dec; 5(6). pii: 356.	Journal of Gerontology & Geriatric Research	Article	Cardiology
K4b2	2016	M. Staniszewska, A. Pudlo, K. Rytarska, E. Stachow Ska	Department of Physiology, 3Department of Biochemistry and Human Nutrition, Pomeranian Medical University, Szczecin, Poland	Influence of physical effort on aortic stiffness in young male athletes	2016; 20: 3440-3446	European Review for Medical and Pharmacological Sciences	Article	Exercise Physiology
K4b2	2016	Kemi Wright, Melissa Licari, Louise Naylor, Stobhan Reid, Bonnie Furzer	University of Western Australia, Perth, WA, Australia	Investigating the relationship between physical activity and cardio-respiratory fitness in children with and without low movement proficiency	2016	Exercise & Sports Science Australia	Article	Paediatric & Children
K4b2	2016	Marieke Kloosterman	Biomedical Engineering Faculty of Engineering Technology	Keep on rolling: functional evaluation of power-assisted wheelchair use	23 Jun 2016	Dissertation	Article	Disabled
K4b2	2016	Ben Schram, Wayne Hing, and Mike Climstein	School of Physiotherapy, Bond University, Gold Coast, QLD, Australia. Climstein is with the Exercise, Health and Performance Faculty Research Group, University of Sydney, Sydney, Australia.	Laboratory- and Field-Based Assessment of Maximal Aerobic Power of Elite Stand-Up Paddle-Board Athletes	2016; 11,28-32	International Journal of Sports Physiology and Performance,	Article	Surf
K4b2	2016	Po Yang, Danius Stankevicius, Vaidotas Marozas, Zhi kun Deng, Arunas Lukosevicius, Feng Dong, Enjie Liu, Dali Xu	School of Computer Science, Liverpool John Moores University, Liverpool L3 3AF, U.K.	Lifelogging Data Validation Model for Internet of Things enabled Personalized Healthcare	19 July 2016; 1 - 15 Volume: PP, Issue: 99	IEEE Transactions on Systems, Man, and Cybernetics: Systems	Article	Ergonomics
K4b2	2016	Amit Pande; Prasant Mohapatra, Alina Nicorici, Jay J Han	University of California Davis, Department of Computer Science, Davis, CA, United States	Machine Learning to Improve Energy Expenditure Estimation in Children With Disabilities: A Pilot Study in Duchenne Muscular Dystrophy.	2016 Jul 19;3(2):e7.	JMIR Rehabil Assist Technol.	Article	Paediatric & Children
K4b2	2016	Vinicius Coneglian Santos , Ana Paula Renno Sierra , Rodrigo Oliveira , Kim Guimarães Caçula , César Miguel Momesso , Fabio Takeo Sato , Maysa Braga Barros Silva , Heloisa Helena Oliveira , Maria Elizabeth Pereira Passos , Diego Ribeiro de Souza , Olivia Santos Gondim , Marino Benetti , Adriana Cristina Levada-Pires , Maria Fernanda Cury-Boaventura	Institute of Biomedical Sciences, University of São Paulo, São Paulo, São Paulo, Brazil	Marathon Race Affects Neutrophil Surface Molecules: Role of Inflammatory Mediators	2016 Dec 2;11(12)	PLoS One	Article	Running
K4b2	2016	Christina B. Dillon, Anthony P. Fitzgerald, Patricia M. Kearney, Ivan J. Perry, Kirsten , L. Rennie, Robert Kozarski, Catherine M. Phillips	HRB Centre for Diet and Health Research, Department of Epidemiology and Public Health, University College Cork, Cork, Ireland.	Number of Days Required to Estimate Habitual Activity Using Wrist-Worn GENEActiv Accelerometer: A Cross-Sectional Study.	2016 May 5;11(5):e0109913	PLoS One	Article	Wearables
K4b2	2016	Lora A. Cavuoto, Rammohan V. Maikala	Industrial and Systems Engineering, University at Buffalo, Buffalo, New York, 14260, United States of America	Obesity and the Role of Short Duration Submaximal Work on Cardiovascular and Cerebral Hemodynamics	April 18, 2016	Plos One	Article	Swimming
K4b2	2016	Manolis Adamakis, Katerina Zounhia, Konstantinos Karteroliotis and Maria Koskolou	Department of Physical Education and Sport Science, National and Kapodistrian University of Athens, Greece	Objective Measures for the Assessment of Energy Expenditure: A Historical Overview	12(3): 1-9. 2016	Journal of Scientific Research & Reports	Article	Wearables
K4b2	2016	Emerson Franchini, Monica Yuri Takito, Maria Augusta Peduti Dal'Molin Kiss	Martial Arts and Combat Sports Research Group, School of Physical Education and Sport, University of Sao Paulo, Sao Paulo, Brazil	Performance and energy systems contributions during upper-body sprint interval exercise	2016 Dec; 12(6): 535–541.	Journal of Exercise Rehabilitation	Article	Exercise Physiology
K4b2	2016	Marit Skogstad, Lars-Kristian Lunde, Øivind Skare, Asgeir Mamen, Jose Hernán Alfonso, Reidun Øvstebø and Bente Ulvestad	Department of Occupational Medicine and Epidemiology, National Institute of Occupational Health, Box 8149 Dep., 0033Oslo, Norway	Physical activity initiated by employer and its health effects; an eight week follow-up study	2016; 16:377	Skogstad et al. BMC Public Health	Article	Exercise Physiology
K4b2	2016	Kaushik Halder, Anjana Pathak, O. S. Tomer, Abhirup Chatterjee, Mantu Saha	Exercise Physiology and Yoga Division, Defence Institute of Physiology and Allied Sciences (DIPAS), Defence Research and Development Organization (DRDO), Min. Of Defence, Lucknow Road, Timarpur, Delhi, India	Physical and Physiological Comparison Between Indian Female College Basketball Players and Sedentary Students	Jan 18, 2016 Vol. 1, No. 2, pp. 18-23.	Advances in Applied Physiology	Article	Basketball
K4b2	2016	L Farias de Oliveira, R Pires da Silva, V de Salles Painelli, B Gualano, B Saunders	School of Physical Education and Sport, University of São Paulo, Brazil. Brazil	Physiological characteristics of competitive Brazilian cyclists	2016 Vol. 5(2), 21-22	J Sci Cycling.	Article	Cycling
K4b2	2016	Fabio Esposito, Lorenzo Pugliese	Università degli Studi di Milano, Department of Biomedical Sciences for Health, Via Mangiagalli 31, 20133 Milan, Italy.	Physiological profile and energy expenditure of high level badminton players.	2016	Badminton World Federation.	Article	Badminton
K4b2	2016	Eddie T.C. Lam a, Kenneth Sparks a, Michele A. Barton-Verdi a, Allison Lowe a, Davon Jones a, Edmond C. Lam	Department of Health and Human Performance, Cleveland State University, Cleveland, OH, USA	Physiological responses and exercise preference between the Trikke and the bicycle ergometer	June 2016, Volume 14, Issue 1, Pages 7-13	Journal of Exercise Science & Fitness	Article	Exercise Physiology

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2016	Leandro Teixeira Floriano, Juliano Fernandes da Silva, Anderson Santiago Teixeira, Paulo Cesar do Nascimento Salvador, Naiandra Dittrich, Lorival José Carminatti, Lucas Loyola Nascimento, Luiz Guilherme Antonacci Guglielmo	Sports Center, Federal University of Santa Catarina, Physical Effort Laboratory, Florianópolis, Brazil.	Physiological Responses During the Time Limit at 100% of the Peak Velocity in the Carminatti's Test in Futsal Player	2016 Dec 1; 54: 91-101	Journal of Human Kinetics	Article	Football
K4b2	2016	L Potel; CJ Christiell	Department of Human Kinetics and Ergonomics, Rhodes University, Grahamstown, South Africa	Physiological responses of batsmen during a simulated One Day International century	2016 vol.28 n.2	SA J. Sports Med.	Article	Cricket
K4b2	2016	Overstreet BS, Bassett DR Jr, Crouter SE, Rider BC, Parr B	Department of Kinesiology, Recreation, & Sport Studies, The University of Tennessee, Knoxville, TN USA	Portable open-circuit spirometry systems: a review	2016 Feb 10	J Sports Med Phys Fitness.	Article	Validation
K4b2	2016	Matthew B. Yandell & Karl E. Zelik	Department of Mechanical Engineering, Vanderbilt University, Nashville, TN 37212, USA.	Preferred Barefoot Step Frequency Is Influenced by Factors Beyond Minimizing Metabolic Rate	18 March 2016 6, 23243	Sci Rep	Article	Exercise Physiology
K4b2	2016	Olivier Rey , Christophe Maiano,Caroline Nicol , Charles-Symphorien Mercier and Jean-Marc Vallier	Université de Toulon, LAMHES, France;	Psycho-Physiological Responses of Obese Adolescents to an Intermittent Run Test Compared with a 20-M Shuttle Run	2016; 15, 451-459	Journal of Sports Science and Medicine	Article	Exercise Physiology
K4b2	2016	Matteo Vandoni, Erwan Codrons, Luca Marin, Luca Correale, Marcelo Bigliassi,Cosme Franklim Buzzachera	Department of Public Health, Experimental Medicine & Forensic Science, University of Pavia, Pavia, Italy	Psychophysiological Responses to Group Exercise Training Sessions: Does Exercise Intensity Matter?	4 Aug. 2016 11(8): e0149997	PLoS ONE	Article	Exercise Physiology
K4b2	2016	Verdegaal EJ, Franklin SH	Equine Health and Performance Centre, University of Adelaide, South Australia, Australia	Science in brief: Highlights from the applied physiology, muscle and genetics abstracts at the International Conference on Equine Exercise Physiology	2016 Jan; 48(1):9-12	Equine Veterinary Journal I	Article	Equine
K4b2	2016	Spencer Wikkerink	University of Waterloo , Department of Kinesiology	The Acute Effect of Exercise Intensity on Cognitive Function	2016	Dissertation	Article	Exercise Physiology
K4b2	2016	Ida Jakobsen, Thomas P. J. Solomon, Kristian Karstoft	The Centre of Inflammation and Metabolism and the Centre for Physical Activity Research, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark	The Acute Effects of Interval-Type Exercise on Glycemic Control in Type 2 Diabetes Subjects: Importance of Interval Length. A Controlled, Counterbalanced, Crossover Study	2016; 11(10): e0163562.	PLoS One	Article	Diabetology
K4b2	2016	Jerrold Petrofsky, Mike Laymon, Iman Akef Khwailed, Haneul Lee and Allie Petrofsky	Loma Linda University, Loma Linda California, USA	The effect of an 8-minute Yoga breathing program on fitness, weight loss and breathing capacity	Vol.5, no. 4, 2016, 57-80	Journal of Applied Medical Sciences	Article	Yoga
K4b2	2016	Mojtaba Kaviani	College of Kinesiology, University of Saskatchewan Saskatoon, Saskatchewan Canada, S7N 5B2	The effects of low-glycemic index lentils on exercise performance and markers of cardiovascular disease risk	Jul 2016;	Dissertation	Article	Diet & Food Supplement
K4b2	2016	Kate Ridley and Timothy Olds	Sport, Health, and Physical Education (SHAPE) Research Centre, School of Education, Flinders University, Australia.	The Energy Cost of Household Chores, Rollerblading, and Riding Scooters in 9- to 14-Year-Old Children	2016, 13 (Suppl 1), S75 -S77	Journal of Physical Activity and Health,	Article	Paediatric & Children
K4b2	2016	Joshua T. Brown	Western Kentucky University,Department of Kinesiology, Recreation and Sport	The Energy Expenditure of Heavy Metal Drummers	2016. Paper 1647	Dissertation	Article	Dance & Music
K4b2	2016	Dina Christina Janse van Rensburg, Catharina Cornelia Grant, Audrey Jansen van Rensburg ,Roelf Petrus Gerhardus Botha, Paola Silvia Wood, Kim Nolte, Lizelle Fletcher, Peet Jacobus du Toit, Michael Sean Pepper, Pieter Ernst Kruger	Section Sports Medicine, Faculty of Health Sciences, University of Pretoria, South Africa	The FitTrack Index as fitness indicator: A pilot study	December 2016 Volume 21, Pages 431-436	Health SA Gesondheid	Article	Exercise Physiology
K4b2	2016	Anton Ušaj, Stojan Burnik	Laboratory of Biodynamics, Faculty of Sport, University of Ljubljana, Slovenia.	The Influence of High-Altitude Acclimatization on Ventilatory and Blood Oxygen Saturation Responses During Normoxic and Hypoxic Testing.	volume 50/2016, 125-133	Journal of Human Kinetics	Article	Altitude
K4b2	2016	Shane Malone, Dominic Doran, Ibrahim Akubat, Kieran Collins	Gaelic Sport Research Centre,Institute of Technology Tallaght Dublin, Tallaght, Dublin, Ireland.	The Integration of Internal and External Training Load Metrics in Hurling	2016 Dec 1; 53: 211-221.	Journal of Human Kinetics volume	Article	Hurling
K4b2	2016	Diogo R. Oliveira, Lio F. Gonçalves,Antônio M. Reis, Ricardo J. Fernandes,Nuno D. Garrido, Victor M. Reis	University of Trás-os-Montes & Alto Douro, Vila Real, Portugal.	The oxygen uptake slow component at submaximal intensities in breaststroke swimming.	Volume 51/2016, 165-173	Journal of Human Kinetics	Article	Swimming
K4b2	2016	KaLai Tsang, BS; Shivayogi V. Hiremath, Theresa M. Crytzer, Brad E. Dicianno,Dan Ding,	Human Engineering Research Laboratories, Department of Veterans Affairs (VA) Pittsburgh Healthcare System, Pittsburgh, PA.	Validity of activity monitors in wheelchair users: A systematic review	2016 Volume 53, Number 6, Pages 641-658	J Rehabil Res Dev.	Article	Disabled
K4b2	2016	Morris KS, Osborne MA, Shephard ME, Skinner TL, Jenkins DG	School of Human Movement and Nutrition Sciences (#26B), The University of Queensland (St. Lucia Campus), Australia	Velocity, aerobic power and metabolic cost of whole body and arms only front crawl swimming at various stroke rates.	2016 May;116(5):1075-85.	Eur J Appl Physiol.	Article	Swimming
K4b2	2016	Sousa A, Vilas-Boas JP, Fernandes RJ, Figueiredo P	Escola Superior de Desporto e Lazer, Instituto Politécnico de Viana do Castelo , Melgaço , Portugal	VO2 at Maximal and Supramaximal Intensities: Lessons to High Interval Training in Swimming	2016 Dec; 5:1-22	International Journal of Sports Physiology and Performance	Article	Swimming
K4b2	2016	Danilo Manari, Massimo Manara, Andrea Zurini, Giovanni Tortorella, Mauro Vaccarezza, Nicolò Prandelli, Davide Ancelotti, Marco Vitale, Prisco Mirandola, Daniela Galli	Centro Cuore Salute, Reggio Emilia, Italy	VO2Max and VO2AT: athletic performance and field role of elite soccer players	August 2016, Volume 12, Issue 2, pp 221-226	Sport Sciences for Health	Article	Football
K4b2	2016	Audra Davidson, Emily S. Gardinier & Deanna H. Gates	School of Kinesiology, University of Michigan, Ann Arbor, MI 48109, USA; Department of Biomedical Engineering, University of Michigan, Ann Arbor, MI 48109, USA	Within and between-day reliability of energetic cost measures during treadmill walking	Volume 3, 2016 - Issue 1	Cogent Engineering	Article	Exercise Physiology
K4b2	2016	John M. Schuna Jr., Tiago V. Barreira, Daniel S. Hsia, William D. Johnson, and Catrine Tudor-Locke	School of Biological and Population Health Sciences, Oregon State University. Barreira is with the Dept of Exercise Science, Syracuse University.	Youth Energy Expenditure During Common Free-Living Activities and Treadmill Walking	2016; 13 (Suppl 1), S29 - S34	Journal of Physical Activity and Health,	Article	Exercise Physiology
K4b2	2015	Felt W, Selinger JC, Donelan JM, Remy CD	Department of Mechanical Engineering, University of Michigan, Ann Arbor, MI, United States of America	"Body-In-The-Loop": Optimizing Device Parameters Using Measures of Instantaneous Energetic Cost	2015 Aug 19;10(8)	PLoS One.	Article	Orthopedics

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2015	Lei Wang, Ning Zhang, Huaping Pan, Zun Wang and Zhenyu Cao	Department of Rehabilitation Medicine, Second Medical School of Nanjing University of Chinese Medicine, Nanjing China	A Combination of Electro-Acupuncture and Aerobic Exercise Improves Cardiovascular Function in Patients with Coronary Heart Disease	2015, 6:9	J Clin Exp Cardiol	Article	Cardiology
K4b2	2015	Iyalomhe O, Chen Y, Allard J, Ntekim O, Johnson S, Bond V, Goerlitz D, Li J, Obisesan TO.	Division of Geriatrics, Department of Medicine, Howard University Hospital, 2041 Georgia Ave NW, Washington, DC 20060, USA.	A standardized randomized 6-month aerobic exercise-training down-regulated pro-inflammatory genes, but up-regulated anti-inflammatory, neuron survival and axon growth-related genes.	2015 May 15.	Exp Gerontol.	Article	Exercise Physiology
K4b2	2015	James Andrew Woodman	University of Tennessee - Knoxville	Accuracy of Energy Expenditure Predictions and Activity Identification in Consumer-Based Activity Monitors	2015		Thesis	Wearables
K4b2	2015	Gribbon A, McNeil J, Jay O, Tremblay MS, Chaput JP.	Healthy Active Living and Obesity Research Group, Children's Hospital of Eastern Ontario Research Institute, Ottawa, Ontario, Canada	Active video games and energy balance in male adolescents: a randomized crossover trial.	2015 Mar 11.	Am J Clin Nutr.	Article	Computer Games
K4b2	2015	Božidara Cvetković, Vito Janko, Mitja Luštrek	Department of Intelligent Systems, Jožef Stefan Institute, Ljubljana, Slovenia	Activity Recognition and Human Energy Expenditure Estimation with a Smartphone	2015	PerCom Conference 2015, At Saint Louis USA	Article	Wearables
K4b2	2015	Jaime Fernández-Fernández; Rafael Sabido-Solana; Diego Moya; Jose Manuel Sarabia ; Manuel Moya	Sports Research Centre, Miguel Hernandez University, Elche, Spain	Acute physiological responses during crossfit® workouts	2015: 35, 114-124	European Journal of Human Movement	Article	Exercise Physiology
K4b2	2015	Paulo Eduardo Redkva, Mauro Ricetti Paes, Sergio Augusto Esmanhotto, Leandro Martinez Vargas, José Roberto Herrera Cantorani, Sandro dos Santos Ferreira, Ragami Chaves Alves, Sergio Gregorio da Silva	Centro de Pesquisa em Exercício e Esporte (CEPEE) – Universidade Federal do Paraná (UFPR) – Curitiba – PR, Brasil	Aerobic and Anaerobic Physiological Characteristics of Brazilian Army Military Orienteers	April 2015 Volume 18 Number 2	Journal of Exercise Physiology online	Article	Public Safety
K4b2	2015	Mário A. Rodrigues-Ferreira, António M. Vences Brito, Renato Fernandes, João Mendes, Félix Romero & Catarina Fernando	Instituto Politécnico de Santarém, Escola Superior de Desporto de Rio Maior. Universidade da Madeira	Aerobic performance in young girls during a maximal laboratory treadmill test: Differences between athletes and non-athletes	10/2015; 3(3):78 - 88	Revista da UIIPS	Article	Exercise Physiology
K4b2	2015	Rodríguez FA, Iglesias X, Feriche B, Calderón-Soto C, Chaverri D, Wachsmuth NB, Schmidt W, Levine BD.	INEFC—Barcelona Sport Sciences Research Group, National Institute of Physical Education of Catalonia, University of Barcelona, Barcelona, SPAIN;	Altitude Training in Elite Swimmers for Sea Level Performance (Altitude Project).	2015 Sep ;47(9):1965-78.	Med Sci Sports Exerc.	Article	Altitude
K4b2	2015	Bach CW, Brown AF, Kinsey AW, Omsbee MJ.	Institute of Sports Sciences and Medicine, Department of Nutrition, Food and Exercise Sciences, Florida State University, Tallahassee, FL;	Anthropometric Characteristics and Performance Capabilities of Highly-Trained Motocross Athletes Compared to Physically Active Men.	2015 May 16.	J Strength Cond Res.	Article	Motorbike
K4b2	2015	J. Ribeiro, P. Figueiredo, L. Guidetti, F. Alves, H. Toussaint, J. P. Vilas-Boas, C. Baldari, R. J. Fernandes	Centre of Research Education, Innovation and Intervention in Sport Faculty of Sport University of Porto, Portugal	AquaTrainer® Snorkel does not Increase Hydrodynamic Drag but Influences Turning Time	2015	Int J Sports Med	Article	Swimming
K4b2	2015	João António Martins Ribeiro	UNIVERSITY OF PORTO , Faculty of Sport Centre of Research, Education, Innovation and Intervention in Sport	Biophysical determinants of front crawl locomotion. A study conducted at different swimming intensities	December 2015	dissertation	Article	Swimming
K4b2	2015	Wyatt Felt, Emily S. Gardinier, Jeffrey Wensman, Deanna H. Gates, C. David Remy	The University of Michigan, Ann Arbor, MI, USA	Body -in - loop optimization for the selection of prosthetic control parameters - a pilot study	2015	American Society of Biomechanics Annual Meeting	Article	Biomechanics
K4b2	2015	Jordan Mackie	Sport and Exercise Science-Loughborough University , UK	Caffeine Ingestion masks the circadian rhythm in endurance cycling performance	2015	Caffeine & Circadian Rhythms	Article	Cycling
K4b2	2015	Juan C. Velásquez	Universidad del Valle. Cali, Colombia	Can heart rate be an estimation of body segments oxygen consumption?	Vol.47 No.2 Mayo - Agosto de 2015	Revista de la Universidad Industrial de Santander. Salud	Article	Exercise Physiology
K4b2	2015	Charlotte C. Hamlyn-Williams, Gavin Tempest, Sarah Coombs and Gaynor Parfitt	Institute of Child Health, University College London, Population, Policy and Practice, UCL Institute of Child Health, London, UK	Can previously sedentary females use the feeling scale to regulate exercise intensity in a gym environment? an observational study	Volume 7, 2015	BMC Sports Science, Medicine and Rehabilitation	Article	Exercise Physiology
K4b2	2015	Neves CD, Lacerda AC, Lage VK, Lima LP, Fonseca SF, de Avelar NC, Teixeira MM, Mendonça VA.	Universidade Federal dos Vales do Jequitinhonha e Mucuri, Programa Multicêntrico de Pós- Graduação em Ciências Fisiológicas, Sociedade Brasileira de Fisiologia, Diamantina, Minas Gerais, Brazil	Cardiorespiratory responses and prediction of peak oxygen uptake during the shuttle walking test in healthy sedentary adult men.	2015 Feb 6;10(2)	PLoS One.	Article	Exercise Physiology
K4b2	2015	Souglis AG, Papapanagiotou A, Bogdanis GC, Travlos AK, Apostolidis NG, Geladas ND.	School of Physical Education and Sport Sciences, University of Athens, Athens, Greece;	Comparison of inflammatory responses to a soccer match between elite male and female players.	2015 May;29(5):1227-33.	J Strength Cond Res.	Article	Football
K4b2	2015	Rafael Mistura Fernandes, Monica Yuri Takito	Universidade de São Paulo. Escola de Educação Física e Esporte. São Paulo, SP. Brasil	Comparison of predictive equations for energy expenditure in pregnant women at rest and during exercise	2015,21 Aug Vol 17, No 6	Rev. Bras. Cineantropom	Article	Pregnancy
K4b2	2015	Rafael Mistura Fernandes, Monica Yuri Takito	Universidade de São Paulo. Escola de Educação Física e Esporte. São Paulo, SP. Brasil	Comparison of predictive equations for energy expenditure in pregnant women at rest and during exercise	2015, 17(6):713-721	Rev Bras Cineantropom Desempenho Hum	Article	Pregnancy
K4b2	2015	Peiffer J, Abbiss CR, Sultana F, Bernard T, Brisswalter J	Laboratory of Human Motricity, Education Sport and Health, University of Nice Sophia Antipolis, Nice, France	Comparison of the influence of age on cycling efficiency and the energy cost of running in well-trained triathletes	2015 Sep 21.	Eur J Appl Physiol.	Article	Triathlon
K4b2	2015	Jun-tian Zhang and Dr. Qingguo Li	Queen's University, Kingston ON. Canada	Control versus self selected gait parameters for passively actuated gait devices	2015	American Society of Biomechanics	Article	Gait
K4b2	2015	Zarko Krkeljas and Sarah Johanna Moss	Physical Activity, Sport and Recreation Research Focus Area, Private Bag x6001, Internal Box 481, North-West University, Potchefstroom, 2520, South Africa	Correlating mechanical work with energy consumption during gait throughout pregnancy.	2015 Nov 20; 15:303	Krkeljas and Moss BMC Pregnancy and Childbirth	Article	Pregnancy
K4b2	2015	Christina Dillon, Cormac Powell, Kieran Dowd, Brian Carson, Alan Donnelly	HRB Centre for Diet and Health Research, Department of Epidemiology and Public Health, University College Cork, Ireland	Criterion validity and calibration of the GENEActiv accelerometer in adults	2015	International Conference on Ambulatory Monitoring of Physical Activity and Movement	Poster	Wearables
K4b2	2015	Adamakis Manolis	Department of Physical Education and Sport Science, National and Kapodistrian University of Athens	Criterion validity of a GPS device and a mobile application during walking and running	June 2015 - Athens, Greece	1st International Conference on Research in healthcare,	Abstract	Wearables
K4b2	2015	Michael Shepetycky, Sarah Burton, Dr. Yan-Fei Liu, and Dr. Qingguo Li	Queen's University, Ontario, Canada	Decreasing the cost of energy harvesting through load profile matching	Ohio University 2015	Dynamic Walking 2015	Abstract	Ergonomics

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K4b2	2015	Kon K, Hayakawa Y, Shimizu S, Nosaka T, Tsuruga T, Matsubara H, Nomura T, Murahara S, Haruna H, Ino T, Inagaki J, Kobayashi T	Department of Prosthetics and Orthotics, Faculty of Health Sciences, Hokkaido University of Science, Japan	Development of an algorithm to predict comfort of wheelchair fit based on clinical measures	2015 Sep;27(9):2813-6	J Phys Ther Sci.	Article	Disabled
K4b2	2015	Freitas LA, Ferreira Sdos S, Freitas RQ, Henrique de Souza C, Garcia ED, Gregorio da Silva S	Department of Physical Education, State University of Londrina, Brazil.	Effect of a 12-week aerobic training program on perceptual and affective responses in obese women	2015 Jul;27(7):2221-4	J Phys Ther Sci.	Article	Obesity
K4b2	2015	Jordyn Vienneau, Elias K. Tomaras, Sandro Nigg, Benno M. Nigg	Human Performance Laboratory, University of Calgary, Calgary, Canada	Effect of basketball shoes of different weights on performance in a game-like scenario	2015 Poitiers France	33rd International Conference on Biomechanics in Sports	Abstract	Basketball
K4b2	2015	Lucília Mangona, Timóteo Daca, Francisco Tchonga, Odete Bule, Nilesh Bhatt, Ilesh Jani, Albertino Damasceno and António Prista	Núcleo de Investigação em Actividade Física e Saúde, FEFD-CIDAF, Universidade Pedagógica, Mozambique	Effect of Different Types of Exercise in HIV + Mozambican Women Using Antiretroviral Therapy	2015, 9, (Suppl 1: M5) 89-95	The Open AIDS Journal	Article	Epidemiology
K4b2	2015	Lucília Mangona, Timóteo Daca, Francisco Tchonga, Odete Bule, Nilesh Bhatt, Ilesh Jani, Albertino Damasceno and António Prista	Núcleo de Investigação em Actividade Física e Saúde, FEFD-CIDAF, Universidade Pedagógica, Mozambique	Effect of Different Types of Exercise in HIV + Mozambican Women Using Antiretroviral Therapy	2015, 9, (Suppl 1: M5) 89-95	The Open AIDS Journal,	Article	Epidemiology
K4b2	2015	Gavin P. Hom, Richard M. Kesler, Elizabeth T. Hsiao-Weckler, Robert W. Motl, Karl S. Rosengren, Bo Fernhall,	Illinois Fire Service Institute, University of Illinois at Urbana-Champaign	Effect of SCBA Design and Firefighting Induced Fatigue on Balance, Gait and Safety of Movement	2015		Paper	Firefighter
K4b2	2015	Sarah Luna, Mercy Lung'aho, Jean Bosco Gahutu and Jere Haas	Cornell University, Ithaca, NY, USA	Effects of an Iron-biofortification Feeding Trial on Physical Performance of Rwandan Women	5(5): 1189, 2015	European Journal of Nutrition & Food Safety	Article	Diet & Food Supplement
K4b2	2015	Gao Zhenzhen, Ji Peng, Xia Yueqing	Nanjing University of Chinese Medicine, Nanajong 210029	Effects of different intensity aerobic exercise on cardiac function and exercise endurance in patients after percutaneous coronary intervention	Apr. 2015: 30(4): 344-348	Chinese Journal of Rehabilitation Medicine	Article	Cardiology
K4b2	2015	Mike Rogerson and Jo Barton	Centre for Sports and Exercise Science, School of Biological Sciences, University of Essex, UK	Effects of the Visual Exercise Environments on Cognitive Directed Attention, Energy Expenditure and Perceived Exertion	2015, 12, 7321-7336	Int. J. Environ. Res. Public Health	Article	Exercise Physiology
K4b2	2015	Kim, Jae-Hee, Son, Hee-Ryoung, Choi, Jung-Sook, Kim, Eun-Kyung	Department of Food and Nutrition, Gangneung-Wonju National University, Gangwon 210-702, Korea	Energy expenditure measurement of various physical activity and correlation analysis of body weight and energy expenditure in elementary school children	2015; 48(2): 180 – 191	Journal of Nutrition and Health (J Nutr Health)	Article	Paediatric & Children
K4b2	2015	Dae-Taek Lee, Youn-Sun Son, Bong-Yeon Hwang, Yoon-Jung Bae	Exercise Physiology Laboratory, Department of Physical Education, Kookmin University	Energy Expenditure on a User Sensitive Spontaneous Speed Control Treadmill	2015;15(1):1-8	Korean J Health Promot	Article	Exercise Physiology
K4b2	2015	Jing Zhou	Faculty of Engineering, University of Technology, Sydney	Enhanced reliability of Wireless Body Area Network with abnormality detection and intelligent Medium Access Control	2015		Thesis	Medical engineering
K4b2	2015	Guohao Lan, Sara Khalifa, Mahbub Hassan, and Wen Hu	School of Computer Science and Engineering, University of New South Wales, Sydney, NSW, Australia	Estimating Calorie Expenditure from Output Voltage of Piezoelectric Energy Harvester - an Experimental Feasibility Study	September 28–30, 2015 Sydney, Australia	10th EAI International Conference on Body Area Networks	Article	Wearables
K4b2	2015	Hyo-Hyun Lee, Young-Ran Lee, Ji-Eun Kim, Siyeon Kim, and Joo-Young Lee	Research Institute of Human Ecology, Seoul National University; Seoul, Korea	Evaluation of Thermoregulatory Properties of Thermal Underwear Named as 'Heating Underwear' using Thermal Manikin and Human Performance Test	Vol. 17, No. 4, pp.657-665(2015)	Fashion & Text. Res. J	Article	Ergonomics
K4b2	2015	Grazzi G, Volpato S, Passaro A, Myers J, Fellin R	Center of Biomedical Studies Applied to Sport, University of Ferrara, Ferrara, Italy.	Exceptional Exercise Capacity in an 80-Year-Old Breast Cancer Survivor and Long-Term Sprint Athlete.	2015 Dec; 63(12):2641-2643	J Am Geriatr Soc	Article	Geriatrics
K4b2	2015	A. F. Gaston, I. Hapkova, F. Durand	Laboratoire Performance, Santé et altitude, Department STAPS, Université de Perpignan Via Domitia, Font-Romeu, France	Exercise induced hypoxemia at moderate altitude: comparison between running and roller skiing field test in young elite biathletes.	2015 Sep; 55(9):865-71	J Sports Med Phys Fitness	Article	Altitude
K4b2	2015	McMurray RG, Butte NF, Crouter SE, Trost SG, Pfeiffer KA, Bassett DR, Puyau MR, Berrigan D, Watson KB, Fulton JE	Exercise and Sport Science and Nutrition, University of North Carolina, Chapel Hill, NC, United States of America,	Exploring Metrics to Express Energy Expenditure of Physical Activity in Youth	2015 Jun 23;10(6)	PLoS One.	Article	Exercise Physiology
K4b2	2015	ERNEST BAIGET, JAIME FERNA´NDEZ-FERNA´NDEZ, XAVIER IGLESIAS, AND FERRAN A. RODRI´GUEZ	Sport Performance Analysis Research Group, University of Vic, Barcelona, Spain	Heart rate deflection point relates to second ventilatory threshold in a tennis test.	2015 Mar; 29(3):765-71.	J Strength Cond Res.	Article	Tennis
K4b2	2015	Attilio Sacripanti, Antonio Buglione, Tania De Blasis, Emanuel Rossetti, Giampolo Andreatta, Joanna Camillieri and Carl De Crée	Department of Medicine and Surgery, University of Rome "Tor Vergata", Italy	Infrared Thermography Calorimetric Quantitation of Energy Expenditure in Biomechanically Different Types of Jūdō Throwing Techniques. A Pilot Study	2(4): 1026.	Annals of Sports Medicine and Research	Article	Combat Sports
K4b2	2015	Attilio Sacripanti, Antonio Buglione, Tania De Blasis, Emanuel Rossetti, Giampolo Andreatta, Joanna Camillieri and Carl De Crée	Department of Medicine and Surgery, University of Rome "Tor Vergata", Italy	Infrared Thermography-Calorimetric Quantitation of Energy Expenditure in Biomechanically Different Types of Jūdō Throwing Techniques. A Pilot Study	Published: 20 April 2015	Annals of Sports Medicine and Research	Article	Combat Sports
K4b2	2015	Sperandio EF, Arantes RL, Matheus AC, Silva RP, Lauria VT, Romiti M, Gagliardi AR, Dourado VZ.	Departamento de Ciências do Movimento Humano, Laboratório de Epidemiologia e Movimento Humano (EPIMOV), Universidade Federal de São Paulo, Santos, SP, Brasil.	Intensity and physiological responses to the 6-minute walk test in middle-aged and older adults: a comparison with cardiopulmonary exercise testing.	2015 Apr;48(4):349-53.	Braz J Med Biol Res.	Article	Geriatrics
K4b2	2015	Schram B, Hing W, Climstein M.	School of Physiotherapy, Faculty of Health Science & Medicine, Bond University, Gold Coast, QLD Australia.	Laboratory and Field based assessment of maximal aerobic power of elite SUP athletes	2015 Apr 7.	Int J Sports Physiol Perform.	Article	Surf
K4b2	2015	Juan Velásquez, Leonardo Bríceno, Luisa Ortiz, Sandra Solarte, Ricardo Agredo	Universidad del Valle. Cali, Colombia	Maximum acceptable work time for the upper limbs task and lower limbs task	3 (2015) 4584 – 4590	Procedia Manufacturing	Article	Exercise Physiology
K4b2	2015	Audra Davidson, Wyatt Felt, Jeffrey Wensman, Emily S. Gardnier, C. David Remy, Deanna H. Gates	obotics And Motion Laboratory, The University of Michigan, Ann Arbor, MI, USA	Metabolic cost changes with the amount of prosthetic ankle power provided	2015	American Society of Biomechanics	Article	Orthopedics
K4b2	2015	Andreas Flouris, Athanasios Jourtas, Ioannis Fatouros, & Yiannis Koutedakis	Department of Physical Education and Sports Sciences, University of Thessaly, Trikala, Hellas	Metabolic Profile of Football Athletes During Running Incorporating Different Levels of Direction Change	Volume 13 (1), 26 - 31 Released: March 2015	Inquiries in Sport & Physical Education	Article	Football
K4b2	2015	Boyd RN, Baque E, Piovesana A, Ross S, Ziviani J, Sakzewski L, Barber L, Lloyd O, McKinlay L, Whittingham K, Smith AC, Rose S, Fiori S, Cunningham R, Ware R, Lewis M, Comans TA, Scuffham PA	Queensland Cerebral Palsy and Rehabilitation Research Centre, School of Medicine, The University of Queensland, Brisbane, Queensland, Australia	Mitii™ ABI: study protocol of a randomised controlled trial of a web-based multi-modal training program for children and adolescents with an Acquired Brain Injury (ABI)	2015 Aug 19;15:140.	BMC Neurol.	Article	Neurology

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2015	Eija Ferreira	University of Oulu, Faculty of Information Technology and Electrical Engineering	Model selection in time series machine learning applications	2015		Thesis	Exercise Physiology
K4b2	2015	Jaime D Morrison, Dale Lovell, Chris McLellan and Clare Minahan	Griffith University Sports Science, QLD, Australia	Performance and Metabolic Responses of Highly-Trained Team-Sport Athletes during Repeated Sprinting in Hypoxia	2015, 4:2	J Athl Enhancement	Article	Football
K4b2	2015	Stephen McGuire, Mark ET Willems1	University of Chichester, Department of Sport & Exercise Sciences, College Lane, Chichester, United Kingdom	Physiological Responses During Multiplay Exergaming in Young Adult Males are Game-Dependent	Volume 46/2015, 263-271	Journal of Human Kinetics	Article	Computer Games
K4b2	2015	Guidetti L, Buzzachera CF, Emerenziani GP, Meucci M, Saavedra F, Gallotta MC, Baldari C.	Department of Movement, Human, and Health Sciences, University of Rome Foro Italico, Rome, Italy.	Psychophysiological responses to Salsa dance.	2015 Apr 10;10(4):e0121465	PLoS One	Article	Dance & Music
K4b2	2015	Stanula A, Gabrys T, Rocznik R, Szmallan-Gabrys U, Ozimek M, Mostowik A.	Department of Sports Training, Chair of Methodology, Statistics and Informatics, The Jerzy Kukuczka Academy of Physical Education, Katowice, Poland	Quantification of the demands during an ice-hockey game based on intensity zones determined from the incremental test outcomes	2015 Jun 30	J Strength Cond Res.	Article	Skating
K4b2	2015	Paul W. Macdermid , Philip W. Fink, Stephen Stannard	School of Sport & Exercise, College of Health, Massey University, Palmerston North 4474, New Zealand	Shock attenuation, spatio-temporal and physiological parameter comparisons between land treadmill and water treadmill running	2015; 1–7	Journal of Sport and Health Science	Article	Exercise Physiology
K4b2	2015	Matthew B. Yandell, Karl E. Zelik	Vanderbilt University, Nashville, TN USA	Shod vs. barefoot walking: why do humans change their step frequency?	2015	American Society of Biomechanics	Article	Gait
K4b2	2015	Morgan K. Boes, Rachel E. Klaren, Richard M. Kesler, Mazharul Islam, Yvonne Learmonth, Matthew N. Petrucci, Robert W. Motl, and Elizabeth T. Hsiao-Weckler	Dept. of Bioengineering, University of Illinois at Urbana-Champaign, Urbana, IL, USA	Spatiotemporal and metabolic impacts on GAIT of a powered ankle exoskeleton in persons with multiple sclerosis	August 5-8, 2015.	39th Annual Meeting of the American Society of Biomechanics, Columbus, OH	Article	Neurology
K4b2	2015	Ernest Baiget, Jaime Fernández-Fernández, Xavier Iglesias, and Ferran A. Rodríguez	Sport Performance Analysis Research Group, University of Vic, Barcelona, Spain,	Tennis Play Intensity Distribution and Relation with Aerobic Fitness in Competitive Players	2015; 10(6): e0131304.	PLoS One.	Article	Tennis
K4b2	2015	Sundar Kumar Veluswamy, Vasudeva Guddattu and Arun G. Maiya	Department of Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal, Karnataka, India	Test-retest reliability of a portable gas analysis system under free living conditions	2015; 59(1) : 117–120	Indian J Physiol Pharmacol	Article	Validation
K4b2	2015	Sandro R. Nigg, John W. Whitting, Elias Tomaras, Elysia Davis, Benno M. Nigg	University of Calgary, Calgary, AB, Canada	The basketball-20: development of a basketball-specific field-based work protocol	December 2015 Vol. 4, no. 3, pp. 26-35.	Journal of Fitness Research	Article	Basketball
K4b2	2015	Parisa Pournemati, Sahar Daneshvar, Mohammad Ali Azarbayjani, Maryam Pournemati	1Sport physiology department, physical education and sport science faculty, university of Tehran (Iran)	The effect of inhaling peppermint essence on some immune responses and cortisol follow one bout of exhausting exercise in female athlete	Vol 3; 5, 216-225: 2015	Journal of Renewable Natural Resources Bhutan	Article	Exercise Physiology
K4b2	2015	Rafael Alves de Aguiar, Felipe Domingos Lisboa, Tiago Turnes, Rogério Santos de Oliveira Cruz, and Fabrício Caputo	Human Performance Research Group, Center for Health and Sport Science, Santa Catarina State University, Florianópolis, Santa Catarina State, Brazil	The Effects of Different Training Backgrounds on VO2 Responses to All-Out and Supramaximal Constant-Velocity Running Bouts	2015; 10(8)	PLoS One.	Article	Running
K4b2	2015	Sheena L. Flores	Faculty of Kinesiology, California State University, Chico	The effect of Vinyasa flow Yoga on aerobic capacity	2015		Thesis	Yoga
K4b2	2015	Ling Feng, Wang Lei, Cao Zhenyu	University of Chinese Medicine, Nanjing, 210029	The influential factor of six minutes walking distance in adults with cerebral palsy	Jan.2015 Vol.3, No.1 - 30(1):14 -17	Chinese Journal of Rehabilitation Medicine	Article	Neurology
K4b2	2015	Sarah Earl, Iain Hunter, Gary W. Mack, Matthew Seeley	Department of Exercise Sciences, Brigham Young University, Provo, UT, USA	The relationship between steeplechase hurdle economy, mechanics, and performance	(2015) 1–4	Journal of Sport and Health Science	Article	Exercise Physiology
K4b2	2015	Amit Pande, Jindan Zhu, Aavek K. Das, Yunze Zeng, Prasant Mohapatra, Jay J. Han	Department of Computer Science, University of California at Davis, CA, USA	Using Smartphone Sensors for Improving Energy Expenditure Estimation	Volume 3, 2015	Journal of Translational Engineering in Health and Medicine	Article	Wearables
K4b2	2015	Mikkel B. Schneller, Mogens T. Pedersen, Nidhi Gupta, Mette Aadahl and Andreas Holtermann	Department of Nutrition, Exercise and Sports, University of Copenhagen, DK-2200 Copenhagen, Denmark	Validation of Five Minimally Obstructive Methods to Estimate Physical Activity Energy Expenditure in Young Adults in Semi-Standardized Settings	2015, 15, 6133-6151	Sensors	Article	Exercise Physiology
K4b2	2015	Barnett A, Cerin E, Vandelanotte C, Matsumoto A, Jenkins D	School of Exercise and Nutrition Sciences, Deakin University, Burwood, VIC Australia	Validity of treadmill- and track-based individual calibration methods for estimating free-living walking speed and VO2 using the Actigraph accelerometer	2015 Nov 25;7:29	BMC Sports Sci Med Rehabil.	Article	Wearables
K4b2	2015	Matthias Fenzl, Klaus Kamber-Rezek, Christian Schlegel, Joeri Gredig and Beat Villiger	Swiss Olympic Medical Center, Switzerland	VO2 Kinetics during Different Forms of Cycling Exercise on Land and in Water	2015 Volume 1 : Issue 2	Sports and exercise Medicine	Article	Water based activities
K4b2	2015	Jana Slaght	The University of Manitoba	Walking Cadence: A Novel Strategy to Improve the Proportion of Inactive Older Adults	2015		Thesis	Geriatrics
K4b2	2014	D. Ellis, E. Sejdíć, K. Zabjek, T. Chau	iMED (Innovative Medical Engineering Developments) lab, University of Pittsburgh	A pediatric correlational study of stride interval dynamics, energy and activity level	2014	Pediatric Exercise Science	Article	Gait
K4b2	2014	Gastinger S, Donnelly A, Dumond R, Prioux J.	Laboratory, Movement, Sport, and Health Sciences (M2S): Physiology and Biomechanics, University Rennes 2, Bruz, France	A Review of the Evidence for the Use of Ventilation as a Surrogate Measure of Energy Expenditure	2014 Apr 17	JPEN J Parenter Enteral Nutr.	Article	Wearables
K4b2	2014	Muggeridge DJ, Howe CC, Spendiff O, Pedlar C, James PE, Easton C.	Institute for Clinical Exercise and Health Science, University of the West of Scotland, Hamilton, Scotland, UNITED KINGDOM	A Single Dose of Beetroot Juice Enhances Cycling Performance in Simulated Altitude	2014 Jan;46(1):143-50	Med Sci Sports Exerc.	Article	Altitude
K4b2	2014	Rachel E Klaren, Gavin P Horn, Bo Fernhall, and Robert W Motl	Illinois Fire Service Institute, University of Illinois at Urbana-Champaign, USA	Accuracy of the VO2peak prediction equation in firefighters	2014; 9: 17.	J Occup Med Toxicol.	Article	Firefighter
K4b2	2014	Jean Carlos Silvestre Claudia Rideli Juzwiak Andréa Pittelli Boiogo Gollücke Victor Zuniga Dourado Vânia D'Almeida	Universidade Federal de São Paulo. Programa Interdisciplinar em Ciências da Saúde. Santos, SP. Brasil.	Acute effect of a grape concentrate intake on oxidative stress markers in triathletes	2014; 16(5):533-544-vol.16 no.5	Rev Bras Cineantropom Desempenho Hum	Article	Triathlon
K4b2	2014	Manzi V, Impellizzeri F, Castagna C	Technical Department, Football Training and Biomechanics Laboratory, Italian Football Association (FIGC), Florence, Italy	Aerobic fitness ecological validity in elite soccer players: a metabolic power approach	2014 Apr;28(4):914-9	J Strength Cond Res.	Article	Football
K4b2	2014	Brisswalter J, Wu SS, Sultana F, Bernard T, Abbiss CR.	Laboratory of Human Motricity, Education Sport and Health, University of Nice Sophia Antipolis, 261, Route de Grenoble, BP 3259, 06205, Nice Cedex 03, France	Age difference in efficiency of locomotion and maximal power output in well-trained triathletes.	2014 Dec; 114(12):2579-86	Eur J Appl Physiol.	Article	Triathlon
K4b2	2014	Zhang Y, Haddad A, Su SW, Celler BG, Coutts AJ, Duffield R, Donges CE, Nguyen HT.	The Faculty of Aeronautics and Astronautics, University of Electronic Science and Technology of China, 611731 Chengdu, China.	An equivalent circuit model for onset and offset exercise response.	2014 Oct 18;13:145.	Biomed Eng Online	Article	Exercise Physiology

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K4b2	2014	A Zignoli, A Savoldelli, F Biral, B Pellegrini, and F Schena	CeRiSM (Research Centre of Mountain Sport and Health) University of Verona, Verona, Italy	Application to cycling of a bioenergetic model: Towards a multi-level biomechanical model for global cyclist performance analysis	Vol. 3(2), 76-77	J Sci Cycling.	Abstract	Cycling
K4b2	2014	Andrade MS, de Lira CA, Vancini RL, Nakamoto FP, Cohen M, da Silva AC.	Departamento de Fisiologia, Universidade Federal de São Paulo, São Paulo, Brazil	Assessment of functional impairment after knee anterior cruciate ligament reconstruction using cardiorespiratory parameters: a cross-sectional study.	2014 May 20;15(1):163	BMC Musculoskelet Disord.	Article	Orthopedics
K4b2	2014	Luke M Mooney, Elliott J Rouse and Hugh M Herr	Center for Extreme Bionics, MIT Media Lab, Massachusetts Institute of Technology, Cambridge, MA, USA	Autonomous exoskeleton reduces metabolic cost of human walking	2014, 11:151	Journal of NeuroEngineering and Rehabilitation	Article	Gait
K4b2	2014	Mooney LM, Rouse EJ, Herr HM	MIT Media Lab, Massachusetts Institute of Technology, Cambridge, MA, USA	Autonomous exoskeleton reduces metabolic cost of human walking during load carriage	2014 May 9;11(1):80	J Neuroeng Rehabil.	Article	Public Safety
K4b2	2014	Pelárido, J. G., Denadai, B. S., Ribeiro, J., Fernandes, R. J., Greco, C. C., Vilas-Boas, J. P.	1The Capes Foundation, Ministry of Education of Brazil, Brazil, 2Faculty of Sport/CIFIZD, University of Porto, Portugal, ABIOMEPE, University of Porto, Portugal, 4Sao Paulo State University, Brazil.	Biophysics of the elite endurance swimmer: A case study during aerobic capacity evaluation using different methods	2014	XIth International Symposium for Biomechanics and Medicine in Swimming	book	Swimming
K4b2	2014	Joao Paulo Vilas-Boas	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport, University of Porto, Portugal	Building up' in swimming science	2014	BMS2014-PROCEEDINGS	Article	Swimming
K4b2	2014	Pablo A. Domene, and Chris Easton	Faculty of Science, Engineering and Computing, Kingston University, Kingston upon Thames, United Kingdom	Combined Triaxial Accelerometry and Heart Rate Telemetry for the Physiological Characterization of Latin Dance in Non-Professional Adults	Volume 18, Number 0, 2014	Journal of Dance Medicine & Science	Article	Dance & Music
K4b2	2014	Brian M. Sandroff, Lara A. Pilutti, Deirdre Dlugoski, Yvonne C. Learmonth, John H. Pula, Robert W. Motl	Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, Urbana, IL	Comparing Two Conditions of Administering the Six-Minute Walk Test in People with Multiple Sclerosis	2014 Spring; 16(1): 48-54.	Int J MS Care.	Article	Neurology
K4b2	2014	Inês Dias do Vale	Environmental Engineering Tecnico de Lisboa, Portugal	Comparison of pedestrians' particulate matter inhalation for different routes in urban centers	2014		Thesis	Exercise Physiology
K4b2	2014	Sin-Ae Park, Kwan S Lee, Kwan-Suk Lee, Ki-Cheol Son	Department of Environmental Health Science, Konkuk University, Seoul 143-701, Korea	Comparison of the Metabolic Costs of Gardening and Common Physical Activities in Children	02/2014; 32(1).	Korean journal of horticultural science and technology	Article	Exercise Physiology
K4b2	2014	Schuller T., Hoffmann U., Iglesias X., Chaverri D., Rodriguez F. A.	Institut für Physiologie und Anatomie, Deutsche Sporthochschule Köln, Germany	Concurrent validity of a new model for estimating peak oxygen uptake based on post-exercise measurements and heart rate kinetics in swimming	Canberra, 2014. pp. 41--42	XIth International Symposium for Biomechanics and Medicine in Swimming.	Article	Swimming
K4b2	2014	Schuller T., Hoffmann U., Iglesias X., Chaverri D., Rodriguez F.A.	Institut für Physiologie und Anatomie, Deutsche Sporthochschule Köln, Germany	Concurrent validity of a new model for estimating peak oxygen uptake based on post-exercise measurements and heart rate kinetics in swimming	2014. pp. 506--511	XIth International Symposium for Biomechanics and Medicine in Swimming	Article	Swimming
K4b2	2014	Ludovic Seifert, John Komar, Florent Crettenand, Gregoire Millet	Centre d'Etude des Transformations des Activités Physiques et Sportives (CETAPS), University of Rouen, Faculty of Sports Sciences, Mont Saint Aignan, France	Coordination Pattern Adaptability: Energy Cost of Degenerate Behaviors	September 2014 Volume 9 Issue 9	Plos One	Article	Swimming
K4b2	2014	Kyle R. Cochrane	University of Montana	Cross system reliability of COSMED K4b2 vs. PARVO 2400 TRUE ONE metabolic systems	2014	University of Montana ScholarWorks	Abstract	Validation
K4b2	2014	Lagowska K, Kapczuk K, Friebe Z, Bajerska J	Department of Human Nutrition and Hygiene, Dietetic Division, University of Life Sciences, Poznań, Poland	Effects of dietary intervention in young female athletes with menstrual disorders.	2014 May 26;11:21	J Int Soc Sports Nutr.	Article	Diet & Food Supplement
K4b2	2014	Jennifer A. Schrack, Vadim Zippunnikov, Jeff Goldsmith, Karen Bandeen-Roche, Ciprian M. Crăiniceanu, Luigi Ferrucci	National Institute on Aging, National Institutes of Health, Baltimore, Maryland	Estimating Energy Expenditure from Heart Rate in Older Adults: A Case for Calibration	April 2014 Volume 9 Issue 4	PLOS ONE	Article	Geriatrics
K4b2	2014	Andrei Sancassani, Dalton M. Pessôa Filho	College of Sciences, State University of São Paulo/Bauru Campus, Brazil	Exercise domain profile through pulmonary gas exchange response during kendo practice by men	2014 VOLUME 10	Archives of Budo	Article	Combat Sports
K4b2	2014	Tolfrey K, Engstrom A, Murphy C, Thackray A, Weaver R, Barrett LA	Paediatric Exercise Physiology Research Group, School of Sport, Exercise and Health Sciences, Loughborough University, UNITED KINGDOM	Exercise energy expenditure and postprandial lipemia in girls.	2014 Feb;46(2):239-46	Med Sci Sports Exerc.	Article	Exercise Physiology
K4b2	2014	Castro-Sepulveda M, Cerda-Kohler H, Pérez-Lucco C, Monsalves M, Andrade DC, Zbinden-Foncea H, Báez-San Martín E, Ramírez-Campillo R.	Exercise Science Laboratory, Faculty of Medicine, Universidad Finis Terrae, Santiago, Chile.	Hydration status after exercise affect resting metabolic rate and heart rate variability.	2014 Dec 17;31(3):1273-7.	Nutr Hosp.	Article	Exercise Physiology
K4b2	2014	Ferreira LG, Santos LF, Silva TR, Anastácio LR, Lima AS, Correia MI.	Surgery Postgraduate Program, Medical School, Universidade Federal de Minas Gerais, Brazil	Hyper- and hypometabolism are not related to nutritional status of patients on the waiting list for liver transplantation.	2014 Oct;33(5):754-60	Clin Nutr.	Article	Pre-Op Assessment
K4b2	2014	H Giorgi, M Andrews, A Gray and M Osborne	The University of Queensland, School of Human Movement Studies, Brisbane, Queensland, Australia	Incorporating internal mechanical power into performance models in cycling	Vol. 3(2), 80-81 2014	J Sci Cycling.	Abstract	Cycling
K4b2	2014	Ana Sousa, Joao Ribeiro, Marisa Sousa, Joao Paulo Vilas-Boas, Ricardo J. Fernandes	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport, University of Porto, Porto, Portugal	Influence of Prior Exercise on VO2 Kinetics Subsequent Exhaustive Rowing Performance	January 2014 Volume 9 Issue 1	PLOS ONE	Article	Rowing
K4b2	2014	Barrera A, Chaverri D, Erola P, Iglesias X, Rodriguez FA.	Institut Nacional d'Educació Física de Catalunya (INEFC), Universitat de Barcelona, INEFC-Barcelona Sports Sciences Research Group Barcelona, Barcelona, Spain.	Intensity profile during an ultra-endurance triathlon in relation to testing and performance.	2014 Dec; 35(14):1170-8	Int J Sports Med.	Article	Triathlon
K4b2	2014	AH Bossi , P Lima, J Hopker and JRP Lima	Faculty of Physical Education and Sports, Federal University of Juiz de Fora, Juiz de Fora, Minas Gerais, Brazil	Laboratory predictors of uphill cycling time trial performance	Vol. 3(2), 5 2014	J Sci Cycling.	Abstract	Exercise Physiology
K4b2	2014	Kliszczewicz, B. Snarr, RL, and Escó, M	Kennesaw State University, Kennesaw, GA 30144	Metabolic and Cardiovascular Response to the crossfit Workout 'Cindy': a Pilot Study	2014;2(2):1-9.	J Sport Human Perf	Article	Exercise Physiology
K4b2	2014	Azzam Haddad, Yi Zhang, Steven Su, Branko Celler, Hung Nguyen	Faculty of Engineering and IT, University of Technology, Sydney (UTS), Sydney, Australia	Modelling and regulating of cardio-respiratory response for the enhancement of interval training	2014, 13:9	BioMedical Engineering OnLine	Article	Exercise Physiology
K4b2	2014	Karolina Lagowska, Karina Kapczuk and Jan Jeszka	Department of Human Nutrition and Hygiene, Poznan University of Life Sciences, Poznan, Poland	Nine-month nutritional intervention improves restoration of menses in young female athletes and ballet dancers	2014, 11:52	Journal of the International Society of Sports Nutrition	Article	Dance & Music

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K4b2	2014	Paola Callea, Giuseppe Zimbalatti, Elisabeth Quendler, Alfred Nimmerichter, Norbert Bachl, Bruno Bernardi, Dario Smorto, Souraya Benalia	Department of Agraria, Feo di Vito, University Mediterranea, Calabria, Italy	Occupational illnesses related to physical strains in apple harvesting	2014, Vol 21, No 2, 407-411	Annals of Agricultural and Environmental Medicine	Article	Occupational Health
K4b2	2014	Ernest Baiget, T. Jaime Ferna Ndez, Xavier Iglesias, Lisi' Maco O Vallejo, and Ferran A. Rodri' Guez	Department of Physical Activity Sciences, University of Vic, Barcelona, Spain	On-court endurance and performance testing in competitive male tennis players.	2014 Jan; 28(1):256-64	Journal of Strength and Conditioning Research	Article	Tennis
K4b2	2014	Baiget E, Fernández-Fernández J, Iglesias X, Vallejo L, Rodríguez FA	1Department of Physical Activity Sciences, University of Vic, Barcelona, Spain	On-court endurance and performance testing in competitive male tennis players.	2014 Jan;28(1):256-64	J Strength Cond Res.	Article	Tennis
K4b2	2014	Benedikt A. Gasser, Adrian M. Stüber, Glenn Lurmann, Fabio A. Breil, Hans H. Hoppeler, Michael Vogt	Swiss Health & Performance Lab, Institute of Anatomy, University of Bern, Bern, Switzerland	Oxygen consumption while standing with unstable shoe design	2014, vol. 15 (3), 160- 165	Human Movement	Article	Ergonomics
K4b2	2014	Rebello A, Brito J, Seabra A, Oliveira J, Krstrup P.	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport , University of Porto , Porto , Portugal.	Physical match performance of youth football players in relation to physical capacity	2014;14 Suppl 1:S148-56	European Journal of Sport Science	Article	Football
K4b2	2014	Jinho Back, Sun Hur, Young-Mee Lee	Kangwon National University, Department of Leisure Sports	Physiological Comparative Analysis of Snowboard Deck in Snowboarders	Vol.49 (ICSS 2014), pp.38-41	Advanced Science and Technology Letters	Article	Skiing
K4b2	2014	Marina M, Rodriguez FA	INEFC Barcelona, Barcelona, Spain	Physiological demands of young women's competitive gymnastic routines	2014 Aug;31(3):217-22.	Biol Sport.	Article	Exercise Physiology
K4b2	2014	Delussu AS, Morone G, Iosa M, Bragoni M, Traballesì M, Paolucci S.	Fondazione Santa Lucia, I.R.C.C.S, Rome, Italy	Physiological responses and energy cost of walking on the Gait Trainer with and without body weight support in subacute stroke patients.	2014 Apr 10;11(1):5	J Neuroeng Rehabil. 4	Article	Gait
K4b2	2014	Best Sampson J, Rogers R, Biggerstaff KD, Bullinger D, Nichols, D and Ben Ezra, V.	Exercise Physiology Laboratory; Kinesiology, Texas Woman's University; Denton, TX	Physiological Responses to a 60-Minute Zumba® Class in College Age Females	2014	TACSM	Abstract	Dance & Music
K4b2	2014	Ijmerker T, Lamothe CJ, Houdijk H, van der Woude LH, Beek PJ.	MOVE Research Institute Amsterdam, Faculty of Human Movement Sciences, VU University Amsterdam, Amsterdam, the Netherlands	Postural threat during walking: effects on energy cost and accompanying gait changes.	2014 Apr 22;11(1):71	J Neuroeng Rehabil.	Article	Gait
K4b2	2014	Christopher C.F. Howe, Richard O. Matzko, Fabio Piaser, Yannis P. Pitsiladis & Chris Easton	School of Life Sciences, Kingston University, Kingston upon Thames, UK	Stability of the K4b2 portable metabolic analyser during rest, walking and running	2014 Vol. 32, No. 2, 157-163	Journal of Sports Sciences	Article	Validation
K4b2	2014	Qian Xing, Lin Qiang, Li Xue	Department of Rehabilitation, 359 Hospital of PLA,Zhenjiang Jiangsu, 212001	Study on exercise and clinical value of the six - minute walk test	2014 Vol. 22, No. 4	Chinese Journal of Trauma and Disability Medicine	Article	Exercise Physiology
K4b2	2014	Zhao Yifan, Pan Sijing, Wang Lei	Department of Rehabilitation, Nanjing University of Traditional Chinese Medicine, Nanjing, 210046	The correlation between heart rate recovery after cardiopulmonary exercise test and cardiopulmonary function, as well as quality of life in patients with coronary heart disease	Nov.2014 Vol.29, No.11: 1039 -1043	Chinese Journal of Rehabilitation Medicine	Article	Cardiology
K4b2	2014	Vinicius de Oliveira Ottone, Flavio de Castro Magalhaes, Fabricio de Paula, Nubia Carelli Pereira Avelar, Paula Fernandes Aguiar, Pamela Fliche da Matta Sampaio, Tamiris Campos Duarte, Karine Beatriz Costa, Tatiane Liliam Araujo, Candido Celso Coimbra, Fabio Yuzo Nakamura, Fabiano Trigueiro Amorim, Etel Rocha-Vieira	Laboratorio de Biologia do Exercício, Centro Integrado de Pesquisa em Saude, Programa Multicentrico de Pós-Graduacao em Ciências Fisiológicas – Universidade Federal dos Vales do Jequitinhonha e Mucuri, Diamantina, Brazil	The Effect of Different Water Immersion Temperatures on Post-Exercise Parasympathetic Reactivation	December 1, 2014	Plos One	Article	Water based activities
K4b2	2014	Eugenia Murawska-Cialowicz	Physiology and Biochemistry Department, University for Physical Education, Wrocław, Poland	The impact of Wingate and progressive tests on homocysteine, vitamin B6, B12 and folic acid levels in athletes'blood	Vol. 8, No. 4/2014: 5-17	Central European Journal of Sport Sciences and Medicine	Article	Exercise Physiology
K4b2	2014	Bülent Kilit, Ömer Şenel , Erşan Arslan , Sema Can, Mustafa Balaban	Hittit University School of Physical Education and Sports	The physiological profile and performance responses of elite male tennis players during tennis match	Nov 7-9 2014	13th International Sport Conference	Abstract	Tennis
K4b2	2014	Stanula A., Rocznik R., Maszczyk A., Pietraszewski P., Zając A.	Department of Methodology, Statistics and Computer Science The Jerzy Kukuczka Academy of Physical Education, Katowice, Poland	The role of aerobic capacity in high intensity intermittent effort in icehockey	Vol. 31 No3, 2014	Biology of Sport	Article	Hockey
K4b2	2014	Antonino Bianco, Francesco Pomara, Antonino Patti, Ewan Thomas, Marco Petrucci, Marianna Bellafiore, Giuseppe Battaglia, Antonio Paoli and Antonio Palma	Sport and Exercise Sciences Research Unit, University of Palermo	The surprising influence of family history to type 2 diabetes on anaerobic performance of young male elite athletes	2014, 3:224	SpringerPlus	Article	Diabetology
K4b2	2014	Ben Jones, Marco Dat, Chris E. Cooper	University of Essex, Centre for Sport and Exercise Sciences, School of Biological Sciences, Wivenhoe Park, Colchester CO4 3SQ, United Kingdom.	Underwater near-infrared spectroscopy measurements of muscle oxygenation: laboratory validation and preliminary observations in swimmers and triathletes.	2014 Dec; 19(12):127002.	J Biomed Opt.	Article	Swimming
K4b2	2014	Ricardo J Fernandes, Kelly de Jesus, Ana Sousa., Karla de Jesus, Joao Ribeiro, Joao Paulo VilasBoas	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport, University of Porto, Portugal.	VO2 slow component assessment along an incremental swimming protocol	118-123	XIth International Symposium for Biomechanics and Medicine in Swimming	Article	Swimming
K4b2	2014	Zanetti S, Pumpa KL, Wheeler KW, Pyne DB	National Institute of Sports Studies, Faculty of Health, University of Canberra, Canberra, Australia	Validity of the SenseWear Armband to assess energy expenditure during intermittent exercise and recovery in rugby union players.	2014 Apr;28(4):1090-5	J Strength Cond Res.	Article	Wearables
K4b2	2014	Philippe Hellard, Pierre-Marie Lepretre, Marta Avalos, Ludovic Seifert, Christophe Hausswirth, Jean-Francois Toussaine , Philo Saunders, David Pyne	IRMES - Institut de Recherche bio-Médicale et d'Epidémiologie du Sport	Ventilatory, metabolic and kinematic responses in sprint versus distance swimmers	Apr. 2014	XIth International Symposium on Biomechanics and Medicine in Swimming	Article	Swimming
K4b2	2014	Ricardo J. Fernandes, Ana Sousa, João Ribeiro, Kelly de Jesus, Jailton Pelarigo, Rodrigo Zacca, Susana Soares, Leandro Machado, Pedro Figueiredo, João Paulo Vilas-Boas	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport, University of Porto and Porto Biomechanics Laboratory, University of Porto, Porto, Portugal.	VO2 kinetics from low to extreme swimming intensities	10,11,12 Oct 2014	Swimming Science II	Article	Swimming

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K4b2	2014	Ricardo J Fernandes, Kelly de Jesus, Ana Sousa, Karla de Jesus, Joao Ribeiro, Joao Paulo Vilas Boas	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport, University of Porto, Portugal,	VO2 slow component assessment along an incremental swimming protocol	May 2014 with 52 Reads	Conference: XII Symposium on Biomechanics and Medicine in Swimming, At Canberra, Australia	Article	Swimming
K4b2	2014	Theo Thompson	Department of Software Engineering, The University of Auckland, Auckland, New Zealand	Whole Body Interaction: Literature Review of Whole Body Tracking	2014		Article	Gait
K4b2	2014	Michael P. Murphy, Chris E. Thorne, Steve Zhang, Jessica Selinger, J. Maxwell Donelan, and Steve Potter	Locomotion Lab, Simon Fraser University, Burnaby, British Columbia, Canada	Whole Leg Augmentation with a Lightweight Knee Mechanism	2014	Dynamic Walking 2014	Article	Orthopedics
K4b2	2013	Michael Wehner, Brendan Quinlivan, Patrick M Aubin, Ernesto Martinez-Villalpando, Michael Baumann, Leia Stirling, Kenneth Holt, Robert Wood, Conor Walsh	Faculty of the School of Engineering and Applied Sciences, Harvard University, Cambridge, MA	A Lightweight Soft Exosuit for Gait Assistance	Karlsruhe, Germany, May 6-10, 2013	2013 IEEE International Conference on Robotics and Automation (ICRA)	Article	Public Safety
K4b2	2013	Alexander R. Gibson ¹ , Robert Ojiambo, Kenn Konstabel, Daniel E. Lieberman, John J. Reilly, John R. Speakman, Yannis P. Pitsiladis	College of Medicine, Veterinary and Life Sciences, Institute of Cardiovascular and Medical Sciences, University of Glasgow, West Medical Building, Glasgow, Scotland	Aerobic Capacity, Activity Levels and Daily Energy Expenditure in Male and Female Adolescents of the Kenyan Nandi Sub-Group	June 2013 Volume 8 Issue 6	PLOS ONE	Article	Exercise Physiology
K4b2	2013	Richard Kesler	University of Illinois at Urbana-Champaign	Analysis of fatigue in firefighters: foot clearances over stair edges and validation of a novel means for metabolic data collection	2013		Thesis	Firefighter
K4b2	2013	Marco Altini, Julien Penders and Oliver Amft	ACTLab, Signal Processing Systems, Eindhoven University of Technology, Eindhoven, The Netherlands	Body Weight-Normalized Energy Expenditure Estimation Using Combined Activity and Allometric Scaling Clustering	Osaka, Japan, 3 - 7 July, 2013	35th Annual International Conference of the IEEE EMBS	Article	Wearables
K4b2	2013	Yang, C., Wickert, Z., Roedel S., Berg, A., & Rothbauer, A.	Department of Kinesiology, University of Wisconsin-Eau Claire	Can Exergaming with the Xbox Kinect Meet Guidelines for Exercise Intensity?	May 2013		Poster	Computer Games
K4b2	2013	Gary R. Hunter, C. Scott Bickel, Gordon Fisher, William H. Neumeier, and John P. McCarthy	Department of Human Studies, University of Alabama at Birmingham, Birmingham, AL	Combined Aerobic and Strength Training and Energy Expenditure in Older Women	2013 Jan 30	Med Sci Sports Exerc.	Article	Exercise Physiology
K4b2	2013	Krzysztof Durkalec-Michalski, Malgorzata Wozniowicz, Joanna Bajerska, Jan Jeszka	Poznań University of Life Sciences, Poznań, Poland	Comparison of accuracy of various non-calorimetric methods measuring energy expenditure at different intensities	2013, vol. 14 (2), 161– 167	Human Movement	Article	Wearables
K4b2	2013	Adam Noah J, Spierer DK, Gu J, Bronner S.	Brain Function Laboratory, Department of Psychiatry, Yale University School of Medicine , 300 George Street Suite 902, New Haven, CT 06511 , USA .	Comparison of steps and energy expenditure assessment in adults of Fitbit Tracker and Ultra to the Actical and indirect calorimetry.	2013 Oct;37(7):456-62	J Med Eng Technol	Article	Wearables
K4b2	2013	Y.D. Gu and Z.Y. Li	School of Biological Science and Medical Engineering, Southeast University, Jiangsu P.R. China	Effect of Shoes' Heel Height on the Energy Cost during Jogging	6(9): 1531-1533, 2013	Research Journal of Applied Sciences, Engineering and Technology	Article	Running
K4b2	2013	Daniel J. Keefer	Millersville University, Millersville, USA	Effects of body movement on the reliability of a portable gas analysis system	2013, vol. 14 (1), 82– 86	Human Movement	Article	Validation
K4b2	2013	Charles P. Hoffmann, Alessandro Filippeschi, Emanuele Ruffaldi & Benoit G. Bardy	Movement to Health (M2H) Laboratory , Montpellier-I University , Montpellier , France	Energy management using virtual reality improves 2000-m rowing performance	2013 Sep 20	J Sports Sci.	Article	Rowing
K4b2	2013	Le Meur Y, Pichon A, Schaal K, Schmitt L, Louis J, Gueneron J, Vidal PP, Hausswirth C	National Institute of Sport, Expertise and Performance, Laboratory of Sport, Expertise and Performance, Paris, France	Evidence of Parasympathetic Hyperactivity in Functionally Overreached Athletes	2013 May 14	Med Sci Sports Exerc.	Article	Exercise Physiology
K4b2	2013	Young Joo Kim, Heaja Chun, and Chul-Hyun Kim	Department of Rehabilitation Medicine, Inje University Sanggye Paik Hospital, Seoul	Exaggerated Response of Systolic Blood Pressure to Cycle Ergometer	2013 June; 37(3): 364-372	Ann Rehabil Med.	Article	Exercise Physiology
K4b2	2013	Kate Woolf-May, Steve Meadows	Department of Sport Science, Tourism and Leisure, Canterbury Christ Church University, Canterbury, Kent, UK	Exploring adaptations to the modified shuttle walking test	2013 May 28;3(5)	BMJ Open.	Article	Exercise Physiology
K4b2	2013	Carlo Baldari, Marco Meucci	Department of Movement, Human and Health Sciences, University of Rome "Foro Italico", Rome, Italy	History of technologic development and data analysis in VO2 evaluation in swimming	2013	Sinergia	Article	Swimming
K4b2	2013	Duncan GE, Lester J, Migotsky S, Higgins L, Borriello G.	Department of Epidemiology, Nutritional Sciences Program, University of Washington, Seattle	Measuring slope to improve energy expenditure estimates during field-based activities	2013 Mar;38(3):352-6	Appl Physiol Nutr Metab.	Article	Exercise Physiology
K4b2	2013	João Noite Mendes, Renato Fernandes, Rodrigues Ferreira, José Correia, António Vences de Brito	ESDRM – Rio Maior, Portugal	Metabolic specialization in pre-pubertal young footballers	2013		Paper	Football
K4b2	2013	Barbara Trutschnigg, Robert D. Kilgour, José A. Morais, Henriqueta Lucar, Laura Hornby, Haneen Molla, Antonio Viganò	McGill Nutrition and Performance Laboratory, Montreal, QC, Canada	Metabolic, nutritional and inflammatory characteristics in elderly women with advanced cancer	2013 Apr;4(2):183-9	J Geriatr Oncol.	Article	Oncology
K4b2	2013	Katherine S. Hall, Cheryl A. Howe, Sharon R. Rana, Clara L. Martin, and Miriam C. Morey	Geriatric Research, Education, and Clinical Center, Durham VA Medical Center, Durham, NC	METs and Accelerometry of Walking in Older Adults: Standard versus Measured Energy Cost	2013 Mar;45(3):574-82	Med Sci Sports Exerc.	Article	Wearables
K4b2	2013	Antonio A. M. Castro, Elias F. Porto, Vinicius C. Iamonti, Gerson F. de Souza, Oliver A. Nascimento, José R. Jardim	Pulmonary Rehabilitation Center of Federal University of São Paulo – Unifesp, São Paulo, São Paulo, Brazil,	Oxygen and Ventilatory Output during Several Activities of Daily Living Performed by COPD Patients Stratified According to Disease Severity	November 2013 Volume 8 Issue 11 e79727	PLOS ONE	Article	Pneumology
K4b2	2013	Antonio Terracciano, Jennifer A. Schrack, Angelina R. Sutin, Wayne Chan, Eleanor M. Simonsick, Luigi Ferrucci	National Institute on Aging, National Institutes of Health, Department of Health and Human Services, Baltimore, Maryland, USA	Personality, Metabolic Rate and Aerobic Capacity	January 2013 Volume 8 Issue 1	PLOS ONE	Article	Geriatrics
K4b2	2013	Sarah R.Ho, Richard M. Smith, Philip G. Chapman, Peter J. Sinclair, and Kazuo Funato	Exercise, Health and Performance Research Group, Faculty of Health Sciences, The University of Sydney, Lidcombe, New South Wales, Australia	Physiological and physical characteristics of elite dragon boat paddlers	2013 - 27(1)/137–145	Journal of Strength and Conditioning Research	Article	Rowing
K4b2	2013	Carlo Castagna, franco M. Impellizzeri, Anis Chaouachi, Vincenzo Manzi	Football Training and Biomechanics Laboratory, Italian Football Association (FIGC), Technical Department, Coverciano	Preseason variations in aerobic fitness and performance in elite-standard soccer players: a team study	2013 27(11)/2959–2965	Journal of Strength and Conditioning Research	Article	Football
K4b2	2013	Christopher Easthope Schmidt	University of Nice Sophia Antipolis, France	Reducing muscular fatigue in trail running - mechanisms and strategies	2013		Thesis	Exercise Physiology

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K4b2	2013	Benjamin J. Darter, Kelly M. Rodriguez, Jason M. Wilken	Brooke Army Medical Center	Test-Retest Reliability and Minimum Detectable Change Using the K4b2: Oxygen Consumption, Gait Efficiency, and Heart Rate for Healthy Adults During Submaximal Walking	2013 June ; 84(2): 223-231	Res Q Exerc Sport.	Article	GAIT
K4b2	2013	Alyssa D. Stookey, Michael G. McCusker, John D. Sorkin, Leslie I. Katzel, Marianne Shaughnessy, Richard F. Macko and Frederick M. Ivey	Baltimore VA Medical Center, Baltimore, MD, USA.	Test-retest reliability of portable metabolic monitoring after disabling stroke.	2013 Nov-Dec; 27(9):872-7.	Neurorehabil Neural Repair.	Article	Validation
K4b2	2013	Neil Baroody	University of New Hampshire - Main Campus	The Effect of a Barefoot Training Program on Running Economy and Performance	Spring 2013	University of New Hampshire Inquiry Journal	Article	Running
K4b2	2013	Matthew A. Tucker, Jill M. Hargreaves, Jenny C. Clarke, Darren L. Dale, and Gavin J. Blackwell	School of Sciences and Physical Education, University of Canterbury, Christchurch, New Zealand	The effects of caffeine on maximal oxygen uptake and vertical jump performance in male basketball players	2013 Feb;27(2):382-7	J Strength Cond Res.	Article	Basketball
K4b2	2013	CA Bisschoff	North-West University, South Africa	The validity of the BioForce Heart rate Variability System and the use of heart rate variability and recovery to determine the fitness levels of a cohort of university-level rugby players	41579		Thesis	Rugby
K4b2	2013	Norcross, Jason R.	NASA Johnson Space Center, Houston, TX, United States	Using Analogs for Performance Testing of Humans in Spacesuits in Simulated Reduced Gravity	24 Sept. 2013	University Lecture;	Paper	Space
K4b2	2013	Scott E. Crouter, Magdalene Horton and David R. Bassett, Jr	University of Massachusetts Boston, Boston, MA	Validity of ActiGraph Child-Specific Equations during Various Physical Activities	2013 Jul;45(7):1403-9	Med Sci Sports Exerc.	Article	Wearables
K4b2	2013	Batista MB, Cyrino ES, Arruda M, Dourado AC, Coelho-E-Silva MJ, Ohara D, Romanzini M, Ronque ER	Group of Study and Research in Physical Activity and Exercise, Londrina State University, Londrina, Brazil	Validity of equations for estimating VO2peak from the 20-m shuttle run test in adolescents aged 11-13 years	2013 Oct;27(10):2774-81	J Strength Cond Res.	Article	Paediatric & Children
K4b2	2012	Kylie Hill, Thomas E Dolmage, Lynda Woon, Debbie Coutts, Roger Goldstein, Dina Brooks	Respiratory Medicine, West Park Healthcare Centre, 82 Buttonwood Ave, Toronto M6M 2J5, Canada.	A simple method to derive speed for the endurance shuttle walk test.	2012 Dec;106(12):1665-70	Respir Med.	Article	Exercise Physiology
K4b2	2012	T. Ahler - M. Bendiksen - P. Krstrup - N. Wedderkopp	Department of Physiotherapy, University College Lillebaelt, Blangstedgårdsvej, Odense, Denmark, Department of Exercise and Sport Sciences, University of Copenhagen, Copenhagen, Denmark, Centre for Research in Childhood Health, University of Southern Denmark, Odense, Denmark	Aerobic Wtness testing in 6- to 9-year-old children: reliability and validity of a modiWed Yo-Yo IR1 test and the Andersen test	DOI 10.1007/s00421-011-2039-4	European Journal of Applied Physiology	Article	Paediatric & Children
K4b2	2012	Catherine Mary Hesford, Stewart J. Laing, Marco Cardinale, and Chris E. Cooper	Department of Biological Sciences, University of Essex, United Kingdom	Asymmetry of Quadriceps Muscle Oxygenation during Elite Short-Track Speed Skating	(2011) DOI: 10.1249/MSS.0b013e31822f8942	Medicine & Science in Sports & Exercise	Article	Skating
K4b2	2012	David R. Bassett JR, Alex Rowlands, and Stewart G. Trost	University of Tennessee, Knoxville, TN	Calibration and Validation of Wearable Monitors	(2012) DOI: 10.1249/MSS.0b013e3182399cf7	Medicine & Science in Sports & Exercise	Article	Wearables
K4b2	2012	I. Bazzucchi, P. Sbriccoli, A. Nicolò , A. Passerini, F. Quinzi, F. Felici, M. Sacchetti	Department of Human Movement and Sport Sciences, Universita' degli Studi di Roma "Foro Italico", Rome, Italy	Cardio-respiratory and electromyographic responses to ergometer and on-water rowing in elite rowers	2012 -I DOI 10.1007/s00421-012-2550-2	European Journal of Applied Physiology	Article	Rowing
K4b2	2012	Chatterjee T, Bhattacharyya D, Pal M, Majumdar D.	Defence Institute of Physiology and Allied Sciences, Defence R & D Organization, Lucknow Road, Timarpur, Delhi	Cardiorespiratory changes with compact backpack system and distributed mode of load carriage	2012 Apr-Jun;56(2):130-6.	Indian J Physiol Pharmacol.	Article	Public Safety
K4b2	2012	Iztok Kavcic, Radoje Milic, Morteza Jourkesh, Sergej M. Ostojic and Mehmet Zeki Ozkol	Soccer Department, Faculty of Sport, University of Ljubljana, Slovenia	Comparative study of measured and predicted VO2max during a multi-stage fitness test with junior soccer players	2012; 1:18-23	Kinesiology 44	Article	Football
K4b2	2012	P. M. Leprêtre, T. Weissland, C. Paton, M. Jeanne, S. Delannaud, S. Ahmaidi	Laboratoire de Recherche Adaptations Physiologiques à l'Exercice et Réadaptation à l'Effort - Université de Picardie Jules Verne campus universitaire Le bailli AMIENS France	Comparison of 2 Portable Respiratory Gas Analysers	2012; 33: 728-733	Int J Sports Med	Article	Validation
K4b2	2012	R.K. Mohanty, P. Lenka, A. Equebal , R. Kumar	National Institute for the Orthopedically Handicapped (NIOH), B T Road, Bon Hooghly, Kolkata 700090, India	Comparison of energy cost in transtibial amputees using "prosthesis" and "crutches without prosthesis" for walking activities	55 (2012) 252-262	Annals of Physical and Rehabilitation Medicine	Article	Disabled
K4b2	2012	Nicolas Berryman, Mathieu Gayda, Anil Nigam, Martin Juneau, Louis Bherer, Laurent Bosquet	Faculte' des Sciences du Sport, Universite' de Poitiers, Poitiers, France, Departement de Kinesiologie, Universite' de Montreal, Montreal, QC	Comparison of the metabolic energy cost of overground and treadmill walking in older adults	(2012) 112:1613-1620	European Journal of Applied Physiology	Article	Geriatrics
K4b2	2012	Kieran P. Dowd, Deirdre M. Harrington, Alan E. Donnelly	Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland, Pennington Biomedical Research Center, Baton Rouge, Louisiana, United States of America	Criterion and Concurrent Validity of the activPALTM Professional Physical Activity Monitor in Adolescent Females	(2012) 7(10): e47633.	PLOS ONE	Article	Wearables
K4b2	2012	J. Ramirez Lechuga, J. J. Muros Molina, J. Morente Sánchez, C. Sánchez Muñoz, P. Femia Marzo4 y M. Zabala Diaz	Department of Sport and Informatics. University Pablo de Olavide. Seville. Spain. Department of Nutrition and Food Sciences. University of Granada. Spain.	Efecto de un programa de entrenamiento aeróbico de 8 semanas durante las clases de educación física en adolescentes	2012;27:747-754)	Nutr Hosp	Article	Paediatric & Children
K4b2	2012	Sharon S. Chiou, Nina Turner, Joyce Zwiener, Darlene L. Weaver and William E. Haskell	Division of Safety Research, National Institute for Occupational Safety and Health, 1095 Willowdale Rd. G800, Morgantown, WV 26505	Effect of Boot Weight and Sole Flexibility on Gait and Physiological Responses of Firefighters in Stepping Over Obstacles	2012 54: 373 originally DOI: 10.1177/0018720811433464 (2012)	The Journal of the Human Factors and Ergonomics Society	Article	Firefighter
K4b2	2012	Catherine M. Hesford, Stewart Laing, Marco Cardinale, and Chris E. Cooper	Centre for Sport and Exercise Science, School of Biological Sciences, University of Essex, UNITED KINGDOM	Effect of Race Distance on Muscle Oxygenation in Short-Track Speed Skating	(2012) 0195-9131/13/4501-0083/0	Medicine & Science in Sports & Exercise	Article	Skating
K4b2	2012	Anna Bugge, Bianca El-Naaman, Magnus Dencker, Karsten Froberg, Ingar Morten K. Holme, Robert G. McMurray, and Lars Bo Andersen	Centre of Research in Childhood Health, Institute of Sport Science and Clinical Biomechanics, University of Southern Denmark, Odense M, DENMARK	Effects of a Three-Year Intervention: The Copenhagen School Child Intervention Study	0195-9131/12/4407-1310/0	Medicine & Science in Sports & Exercise	Article	Paediatric & Children
K4b2	2012	Joana F. Reis, Francisco B. Alves, Paula M. Bruno, Veronica Vleck, Gregoire P. Millet	CIPER, Faculty of Human Kinetics, Technical University of Lisbon	Effects of aerobic fitness on oxygen uptake kinetics in heavy intensity swimming	(2012) 112:1689-1697	European Journal of Applied Physiology	Article	Swimming

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K4b2	2012	Won Hyuk Chang, Min Su Kim, Jung Phil Huh, Peter K. W. Lee and Yun-Hee Kim	Department of Physical Medicine and Rehabilitation, Division for Neurorehabilitation, Stroke and Cerebrovascular Center, Samsung Medical Center, Sungkyunkwan University School of Medicine, Republic of Korea	Effects of Robot-Assisted Gait Training on Cardiopulmonary Fitness in Subacute Stroke Patients : A Randomized Controlled Study	2012 26: 318	Neurorehabilitation and Neural Repair	Article	Gait
K4b2	2012	Enrico Tam, Huber Rossi , Christian Moia, Claudio Berardelli, Gabriele Rosa, Carlo Capelli, Guido Ferretti,	Departement de Neurosciences Fondamentales, Universite' de Geneve, Geneva, Switzerland Facolta' di Scienze Motorie, Universita' di Bologna, Bologna, Italy	Energetics of running in top-level marathon runners from Kenya	(2012) 112:3797–3806	European Journal of Applied Physiology	Article	Running
K4b2	2012	Jingjing Wang, Stephen J Redmond, Matteo Voleno, Michael R Narayanan, Ning Wang, Sergio Cerutti and Nigel H Lovell	Graduate School of Biomedical Engineering, University of New South Wales, Sydney, NSW, 2052, Australia	Energy expenditure estimation during normal ambulation using triaxial accelerometry and barometric pressure	Physiol. Meas. 33 (2012) 1811–1830	Physiological measurement	Article	Wearables
K4b2	2012	Michael J. Stec and Eric S. Rawson	Department of Exercise Science, Bloomsburg University, Bloomsburg, Pennsylvania	Estimation of Resistance exercise energy expenditure using triaxial accelerometry	(2012) 26(5)/1413–1422	Journal of Strength and Conditioning Research	Article	Wearables
K4b2	2012	Gregory G. Doncaster, Craig Twist	Department of Sport and Exercise Sciences, University of Chester, Chester CH1 4BJ, UK	Exercise-induced muscle damage from bench press exercise impairs arm cranking endurance performance	(2012) 112:4135–4142	European Journal of Applied Physiology	Article	Conditioning
K4b2	2012	Romulo Bertuzzi, Emerson Franchini, Valmor Tricoli, Adriano E. Lima-Silva, Flavio De Oliveira Pires, Nilo Okuno, and Maria APDM Kiss	Department of Sport, School of Physical Education and Sport, University of Sao Paulo, Sao Paulo, Brazil	Fit-climbing test: A field test for indoor rock climbing	(2012) 26(6)/1558–1563	Journal of Strength and Conditioning Research	Article	Climbing
K4b2	2012	Herman Pontzer, David A. Raichlen, Brian M. Wood, Audax Z. P. Mabulla, Susan B. Racette, Frank W. Marlowe	Department of Anthropology, Hunter College, New York, New York, United States of America, New York Consortium in Evolutionary Primatology, New York, New York, USA	Hunter-Gatherer Energetics and Human Obesity	July 25, 2012 7(7): e40503.	PLOS ONE	Article	Obesity
K4b2	2012	Chris Easton, Chris C.F. Howe, Richard O. Matzko, Fabio Piaser, Yannis P. Pitsiladis	Kingston University, Kingston upon Thames UK	Impact of K4b2 calibration drift on respiratory measurements during walking and running	2012	ACSM	Abstract	Validation
K4b2	2012	Roy J. Shephard, Yukitoshi Aoyagi	Faculty of Physical Education and Health, University of Toronto, Toronto, ON, Canada, Exercise Sciences Research Group, Tokyo Metropolitan Institute of Gerontology, Itabashi, Tokyo, Japan	Measurement of human energy expenditure, with particular reference to field studies: an historical perspective	(2012) 112:2785–2815	European Journal of Applied Physiology	Article	Exercise Physiology
K4b2	2012	JeVrey M. McBride , James G. Snyder	Neuromuscular and Biomechanics Laboratory, Department of Health, Leisure and Exercise Science, Appalachian State University, Boone, NC 28607, USA	Mechanical efficiency and force–time curve variation during repetitive jumping in trained and untrained jumpers	(2012) 112:3469–3477	European Journal of Applied Physiology	Article	Exercise Physiology
K4b2	2012	Maria Francesca Piacentini, Attilio Parisi ,Nicole Verticchio, Stefania Comotto, Romain Meeusen, Laura Capranica, F,	Department of Human Movement and Sport Sciences University of Rome "Foro Italico", Rome, Italy Department of Human Physiology and Sportsmedicine, Vrije Universiteit Brussel, Brussels, Belgium	No changes in time trial performance of master endurance athletes after 4 weeks on a low carbohydrate diet	(2012) 8:51–58	Sport Science Health	Article	Running
K4b2	2012	Jaimie A. Roper Elizabeth L. Stegemoeller Mark D. Tillman Chris J. Hass	Department of Applied Physiology and Kinesiology, University of Florida,Gainesville, FL 32611-8205, USA	Oxygen consumption, oxygen cost, heart rate, and perceived effort during split-belt treadmill walking in young healthy adults	2012 - DOI 10.1007/s00421-012-2477-7	European Journal of Applied Physiology	Article	Orthopedics
K4b2	2012	Jaimie A. Roper, Elizabeth L. Stegemoeller , Mark D. Tillman, Chris J. Hass,	Department of Applied Physiology and Kinesiology, University of Florida, 122 Florida Gym, PO Box 118205, Gainesville, FL 32611-8205, USA	Oxygen consumption, oxygen cost, heart rate, and perceived effort during split-belt treadmill walking in young healthy adults	2012 DOI 10.1007/s00421-012-2477-7	European Journal of Applied Physiology	Article	Exercise Physiology
K4b2	2012	Ramdane Almansba, Andree-Anne A. parent, Jean P. Boucher, Alain S. Comtois	University of Quebec in Montreal Canada	Oxygen uptake and cardiopulmonary demands od world class judoists performing the Uchikomi Fitness test	2012	ACSM	Abstract	Combat Sports
K4b2	2012	Nicola J. Wiles, Anne M. Haase, Debbie A. Lawlor Andy Ness Glyn Lewis	Academic Unit of Psychiatry, School of Social and Community Medicine, University of Bristol, Oakfield House, MRC Centre for Causal Analyses in Translational Epidemiology, School of Social and Community Medicine, University of Bristol, Bristol, UK Oakfield Grove, Bristol , UK	Physical activity and depression in adolescents: cross-sectional findings from the ALSPAC cohort	(2012) 47:1023–1033	Soc Psychiatry Psychiatr Epidemiol	Article	Paediatric & Children
K4b2	2012	Smallwood SR, Morris MM, Fallows SJ, Buckley JP	Departmentof Clinical Science, Universityof Chester, Chester, England.	Physiologic responses and energy expenditure of kinect active video game play in schoolchildren	2012 Nov;166(11):1005-9	Arch Pediatr Adolesc Med.	Article	Computer Games
K4b2	2012	Yann Le Meur, Sylvain Dorel , Yann Baup, Jean Pierre Guyomarch, Christian Roudaut, Christophe Hausswirth,	Research Department, National Institute of Sport, Expertise and Performance, 75012 Paris, France	Physiological demand and pacing strategy during the new combined event in elite pentathletes	(2012) 112:2583–2593	European Journal of Applied Physiology	Article	Triathlon
K4b2	2012	Jamie Burr, C. Taylor Drury, Adam C. Ivey, Darren E.R. Warburton	Kinesiology, Cardiovascular Physiology and Rehabilitation Laboratory, University of British Columbia, Vancouver, British Columbia, Canada, and Experimental Medicine, University of British Columbia, Vancouver, British Columbia, Canada	Physiological demands of downhill mountain biking	2012; 1–9, iFirst article	Journal of Sports Sciences	Article	Cycling
K4b2	2012	Thiago Teixeira Mendes, Tatiana Ramos Fonseca, Guilherme Passos Ramos, Carolina Franco Wilke, Christian Emmanuel Torres Cabido, Cristiano Lino Monteiro De Barros Andre' Maia Lima, Lucas de A'vila Carvalho Fleury Mortimer , Moise's Vieira de Carvalho Mauro Martins Teixeira, Nilo Resende Viana Lima, Emerson Silami Garcia,	Laboratory of Exercise Physiology, Federal University of Minas Gerais, Belo Horizonte, Brazil	Six weeks of aerobic training improves VO2max and MLSS but does not improve the time to fatigue at the MLSS	(Oct-2012) DOI 10.1007/s00421-012-2501-y	European Journal of Applied Physiology	Article	Exercise Physiology

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2012	Rai B, Kaur J, Foing BH	Simulated Microgravity and Human Body, JBR Institute of Health Education Research and Technology, India	Stress, Workload and Physiology Demand During Extravehicular Activity: A Pilot Study	2012 Jun;4(6):266-9	N Am J Med Sci.	Article	Space
K4b2	2012	Branko Škof, Radoje Milić	University of Ljubljana, Faculty of Sport, Gortanova 22,1000 Ljubljana, Slovenia	Stroke volume dynamics in male subjects of different fitness levels	18, 1, 5–13 (2012)	Kinesiologia Slovenica	Article	Exercise Physiology
K4b2	2012	Nikolaos P. E. Kadoglou, Grigorios Fotiadis, Zoi Athanasiadou, Ioulia Vitta, Stylianos Lampropoulos, Ioannis S. Vrabas,	Department of Physical Education and Sports Science, Aristotle University of Thessaloniki, Ag Ioannis, 62110 Serres, Greece , 1st Department of Internal Medicine, Department of Cardiology, "Bodosakio" General Hospital of Ptolemaida, Ptolemaida, Greece"Hippokratio" General Hospital of Thessaloniki, Thessaloniki, Greece	The effects of resistance training on ApoB/ApoA-I ratio, Lp(a) and inflammatory markers in patients with type 2 diabetes	DOI 10.1007/s12020-012-9650-y	Endocrine	Article	Diabetology
K4b2	2012	Jennifer A. Schrack, PhD, Eleanor M. Simonick, PhD, Paulo H.M. Chaves, MD, PhD, and Luigi Ferrucci, MD, PhD	Center on Aging and Health, Bloomberg School of Public Health, Johns Hopkins University, Baltimore Maryland;	The Role of Energetic Cost in the Age-Related Slowing of Gait Speed	60:1811–1816, 2012 © 2012,	JAGS	Article	GAIT
K4b2	2012	Véronique Billat, Hélène Petot, Jason R. Karp, Guillaume Sarre, R. Hugh Morton & Laurence Mille-Hamard	University Genopole Evry, ZAC Bras de Fer, Evry, France, School of Sport and Exercise, Massey University, Palmerston North, New Zealand	The sustainability of VO2max: effect of decreasing the workload	2012- I DOI 10.1007/s00421-012-2424-7	European Journal of Applied Physiology	Article	Exercise Physiology
K4b2	2012	Scott E. Crouter, Magdalene Horton, and David R. Bassett JR	University of Massachusetts Boston, Boston, MA; and The University of Tennessee, Knoxville, TN	Use of a Two-Regression Model for Estimating Energy Expenditure in Children	0195-9131/12/4406-1177/0	Medicine & Science in Sports & Exercise	Article	Paediatric & Children
K4b2	2012	Scott E. Crouter, Magdalene Horton, David R. Bassett	University of Massachusetts Boston, Boston, MA	Use of a Two-Regression Model for Estimating Energy expenditure in Children	(2012) DOI: 10.1249/MSS.0b013e3182447825	Medicine & Science in Sports & Exercise	Article	Paediatric & Children
K4b2	2012	Carlo Baldari, Ricardo J. Fernandes, João Ribeiro, Marco Meucci, João P. Vilas-Boas, Laura Guidetti	University of Rome "Foro Italico", Rome, Italy	Validation of a Snorkel Prototype for Measuring Gas Exchange Parameters during Swimming	2012	ACSM	Poster	Swimming
K4b2	2012	Johanna M. Hänggi, Lisa R.S. Phillips , Alex V. Rowlands	Swiss Federal Institute of Sport, Magglingen, Switzerland School of Sport and Health Sciences, College of Life and Environmental Sciences, University of Exeter, UK	Validation of the GT3X ActiGraph in children and comparison with the GT1M ActiGraph	(2012) dx.doi.org/10.1016/j.jsams.2012.05.012	JSMS	Article	Wearables
K4b2	2012	Nicolas Peyrot, David Thivel, Laurie Isacco, Jean-Benoit Morin, Alain Belli, and Pascale Duche	University of La Re'union, UFR SHE, Le Tampon, FRANCE	Why Does Walking Economy Improve after Weight Loss in Obese Adolescents?	2012 -DOI: 10.1249/MSS.0b013e318236edd8	Medicine & Science in Sports & Exercise	Article	Obesity
K4b2	2012	Luigi Fattorini, Giancarlo Pittiglio, Bruno Federico, Anastasia Pallicca, Marco Bernardi, and Angelo Rodio	Department of Physiology and Pharmacology "V. Erspamer," Sapienza University of Rome, Rome, Italy; and Department of Sport and Health Sciences, University of Cassino, Cassino, Italy	Workload comparison between hiking and indoor physical activity	26(10)/2883–2889 Volume 26, Number 10 October 2012	Journal of Strength and Conditioning Research	Article	Hiking
K4b2	2011	Virginie Felizardo, Pedro Dinis Gaspar, Nuno M. Garcia, Victor Reis	University of Beira Interior, Portugal, University of Beira Interior, Portugal, Lusophone University of Humanities and Technologies (ULHT) and Telecommunications Institute, Covilhã, Portugal, Research Centre for Sports, Health & Human Development, Portugal	Acquisition of Multiple Physiological Parameters During Physical Exercise	2011- DOI: 10.4018/jehmc.2011100103	International Journal of E-Health and Medical Communications	Article	Exercise Physiology
K4b2	2011	Martinez-Villalpando EC, Mooney L, Elliott G, Herr H	Biomechanics Group at the Massachusetts Institute of Technology, Media Laboratory, Cambridge, MA USA	Antagonistic Active Knee Prosthesis. A Metabolic Cost of Walking Comparison With a Variable-Damping Prosthetic Knee	2011:2011:8519-22	Conf Proc IEEE Eng Med Biol Soc.	Article	Orthopedics
K4b2	2011	Krzysztof Durkalec-Michalski, Jan Jeszka	Department of Hygiene and Human Nutrition, University of Life Sciences in Poznań, Poland	Assessment of aerobic efficiency and state of nutrition in a selected group of Polish athletes practicing Brazilian jiu-jitsu	2011	7th EFSMA	Abstract	Combat Sports
K4b2	2011	M. Kathleen Thornton, Stephen J. Rossi, and Jim L. McMillan	Department of Health and Kinesiology, Georgia Southern University, Statesboro, Georgia	Comparison of two different resistance training intensities on excess post-exercise oxygen consumption in African American women who are overweight	(2011) 25(2)/489–496	Journal of Strength and Conditioning Research	Article	Exercise Physiology
K4b2	2011	Carmen Marten-Ellis Graves	Massachusetts Institute of Technology	Design of a Biomechanically Synergistic Exotendon Suit	2011		Thesis	Ergonomics
K4b2	2011	Mitja Gerzevic, Vojko Strojnik, and Tomaz Jarm	Laboratory for Kinesiology and Laboratory for Sports Physiology, Faculty of Sport, University of Ljubljana, Ljubljana, Slovenia	Differences in muscle activation between submaximal and maximal 6-minute rowing tests	(2011) 25(9)/2470–2481	Journal of Strength and Conditioning Research	Article	Rowing
K4b2	2011	Robert G. McMurray, Kristin S. Ondrak	Department of Exercise and Sport Science, University of North Carolina, USA,	Effects of being overweight on ventilatory dynamics of youth at rest and during exercise	(2011) 111:285–292	European Journal of Applied Physiology	Article	Obesity
K4b2	2011	J. Theurel, M. Crepin, M. Foissac, J. J. Temprado	Institute of Movement Sciences E-J Marey, UMR CNRS 6233, Aix-Marseille University, Parc Scientifique et Technologique de Luminy, Marseille, France, 2INSERM U887 ratory, Faculty of Sport Sciences, University of Bourgogne, Dijon, France, 3Oxylane Research, Villeneuve d'Ascq cedex, France	Effects of different pedalling techniques on muscle fatigue and mechanical efficiency during prolonged cycling	2011 John Wiley & Sons A/S doi: 10.1111/j.1600-0838.2011.01313.x 2012: 22: 714–721	Scand J Med Sci Sports	Article	Cycling
K4b2	2011	Olivier Castagna, Jeanick Brisswalter, Nicolas Vallee, Jean-Eric Blatteau	Biomedical Research Institute of the Army (IRBA), Naval Medical Institute (IMNSSA-Toulon), Departments of Operational Environment and Marine and Underwater research, Toulon, France	Endurance exercise immediately before sea diving reduces bubble formation in scuba divers	(2011) 111:1047–1054	European Journal of Applied Physiology	Article	Diving
K4b2	2011	Bruce W. Bailey, Kyle McInnis	Department of Exercise Sciences, Brigham Young University, Provo, Utah	Energy Cost of Exergaming. A Comparison of the Energy Cost of 6 Forms of Exergaming	July 2011, Vol 165, No. 7	JAMA Pediatrics	Article	Computer Games
K4b2	2011	Florent Botton, Christophe Hautier and Jean-Paul Eclache	Center for Research and Innovation in Sport, Lyon University, France	Energy expenditure during tennis play: A preliminary video analysis and metabolic model approach	(2011) 25(11)/3022–3028	Journal of Strength and Conditioning Research	Article	Tennis

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K4b2	2011	Swartz AM, Squires L, Strath SJ	Physical Activity and Health Research Laboratory, Department of Human Movement Sciences, University of Wisconsin-Milwaukee, USA	Energy expenditure of interruptions to sedentary behavior	2011 Jun 27;8:69	Int J Behav Nutr Phys Act.	Article	Exercise Physiology
K4b2	2011	Norton L. Oliveira and Jose Oliveira	Research Center in Physical Activity, Health and Leisure (CIAFEL), Faculty of Sport, University of Porto, Porto, Portugal	Excess postexercise oxygen consumption is unaffected by the resistance and aerobic exercise order in an exercise session	(2011) 25(10)/2843-2850	Journal of Strength and Conditioning Research	Article	Exercise Physiology
K4b2	2011	G. Valli, A. Cogo, C. Passino, D. Bonardi, G. Morici, V. Fasano, M. Agnesi, L. Bernardi, A.M. Ferrazza, S.A. Ward, P. Palange	Department of Clinical Medicine, University of Rome "La Sapienza" Rome, Italy	Exercise intolerance at high altitude (5050 m): Critical power and W	177 (2011) 333-341	Respiratory Physiology & Neurobiology	Article	Altitude
K4b2	2011	Ruth England, Matthew Maddocks, Cathann Manderson, Andrew Wilcock	Department of Palliative Medicine, Nottingham University UK	Factors influencing exercise performance in thoracic cancer	(2012) 106, 294e299	Respiratory Medicine	Article	Oncology
K4b2	2011	Sergio G. Dasilva, Laura Guidettil, Cosme F. Buzzachera, Hassan M. Elsangedy, Kleverton Krinski, Wagner De Campos, Fredric L. Goss, and Carlo Baldari	1Department of Physical Education, Federal University of Parana, Curitiba, Brazil	Gender based differences in substrate use during exercise at a self-selected pace	(2011) 25(9)/2544-2551	Journal of Strength and Conditioning Research	Article	Exercise Physiology
K4b2	2011	Ross, Ramzy; Fudge, Barry; Gibson, Alexander; Ojiambo, Robert; Pitsiladis, Yannis	University of Glasgow, Glasgow, United Kingdom. English Institute of Sport, Loughborough, United Kingdom	K4b2 Validity and Reliability during Fast Outdoor Running	May 2011 - Volume 43 - Issue 5 - p 80	Medicine & Science in Sports & Exercise	Abstract	Validation
K4b2	2011	Kenneth Conroy, Gregory May, Mark Roantree, Giles Warrington, Sarah Jane Cullen, and Adrian McGoldrick	CLARITY: Centre for Sensor Web Technologies Interoperable Systems Group, School of Computing School of Health & Human Performance, Dublin City University, Dublin, Ireland, The Turf Club, The Curragh, Co. Kildare, Ireland	Knowledge Acquisition from Sensor Data in an Equine Environment	2011		Article	Equine
K4b2	2011	Carlo Baldari, Laura Guidetti and Marco Meucci	Exercise and Sport Sciences Unit, Department of Health Sciences, University of Rome "Foro Italico", Rome, Italy	Measuring energy expenditure in swimming to assess gross mechanical efficiency	11 (Suppl. 3), 2011	Portuguese Journal of Sport Sciences	Article	Swimming
K4b2	2011	Nubia C.P. Avelar, Adriano P. Simao, Rosalina Tossige-Gomes, Camila D.C. Neves, Bruno Mezencio, Leszek Szmuchowski, Candido C. Coimbra, and Ana C.R. Lacerda	1Exercise Physiology Laboratory, Healthy and Biological Sciences Faculty, Federal University of the Jequitinhonha and Mucuri Valleys, Diamantina, Minas Gerais/Brazil	Oxygen consumption and heart rate during repeated squatting exercises with or without whole body vibration in the elderly	(2011) 25(12)/3495-3500	Journal of Strength and Conditioning Research	Article	Geriatrics
K4b2	2011	Babak Farzad, Reza Gharakhanlou, Hamid Agha-Alinejad, David G. Curby, Mahdi Bayati, Morteza Bahraminejad, and Jarek Maestu	Department of Physical Education and Sports Sciences, School of Humanity Sciences, Tarbiat Modares University, Tehran, Iran	Physiological and performance changes from the addition of a sprint interval program to wrestling training	(2011) 25(9)/2392-2399	Journal of Strength and Conditioning Research	Article	Combat Sports
K4b2	2011	Barbara E. Shykoff, Dan E. Warkander	Navy Experimental Diving Unit, 321 Bullfinch Rd., Panama City, FL 32407, USA	Physiologically acceptable resistance of an air purifying respirator	2011 - Vol. 54, No. 12, December 2011, 1186-1196	Ergonomics	Article	Medical engineering
K4b2	2011	John P. Abt, Timothy C. Sell, Yungchien Chu, Mita Lovalekar, Ray G. Burdett, and Scott M. Lephart	Neuromuscular Research Laboratory, Department of Sports Medicine and Nutrition, University of Pittsburgh, Pittsburgh, PA	Running kinematics and shock absorption do not change after brief exhaustive running	(2011) 25(6)/1479-1485	Journal of Strength and Conditioning Research	Article	Running
K4b2	2011	Norcross, Jason R., Gernhardt, Michael L	(Wyle Integrated Science and Engineering Group, Houston, TX, United States	Selecting Tasks for Evaluating Human Performance as a Function of Gravity	2011	18th IAA Humans in Space Symposium	Paper	Space
K4b2	2011	Giuseppe Rabita, Jean Slawinski, Olivier Girard, Frank Bignet, and Christophe Hausswirth	Research Department, National Institute of Sport, Expertise and Performance, INSEP, Paris, FRANCE; Team Lagarde're, Stade Paris Jean-Bouin, Paris, FRANCE; ASPETAR, Research and Education Center, Doha, QATAR; and French Federation of Triathlon, La Plaine Saint-Denis, FRANCE	Spring-Mass Behavior during Exhaustive Run at Constant Velocity in Elite Triathletes	0195-9131/11/4304-0685/0	Medicine & Science in Sports & Exercise	Article	Triathlon
K4b2	2011	Sperlich B, Koehler K, Holmberg HC, Zimmer C, Mester J.	Institute of Training Science and Sport Informatics, German Sports University Cologne, Cologne, Germany	Table Tennis: Cardiorespiratory and Metabolic Analysis of Match and Exercise in Elite Junior National Players	2011 Jun;6(2):234-42	Int J Sports Physiol Perform.	Article	Tennis
K4b2	2011	Stefano Lazzar, Luca Plaino, Guglielmo Antonutto	Department of Biomedical Sciences and Technologies, University of Udine, Udine, Italy, School of Sport Sciences, University of Udine, Udine, Italy MATI (Microgravity, Ageing, Training, Immobility) Center of Excellence, University of Udine, Udine, Italy	The energetics of cycling on Earth, Moon and Mars	(2011) 111:357-366	European Journal of Applied Physiology	Article	Space
K4b2	2011	Martin Burtscher, Werner Nachbauer, Randall Wilber	Department of Sport Science, Medical Section, University of Innsbruck, Fu'rstenweg 185, 6020 Innsbruck, Austria	The upper limit of aerobic power in humans	(2011) 111:2625-2628	European Journal of Applied Physiology	Article	Exercise Physiology
K4b2	2011	A.G. Goachet, J. Fortier, V. Julliard, H. Assadi, R. Lepers	Faculté des Sciences du Sport, Université de Bourgogne, Dijon, France	The use of equine K4b2 during incremental field exercise tests in driven Standardbred trotters: a preliminary study	(2011) 11-15 octobre, Paris, France. 221-226	Proceedings of the Equine Nutrition and Training Symposium	Abstract	Equine
K4b2	2011	Scott E. Crouter, Diane M. Della Valle, Magdalene Horton, Jere D. Haas, Edward A. Fronigillo, David R. Bassett Jr	University of Tennessee, Knoxville (USA)	Validity of the actical for estimating free-living physical activity	(2011) 111:1381-1389	European Journal of Applied Physiology	Article	Wearables
K4b2	2011	Flavio O. Pires, John Hammond, Adriano E. Lima-Silva, Romulo C. M. Bertuzzi, and Maria Augusta P. D. M. Kiss	School of Physical Education and Sport, University of Sa'o Paulo, Brazil	Ventilation behavior during upper-body incremental exercise	(2011) 25(1)/225-230	Journal of Strength and Conditioning Research	Article	Conditioning
K4b2	2011	Ana Sousa, Pedro Figueiredo, Kari L. Keskinen, Ferran A. Rodriguez, Leandro Machado, João P. Vilas-Boas, Ricardo J. Fernandes	Centre of Research, Education, Innovation and Intervention in Sport, Faculty of Sport, University of Porto, Portugal	VO2 off transient kinetics in extreme intensity swimming	(2011) 10, 546-552	Journal of Sports Science and Medicine	Article	Swimming
K4b2	2010	V. Z. Dourado, M. C. Banov, M. C. Marino, V. L. de Souza, L. C. de O. Antunes, M. A. McBurnie	Federal University of Sa'o Paulo, Department of Health Sciences	A simple approach to assess VT during a field walk test	10.1055/s-0030-1255110 2010	International Journal of Sport Medicine	Article	Exercise Physiology

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K4b2	2010	F.O. Pires , A. E. Lima-Silva1 , J. Hammond , E. Franchini , M. A. P. Dal Molin Kiss , R. Bertuzzi	University of São Paulo, School of Physical Education and Sports, São Paulo, Brazil	Aerobic Profile of Climbers During Maximal Arm Test	2010; 31: 1 – 4	International Journal of Sport Medicine	Article	Climbing
K4b2	2010	M. Gruet, J. Brisswalter, L. Mely, J.M. Vallier	Laboratoire HandiBio, Université du sud Toulon-Var, France	Clinical utility of the oxygen uptake efficiency slope in cystic fibrosis patients	9 (2010) 307–313	Journal of Cystic Fibrosis	Article	Pneumology
K4b2	2010	J. A. Schrack, E. M. Simonsick, L. Ferrucci	Longitudinal Studies Section, Clinical Research Branch, National Institute on Aging, National Institutes of Health, Baltimore, Maryland, USA, Center on Aging and Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA	Comparison of the Cosmed K4b2 Portable Metabolic System in Measuring Steady-State Walking Energy Expenditure	February 2010, Volume 5, Issue 2 , e9292	PLOS ONE	Article	Validation
K4b2	2010	K. Hatakeyama, Y. Shimada, K. Kato, M. Sato, T. Matsunaga, S.Chida, A. Misawa, A Ando, T. Minato, K. Iizuka	Rehabilitation Division, Akita university Hospital, Akita Japan	Comparisons of energy expenditure during gait using the walkabout and the primwalk in paraplegia	1-1-1 Hondo Akita 010-8543, Japan	Japanese Journal of Comprehensive Rehabilitation Science	Abstract	GAIT
K4b2	2010	Adriano E. Lima-Silva, Romulo C. M. Bertuzzi, Flavio O. Pires, Ronaldo V. Barros, Joa'õ F. Gagliardi, John Hammond, Maria A. Kiss, David J. Bishop	Laboratory of Energetic Determinants to Sport Performance, University of Sao Paulo, Sao Paulo, Brazil	Effect of performance level on pacing strategy during a 10-km running race	(2010) 108:1045–1053	European Journal of Applied Physiology	Article	Running
K4b2	2010	T. M. Barbosa, V. F. Sousa, A. J. Silva, V.M. Reis, D. A. Marinho, J. Bragada,	Department of Sports Sciences, Polytechnic Institute of Bragança, Bragança, Portugal University of Trás-os-Montes and Alto Douro, Vila Real, Portugal, University of Beira Interior, Covilhã, Portugal Research Centre in Sport, Health and Human Development, Vila Real, Portugal	Effects Of Musical Cadence In The Acute Physiological Adaptations To Head-Out Aquatic Exercises	2010 24(1)/244–250	JSCR	Article	Water based activities
K4b2	2010	T.M. Barbosa, J.A Bragada, V. M. Reis, D. A. Marinho, C. Carvalho, A.J. Silva	Polytechnic Institute of Bragança, Bragança, Portugal University of Trás-os-Montes and Alto Douro, Vila Real, Portugal University of Beira Interior, Covilhã, Portugal Higher Institute of Maia, Maia, Portugal Research Centre in Sport, Health and Human Development, Vila Real, Portugal	Energetics and biomechanics as determining factors of swimming performance: updating the state of the art	2010 Mar;13(2):262-9	JSAMS	Abstract	Swimming
K4b2	2010	Antonio Buglione, Stefano Lazzer, Roberto Colli, Elisabetta Introini, Pietro Enrico di Prampero	Human Performance and Training Lab "Carmelo Bosco", Università degli Studi di Roma "Tor Vergata",	Energetics of Best Performances in Elite Kayakers and Canoeists	2010 -DOI: 10.1249/MSS.0b013e3181fd6b7	Medicine & Science in Sports & Exercise	Article	Rowing
K4b2	2010	E Collins , WE Langbein, K Williams, C Maloney, B Nemchausky	Hines VA Hospital, Hines, IL-USA, Department of Veterans Affairs, Veterans Health Administration, Rehabilitation Research and Development Service	Energy cost of selected physical activities in persons with Spinal Cord Injury	2010	Medicine & Science in Sports & Exercise	Article	Disabled
K4b2	2010	Miyoung Lee, Ph.D., Weimo Zhu, Ph.D., FACSM, Brad Hedrick, Ph.D, Bo Fernhall, Ph.D., FACSM,	Oregon State University University of Illinois at Urbana-Champaign	Estimating MET Values Using the Ratio of Heart Rate	2010- DOI: 10.1249/MSS.0b013e3181c0652b	Medicine & Science in Sports & Exercise	Article	Exercise Physiology
K4b2	2010	Reis VM, Marinho DA, Policarpo FB, Carneiro AL, Baldari C, Silva AJ.	Department of Sport Sciences, Exercise and Health, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal.	Examining accumulated oxygen deficit method in crawl swimming	2010 Jun;31(6):421-7	International Journal of Sport Medicine	Abstract	Swimming
K4b2	2010	Victor Machado Reis, Daniel Almeida Marinho, Fernando Policarpo Barbosa, António Malvas Reis, Laura Guidetti, Antonio Jose' Silva	University of Trás-os-Montes and Alto Douro (UTAD)	Examining the accumulated oxygen deficit method in breaststroke swimming	(2010) 109:1129–1135 DOI 10.1007/s00421-010-1460-4	European Journal of Applied Physiology	Article	Swimming
K4b2	2010	C. Galvani, I. Annoni, D. Savi, S. Boniello, M. Mondoni, M. Faina	Lab Fisiologia Applicata, Università cattolica Sacro Cuore, Milano, Italy	Excess postexercise oxygen consumption after three different moderate aerobic exercises	Vol 50 - Sept 2010	J Sports Medi & Physical Fitness	Poster	Exercise Physiology
K4b2	2010	C. Raffaelli, M. Lanza, L. Zanolla, P. Zamparo	Department of Neurological and Visual Sciences, Faculty of Exercise and Sport Sciences, University of Verona, Verona, Italy, Cardiology Department, University of Verona, Ospedale Civile Maggiore, Verona, Italy	Exercise intensity of head-out water-based activities (water fitness)	Eur J Appl Physiol (2010) 109:829–838 DOI 10.1007/s00421-010-1419-5	European Journal of Applied Physiology	Article	Water based activities
K4b2	2010	Narváez P.G.E.; Narváez A.G.E; Drouet S.S; Santelices P.R. and Moncayo F.P.	Centro Olímpico de Alto Rendimiento. Comité Olímpico Ecuatoriano. Guayaquil – Ecuador	Functional Outcome at Sea Level vs. Moderate Altitude (2500 m) in Race Walk.	(June 2010)	US Kinesiology Congress	Poster	Altitude
K4b2	2010	Fairley JA, Sejdíć E, Chau T.	Bloorview Research Institute, Bloorview Kids Rehab, Toronto, Ontario, Canada	Investigating the correlation between paediatric stride interval persistence and gross energy expenditure	2010 Feb 26;3:47	BMC Res Notes.	Article	Exercise Physiology
K4b2	2010	Denine Kristen Ellis	Department of Rehabilitation Sciences c.p. Biomedical Engineering University of Toronto	Investigating the Relationship between Stride Interval Dynamics, the Energy Cost of Walking, and Physical Activity Levels in a Pediatric Population	2010		Thesis	Paediatric & Children
K4b2	2010	Denine Kristen Ellis	Graduate Department of Rehabilitation Sciences c.p. Biomedical Engineering University of Toronto	Investigating the Relationship between Stride Interval Dynamics, the Energy Cost of Walking, and Physical Activity Levels in a Pediatric Population	2010		Thesis	Paediatric & Children
K4b2	2010	Tiago Barbosa - António José Silva, António Malvas Reis - Mário Costa - Nuno Garrido , Fernando Policarpo - Victor Machado Reis,	Department of Sports Sciences, Polytechnic Institute of Bragança, Bragança, Portugal	Kinematical changes in swimming front Crawl and Breaststroke with the AquaTrainer® snorkel	(2010) 109:1155–1162	European Journal of Applied Physiology	Article	Swimming
K4b2	2010	Anne M. May, Ellen van Weert, Irene Korstjens, Josette E. Hoekstra-Weebers, Cees P. van der Schans, Maria L. Zonderland, Ilse Mesters, Bart van den Borne, Wynand J. Ros	University Medical Centre Utrecht, Utrecht University, Utrecht, the Netherlands	Monitoring Training Progress During Exercise Training in Cancer Survivors	Vol 91, March 2010	Arch Phys Med Rehabil	Article	Oncology
K4b2	2010	Mathieu Gayda, Martin Juneau, Thibaut Gauraud, Jean Lambert, Anil Nigam, MD	Montreal Heart Institute, Montreal, Quebec, Canada	Optimization and Reliability of a Deep Water Running Test in Healthy Adults Older than 45 Years	Vol. XX, No. X, XXX 2010	Am. J. Phys. Med. Rehabil.	Article	Geriatrics
K4b2	2010	F.Cottin, N.Metayer, A.G. Goachet, V.Julliland, J. Slawinski, V. Billat, E. Barrey	Unite de Biologie Integrative des Adaptions a L'Exercice	Oxygen consumption and gait variables of Arabian endurance horses measured during a field exercise test	(2010) 42 (s1)	Equine Veterinary Journal	Article	Equine
K4b2	2010	Reis,J.F.,Alves, F.B.	GIP ER, Faculty of Human Kinetics, Lisbon, Portugal	Oxygen Uptake Kinetics and Performance in Swimming	2010	BIOMECHANICS AND MEDICINE IN SWIMMING XI	Article	Swimming

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K4b2	2010	R. C. M. Bertuzzi, E. Franchini, C. Ugriñowitsch, E. Kokubun, A. E. Lima-Silva, F. O. Pires, F. Y. Nakamura, M. A. P. D. M. Kiss	University of São Paulo, School of Physical Education and Sport, São Paulo, Brazil	Predicting MAOD Using Only a Supramaximal Exhaustive Test	2010; 31: 477 – 481	International Journal of Sport Medicine	Article	Exercise Physiology
K4b2	2010	Scott E. Crouter, Erin Kuffel, Jere D. Haas, Edward A. Frongillo and David R. Bassett JR.	University of Massachusetts Boston	Refined Two-Regression Model for the ActiGraph Accelerometer	Sep 2009 - 0195-9131/10/4205-1029/0	Medicine & Science in Sports & Exercise	Article	Wearables
K4b2	2010	Jun-ichi Kasai, Ohta Akira, Jung Tae Eung and Takeshi Mori	Department of Sports Sciences, Waseda University, Japan, Nippon Sport Science University, Japan	Research on table tennis player's cardio-respiratory endurance	No.6(2010)	International Journal of Table Tennis Sciences	Abstract	Tennis
K4b2	2010	L. Seifert , J. Komar , P. M. Leprêtre , F. Lemaître , F. Chavallard , M. Alberty , N. Houel , C. Hausswirth, D. Chollet , P. Hellard	Faculty of Sport Sciences CETAPS UPRES, Mont Saint Aignan, France	Swim Specialty Affects Energy Cost and Motor Organization	2010; 31: 624– 630	International Journal of Sport Medicine	Article	Swimming
K4b2	2010	Jennifer A. Schrack, MS, Eleanor M. Simonsick, PhD, and Luigi Ferrucci, MDP, PhD,	Center on Aging and Health, Johns Hopkins Bloomberg School of Public Health, Baltimore	The Energetic Pathway to Mobility Loss: An Emerging New Framework for Longitudinal Studies on Aging	2010 October ; 58(Suppl 2): S329–S336.	J Am Geriatr Soc.	Article	Geriatrics
K4b2	2010	Parvaneh Nazar Ali, Parichehr Hanachi, Najmeh Rezaei Nejad	Faculty of Sport Science, Alzahra University, Tehran Iran, Faculty of Basic Science, Biology Department, Biochemistry unite, Alzahra University, Tehran Iran, Faculty of Sport Science, Alzahra University, Tehran Iran	The Relation of Body Fats, Anthropometric Factor and Physiological Functions of Iranian Female National Judo Team	Vol. 4, No. 6; June 2010	Modern Applied Science	Abstract	Combat Sports
K4b2	2010	Santanasto, Adam J.; Glynn, Nancy W.; Taylor, Christopher A.; Newman, Mark A.; Newman, Anne B.; Goodpaster, Bret H.	University of Pittsburgh, Pittsburgh, PA.	Validation of Energy Expenditure Using a Multisensor Body Monitor in Older Adults	May 2010 - Volume 42 - Issue 5 - p 480	Medicine & Science in Sports & Exercise	Poster	Wearables
K4b2	2010	Flavio O. Pires, John Hammond, Adriano E. Lima-Silva, Romulo C. M. Bertuzzi, and Maria Augusta P. D. M. KISS	School of Physical Education and Sport, University of São Paulo, Brazil	Ventilation behaviour during upperbody incremental exercise	2010 (0)/1–6	Journal of Strength and Conditioning Research	Article	Exercise Physiology
K4b2	2010	Rômulo Cássio de Moraes Bertuzzi, Adriano Eduardo Lima Silva, Flávio de Oliveira Pires, Maria Augusta Peduti Dal Molin Kiss	Escola de Educação Física e Esporte da Universidade de São Paulo, São Paulo	Visual Determination of the Fast Component of Excessive Oxygen Uptake After Exercise	Vol. 16, No 2 – Mar/Abr, 2010	Revista Brasileira de Medicina do Esporte	Article	Exercise Physiology
K4b2	2009	F. Vercruyssen, N. Blin ,D. L'Huillier J. Brisswalter,	Laboratoire Handibio, groupe "Mouvement alteré" et efficience energetique", UFR STAPS, Université de Toulon-Var La Garde Cedex, France, Direction, D. L'Huillier DLS Kiteboarding Company et parlementale et regionale de Paris, Ile de France,	Assessment of physiological demand in kitesurfing	(2009) 105:103–109	European Journal of Applied Physiology	Article	Surf
K4b2	2009	Alexandra M. Rodrigues, Isa P. Cintra, Luana C. Santos, Ligia A. Martini, Marco T. Mello, Mauro Fisberg	Departamento de Pediatria, Universidade Federal de São Paulo (UNIFESP), São Paulo, Brasil	Bone mineral density, body composition, and food intake of adolescent runway models	2009;85(6): 503-508:	Jornal de Pediatria	Article	Paediatric & Children
K4b2	2009	Martin Bucheit, Hani Al Haddad, Gregoire Paul Millet, Pierre Marie Lepretre, Michael Newton, Said Ahmaidi	Laboratory of Exercise Physiology and Rehabilitation, Faculty of Sport Sciences, University of Picardie Jules Verne, Amiens, France	Cardiorespiratory and cardiac autonomic responses to 30-15 intermittent fitness test in team sport players	2009 23(1)/93–100	Journal of Strength and Conditioning Research	Article	Exercise Physiology
K4b2	2009	S. Gallanagh, J.S. Wright, S.A. Sheriff, G. Innes, P. MacIntyre, K.Stewart, W.S. Hillis	University of Glasgow, Glasgow, Scotland, UK , Royal Alexandra Hospital, Paisley, Scotland UK , The Western Infirmary, Glasgow, Scotland, UK	Comparing the Shuttle Walk Test and Chester Step Test in Cardiac Rehabilitation Patients in Scotland	May 2009 - volume 41 , issue Supplement 1 , on page 32	Medicine & Science in Sports & Exercise	Article	Cardiology
K4b2	2009	P-M. Lepretre, N.Metayer, G. Giovagnoli, E. Pagliei, E.Barrey	Faculter des Sciences du Sport, Université de Picardie Jules Verne, Amiens, France	Comparison of analyses of respiratory gases made with the k4b2 portable and Quark laboratory analysers in 7 horses	(2009) 164	Veterinary Record	Article	Equine
K4b2	2009	Ma Ming, Lin Qiang, Qin Hong - yun	Department of Rehabilitation Medicine, Zhongda Hospital, Nanjing, China	Correlation between 6 minutes walking test and oxygen uptake.	December 10 2009; Volume 13 No. 50	Journal of Clinical Rehabilitative Tissue Engineering Research	Article	Exercise Physiology
K4b2	2009	M. L. Gault, R. E. Clements, M. E. T. Willems	University of Chichester, Faculty of Sport, Education & Social Sciences College Lane, Chichester, West Sussex, UK	Effect of Wearing the Cosmed K4b2 Metabolic System on 1 Mile Walking Performance in Older Adults	21 2009, 41-48	Journal of Human Kinetics	Article	Geriatrics
K4b2	2009	M. Simons, E. Vanes, I. Hendriksen	TNO Quality of Life, Leiden, NL;TNO Defence, Security and Safety, Soesterberg,NL; Body@Work, Research Center Physical Activity, Work and Health, TNO-VU/VUmc, VU University Medical Center, Amsterdam,NL	Electrically Assisted Cycling: A New Mode for Meeting Physical Activity Guidelines?	(2009)0195-9131/09/4111-2097/0 MSSE	Medicine & Science in Sports & Exercise	Article	Cycling
K4b2	2009	Eileen G. Collins, David Gater, Jenny Kirati, Jolene Butler, Karla Hanson and W. Ewing Langbein	Center for Management of Complex Chronic Care	Energy Cost of Physical Activities in Persons with Spinal Cord Injury	Aug 2009 - 0195-9131/10/4204-0691/0	Medicine & Science in Sports & Exercise	Article	GAIT
K4b2	2009	E.S.Rawson, FACSM, T. M. Walsh	Bloomsburg University, Bloomsburg, PA	Estimation Of Energy Expenditure During Resistance Training Using Accelerometry	2009	American College of Sports Medicine.		Wearables
K4b2	2009	M. Faina, I. Annoni, G. Senini, C.Mauri, G. Galvani	Catholic University , Milan, Italy, Italian National Olympic Committee, Rome, Italy	Excess Post-exercise Oxygen Consumption After Thirty Minutes Of Cycling Exercise And Daily Living Activities	2009	ACSM		Exercise physiology
K4b2	2009	Galo E. Narvaez Perez, Galo E., Narvaez Alban, Sidney Drouet S, Ricardo Chavarria	Comite Olimpico Ecuatoriano, Guayaquil, Ecuador	Functional Outcome at Sea Level vs. Moderate Altitude (2500 m) in Race Walk	10-SA-2991-2009	ACSM	Abstract	Altitude
K4b2	2009	F. Whitton, O.D. Roy, F. Bouchard	Whitton et Associés Sport Performance- Technologies, Quebec, QC, Canada, Université du Québec à Montréal QC, Canada	Ice Hockey Players Skating Speed Improved By A Novel Material Skate Blade	2009	American College of Sports Medicine.		Hockey
K4b2	2009	Grabowski AM, Herr HM.	Media Laboratory Biomechanics Group, Massachusetts Institute of Technology, Cambridge, Massachusetts	Leg exoskeleton reduces the metabolic cost of human hopping	2009 Sep;107(3):670-8.	J Appl Physiol (1985).	Article	Orthopedics
K4b2	2009	M. ET Willems, T. S Bond	Faculty of Sport, Education & Social Sciences, University of Chichester, College Lane, Chichester, UK	Metabolic equivalent of brisk walking and playing new generation active computer games in young-adults	13 (2): 95-98, 2009	Medicina Sportiva	Article	Computer Games
K4b2	2009	V. L. Billat, M. Dupre , J.R. Karp, J.P. Koralsztejn	V. L. Billat, M. Dupre , J. P. Koralsztejn Faculty of Sport Sciences, Laboratory U902 INSERM, Genopole , University of Evry-Val, d'Essonne, Evry, France	Mountaineering experience decreases the net oxygen cost of climbing Mont Blanc	10.1007/s00421-009-1334-9	European Journal of Applied Physiology	Article	Altitude

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K4b2	2009	Narváez PGE, Narváez AGE, Santelices R.	Centro Olímpico de Alto Rendimiento. Comité Olímpico Ecuatoriano	Oxygen kinetics during specific intermittent work	Volume 41:5 Supplement, 2009.	Medicine & Science in Sports & Exercise	Poster	Altitude
K4b2	2009	F. Alves, J Reis, V Vleck, P. Bruno, G. Millet	Faculty Human Kinetics, Lisbon Portugal, University of Westminster London UK, University of Lausanne, Lausanne, Switzerland	Oxygen Uptake Kinetics In Heavy Intensity Exercise And Endurance Performance In Swimmers	2009			Swimming
K4b2	2009	Samuel K. Au, Jeff Weber, and Hugh Herr	Department of Mechanical Engineering, MIT Media Laboratory, Massachusetts Institute of Technology (MIT), Cambridge, MA, USA	Powered Ankle-Foot Prosthesis Improves Walking Metabolic Economy	VOL. 25, NO. 1, February 2009	IEEE Transactions on Robotics	Article	Orthopedics
K4b2	2009	Jonathan A. Mitchell, Calum Mattocks, Andy R. Ness, Sam D. Leary, Russell R. Pate, Marsha Dowda, Steven N. Blair and Chris Riddoch	Department of Exercise Science, University of South Carolina, Columbia, South Carolina, USA; School for Health, University of Bath, Bath, UK; Department of Oral and Dental Science, University of Bristol, Bristol, UK.	Sedentary Behavior and Obesity in a Large Cohort of Children	(2009) 17, 1596-1602. doi:10.1038/oby.2009.42	Obesity	Article	Paediatric & Children
K4b2	2009	Ramaprabhu Vempati, Ramesh Lal Bijlani and Kishore Kumar Deepak	Department of Physiology, All India Institute of Medical Sciences, New Delhi, India	The efficacy of a comprehensive lifestyle modification programme based on yoga in the management of bronchial asthma: a randomized controlled trial	2009, 9:37 doi:10.1186/1471-2466-9-37	BMC Pulmonary Medicine	Article	Yoga
K4b2	2009	Ramaprabhu Vempati, Ramesh Lal Bijlani and Kishore Kumar Deepak	Department of Physiology, All India Institute of Medical Sciences, New Delhi, India	The efficacy of a comprehensive lifestyle modification programme based on yoga in the management of bronchial asthma: a randomized controlled trial	2009, 9:37 doi:10.1186/1471-2466-9-37	BMC Pulmonary Medicine	Article	Yoga
K4b2	2009	S.E. Crouter, D.M. Della Valle, E. Kuffel, E.A. Frongillo, JD. Haas, DR Basset, FACSM	University of Massachusetts Boston, Boston MA, Cornell University Ithaca NY, Michigan State University, east Lansing MI, University of South Carolina, Columbia SC, The university of Tennessee Knoxville, Knoxville TN	Validity Of Accelerometry During Free-living Activity_ACSM2009	2009	American College of Sport Medicine		Wearables
K4b2	2009	S. Sienko Thomas, C. E Buckon, M. H Schwartz, B. S Russman, M. D Sussman, M. D Aiona	Shriners Hospitals for Children (SHC), Portland, OR USA. 2 Gillette Children's Hospital Specialty, St Paul, MN USA.	Variability and minimum detectable change for walking energy efficiency variables in children with cerebral palsy	2009, 51; 615-621	Developmental Medicine & Child Neurology	Article	Gait
K4b2	2009	Susan Sienko Thomas, Cathleen E Buckon, Michael H Schwartz, Barry S Russman, Michael D Sussman, Michael D Aiona	Shriners Hospitals for Children (SHC), Portland, OR USA.	Variability and minimum detectable change for walking energy efficiency variables in children with cerebral palsy	2009, 51; 615-621	Developmental Medicine & Child Neurology	Article	Gait
K4b2	2008	Kruckenberg, Kaminsky, Brubaker, Strath, Hargens, Hanna, Hargens	Ball State University Muncie IN, Wake forest University, Winston Salem NC, University of Wisconsin-Milwaukee, Milwaukee, WI	Accuracy of actigraph GT1M energy expenditure estimates of lifesteayle activities	Volume 40 (5), May 2008p, S202-S203	Medicine & Science in Sports & Exercise	Abstract	Wearables
K4b2	2008	M. Bernadette, C. Potter, S. Dorgo, G.A. King	University of Texas, El Paso, El Paso, Texas	Accuracy of an armband physiological body monitor	Volume 40 (5), May 2008p, S207	Medicine & Science in Sports & Exercise	Abstract	Wearables
K4b2	2008	Kaminsky, Brubaker, Hanna, Lauren, Hargens,	Ball State University Muncie IN, Wake forest University, Winston Salem NC	Accuracy of energy expenditure estimates from lifecorder	Volume 40 (5), May 2008p, S201	Medicine & Science in Sports & Exercise	Abstract	Wearables
K4b2	2008	Geetanjali K Kelkar, Subhadra M, Rana K Chengappa	Department of Food, Nutrition and Dietetics, College of Home Science, Nirmala Niketan, 49 New Marine Lines, Mumbai, 20	Body composition, haematological status and aerobic capacity of competitive Indian athletes	Volume 45, Issue 9, September 2008	The Indian Journal of Nutrition and Dietetics	Article	Exercise Physiology
K4b2	2008	Hui, Stanley Sai-Chuen, Wong Jean Woo, Kwok Timothy C.Y	Chinese University Shatin Hong Kong	Changes in resting metabolic rate from 12 weeks of Tai chi and walking exercise a randomized control tria	Volume 40 (5), May 2008p, S252	Medicine & Science in Sports & Exercise	Abstract	Combat Sports
K4b2	2008	Fabrizio Perroni, Antonio Tessitore, Corrado Lupo, Cristina Cortis, Lamberto Cignitti, Laura Capranica	Department of Human Movement and Sport science, University of Rome, Foro Italico (Italy)	Do Italian fire fighting recruits have an adequate physical fitness profile for fire fighting	(2008) 4:27-32	Sport Science Health	Article	Firefighter
K4b2	2008	Hendriksen, Ingrid J.M.; Simons, Monique; van Es, Eline M.; van Mechelen, Willem FACSM	TNO Quality of Life, Leiden, The Netherlands. TNO Defence, Security and Safety, Soesterberg, The Netherlands. EMGO-Institute, VU University Medical Center, Amsterdam, he Netherlands.	Electrical Assisted Cycling: Energy Expenditure, Heart Rate and Power Output	Volume 40(5) Supplement 1 May 2008p S196	Medicine & Science in Sports & Exercise	Article	Medical engineering
K4b2	2008	T. Abel, P. Platen, S. Rojas Vega, S. Schneider and HK. Struder	Institute of Motor Control and Movement Technique, German Sport University, Cologne, Germany and Institute of Sports Medicine and Sports Nutrition, Ruhr University Bochum, Germany	Energy expenditure in ball games for wheelchair users	(2008) 46, 785-790	Spinal Cord	Article	Disabled
K4b2	2008	Mahindrakar, Ambica	Department of Farm Machinery and power Engineering College of technology and Engineering Mahara Pratap University of Agriculture and Technology, Udaipur 313 001 India	Ergonomical studies on women agricultural workers for manual weeding and cob picking operations	22 Jul 2008	Dissertation	Article	Ergonomics
K4b2	2008	Schaffner, Grant, Sharp, Carwyn, Stroud, Leah	NASA Johnson Space Center, Houston, TX, United States	Exer-Genie Exercise Device Hardware Evaluation	2008		Paper	Space
K4b2	2008	Barri L Schnall, Brian S Baum, Anne M Andrews	Center for Performance and Clinical Research, Military Advanced Training Center, Walter Reed Army Medical Center, Washington, USA	Gait Characteristics of a Soldier With a Traumatic Hip Disarticulation	December 2008 Volume 88 Number 12	Physical Therapy	Article	GAIT
K4b2	2008	Aaron M. Dollar, and Hugh Herr	Harvard/Massachusetts Institute of Technology (MIT) Division of Health Sciences and Technology	Lower Extremity Exoskeletons and Active Orthoses: Challenges and State-of-the-Art	VOL. 24, NO. 1, February 2008	IEEE Transactions on Robotics	Article	Orthopedics
K4b2	2008	Miller, Brown,	California State University Fullerton, CA, USA	Physiological characteristics of a professional continental cycling team during the pre-season	Volume 40 (5), May 2008p, S387	Medicine & Science in Sports & Exercise	Abstract	Cycling
K4b2	2008	Rodrigo, Bell, Michael, Sharratt, Hughson	University of Waterloo, Waterloo, ON Canada	Physiological demands and air management for firefighters breathing from an Sba	Volume 40 (5), May 2008p, S355	Medicine & Science in Sports & Exercise	Abstract	Firefighter
K4b2	2008	Narváez P.G.E.; Flores P. T.; Vargas E y Spielvogel H	Centro Olímpico de Alto Rendimiento COAR. Guayaquil - Ecuador	Physiological Responses of the Competence in Altitude	February 2008	International Symposium of Altitude Training. Sierra Nevada Spain.	Article	Altitude
K4b2	2008	T. M. Barbosa, R. J. Fernandes, P. Morouco and J. P. Vilas-Boas	Polytechnic Institute of Bragança, Bragança, Portugal, Faculty of Sport, University of Porto, Portugal	Predicting the intra-cyclic variation of the velocity of the centre of mass from segmental velocities in butterfly stroke: A pilot study	(2008) 7, 201-209	Journal of Sports Science and Medicine	Article	Swimming

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2008	R. Di Michele	Alma Mater Studiorum Università di Bologna	Relationships between running economy and mechanics in middle-distance runners	2008	Thesis	Article	Running
K4b2	2008	Candice J. Christie, Andrew I. Todd, Gregory A. King	Department of Human Kinetics and Ergonomics, Rhodes University, South Africa	Selected physiological responses during batting in a simulated cricket work bout: A pilot study	2008 11, 581—584	Journal of Science and Medicine in Sport	Article	Cricket
K4b2	2008	Villar Rodrigo, Bell, Michael, Hughson	University of Waterloo, Waterloo, ON Canada	Stair climbing while wearing a weighted vest to simulated fire fighter turnout gear and hose pack	Volume 40 (5), May 2008p, S355	Medicine & Science in Sports & Exercise	Abstract	Firefighter
K4b2	2008	Briand, Whitton, McCrossin, Comtois	Université du Québec à Montréal, Montréal, QC, Canada, Whitton & Associates Québec à Montréal, Montréal, QC	The effect of aerobic capacity on maintaining max skating speed on ice	Volume 40 (5), May 2008p, S393	Medicine & Science in Sports & Exercise	Abstract	Skating
K4b2	2008	A. Caterisano, B. Patrick, J. Grossnickle, R. Moss	Furman University Greenville S.C. USA	The effect of varying intensity on total energy expenditure during circuit weight training with equal	Volume 40 (5), May 2008p, S257	Medicine & Science in Sports & Exercise	Abstract	Conditioning
K4b2	2008	Norcross, Jason, Stroud, Leah C., Schaffner, Grant, Glass, Brian J., Lee, Pascal C., Jones, Jeff A., Gernhardt, Michael L.	NASA Johnson Space Center, Houston, TX, United States	The Effects of Terrain and Navigation on Human Extravehicular Activity Walkback Performance on the Moon	2008	79th Annual Scientific Meeting of the Aerospace Medical Association	Paper	Space
K4b2	2008	T. M. Barbosa, R. J. Fernandes, K. L. Keskinen, J. P. Vilas-Boas	Research Center in Sport, Health and Human Development, Department of Sports Sciences, Polytechnic Institute of Braganca, Campus Sta. Apolonia Braganca, Portugal	The influence of stroke mechanics into energy cost of elite swimmers	2008-DOI 10.1007/s00421-008-0676-z	European Journal of Applied Physiology	Article	Swimming
K4b2	2008	McMurray, Ondrak, Evenson	University of North Carolina Chapel Hill, NC,	Use of heart rate and accelerometer counts to estimate energy expenditure of young children	Volume 40 (5), May 2008p, S66	Medicine & Science in Sports & Exercise	Abstract	Paediatric & Children
K4b2	2008	Marissa E Mendelsohn, Denise M Connelly, Tom J Overend, Robert J Petrella	School of Physical Therapy, The University of Western Ontario, London, Canada	Validity of Values for Metabolic Equivalents of Task During Submax All-Extremity Exercise & Reliability Exercise Responses in Frail Older Adults	Volume 88 Number 6 Jul 2008	Physical Therapy	Article	Geriatrics
K4b2	2007	Marcello Faina	University Institute of Motor Science, Rome, Italy.	A Comparison of Physiological Responses During a CPR Exercise on Treadmill and a Low Impact Aerobic Dance Lesson	May 2007 - Volume 39 - Issue 5 - p S350	Medicine & Science in Sports & Exercise	Poster	Aerobics
K4b2	2007	Eduardo Oliveira De Souza, Valmor Tricoli, Emerson Franchini, Anderson Caetano Paulo, Marcelo Regazzini and Carlos Ugrinowitsch	Department of Sport, School of Physical Education and Sport, University of Sa o Paulo, Sa o Paulo, SP, Brazil	Acute effect of two aerobic exercise modes on maximum strength and strength endurance	2007, 21(4), 1286–1290	Journal of Strength and Conditioning Research	Article	Conditioning
K4b2	2007	K. Corder, S. Brage, C. Mattocks, A. Ness, C. Riddoch, N. J. Wareham and U. Ekelund	MRC Epidemiology Unit, Cambridge, UK; University of Bristol, Bristol, UK; and University of Bath, Bath, UK	Comparison of Two Methods to Assess PAEE during Six Activities in Children	2007-0195-9131/07/3912-2180/0	Medicine & Science in Sports & Exercise	Article	Wearables
K4b2	2007	E. Van Erck, D. Votion, D. Serteyn, T. Art	Equine Sports Medicine Center, Equine Pole, Faculty of Veterinary Medicine, University of Liège, Belgium, European Horse Centre of Mont-He-Soie, Vielsalm, Belgium	Evaluation of oxygen consumption during field exercise tests in Standardbred trotters	Volume 4 / Issue 01 / February 2007, pp 43-49	Equine and Comparative Exercise Physiology /	Article	Equine
K4b2	2007	T. M. Barbosa, M. F. Garrido, and J. Bragada	Department of Sports Sciences, Polytechnic Institute of Braganca, Campus Sta. Apolonia, Braganca, Portugal.	Physiological adaptations to head-out aquatic exercises with different levels of body immersion	2007, 21(4), 1255–1259	Journal of Strength and Conditioning Research	Article	Water based activities
K4b2	2007	Marco Bernardi, Giuseppe Fontana, Angelo Rodio, Andrea Madaffari, Elisabetta Bernardi, Marco Brugnoli, Marco Marchetti	Department of Human Physiology and Pharmacology, University of Rome La Sapienza, Rome.	Physiological characteristics of America's Cup sailors.	2007 Aug;25(10):1141-52	J Sports Sci	Article	Sailing
K4b2	2007	E. Fredrickson, R.L. Ruff, J. J. Daly	Department of Veterans Affairs, Office of Rehabilitation Research and Development,	Physiological Cost Index as a Proxy Measure for the Oxygen Cost of Gait in Stroke Patients	2007; 21; 429	Neurorehabilitation and Neural Repair	Abstract	GAIT
K4b2	2007	Williams-Bell, F. Michael,	University of Waterloo	Physiological demands and ventilatory requirements during simulated large structure firefighting tasks	2007		Abstract	Firefighter
K4b2	2007	M. R. Zainuldin, D. Knoke, M. G. Mackey, N. Luxton, J. A. Alison	Discipline of Physiotherapy, University of Sydney, Sydney, Australia and Department of Physiotherapy, Royal Prince Alfred Hospital, Sydney, Australia	Prescribing cycle training intensity from the six-minute walk test for patients with COPD	2007, 7-9 doi:10.1186/1471-2466-7-9	BioMed Central	Abstract	Pneumology
K4b2	2007	L. Piccinini, V. Cimolin, M. Galli, M. Berti, M. Crivellini, A.C. Turconi	Bioengineering Department Politecnico di Milan Italy	Quantification of energy expenditure during gait in children affected by cerebral palsy	2007; 43:7-12	Europa Medicophysica	Article	Gait
K4b2	2007	O. Castagna, C. Vaz Pardal, J. Brisswalter	I.M.N.S.S.A, B.P.610, 83800 Toulon Arme es, France, Andalusian Center of Sports Medicine, San Fernando, Cadix, Spain, Laboratoire d'Ergonomie Sportive, Université du Sud Toulon-Var, avenue de l'Université La garde, France,	The assessment of energy demand in the new olympic windsurf board: Neilpryde RS:X	(2007) 100:247–252 DOI 10.1007/s00421-007-0403-1	European Journal of Applied Physiology	Article	Surf
K4b2	2006	B. W Fudge; H. Budd; C. Logan; M. Gillespie; J. Wilson; L. Irwin; B. Kayser; Y. P. Pitsiladis	International Centre for East African Running Science (ICEARS), Institute of Biomedical & Life Sciences (IBLS), University of Glasgow, Glasgow, United Kingdom	Accuracy of K4b2 portable breath by breath system during treadmill and outdoor running	2006 MSSE-D-08-00088	Editorial Manager(tm) for Medicine & Science in Sports & Exercise	Abstract	Validation
K4b2	2006	Gregory D. Farris	Human Sciences, Baylor University, Texas	Analysis of exercise intensity and energy expenditure of women participating in the Curves Exercise program	2006		Thesis	Aerobics
K4b2	2006	Schiffman, Jeffrey M.; Hasselquist, Leif; Gregorczyk, Karen N.; Piscitelle, Louis; Bensek, Carolyn K.; Obusek, John P.	U.S. ArmyNatick Soldier Center, Natick, MA.	Backpack Moment of Inertia Affects Oxygen Consumption During Walking	May 2006 - Volume 38 - Issue 5 - p S270	Medicine & Science in Sports & Exercise	Poster	Ergonomics
K4b2	2006	Norimitsu Kinoshita, K. Tadokoro M., J. Ando, S. Onishi, H. Yamazaki, Y. Oguma, F. Katsukawa	Sports Medicine Research Center, Keio University; Kanagawa Prefectural Board of Education, Ogusu high school, Japan	Cardiorespiratory Response to 20 km of Road Running Estimated by the Cosmed K4b2	2006	ECSS	Poster	Running
K4b2	2006	Carlo Castagna, Franco Impellizzeri, Romualdo Belardinelli, Grant Abt, Aaron Coutts, Karim Chamari and Stefano D'Ottavio	School of Sport and Exercise Sciences, Faculty of Medicine and Surgery, University of Rome Tor Vergata, Rome, Italy	Cardio-respiratory Responses to yo-yo intermittent endurance test in nonelite youth soccer players	2006, 20(2), 326–330	Journal of Strength and Conditioning Research	Poster	Football
K4b2	2006	P.M. Lepretre, V. L. Billat, N. Metayer, G. Giovagnoli, E. Pagliel and E. Barry	Laboratoire d'Etude de la Physiologie de l'Exercice (LEPHE), département STAPS, Université d'Evry - Val d'Essonne, INRA, Jouy en Josas, France. Italian Equestrian Federation, Roma, Italy, Cosmed, Roma, Italy.	Comparison of the portable and fixed gas respiratory analysers in horses according the exercise intensity.	August 26-31, 2006	ICEEP 7, Fontainebleau, France	Abstract	Equine

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K4b2	2006	D. Nunan	School of Life Sciences, Kingston University, Kingston-upon-Thames, UK	Development of a sports specific aerobic capacity test for karate: a pilot study	(2006) CSSI, 47-53	Journal of Sports Science and Medicine	Abstract	Combat Sports
K4b2	2006	Thomas Crampton, Veronique Billat		Devices help heart research in the long run	April 13, 2006	Intl. Herald Tribune	Article	Cardiology
K4b2	2006	Johann Edge, David Bishop, Carmel Goodman	School of Human Movement and Exercise Science, The University of Western Australia, Perth, Australia	Effects of chronic NaHCO ₃ ingestion during interval training on changes to muscle buffer capacity, metabolism, and short-term endurance performance	101: 918–925, 2006	JAP	Article	Exercise physiology
K4b2	2006	D.H. Duvivier, E. van Erck, B. de Moffart, D. Votion, D. Bedoret, JP Lejeune, P. Lekeux, D. Serteyn	Equine Sports Medicine Center and Surgical Pathology, Equine Clinics, Faculty of Veterinary medicine, European Horse Centre of Mont-le-Soie, Vielsalm, Belgium	Evaluation of a portable equine metabolic measurement system	2006	7th International Conference on Equine Exercise Physiology	Article	Equine
K4b2	2006	T. M. Barbosa, R. Fernandes, K. L. Keskinen, P. Colaco, C. Cardoso, J. Silva, J. P. Vilas-Boas	Department of Sports Sciences, Polytechnic Institute of Braganca, Braganca, Portugal Faculty of Sports Sciences, University of Porto, Porto, Portugal, Finnish Society for Research in Sport and Physical Education, Helsinki, Finland Department of Biology of Physical Activity, University of Jyväskylä, Jyväskylä, Finland	Evaluation of the Energy Expenditure in Competitive Swimming Strokes	2006; 27: 894–899	International Journal of Sport Medicine	Article	Swimming
K4b2	2006	A.E. Minetti, F.o Formenti and L. P. Ardigo	Faculty of Medicine, Institute of Human Physiology, University of Milan, Italy, Institute for Biophysical and Clinical Research into Human Movement, Manchester Metropolitan University, Cheshire, UK,	Himalayan porter's specialization: metabolic power, economy, efficiency and skill	(2006) 273, 2791–2797	Proc. The Royal Society	Abstract	Altitude
K4b2	2006	Charles L. Dumke, Lesli Shooter, Robert H. Lind and David C. Nieman	Human Performance and Fisher Hamilton/Nycom Laboratory, Appalachian State University, Boone, N.C.; USA	Indirect Calorimetry During Ultradistance Running: A Case Report	Dec 2006; 5(4): 692–698	J Sports Sci Med.	Article	Running
K4b2	2006	Charles L. Dumke, Lesli Shooter, Robert H. Lind, David C. Nieman	From the Human Performance and Fisher Hamilton/Nycom Laboratory, Appalachian State University, Boone, N.C.; USA	Indirect calorimetry during ultradistance running: a case report	(2006) 5, 692-698	Journal of Sports Science and Medicine	Article	Running
K4b2	2006	A. Kwaśna, M. Chrobot, B. Zysiak	University School of Physical Education in Wrocław, Poland	Influence of body buoyancy on the results achieved by 11 year-old children training swimming	2006	Lithuania; 8th International Sports Science Conference	Article	Paediatric & Children
K4b2	2006	D. Votion, I. Coudron, JP. Lejeune, L. Vander Heyden, T. Art, E. Van Erck, D. Serteyn	Equine Sports Medicine Center, Equine Pole, Faculty of Veterinary Medicine, University of Liège, Belgium, European Horse Centre of Mont-le-Soie, Vielsalm, Belgium	Measurement of oxygen consumption and cardiorespiratory parameters in ridden horses	Aug-2006	Pferdeheilkunde	Abstract	Equine
K4b2	2006	Marina M. Platts, Daniel Rafferty, Lorna Paul	Rehabilitation Medicine Service, UK; and 2School of Health and Social Care, Glasgow Caledonian University, Glasgow, Scotland, UK	Metabolic Cost of Overground Gait in Younger Stroke Patients and Healthy Controls	2006, Vol. 38, n. 6 (1041-1046)	Medicine & Science in Sports & Exercise	Article	GAIT
K4b2	2006	Votion D.M. Caudron I., Lejeune J.P., Vander Heyden L., Art T., Van Erck E., Serteyn D	Equine European Centre of Mont-le-Soie, Vielsalm, Belgium; Equine Clinic, University of Liège, Liège, Belgium; Equine Sports Medicine Centre, University of Liège, Liège, Belgium	New perspective for field measurement of cardiorespiratory parameters in exercising horses	22 (2006) 5 (September/October) 619-624	Pferdeheilkunde	Article	Equine
K4b2	2006	T. Abel, S. Schneider, P. Platen and HK. Struder	Institute of Motor Control and Movement Technique, German Sport University Cologne, Cologne, Germany; Institute of Cardiology and Sports Medicine, German Sport University Cologne, Cologne, Germany	Performance diagnostics in handbiking during competition	(2006) 44, 211–216	Spinal Cord	Article	Cycling
K4b2	2006	Dong Yan, Wango Tong, Wu Tao	Department of Rehabilitation Medicine, Hangzhou Hospital of Zhejiang, China	Pilot Study of the Exercise Intensity Criteria in Common Therapeutic of Stroke Patients		China Academic Journal	Article	Cardiology
K4b2	2006	Zeljko Dujic, Vladimir Ivancev, Zoran Valic, Darija Bakovic Ivana Marinovic-Terzic, Davor Eterovic, Urtik Wisioeff	Department of Physiology and Biophysics, University of Split School of Medicine, Split, CROATIA; and 2Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, NORWAY	Postexercise hypotension in moderately trained athletes after maximal exercise	2006, Vol. 38, n. 2 (318-322)	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2006	Fabiana Andrade Machado, Luiz Guilherme Antonacci Guglielmo, Camila Coelho Greco and Benedito Sérgio Denadai	Laboratório de Avaliação da Performance Humana, UNESP – Rio Claro, SP (Brazil)	Slow component of VO ₂ in children during running exercise performed at heavy intensity domain: analysis with different mathematical models	Vol. 12, Nº 6 – Nov/Dez, 2006	Revista Brasileira de Medicina do Esporte	Article	Paediatric & Children
K4b2	2006	Marcelo Velloso, and José R. Jardim	Respiratory Division, Federal University of Sao Paulo, San Paulo, Brazil	Study of Energy Expenditure During Activities of Daily Living Using and Not Using Body Position Recommended by Energy Conservation Techniques in Patients With COPD	2006;130:126-132	Chest	Article	Pneumology
K4b2	2006	Stanley Sai-chien and Janus Wan-sze Chan	Department of Sport Sciences and Physical Education, Chinese University of Hong Kong	The relationship between heart rate reserve and oxygen uptake reserve in children and adolescents	(2006) Vol. 77, No. 1, pp. 41-49	Research Quarterly for Exercise and Sport	Article	Paediatric & Children
K4b2	2006	Russell R. Pate, Maria J. Almeida, Kerry L. McIver, Karin A. Pfeiffer, and Marsha Dowda		Validation and Calibration of an Accelerometer in Preschool Children	Vol. 14 No. 11 November 2006	OBSESITY	Article	Wearables
K4b2	2006	Karin A. Pfeiffer, Kerry L. McIver, Marsha Dowda, Maria J.C.A. Almeida and Russel R. Pate	Department of Exercise Science, Arnold School of Public Health, University of South Carolina, Columbia, SC; and Department of Physical Education and Sport, University of Madeira, Madeira, PORTUGAL	Validation and Calibration of the Actical Accelerometer in Preschool Children	0195-9131/06/3801-0152/0	Medicine & Science in Sports & Exercise	Article	Wearables
K4b2	2006	Art T, Duvivier DH, van Erck E, de Moffarts B, Votion D, Bedoret D, Lejeune JP, Lekeux P, Serteyn D.	Equine Sports Medicine Centre and tSurgical Pathology, Equine Clinics, Faculty of Veterinary Medicine, University of Liege, Bdt.B42, Sart-Tilman, B-4000 Liege, Belgium.	Validation of a portable equine metabolic measurement system.	2006 Aug;(36):557-61.	Equine Vet J Suppl.	Article	Equine
K4b2	2006	Millet, Gregoire P.	UM1, Montpellier, France	VO ₂ Kinetics is Slower in Swimming than in Arm Cranking or Cycling in Trained Triathletes	May 2006 - Volume 38 - Issue 5 - p S237-S238	Medicine & Science in Sports & Exercise	Poster	Triathlon

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K4b2	2005	A. Caterisano, B.T. Patrick, D. Shelby, K. Stevens, L. King, P. Amett, R. Bowers, D. Washmuth	Health and Exercise Science Department, Furman University, Greenville, SC.	A Comparison of Excess Postexercise Oxygen Consumption in Trained Males Following Three Sets of Chest Presses with Different Rest Intervals and Following One uperlow Set	July 2005	NSCA National Convention	Abstract	Conditioning
K4b2	2005	Lara R. Dugas, Lize Van der Merwe, Hendrick Odendal, Timothy D. Noakes, Estelle V. Lambert	Exercise Science and sports medicine unit, Dept of human biology, Uni of Cape town. Sport science inst. Of South Africa, Newlands, South Africa; Faculty of Medicine, Uni of Stellenbosch, Tygerberg, South Africa	A Novel Energy Expenditure Prediction Equation For Intermittent Physical Activity	2005, Vol. 37, n.12 pp 2154-2161	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2005	Scott E. Crouter, Kurt G. Clowers, David R. Bassett, Jr.	Department of Exercise, Sport, and Leisure Studies, University of Tennessee, Knoxville, Tennessee	A novel method for using accelerometer data to predict energy expenditure	100:1324-1331, 2006	JAP	Article	Wearables
K4b2	2005	Koh, Yunsuk; Chacko, Anice; Biggerstaff, Kyle D.	Texas Woman's University, Denton, TX.	Accuracy Of The Cosmed K4b2 Telemetry System During Different Intensities Of Exercise.	Volume 37(5) Supplement May 2005p S22-S23	Medicine & Science in Sports & Exercise	Article	Validation
K4b2	2005	T. Meyer, R.C.R. Davison, W. Kindermann	Institute of Sports and Preventive Medicine, University of Saarland, Faculty of Clinical Medicine Saarbrücken, Germany	Ambulatory gas exchange measurements, current status and future options	2005, 26 S19 S27 ISSN 0172-4622	Sports Med	Article	Exercise physiology
K4b2	2005	L. Flacco, T. Pietrangelo, G. Di Tano, M. Bertollo, G. Fanò	Unità di Fisiologia Clinica, CeSI and Istituto Interuniversitario di Miologia, Università "G. d'Annunzio" Chieti-Pescara, Italy	Analysis of aerobic and anaerobic abilities in elite junior cross-country skiers: a preliminary report	11th – 12th November 2005	International Congress: Mountain & Sport – Rovereto	Abstract	Skiing
K4b2	2005	R. Duffield, B. Dawson, & D. Bishop.	University Of Western Australia, Crawley, Australia	Association between selected in-race and laboratory physiological measures with middle-distance track running	2005	Australian Conference of Science and Medicine in Sport And Third National Sports Injury Prevention Conference	Abstract	Running
K4b2	2005	Ioannis Vgiatzis, Giuseppe De Vito, Andrea Rodio, Marco Marchetti	National & Kapodistrian University of Athens, Faculty of Physical Education and Sports Science, Department of Aquatic Sports	Comparison of the physiological responses to upwind and downwind sail- pumping in windsurfers	01/2005; 33(2):66-69	The New Zealand Journal of Sports medicine	Article	Surf
K4b2	2005	F. Formenti, L. P. Ardigò , A. E. Minetti	Institute for Biophysical and Clinical Research into Human Movement, MMU Cheshire, Manchester, UK	Determinants of economy and speed of skiing across the ages	11th – 12th November 2005	International Congress: Mountain & Sport – Rovereto		Skiing
K4b2	2005	C. H. E. Imray, S. D. Myers, K. T. S. Pattinson, A. R. Bradwell, C. W. Chan, S. Harris, P. Collins, A. D. Wright, Birmingham Medical Research Expeditionary Society	Coventry and Warwickshire County Vascular Unit, University Hospitals Coventry and Warwickshire National Health Service Trus; QinetiQ, Farnborough	Effect of exercise on cerebral perfusion in humans at high altitude	99:699-706, 2005	JAP	Article	Altitude
K4b2	2005	J-M Vallier, F Grego, F Basset, R Lepers, T Bernard, J Brisswalter	Laboratoire Ergonomie Sportive et Performance, Université du Sud Toulon-Var, La Garde Cedex, France	Effect of fluid ingestion on neuromuscular function during prolonged cycling exercise	2005:39:e17	British Journal of Sports Medicine	Article	Exercise physiology
K4b2	2005	Belle Roels, Gregoire Millet, Christophe Marcoux, Olivier Coste, David Bentley, Robin Candau	UPRES-EA 3579 Faculte des sciences du sport Montpellier (FR); Dept. of medical Physiology lab, uni. Of Copenhagen, Denmark, regional and departmental direction of Youth & sports, Montpellier, France	Effects of Hypoxic Interval Training on cycling performance	2005, Vol. 37, n.1 pp 138-146	Medicine & Science in Sports & Exercise	Article	Cycling
K4b2	2005	Roels Belle, Thomas Claire Bentley J. David, Mercier Jacques, Hayot Maurice Millet Grégoire	UPRES EA 3759 Montpellier, France; Brunel University, School of Sport and Education, UK; Laboratory of Interaction Physiology, Biology Institute, Montpellier, France; niversity of Evry Val d'Essonne, Department of STAPS, Evry, France	Effects of intermittent hypoxic training on amino and fatty acid oxidative combustion in human permeabilized muscle fibers	(September 21, 2006).doi:10.1152/jappphysiol.01319.2005	JAP	Article	Exercise physiology
K4b2	2005	Alejandro Casas, Jordi Vilario, Roberto Rabinovich, Anamaria Mayer, Joan Albert Barbera ,Robert Rodriguez-Roisin and Josep Roca	Servei de Pneumologia, Hospital Clínic, Villarroel 170, 08036 Barcelona, Spain.	Encouraged 6-min Walking Test Indicates Maximum Sustainable Exercise in COPD Patients	2005 Jul;128(1):55-61	Chest	Article	Pneumology
K4b2	2005	Alejandro Casas, Jordi Villario, Roberto Rabinovich, Ana F. Mayer, Jose Luis Valera, Emanuela Bertoni, Joan A. Barbera, Roberto Rodriguez-Roisin, Josep Roca	Servei de Pneumologia, Hospital Clínic Barcelona (ES), EUIF Blanquerna Universitat Ramon Llull, Barcelona (ES)	Encouraged six minute walking test reflects "maximal" sustainable exercise performance in COPD patients	2005;128:55-61	Chest	Article	Pneumology
K4b2	2005	T. M. Barbosa, K. L. Keskinen, R. Fernandes, P. Colaco, A. B. Lima J. P. Vilas-Boas	Department of Sports Sciences, Polytechnic Institute of Braganca, Campus Sta. Apolonia, Apartado 1101, 5301-856 Braganca, Portugal,	Energy cost and intracyclic variation of the velocity of the centre of mass in butterfly stroke	(2005) 93: 519–523	European Journal of Applied Physiology	Abstract	Swimming
K4b2	2005	Joanne S. Harrel, Robert G. McMurray, Christopher D. Baggett, Michael L. Pennell, Patricia F. Pearce, Shrikant I. Bangdiwala	School of Nursing, Dept. of exercise and sport science, school of public health, university of North Carolina at Chappel Hill, College of Nursing, University of Utah	Energy cost of physical activities in children and adolescent	2005, Vol.37, n.2, pp 329-336	Medicine & Science in Sports & Exercise	Article	Paediatric & Children
K4b2	2005	P. Zamparo, M. Bonifazi, M. Faina, A. Milan, F. Sardella, F. Schena, C. Capelli	Department of Biomedical Sciences, School of Medicine, University of Udine; Department of Physiology, University of Siena; Ce.Bi.S.M, University of Trento, Rovereto;	Energy cost of swimming of elite long-distance swimmers	(2005) 94: 697–704	European Journal of Applied Physiology	Article	Swimming
K4b2	2005	Chin T, Sawamura S, Shiba R, Oyabu H, et al.	Hyogo Rehabilitation Center, Kobe, Japan	Energy expenditure during walking in amputees after disarticulation of the hip	Jan. 2005	Journal of Bone and Joint Surgery	Article	GAIT
K4b2	2005	T. Chin, MD, PhD	Hyogo Rehabilitation Center, 1070 Akebono-Cho, NishiKu, Kobe 651-2181, Japan	Energy expenditure during walking in amputees after disarticulation of the hip	2005	Journal of Bone and Joint Surgery	Article	GAIT
K4b2	2005	Rob Duffield, Brian Dawson	School of human movement and exercise sciences, University of Western Australia (Perth, Aus)	Energy system contribution to 400-metre and 800-metre track running	March 2005; 23(3): 299 – 307	Journal of Sports Sciences	Article	Running
K4b2	2005	A D Flouris, G S Metsios, Y Koutedakis	University of Thessaly, Department of Sport and Exercise Science, Karfies, Tritala, Greece	Enhancing the efficacy of the 20 m multistage shuttle run test	Mar 2005; 39: 166 - 170	British Journal of Sports Medicine	Article	Exercise physiology
K4b2	2005	Marco Bernardi	Department of Human Physiology and Pharmacology, University of Rome "La Sapienza", Rome, Italy, Italian Paralympic Committee (CIP), Rome, Italy.	Evaluation programs for Italian Teams preparing the Paralympic Games	11th – 12th November 2005	International Congress: Mountain & Sport – Rovereto	Abstract	Disabled

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K4b2	2005	Bastien, G. J., Schepens, B., Willems, P. A. and Heglund, N. C. Head		Head-supported load carriage by Nepalese porters II: energetics.	vol. 308, no. 5729, pp. 1755-1755, 2005	J. Exp. Biol	Article	Altitude
K4b2	2005	Amy M. Hayes, Jonathan N. Myers, Monica Ho; Matthew Y. Lee, Inder Perkash, B. Jenny Kiratli	Spinal Cord Injury Center, Department of Veterans Affairs Palo Alto Health Care System (VAPAHCS), Palo Alto, CA-USA, Cardiology Division, VAPAHCS, Palo Alto, CA; Stanford University, Palo Alto, CA USA;	Heart rate as a predictor of energy expenditure in people with spinal cord injury	Volume 42, Number 5, Pages 617-624 Sept/Oct 2005	Journal of Rehabilitation Research & Development	Article	Disabled
K4b2	2005	Pierre Marie Lepretre, Carl Foster, Jean-Pierre Koralsztein, Veronique L. Billat	Laboratoire d'Etude de la Physiologie de l'Exercice, Department of Sciences and Technology in Sports and Physical Activities, University of Evry Val d'Essonne, Evry, France	Heart rate deflection point as a strategy to defend stroke volume during incremental exercise	98: 1660-1665, 2005	JAP	Article	Cardiology
K4b2	2005	Federico Formenti, Luca P. Ardigo' and Alberto E. Minetti	Institute for Biophysical and Clinical Research into Human Movement, Manchester Metropolitan University Cheshire	Human locomotion on snow: determinants	(2005) 272, 1561-1569	Proceedings of the royal society B	Article	Skiing
K4b2	2005	V.E. Vleck, S. Santos, D. Bentley and F. Alves	Medway School of Sciences, University of Greenwich, Kent, ME4 4TB, Faculty of Human Movement, Technical University of Lisbon, Alameda de Santo Antonio dos Capuchos Lisbon, Portugal, Dept of Human and Health Sciences, University of Westminster, W1W 6UW	Influence of prior cycling on the OBLA measured during incremental running in triathletes.	2005, 93-223	Journal of Sports Sciences	Abstract	Triathlon
K4b2	2005	De Angelis M., Faina M., Schena F., Trozzi V., Campaci R., Petriani C.	Italian National Olympic Committee, Institute of Sport Science, Rome, Italy 2Italian Winter Sport Federation, Milan, Italy	Metabolic measurements in classic and skating cross country simulated competition	11th - 12th November 2005	International Congress: Mountain & Sport - Rovereto	Abstract	Skating
K4b2	2005	Scott Eric Fuller	Louisiana State University and Agricultural and Mechanical College	Oxygen Uptake Efficiency Slope and functional physical performance in elderly adults	May 2005	Thesis for the degree of Master of Science in The Department of Kinesiology	Thesis	Geriatrics
K4b2	2005	K Woolf-May, S Bird	Department of Sport Science, Tourism and Leisure, Canterbury Christ Church University College, Canterbury, Kent UK	Physical activity levels during phase IV cardiac rehabilitation in a group of male myocardial infarction patients	2005;39:e12	British Journal of Sports Medicine	Article	Cardiology
K4b2	2005	Kenneth S Dyson, Richard L Hughson	Department of Kinesiology, University of Waterloo, Waterloo, Ontario, Canada	Preliminary study of the physiological demands of mars analogue extravehicular activity	2005	International Astronautical Congress Fukuoka, Japan	Poster	Space
K4b2	2005	Marco Y. C. Pang; Janice J. Eng; Andrew S. Dawson	Rehabilitation Research Laboratory and Acquired Brain Injury Program, GF Strong Center, Vancouver, Canada;	Relationship Between Ambulatory Capacity and Cardiorespiratory Fitness in Chronic Stroke*	2005;127:495-501	Chest	Article	Cardiology
K4b2	2005	T. M. Barbosa, R. Fernandes, K. L. Keskinen, P. Colaco, C. Carmo, J. P. Vilas-Boas	Department of Sports Sciences, Polytechnic Institute of Braganca, Braganca, Portugal, Department of Biology of Physical Activity, University of Jyväskylä, Jyväskylä, Finland - Faculty of Sports Sciences, University of Porto, Porto Portugal	Relationships between energetic stroke determinants and velocity butterfly	2005, DOI 10.1055/s-2005837470 - ISSN 0172-4622	International Journal of Sport Medicine	Abstract	Swimming
K4b2	2005	M. R. Rizzo, D. Mari, M. Barbieri, E. Ragno, R. Grella, R. Provenzano, I. Villa, K. Esposito, D. Giugliano, and G. Paolisso	Department of Geriatric Medicine and Metabolic Diseases, II University of Naples, Naples, Italy; Department of Internal Medicine (D.M., R.P.), University of Milano, Milano Italy; and Airoldi Muzzi Institution (I.V.), Lecco, Italy	Resting Metabolic Rate and Respiratory Quotient in Human Longevity	(2005) 90(1):409-413	The Journal of Clinical Endocrinology & Metabolism	Article	Geriatrics
K4b2	2005	Eli Robert Groppo, Robert Kenneth Eastlack, Andrew Mahar, Alan Robert Hargens, Robert Alan Pedowitz	University of California, San Diego, Department of Orthopaedic Surgery, San Diego, CA; Children's Hospital, San Diego, Orthopedic Biomechanics Research Center, San Diego, CA	Simulated hypergravity running increases skeletal and cardiovascular loads	2005, Volume 37, n. 2, 262-266	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2005	O Girard, P Sciberras, M Habrard, P Hot, R Chevalier, G P Millet	O Girard, UPRES EA 3759, Faculty of Sport Sciences, University of Montpellier, Montpellier, France;	Specific incremental test in elite squash players	2005;39:921-926. doi:10.1136/bjsm.2005.018101	Br J Sports Med	Article	Tennis
K4b2	2005	Stanley Sai -chuen Hui, Janus Wan -sze Chan	Department of Sport Science and Physical Education at the Chinese University of Hong Kong	The relationship between heart rate reserve and oxygen uptake reserve in children and adolescents	March 2006	Research Quarterly for Exercise and Sport	Article	Paediatric & Children
K4b2	2005	M. Fenzl, W. Shnizer, B. Hartmann, B. Villiger, O. Knusel	Swiss Olympic Medical center, Bad Ragaz Switzerland; Agnes-Bernauer-Strasse Muhnchen, Germany; Balneologie, Clinical University of Freiburg, Bad Krozingen, Germany; Clinic of Valens, Valens, Switzerland	Unterschiede in der maximalen Sauerstoffaufnahme bei körperlichen belastungen im wasser oder anland	53(4).172-178;2005	Scheizerische zeitschrift fur sportmedizin und sporttraumatologie	Article	Exercise physiology
K4b2	2005	B Roels, L Schmitt, S Libicz, D Bentley, J-P Richalet and G Millet	B Roels, School of Sport and Education, Brunel and Education, Brunel University, Uxbridge, Middlesex , UK	V.O2MAX and the ventilatory threshold in free swimming and cycle ergometry: comparison between triathletes and swimmers	2005;39:965-968 doi:10.1136/bjsm.2005.020404	Br. J. Sports Med.	Article	Swimming
K4b2	2005	L. D. Hodges, D. A. Brodie, P. D. Bromley	Research Centre for Health Studies, Buckinghamshire Chilterns University College, Buckinghamshire, UK	Validity and reliability of selected commercially available metabolic analyzer systems	2005: 15: 271-279	Scandinavian Journal Medicine & Science in Sports	Article	Validation
K4b2	2005	Sean M. Tweedy and Stewart G. Trost	School of Human Movement Studies, University of Queensland, Australia	Validity of Accelerometry for Measurement of Activity in People with Brain Injury	April 2005. 0195-9131/05/3709-1474/0	Medicine & Science in Sports & Exercise	Article	Wearables
K4b2	2005	Firstbeat Technologies Ltd	Firstbeat Technologies Ltd	VO2 Estimation Method Based on Heart Rate Measurement	2005- www.firstbeattechnologies.com	Web site	Internet	Wearables
K4b2	2005	S. Duvergé , I. Boudreault, S. Nadeau, E. Kalinova, M. Leone, AS Comtois	Université du Québec à Montréal, Canada	VO2 requirements during the 6-minute self-paced walk test in older trained adult populations	2005	18th Congress of the International Association of Gerontology	Abstract	Geriatrics

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K4b2	2004	R. Duffield, B. Dawson, H.C. Pinnington, P. Wong	School of human movement and exercise sciences, University of Western Australia, Crawley WA (Aus)	Accuracy and reliability of a Cosmed K4b2 portable gas analysis system	2004 Mar; 7(1): 11-22	J Sci Med Sport	Article	Validation
K4b2	2004	Jastrzebski Zbigniew	Dept of physiology, The University school of Physical Education Gdansk (Poland)	Aerobic capacity of national team handball players	2004, Clermont Ferrand	ECSS	Abstract	Handball
K4b2	2004	Giuseppe Morici, Maria R. Bonsignore, Daniele Zangla, Loredana Riccobono, Mirella Profita, Anna Bonanno, Alessandra Paternò, Rossana Di Giorgi, Franco Mirabella, Laura Chimenti, Arcangelo Benigno, Antonio M. Vignola, Vincenzo Bellia, Giuseppe Amato and Giovanni Bonsignore	Department of Experimental Medicine and Institute of Medicine and Pneumology, University of Palermo, ITALY; Institute of Biomedicine and Molecular Immunology (IBIM), Italian National Research Council (CNR), Palermo, ITALY	Airway Cell Composition at Rest and after an all out test in competitive rowers	2004, (36); 1723-1729	Medicine & Science in Sports & Exercise	Article	Rowing
K4b2	2004	Craig McDonald, Sandra A. Walsh, Lana WidmaN, Denise Walsh, Ted Abresh	Shriners Hospital For Children, CA (USA); University of California, Davis CA (USA);	Assesment of Energy cost under various modes of locomotion in children with spinal cord injuries and able bodied controls	????	????	Abstract	GAIT
K4b2	2004	Floor Hettinga, Joanne Lampen, Jos J. de Koning, Maarten F. Bobbert, Carl Foster, FACSM	Institute for Fundamental and Clinical Human Movement Sciences, Vrije Universiteit, Amsterdam, The Netherlands; Department of Exercise and Sport Science, University of Wisconsin-La Crosse, La Crosse, USA	Can anaerobic capacity be fully utilized in two minutes of supra-maximal speed skating exercise?	2004, Indianapolis	ACSM	Abstract	Skating
K4b2	2004	Tanja Princi, Carlo Capelli, Giorgio Delbello, Larissa Nevierov	Department of Physiology and Pathology, University of Trieste	Cardiovascular and Metabolic Effort in a World Class Sailor at Different Wind Velocities	Volume 473 of the series CISM Courses and Lectures pp 37-41	Biomechanics and Sports	Article	Sailing
K4b2	2004	Marco Bernardi, Barbara Di Giacinto, Emanuele Guerra, Claudio Marini, Cataldo Piscicchio, Filippo M. Quattrini	University of Rome "La Sapienza" (IT); Italian federation of sport for disabled, CONI Rome (IT); Institute of sport science, CONI, Rome (IT)	Cardiovascular and respiratory adaptation to exercise in locomotor disabled athletes	2004, Clermont Ferrand	ECSS	Abstract	Disabled
K4b2	2004	M. S. Treuth, K. Schmitz, Diani J. Catellier, Robert G. McMurray, David M. Murray, M. Joao Almeida, Scott. Going, James E. Norman, Russel Pate	Johns Hopkins Bloomberg school of Public health Baltimore; Uni of Minnesota; Uni of North Carolina; Uni of Memphis, Uni of South Carolina; Uni of Arizona; National, Lung & Blood institute, Bethesda	Defining Accelerometer Thresholds for Activity Intensities in Adolescent Girls	2004, 0195-9131/04/3607-1259	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2004	Jean Slawinski, veronique Billat	Dept STAPS, UFRSFA Université D'Evry-Val D'Essones, Bat des Sciences Bd Francois Mitterand EVRY Cedex, France	Effect of an exhausting overground run on the energetic cost and on the mechanical cost of running	2004	ECSS	Abstract	Running
K4b2	2004	Roels Belle, Thomas Claire, Gregoire Millet, Hayot Maurice, Jaques Mercier	Approche Bio-Psycho-Sociale du dopage, Faculté de sciences du sport, University of Montpellier (FR); Laboratoire de physiologie des interactions, Institut de Biologie, Montpellier (FR)	Effect of hypoxic Training on performance and mitochondrial respiration in human muscle fibres	2004	ECSS	Abstract	Altitude
K4b2	2004	Horvais Nicolas, Samozino Pierre, Frederique Hintzy	Laboratoire de modelisation des activites sportives, Université de Savoie, Bourget du Lac (FR)	Effect of pedalling rate on the mechanical efficiency-power output relationships during submaximal cycling	2004	ECSS	Abstract	Cycling
K4b2	2004	C. Castagna, G. Annino, E. Padua, V. Manzi, G. Abt, O. Tsarpela, G. Mafre, M. G. Giganti, R. Belardinelli, S. D'Ottavio	Motor Science Inst. University of Rome "Tor Vergata", (IT); Teknosport.com, Ancona (IT); St. Martin's College, Lancaster (UK); Lancisi Hospital, Cardiovascular Rehabilitation	Effect of VO2 max level on repeated sprint ability in basketball players	2004	ECSS	Abstract	Basketball
K4b2	2004	Rob Duffield, Johann Edge, David Bishop	School of human movement and exercise sciences, University of Western Australia, Perth WA (Aus)	Effects of high intensity intervall training on the VO2 response during severe exercise	2004	ECSS	Abstract	Exercise physiology
K4b2	2004	Aurelien Bringard, Stephane Perrey, Nicolas Belluye	EA 2991 Efficience et deficiencie motrice, Montpellier (FR); Centre de recherche decathlon, Villeneuve d'Ascq (FR)	Effects of short compression pants on aerobic energy cost and subjective sensation during submaximal running exercise	2004	ECSS	Abstract	Exercise physiology
K4b2	2004	Antonio Gianfelici, Maria Francesca Piacentini, Marcello Faina, Carlo Minganti, Laura Capranica	Dept of human movement and sport science IUSM, Rome (IT), CONI, Institute of sport science, Rome (IT)	Energy Cost and Mechanical power of a 1h Spinning class	2004	ECSS	Abstract	Cycling
K4b2	2004	Gregory A. Brown, Ph.D., Mary P. Rebok, Meshia L. Scott, Junior Harris III, and Matthew K. Colaluca	Human Performance Laboratory, Jiann-Ping Hsu School of Public Health, Georgia Southern University, Statesboro, GA (USA)	Energy Cost of Jogging Stroller Use During Running	2004, Indianapolis	ACSM	Abstract	Running
K4b2	2004	T. Wayne, Phillips and Joana R. Zuuratis	Dept of Exercise and Wellness, Arizona State University East, Mesa, Arizona (USA)	Energy Cost of single set resistance training in older adults	2004, 18(3),000-000	Journal of Strength and Conditioning Research		Geriatrics
K4b2	2004	Luisa Righetti, M. F. Piacentini, L. Capranica, F. Felici	University of Rome "Tor Vergata"-FGI, ITA	Energy sources for aerobic gymnastics competition routines	Summary 2010-2014 / 1st edition	Scientific research in aerobic gymnastics	Article	Aerobics
K4b2	2004	Richard Heubert, Pierre Marie Lepetre, Laurent Laffite, Jean Pierre Koralsztein, Veronique Billat	Centre de Medicine du sport CCAS, Paris (FR); Laboratoire des interactions genes et entrainement, Universite d'Evry Val-d'Essonne, Evry (FR)	Etiology of the VO2 drop at the end of exhaustive exercises eliciting VO2 max	2004	ECSS	Abstract	Exercise physiology
K4b2	2004	Kentarou Takahashi, Noriaki Maeda, Masahito Murakami, Katsuhiro Machida, Junichi Katoh	Department of Physical Therapy, Hyogo Rehabilitation Center Hospital, Japan	Exercise Tolerance for Operating a Wheelchair in Patients with Cerebrovascular Disorder-associated Hemiplegia	Vol. 16 (2004) No. 2 P 115-117	Journal of Physical Therapy Science	Article	Disabled
K4b2	2004	Miriam Christina Renz	Department of Human Kinetics and Ergonomics Rhodes University, Grahamstown, South Africa	Laboratory investigation of a simulated industrial task pre and post ergonomics intervention	2004		Thesis	Ergonomics
K4b2	2004	Simon M. Gunn, Grant E. van der Ploeg, Robert T. Withers Christopher J. Gore, Neville Owen, Adrian E. Bauman- John Cormack	Exercise Physiology Laboratory, School of Education, Flinders University School of Education, Adelaide, South Australia, Australian Institute of Sport, Henley Beach, South Australia	Measurement and prediction of energy expenditure in males during household and garden tasks	(2004) 91: 61-70	European Journal of Applied Physiology	Article	Household
K4b2	2004	David L. Wenos, Michael L. Deaton, Peter C. Kovalcik, & Michael J. Saunders, FASCM	Human Performance Laboratory, James Madison University, Harrisonburg, VA (USA)	Metabolic Responses During Appalachian Trail Backpacking With and Without Trekking Poles	2004, Indianapolis	ACSM	Abstract	Hiking
K4b2	2004	A. Pulkkinen, J. Kettunen, K. Martinmäki, S. Saalasti, H.K. Rusko, FACSM	KIHU-Research Institute for Olympic Sports, Jyväskylä, Finland	On and off dynamics and respiration rate enhance the accuracy of heart rate based VO2 estimation	2004	ACSM	Poster	Exercise physiology

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2004	David Bentley, Roels Belle, Libicz Sebastien, Philippe Helleard, Gregoire Millet	Dept. Of Human and Health sciences, University of Westminster, London (UK); UPRES-EA 3759, Faculté des sciences du sport, University of Montpellier (FR); French Swimming federation, Paris (FR)	Physiological Responses during aerobic interval swimming training: effects of interval duration	2004	ECSS	Abstract	Swimming
K4b2	2004	C. Castagna, G. Annino, E. Padua, V. Manzi, G. Abt, O. Tsarpela, G. Mafre, M. G. Giganti, R. Belardinelli, S. D'Ottavio	Motor Science Inst. University of Rome "Tor Vergata", (IT); Teknosport.com, Ancona (IT); St. Martin's College, Lancaster (UK); Lancisi Hospital, Cardiovascular Rehabilitation Dept, Ancona (IT)	Physiological responses to a repeated sprint protocol for Basketball	2004	ECSS	Abstract	Basketball
K4b2	2004	Kong Y Chen	Vanderbilt University Medical Center Nashville, Tennessee, USA	Portable physical activity monitors for measuring energy metabolism in ROTC Cadets	September 2004		Thesis	Wearables
K4b2	2004	N Kawashima, K Nakazawa N Ishii, M Akai and H Yano	Department of Rehabilitation for the Movement Functions, Research Institute of National Rehabilitation Center for Persons with Disabilities, Saitama, Japan	Potential impact of orthotic gait exercise on natural killer cell activities in thoracic level of spinal cord-injured patients	(2004) 42, 420-424	Spinal Cord	Abstract	GAIT
K4b2	2004	K. Pattison, S. Myers, C. Gadner Thorpe	University hospital Coventry and Warwickshire NHS Trust (UK); Centre for Human Science, QuinetiQ, Farnborough (UK); Stoke Mandeville Hospital, Aylesbury, Bucks (UK)	Problems with capnography at high altitude	2004, 59, pages 69-72	Anesthesia		Altitude
K4b2	2004	Tiago Barbosa, Kari Keskinen, Ricardo Fernandez, Paulo Colaco, Antonio Lima, Joao Paulo Vilas-Bosa	Dept of sports sciences, polytechnic Institute of Braganca, Portugal; Dept of biology of physical activity, University of Jyväskylä Finland; Faculty of sport sciences, University of Porto, Portugal	Speed fluctuation as a determinant factor of energy cost in butterfly stroke	2004	ECSS	Abstract	Swimming
K4b2	2004	Liam Tyrrell, Nick Mahony, Bernard Donne	Human Performance laboratory, anatomy dept, Trynity College, Dublin Ireland	The effects of varying cadence on sub maximal heart rate, blood lactate and VO2 in elite male flatwater kayakers	2004	ECSS	Abstract	Rowing
K4b2	2004	J. Jaszczur-Nowicki, V. Smulskij	Academy of Physical education in Gdansk (Poland)	The Energy Expenditure in Boardsailors	2004	ECSS	Abstract	Sailing
K4b2	2004	F. Esposito F. M. Impellizzeri, V. M. R. Vanni, G. Pizzini, A. Veicsteinas	Institute of Physical Exercise, Health and Sports, Milan, Italy University of Milan,	Validity of heart rate as an indicator of aerobic demand during soccer activities in amateur soccer players	(2004) 93: 167-172	European Journal of Applied Physiology	Article	Football
K4b2	2004	Joey C. Eisenmann, Scott J. Strath, Danny Shadrick, Paul Rigsby, Nicole Hirsh, Leigh Jacobson	Dept of health and human performance, Iowa state university (USA); University of Michigan (USA); University of Wyoming (USA)	Validity of uniaxial accelerometry during activities of daily living in children	2004; 91: 259-263	European Journal of Applied Physiology	Abstract	Wearables
K4b2	2004	Gregoire P.Millet, Libicz Sebastien, Roels Belle, Fabio Borrani,	Faculté des sciences du sport, University of Montpellier (FR); Institut de sciences du sport et de l'éducation physique, Université de Lausanne, Switzerland	VO2 kinetics in cycling, arm cranking and swimming	2004	ECSS	Abstract	Exercise physiology
K4b2	2003	K.J. Nobes, D.L. Montgomery, D.J. Pearsall, R.A. Turcotte, R. Lefebvre, F. Whitton	Department of Kinesiology and Physical Education, Seagram Sports Centre, McGill University, Montreal, QC.	A comparison of skating economy on ice and on the skating treadmill	2003 Feb;28(1):1-11	Can J Appl Physiol.	Abstract	Skating
K4b2	2003	Beth Morgan, Sara J. Woodruff, Peter M. Tiidus	Dept of Kinesiology, University of Waterloo, Ontario (CA);	Aerobic energy expenditure during recreational weight training in females and males	(2003) 2, 117-122	J Sport Sci and med	Article	Conditioning
K4b2	2003	Beth Morgan, Sarah J. Woodruff and Peter M. Tiidus	Department of Kinesiology & Physical Education, Wilfrid Laurier University, Waterloo ON, Canada	Aerobic energy expenditure during recreational weight training in females and males	(2003) 2, 117-122	Journal of Sports Science and Medicine	Article	Conditioning
K4b2	2003	Jan Olbrecht	Artevelde-Institute of higher education, dept of physiotherapy, Ghent, Belgium;	Application of a theoretical metabolic calculation model in field tests and implication on training periodisation and monitoring	2003, Salzburg	ECSS	Abstract	Exercise physiology
K4b2	2003	M. Faina	Institute of sport science, CONI Rome (IT)	Back extrapolation test of O2 uptake on the British Olympic swimming team	2003	Experiment carried out at the Acqua Cetosa Olympic center	Lecture	Swimming
K4b2	2003	Carlo Castagna, Romualdo Belardinelli, Grant Abt	Instituto tecnico Industriale statale "V. Volterra" Torrette Ancona (IT); Dept of Cardiovascular rehabilitation and prevention, "G. M. Lancisi" Hospital, Ancona (IT); St. Martin College, Lancaster (UK); Research Dept Teknosport.com Ancona (IT);	Cardio-respiratory responses of regional soccer players to a progressive maximal intermittent field-test	2003 Portugal	"Science & football", 5th World Congress	PPT	Football
K4b2	2003	J. C. Eisenmann, N. Brisko, D. Shadrick, S. Welsh	Division of Kinesiology and Health, University of Wyoming, Laramie (USA)	Comparative analysis of the Cosmed Quark b2 and K4 b2 gas analysis systems during submaximal exercise	2003; 43:150-5	The J. of sport med and physical fitness	Article	Validation
K4b2	2003	Jean Slawinski, Veronique Louise Billat	Université Paris Ouest Nanterre La Défense	Coût mécanique et coût énergétique de la course à pied chez des marathoniens élités hommes et femmes	January 2003	Science et Motricité	Article	Running
K4b2	2003	Susanne Ring, Marlies Malzer, Elizabeth Ardelt Gattinger, Erich Muller	Institute of sport science, Institute of Psychology University of Salzburg (Austria)	Determination of aerobic Fitness in obese adults: comparison of a lab and field test method	2003, Salzburg	ECSS	Abstract	Obesity
K4b2	2003	R. Reer, W. Beckmann, K M Braumann	Institute for sports & exercise medicine, University of Hamburg, Germany	Do braces influence physical performance?	2003	ACSM	Poster	Exercise physiology
K4b2	2003	Anne Delextat, Fabrice Vercreuyssen, Veronique Tricot, Thierry Bernard, Christophe Hausswirth, Jeanick Brisswalter	Uni of Toulon-Var, dept of ergonomics (Cedex FR); National Inst. of Sport & Physical Education (Paris FR)	Drafting during Swimming Improves Efficiency during Subsequent Cycling	2003, 0195-9131/03/3509-1612	Medicine & Science in Sports & Exercise	Article	Swimming
K4b2	2003	Peter Schilcher, Hermann Schwameder, Elke Lindenhofer, Susanne Ring	Institute of sport science, University of Salzburg (Austria);	Effect of different binding-boot on mechanical and metabolic energy in ski-touring	2003, Salzburg	ECSS	Abstract	Skiing
K4b2	2003	Darby S. Pettit, Sigurbjorn A., Amgrimsson, Kirk J. Cureton	Department of Exercise Science, University of Georgia, Athens, Georgia USA	Effect of resistance exercise on postprandial lipemia	94: 694-700, 2003.	JAP	Article	Exercise physiology
K4b2	2003	J. Edge, D. Bishop & R. Duffield	University Of Western Australia, Crawley, Australia	Effects of high-intensity interval training on the UO2 response during heavy exercise	2003	Australian Conference of Science and Medicine in Sport And Third National Sports Injury Prevention Conference	Abstract	Exercise physiology
K4b2	2003	Bonita I. Marks Elizabeth Galleher, Teresa Moore and Laurence M. Katz	University of North Carolina at Chapel Hill, department of exercise and sport science, NC USA	Energy Balance Monitoring in Tennis Players	Volume 8, nr. 3 Dec 2003; pages 8-9	Medical and science in tennis	Article	Tennis

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K4b2	2003	Wayne T. Phillips, Joanna R. Ziuraitis	Dept. of Exercise and Wellness, Arizona State University	Energy Cost of the ACSM Single-set Resistance Training Protocol	2003, 17 (2), 350-355	J. of Strength & Condition. Research.	Article	Exercise physiology
K4b2	2003	Thomas Elju E., Giuseppe De Vito, Andrea Macaluso	Applied Physiology group, Strathclyde Institute for biomedical science, University of Strathclyde, Glasgow (UK)	Energy cost of walking on a treadmill varies with body weight unloading and speed in both healthy young and older women	2003, Salzburg	ECSS	Abstract	Exercise physiology
K4b2	2003	N Kawashima, Y Sone, K Nakazawa, M Akai and H Yano	Motor Dysfunction Division, Research Institute, National Rehabilitation Center for the Disabled, Namiki, Tokorozawa City, Saitama Pref., Japan; Koumei School for Disabled Children, 6-38-27 Matsubara, Setagaya Ward, Tokyo, Japan	Energy expenditure during walking with weight-bearing control (WBC) orthosis in thoracic level of paraplegic patients	Spinal Cord (2003) 41, 506-510	Spinal Cord	Abstract	Disabled
K4b2	2003	K. Keskinen, O. Keskinen, F. Rodriguez, A. Ferran, J. Merikari	University of Jyväskylä, Finland; Institut Nacional d'Educació Física de Catalunya, University of Barcellona, Spain	Human cardiorespiratory responses to resting water immersion to the neck with changing body position	(2003), pp. 337-342	Biomechanics and Medicine In Swimming IX	Article	Water based activities
K4b2	2003	A.A. Ionescu, T.D. Mickleborough, K. Chatham, M.R. Lindley, L.S. Nixon, C.E. Bolton, D.J. Shale	Respiratory Medicine, University of Wales College of Medicine, Cardiff, Wales; Department of Kinesiology, Indiana University, Bloomington, IN; University of Wales Institute Cardiff, Cardiff, Wales	Increased Oxygen Uptake and Energy Expended during Some Activities in Cystic Fibrosis	Seattle 2003	ATS	Abstract	Pneumology
K4b2	2003	Alison Kirk, Nanette Mutrie, Paul MacIntyre, Miles Fisher	Center for Exercise Science and Medicine, University of Glasgow, Scotland; The Diabetes Center, Glasgow Royal Infirmary, Scotland	Increasing Physical Activity in People With Type 2 Diabetes	VOLUME 26, NUMBER 4, APRIL 2003	Diabetes care	Article	Diabetology
K4b2	2003	Fabrizio Caputo, Sérgio Garcia Stella, Marco Túlio de Mello and Benedito Sérgio Denadai	Laboratório de Avaliação da Performance Humana - Unesp, Rio Claro-SP	Indexes of power and aerobic capacity obtained in cycle ergometry and treadmill running comparisons between sedentary, runners, cyclists and triathletes	Vol. 9, Nº 4 - Jul/Ago, 2003	Revista Brasileira de Medicina do Esporte	Article	Triathlon
K4b2	2003	Magaly Tardieu, Delphine Thevenet, Hassan Zouhal, Jaques Prioux	"Motricité - Interacion - Performance" Laboratory, UFRSTAPS, University of Nantes (FR); "Laboratoire de Physiologie et de Biomecaniques de l'exercice Musculaire", UFR-APS University of Rennes 2 (FRA)	Influence of Intensity on time spent at maximal oxygen uptake during short intermittent exercise	2003, Salzburg	ECSS	Abstract	Exercise physiology
K4b2	2003	Victor Mishchenko, Tomash Tomiak, Tetyana Kuehne	University school of physical education, Gdansk, Poland; University of Physical Education and Sport, Kiev, Ukraine	Inter-individual differences of anaerobic capacity in the homogenous groups of high performance athletes (rowers and cyclists)	2003, Salzburg	ECSS	Abstract	Exercise physiology
K4b2	2003	Heikki Kyrolainen, Riikka Kivela, Satu Koskinen, Jeff McBride, Jesper L. Andersen, Timo Takala, Sarianna Sipilä, Paavo Komi	Uni of Jyväskylä (Neuromuscular research dept., biological & physical activity dept. and health sciences dept.), Copenhagen Muscle Research centre (CMRC), dept. of molecular muscle biology (Denmark)	Interrelationships between Muscle Structure, Muscle Strength, and Running Economy	2003, 0195-9131/03/3501-0045	Medicine & Science in Sports & Exercise	Article	Running
K4b2	2003	Marco Bernardi, B. Di Giacinto, C. Pisicchio, F. M. Quattrini	Dipartimento di fisiologia umana e farmacologia, Università di Roma "La Sapienza"; Scuola di specializzazione in medicina dello sport Università di Roma "la Sapienza"; Federazione Italiana Sport Disabili CONI Roma	Lo sport praticato con disabili con patologia locomotoria è in grado di determinare effetti benefici sulla salute?	2003, 56:000-000	Med. Sport	Article	Disabled
K4b2	2003	S. Myers, S. Harris, I. Chesner, A. Bradwell	QinetiQ Centre for Human Sciences, QinetiQ, Birmingham Heartlands hospital, Dept. Immunology Medical School Univ Birmingham UK	Maximal oxygen uptake at altitude using a breath-by-breath metabolic analyser and supine cycleergometer.	19-22, 2003 Banff, Alberta, Canada	13th International Hypoxia Symposium February	Abstract	Altitude
K4b2	2003	Paolo Onorati, Rosa Antonucci, Gabriele Valli, Emanuela Berton, Francesca De Marco, Pietro Serra, Paolo Palange	University of Rome "La Sapienza", dept of clinical medicine, Rome, Italy	Non-invasive evaluation of gas exchange during a shuttle walking test vs. a 6-min walking test to assess exercise tolerance in COPD patients	2003, 89, 331-336	European Journal of Applied Physiology	Article	Pneumology
K4b2	2003	S. Myers, W. Withey	QinetiQ Centre for Human Sciences	Operation of a portable metabolic monitor at low ambient temperature	19-22, 2003 Banff, Alberta, Canada	13th International Hypoxia Symposium February	Abstract	Altitude
K4b2	2003	E. Barrey, N. Metayer, A. G. Goachet, V. Billat, V. Julliard, J. Slawinski	INRA, Jouy-en-Josas Cedex (FR), ENESAD, Dijon (FR), Uni of Evry Vlla D'Essonne (FR)	Oxygen consumption measured in Arabians tested in a field endurance exercise test	2003, August 31st-September 3rd	54th Meeting of European Association for Animal Production, Rome, 31Aug/3 Sept. 2003	Abstract	Equine
K4b2	2003	Emilson Colantonio, Ronaldo Vilela Barros, Maria Augusta Peduti Dal Molin Kiss	Laboratory of sport performance, Physical education and sport school, University of Sao Paulo (Brazil); Physical Education & Physiotherapy research laboratory, LAPEFI Sao Paulo (Brazil); Monte Serrat University Center UNIMONTE (BRA)	Oxygen uptake during wingate tests for arms and legs in swimmers and water polo players	37622	Revista Brasileira de Medicina do Esporte	Abstract	Swimming
K4b2	2003	F. Caputo, M.T. Mello and B.S. Denadai	Human Performance Laboratory, UNESP, Rio Claro, Brazil	Oxygen Uptake Kinetics and Time to Exhaustion in Cycling and Running: A Comparison Between Trained and Untrained Subjects	2003, Vol. 111, No. 5, pp. 461-466	Archives of Physiology and Biochemistry	Article	Exercise physiology
K4b2	2003	N. D. Anderson, K. R. Mitchell, D. G. O'Connell, J. K. O'Connell	Hardin-Simmons University, Abilene, TX (USA)	Patients with acute CVAS self-select energy efficient walking speeds on tile, dirt and gravel	2003	J of the American physical therapy association	Abstract	GAIT
K4b2	2003	Anderson ND., Mitchell KR. O'Connell DG. O'Connell JK.	Department of Physical Therapy, Hardin-Simmons University, Abilene, TX 79698. Funded by the HSU Academic Foundation.	Patients with acute CVAs self-select energy efficient walking speeds on tile, dirt, and gravel	Abstract Publication PO-RR-8-F - PT 2003	American Physical Therapy Association	Abstract	GAIT
K4b2	2003	Carl Foster, Jos De Koning, Floor Hettinga, Joanne Lampen, Kerry L. La Clair, Christopher Dodge, Maarten Bobbert, John P. Porcari	Dept. of Exercise and Sport Science, University of Wisconsin-La crosse, IFKB faculty of Human Movement sciences, Vrije Universiteit-Amsterdam (the Netherlands)	Pattern of Energy Expenditure during Simulated Competition	2003, 0195-9131/03/3505-0826	Medicine & Science in Sports & Exercise	Article	Cycling
K4b2	2003	M. Bernardi, F.M.Quattrini, A Rodio, G. Fontana, A Madaffari, M. Marchetti	Uni of Rome "La Sapienza", Uni of Cassino, ACI Global Spa, Toscana Challenger Livorno, Italy	Physiological Characteristics and Functional Evaluation of America's Cup Grinders	2003	Sailing Sport Science Conference Toulon-var (UFR STAPS) on the 22th of May 2004	Abstract	Sailing

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K4b2	2003	A. William Sheel, Nicholas Seddon, Andrew Knight, Donald C. McKenzie, Darren E. R. Warburton	School of Human Kinetics, Uni of British Columbia, Vancouver Canada	Physiological Responses to Indoor Rock-Climbing and Their Relationship to Maximal Cycle Ergometry	2003, 0195-9131/03/3507-1225	Medicine & Science in Sports & Exercise	Article	Climbing
K4b2	2003	G. Kervio, F. Carre, N. S. Ville	Groupe de Recherche Cardio Vasculaire, University Rennes 1, Rennes France	Reliability and Intensity of the Six minute Walking test in healthy elderly subjects	2003 Jan; 35(1): 169-74	Med Sci Sports Exerc.	Article	Geriatrics
K4b2	2003	Luo Ming,Lan Yajia,Wang Zhiming	Department of Occupational Health,School of Huaxi Public Health,Sichuan University,Chengdu 610041.	Reliability Appraisal of A Portable Cardiorespiratory Function Testing Instrument	2003; Vol. 18, No. 1	Journal of Occupational Health and Damage	Article	Validation
K4b2	2003	Tomas Gabrys, Ursula Szmatlan-Gabrys, Anna Mronz, Michal Plewa	Academy of Physical education of Warsaw and Katowice (Poland)	Skiers Interval Anaerobic test (SIAT) a new method of measuring anaerobic capacity in cross-country skiers	2003, Salzburg	ECSS	Abstract	Skating
K4b2	2003	Robert Jones & Agnes Hunt	Orthopaedic & District Hospital NHS Trust, Oswestry, Shropshire, UK	The Case for gait analysis as part of the management of incomplete spinal cord injury	Spinal Cord (2003) 41, 479-482	Spinal Cord	Article	Gait
K4b2	2003	Robert Jones & Agnes Hunt	Orthopaedic & District Hospital NHS Trust, Oswestry, Shropshire, UK	The Case for gait analysis as part of the management of incomplete spinal cord injury	Spinal Cord (2003) 41, 479-482	Spinal Cord	Abstract	GAIT
K4b2	2003	Laffite LP, Mille-Hamard L, Koralsztein JP, Billat VL.	Centre de médecine du sport CCAS, Paris, France	The effects of interval training on oxygen pulse and performance in supra-threshold runs.	2003 Jul;111(3):202-10.	Arch Physiol Biochem	Article	Exercise Physiology
K4b2	2003	J. Edge, D. Bishop & R. Duffield	University Of Western Australia, Crawley, Australia	The relationship between UO response, muscle and blood metabolites and performance during exhaustive exercise	2003	Australian Conference of Science and Medicine in Sport And Third National Sports Injury Prevention Conference	Abstract	Exercise physiology
K4b2	2003	Carlo Castagna, Romualdo Belardinelli, Grant Abt	Instituto tecnico Industriale statale "V. Volterra" Torrette Ancona (IT); Dept of Cardiovascular rehabilitation and prevention, "G. M. Lancisi" Hospital, Ancona (IT); St. Martin College, Lancaster (UK); Research Dept Teknosport.com Ancona (IT);	The VO2 and HR response to training with a ball in youth soccer players	2003 Portugal	"Science & football", 5th World Congress	PPT	Football
K4b2	2003	Veronique Billat, Pierre Marie Lepretre, Anne-Marie Heugas, Mille-Hamard Laurence, Drai Salim, Jean Pierre Koralsztein	Uni of Evry-Val d'Essonne (FR) Uni of Paris (FR), CCAS Paris (FR)	Training and Bioenergetic Characteristics in Elite Male and Female Kenyan Runners	2003, 0195-9131/03/3502-0297	Medicine & Science in Sports & Exercise	Article	Running
K4b2	2003	Manuella Barbosa Crawley	Kinesiology, The Pennsylvania State University	Validation of the Sensewear HR armband for measuring heart rate and energy expenditure	2003		Thesis	Wearables
K4b2	2003	J. C. Eisenmann, S.J. Strath, D. Shadrick, P. Rigsby, N. Hirsch, L. Jacobson	Department of Health and Human Performance, Iowa State University, Ames, IA 50011 , USA,University of Michigan, Ann Arbor, Michigan, USA, University of Wyoming Laramie, Wyoming USA	Validity of uniaxial accelerometry during activities of daily living in children	(2004) 91:259-263	European Journal of Applied Physiology	Article	Wearables
K4b2	2002	Marc Vanderthommen, Marc Francaux, Cedrik Colinet, Cedric Lehance, Claude Lhermerout, Jean-Michel Crielaerd, Daniel Theisen	Institut Supérieur d'Education Physique et de Kinesitherapie et Readaptation, Université de Liege, Belgium; Institut d'Education Physique et de Readaptation, Université Catholique de Louvain, Belgium	A multistage field test of wheelchair users for evaluation of fitness and prediction of peak oxygen consumption	Vol. 39 No. 6, Nov./Dec. 2002 Pages 685-692	Journal of Rehabilitation Research & Development	Article	Disabled
K4b2	2002	R. A. Littlewood, M. S. White, K. L. Bell, P. S. W. Davies, G. J. Cleghorn, R. Grote	Children's nutritional research center, dept of paediatrics and child health, University of Queensland (AUS), Statewide paediatric rehabilitation service, Royal Children's hospital (AUS)	Comparison of the Cosmed K4b2 and the Deltatrac II metabolic cart in measuring resting energy expenditure in adults	(2002) 21(6): 491-497	Clinical nutrition ONLY PAPER - DO NOT DISTRIBUTE	Article	Validation
K4b2	2002	Ioannis Vogiatzis, Giuseppe De Vito, Andrea Rodio, Marco Marchetti	National & Kapodistrian University of Athens	Comparison of the physiological responses to upwind and downwind sailpumping in windsurfers	Vol 33, No 2, P69	NZJSM	Article	Surf
K4b2	2002	Gregory Dupont, Nicolas Blondel, Ghislaine Lensele, Serge Berthoin	Faculté des sciences du sport et de l'éducation physique, Université de Lille 2 (FR)	Critical Velocity and Time Spent at a High Level of VO2 for Short Intermittent Runs at Supramaximal Velocities	2002, 27 (2), 103-115	Canadian J. of Appl. Physiol.	Article	Running
K4b2	2002	Nigel K.Stepto, Andrew L. Carey, Heidi M. Staudacher, Nicola K. Cummings, Louise M. Burke, John A. Hawley	Exercise Metabolism group, School of medicine sciences, faculty of Health sciences, RMIT Uni of Bandoora (AUS); Australian Inst. of Sport, Belconnen (AUS)	Effect of short-term fat adaptation on high-intensity training	2002, 0195-9131/02/3403-0449	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2002	Gregoire P.Millet, Bernard Jaouen, Fabio Borrani, Robin Candau	UPRES-EA 2991, Sport, performance, Santé (FR); Faculte des sciences du sport Montpellier (FR); CREPS Montpellier (FR)	Effects of concurrent endurance and strength training on running economy and VO2 kinetics	2002, 0195-9131/02/3408-1351	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2002	G. Baquet, S. Berthoin, G. Dupon, N. Blondel, C. Fabre, E. van Praagh	faculté du sport, Université de Lille 2 (FR), UFR STAPS, Université de l'Artois (FR), UFR STAPS Université Blaise Pascal, Clermont Ferrand (FR).	Effects of High Intensity Intermittent Training on Peak VO2 in Prepubertal Children	2002; 23: 439-444	International Journal of Sport Medicine	Article	Paediatric & Children
K4b2	2002	Atul Singhal, Stephany Parker, Louise Linsell, and Graham Serjeant	MRC Childhood Nutrition Research Center, Institute of Child Health, London (AS); the Cooperative Extension Service and the Department of Nutritional Sciences, klahoma State University, Stillwater (SP)	Energy intake and resting metabolic rate in preschool Jamaican children with homozygous sickle cell disease	2002;75:1093-7.	American Journal Clinical Nutrition	Article	Paediatric & Children
K4b2	2002	Brona McDowell, Aidan Cosgrove, Richard Baker	Rehab. Sciences Research group, Uni of Ulster, newtonberry, Green Park Healthcare trust, Belfast	Estimating mechanical cost in subjects with myelomeningocele	2002, 15, 25-31	Gait & Posture	Article	GAIT
K4b2	2002	Marcello Faina, Piero Faccini	C.O.N.I., Istituto di Scienza dello Sport, Rome, Italy	Functional model of fire fighter activity and assesment of physiological capacities	2002 Rome 18-20 April	Firefighters: safety in rescue operations	Article	Firefighter
K4b2	2002	Giuseppe Morici, Loredana Riccobono, Daniele Zangala, Rossana Di Giorgi, Franco Mirabella, Anna Bonanno, Laura Chimentì, Francesco Pomara, Arcangelo Benigno, Antonio M. Vignola, Maria R. Bonsignore, Giovanni Bonsignore	Dept. of Experimental medicine, Uni of Palermo (IT), Inst. of Respiratory Pathophysiology CNR Palermo (IT), Ist. Medicina generale e Pneumologia, Uni of Palermo (IT)	Induced sputum and exhaled nitric oxide (NO) after short and intense exercise in competitive rowers	2002	ERS	Abstract	Rowing

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2002	Millet, G. P., C. Tronche, N. Fuster, and R. Candau	UPRES-EA 2991 Sport, Performance, Sante, Faculte des Sciences du Sport, Montpellier, FRANCE	Level ground and uphill cycling efficiency in seated and standing positions	34:1645-1652, 2002	Medicine & Science in Sports & Exercise	Article	Cycling
K4b2	2002	F. A. Rodriguez, K. L. Keskinen, O. P. Keskinen, M. Malvela	National Inst. of Phys. Edu. of Catalunya, Uni of Barcellona (ES); Uni of Jyvaskyla, Dept of biology of physical activity (FIN)	Oxygen uptake kinetics during free swimming: a pilot study	Saint Etienne (FR) 2002	World Symposium Biomechanics & medicine in swimming	Abstract	Swimming
K4b2	2002	Alejandro Casas, Jordi Villaro, Roberto Rabinovich, Ana F. Mayer, Jose Luis Valera, Emanuela Bertoni, Joan A. Barbera, Roberto Rodriguez-Roisin, Josep Roca	Servei de Pneumologia, Hospital Clinic Barcelona (ES), Escola Universitaria d'infermeria y fisioterapia (EUIF) Blanquerna Universitat Ramon Lull, Barcelona (ES)	Physiological responses during four clinical exercise protocols in COPD patients	2002	ERS	Abstract	Pneumology
K4b2	2002	T. Troosters, R. Rabinovich, Jordi Villaro, R. Rabinovich, A. Casas, J. A. Barbera, R. Rodriguez-Roisin, J. Roca	Katholieke Universiteit of Luoven (BE), EUIF Blanquerna, Universitat Ramon Lull, Barcelona (ES), Universitat de Barcellona (ES)	Physiological responses to the 6-min walk test in patients with chronic obstructive pulmonary disease	2002; 20: 564-569	European Respiratory Journal	Article	Pneumology
K4b2	2002	Payne Warren, Culvenor John Lawrance Michael, Harvey Jack Cowley Stephen, Stuart David Williams Robyn	Movement of Sport Science, University of Ballarat, Ballarat, Victoria 3350, Australia	Reducing the energy cost of dragging sheep during sheep shearing	Aust NZ 2002; 18(2):173/179	Occup Health Safety	Article	Ergonomics
K4b2	2002	I. Vogiatzis, G. De Vito, A. Rodio, A. Madaffari, M. Marchetti	Strathclyde Institute for Biomedical Sciences, University of Strathclyde	The physiological demands of sail pumping in Olympic level	(2002) 86: 450-454	European Journal of Applied Physiology	Article	Sailing
K4b2	2001	Hua Ting, Xing-Guo Sun, Ming-Lung Chuang, David A. Lewis, James E. Hanson, and Karlman Wasserman	Division of Respiratory and Critical Care Physiology and Medicine, Department of Medicine, Harbor-UCLA Medical Center, Torrance, USA; Chung Shan Medical and Dental College, Taichung, Taiwan; Chang Gung Memorial Hospital, Taipei, Taiwan.	A non invasive assessment of pulmonary perfusion abnormality in patients with primary pulmonary hypertension	2001;119:824-832	Chest	Article	Pneumology
K4b2	2001	K. Keskinen, O. Keskinen, F. Rodriguez	University of Jyvaskyla, Finland; Istitut Nacional d'Eduacio Fisica de Catalunya, University of Barcellona, Spain	Aerobic cost of crawl during an incremental pool test measured by breath by breath gas analysis	Cologne 24-28, July, 2001	ECSS	Abstract	Swimming
K4b2	2001	M. Kiss, R. Vilela, K. Matsushige, E. Franchini, V. Martin, M. Regazzini	Laboratory of sport performance, Physical education and sport school, University of Sao Paolo (Brazil)	Aerobic power of Young soccer players in treadmill and 20 m shuttle run test	Cologne 24-28, July, 2001	ECSS	Abstract	Football
K4b2	2001	Duncan J. Macfarlane	Physical Education and Sports Science Unit, The University of Hong Kong, Pokfulam, Hong Kong	Automated Metabolic Gas Analysis Systems	2001; 31 (12)	Sports Med	Article	Validation
K4b2	2001	Macfarlane DJ	Physical Education and Sports Science Unit, The University of Hong Kong, Pokfulam	Automated metabolic gas analysis systems: a review.	2001;31(12):841-61.	Sports Med.	Article	Validation
K4b2	2001	Kristin Leigh Campbell	School of human kinetics, University of British Columbia	Body changes in women undergoing chemotherapy for breast cancer	2001		Thesis	Oncology
K4b2	2001	Scott Crouter, Carl Foster, Phillip Esten, Glen Brice, John P. Porcari	Dept of Exercise and Sport Science, University of Wisconsin-La Crosse (USA)	Comparison of incremental treadmill exercise and free range running	2001, 0195-9131/01/3304-0644	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2001	S.Perrey, A.Betik, R. Candau, J. D. Rouillon, R. L. Hughson	University of Waterloo, Ontario (CA); UFRSTAPS, Besancon Cedex (FR); Universitè de Montpellier, Montpellier (FR)	Comparison of oxygen uptake kinetics during concentric and eccentric cycle exercise	2001, 91, 2135-2142	J. Appl. Physiol.	Article	Exercise physiology
K4b2	2001	Murray J. Chrusch, Philip D. Chilibeck, Karin E. Chad, K. Shawn Davison, Darren G. Burke	College of Kinesiology, University of Saskatchewan, Saskatoon, Saskatchewan Canada	Creatine supplementation combined with resistance training in older men	2001, 0195-9131/01/3312-2111	Medicine & Science in Sports & Exercise	Article	Diet & Food Supplement
K4b2	2001	F. Rodriguez, T. Cabanes, X. Iglesias, J. Garcia-Manso, J. Ventura, M. Huertas, R. Costa	Institut nacional d'Eduacio Fisica de Catalunya, Universitat de Barcellona, Spain; Departamento de educacion fisica, Universidad de Las Palmas de Gran Canaria Spain	Cycling performance and Vo2 kinetics at sea level and simulated Altitude (2230 m) in world-class track cyclists	Cologne 24-28, July, 2001	ECSS	Abstract	Altitude
K4b2	2001	Alexandre P. Demarle, Jean J. Slawinski, Laurent P. Laffitte, Valery G. Bocquet, Jean Pierre Koralsztein, Veronique Billat,	Faculte de science du sport, Universitè de Lille 2, Ronchin (FR) Universitè du Paris (FR), CCAS Paris (FR)	Decrease of O2 deficit is a potential factor in increased time to exhaustion after specific endurance training	2001, 90, 947-953	J. Appl. Physiol.	Article	Running
K4b2	2001	S. Ring, B. Paulweber, L. Schimofor, M. Weiss, E. Muller	Institute od sport sciences, University of Salzburg, Austria; dept of internal medicine, St. Johannes Hospital, Landeskliniken Slazburg	Dose-Response effects in physical activity and blood lipids of sedentary males with metabolic syndrome	Cologne 24-28, July, 2001	ECSS	Abstract	Obesity
K4b2	2001	Veronique Billat, Jean Slawinski, Mathieu Danel, Jean Pierre Koralsztein	Faculty of sport science, Universite de Lille 2 (FR); CCAS, Paris (FR);	Effect of free versus constant pace on performance and oxygen kinetics in running	2001, 0195-9131/01/3312-2082	Medicine & Science in Sports & Exercise	Article	Running
K4b2	2001	J. Merkari, K. Keskinen, F. Rodriguez	University of Jyvaskyla, Finland; Istitut Nacional d'Eduacio Fisica de Catalunya, University of Barcellona, Spain	Effects of body position and water immersion on human cardiorespiratory and metabolic responses	Cologne 24-28, July, 2001	ECSS	Abstract	Water based activities
K4b2	2001	Yi-Jane Wu, Ssu-Yuan Chen, Ming-Chuan Lin, Ching Lan, Jin-Shin Lai	Dept of physical medicine and rehabilitation, National Taiwan University hospital, Taipei, Taiwan	Energy Expenditure of Wheeling and Walking During Prosthetic Rehabilitation in a Woman With Bilateral Transfemoral Amputations	2001, vol 82, 265-269	Arch Phys Med Rehabil	Article	GAIT
K4b2	2001	Kristopher H. Doyon, Stephane Perrey, Daijro Abe, Richard L. Hughson	Dept of Kinesiology, University of Waterloo, Ontario (CA);	Field testing of VO2 peak in cross-country skiers with portable breath by breath system	2001; 26(1): 1-11	Canadian J. of Appl. Physiol.	Article	Skiing
K4b2	2001	J. Harrell		Fighting Childhood Cardiovascular Risk Factors and their Adulthood Consequences.	2000-2001 11	Carolina Nursing Research Chronicle	Article	Cardiology
K4b2	2001	B. Ochmann	dept of exercise physiology, University of Physical education, Wroclaw, Poland	Generalized regression neural networks for prediction of VO2 in progressive exercise on cycle ergometer	Cologne 24-28, July, 2001	ECSS	Abstract	Exercise physiology
K4b2	2001	Ching Lan, Ssu-Yuan Chen, Jin-Shin Lai, May-Kuen Wong	National Taiwan University hospital; Chang Gung Memorial Hospital, Taipei, Taiwan ;	Heart Rate Responses and Oxygen Consumption during Tai Chi Chuan Practice	2001, vol 29, Nos. 3-4, pp. 403-410	American J. Chinese Med.	Article	Combat Sports
K4b2	2001	L. V. Billat	Faculty of Sport Science, University Lille, Lille, France	Interval Training for Performance: A Scientific and Empirical Practice	2001; 31 (1): 13-31 0112-1642/01/0001-0013	Sports Med	Article	Running
K4b2	2001	Maassen N., Schneider B., Schro' der O., Mathews J.	Department of the Sports Physiology, Medical School, Hannover, Germany	Kinetics of oxygen uptake during exercise is dependent on carbohydrate intake	Marseille (France), October 4-6, 2001	Workshop 'Non Invasive Investigation of Muscle Function'	Abstract	Exercise physiology
K4b2	2001	Philippe Terrier, Quentin Ladetto, Bertrand Merminod, Yves Schultz	Institute of Physiology, University of Lausanne, Lausanne, Switzerland; Institute of Geomatics Swiss Federal Institute of technology, Lausanne Switzerland	Measurement of the mechanical power of walking by satellite positioning system (GPS)	2001, 0195-9131/01/3311-1912	Medicine & Science in Sports & Exercise	Article	Exercise physiology

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K4b2	2001	A. Ferrauti, B. Jentsch, E. Grodzinski, H. Leehr, K. Weber	Institute for sport games, German sport university Cologne (DE)	Metabolic and cardiovascular demands in womens senior golf	Cologne 24-28, July, 2001	ECSS	Abstract	Golf
K4b2	2001	J. M. Labreche	B.H.K. University of British Columbia	Metabolic specificity in outrigger canoe paddlers	2001		Thesis	Rowing
K4b2	2001	B. Dawson*, N. Randall, K. Cowper & H. Pinnington	Human Movement and Exercise Science, The University of Western Australia	Minimum aerobic fitness standards for Western Australian firefighters	2001	Australian Conference of Science and Medicine in Sport	Abstract	Firefighter
K4b2	2001	A. Schmidt, S. Weber	Institute of sports and environment (dept of cycling) German Sport university Cologne (DE)	Pedaling technique effects cycling performance.	Cologne 24-28, July, 2001	ECSS	Abstract	Cycling
K4b2	2001	Veronique Billat, Alexandre Demarle, Jean Slawinski, Mario Paiva, Jean Pierre Koralsztein	Faculty of sport science, Universite de Lille 2 (FR); University of Porto (PT); CCAS, Paris (FR);	Physical and training characteristics of top-class marathon runners	2001, 0195-9131/01/3312-2089	Medicine & Science in Sports & Exercise	Article	Running
K4b2	2001	E. Franchini, M. Takito, R. Bertuzzi, C. Cavinato, M. Kiss	Laboratory of sport performance, Physical education and sport school, University of Sao Paulo (Brazil)	Physiological and metabolic profile of upper body intermittent anaerobic exercise	Cologne 24-28, July, 2001	ECSS	Abstract	Exercise physiology
K4b2	2001	N. Blondel, G. Lensele, S. Berthoin, V. Billat	Laboratoire d'etude de la motricité humaine, Université de Lille II (FR); Laboratoire d'Analyse multidisciplinaire des activités physiques et sportives (LAMAPS), UFRSTAPS de Lievin, Université d'Artois, France	Relationship between run times to exhaustion at 90, 100, 120 and 140% of vVO2 max and velocity expressed relatively to critical velocity and maximal velocity	2001; 22:27-33	International Journal of Sport Medicine	Article	Running
K4b2	2001	R. Acero, M. Del Olmo, J. Tuimil, X. Iglesias, F. Rodriguez	Instituto nacional de Educacion Fisica de Galicia, Universidade da Coruna, Spain; Institut Nacional d'Educao Fisica de Catalunya, Universitat de Barcelona Spain	Running Efficiency parameters during a track test for the determination of the aerobic speed	Cologne 24-28, July, 2001	ECSS	Abstract	Running
K4b2	2001	R. Acero, M. Del Olmo, J. Tuimil, X. Iglesias, F. Rodriguez	Instituto nacional de Educacion Fisica de Galicia, Universidade da Coruna, Spain; Institut Nacional d'Educao Fisica de Catalunya, Universitat de Barcelona Spain	Running Pattern during exhaustive track test at the maximum aerobic speed and time limit performance	Cologne 24-28, July, 2001	ECSS	Abstract	Running
K4b2	2001	A. Jastrzebska	Dept of exercise physiology, University of Physical education, Wroclaw, Poland	Searching the work rate for physical ability estimation	Cologne 24-28, July, 2001	ECSS	Abstract	Exercise physiology
K4b2	2001	Scott J. Strath, David R. Bassett, Ann M. Swartz, Dixie L. Thompson	Dept. of exercise science and sport management University of Tennessee, Knoxville (TN)	Simultaneous heart rate-motion sensor technique to estimate energy expenditure	2001, 0195-9131/01/3312-2118	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2001	U. Hartmann, M. Niessen, B. Sasse, R. Paulet, J. Mester	Institute for theory and practice of training and movement, German Sport University of Cologne (DE); Institute for theory and practice in sports, Faculty of sport science,, Technical University Munich (DE)	The effect of an oral MCT-Based supplementation on athletic performance and energy metabolism	Cologne 24-28, July, 2001	ECSS	Abstract	Diet & Food Supplement
K4b2	2001	V. Mishchenko, A. Suchanowski, T. Tomiak	University school of physical education, Gdansk, poland	The features of endurance performance in elite rowers with different VO2 Kinetics response	Cologne 24-28, July, 2001	ECSS	Abstract	Rowing
K4b2	2001	Sue Ann Sisto	Kesseler medical rehabilitation research & education corporation	The human performance and movement analysis laboratory: investigating novel ways of overcoming disability	Volume 1, 2001	Innovations	Article	GAIT
K4b2	2001	H. C. Pinnington, P. Wong, J. Tay, D. Green, B. Dawson	Dept of human movement and exercise sciences, the university of Western Australia (Perth, Aus)	The level of accuracy and agreement in measures of FEO2, FECO2 and VE between the Cosmed K4b2 portable, respiratory gas analysis system and a metabolic cart	2001 Sep; 4(3):324-35	J Sci Med Sport	Abstract	Validation
K4b2	2001	Eli R. Groppo, Andrew T. Mahar, Rachel C. VanderLinden, Adnan Kutuk, Robert K. Eastlack, Amy Langemack, Greg C. Steinbach, Robert A. Pedowitz, Alan R. Hargens	Dept of Orthopaedics, University of California, San Diego, CA (USA); Orthopaedic Biomechanics Research Center, Children's Hospital San Diego, CA (USA);	The Use of a lower body pressure chamber as a rehabilitation and training modality: a Biomechanical Analysis	2001	American Society of Biomechanics	Lecture	Medical engineering
K4b2	2001	G. Galvani, M. Massarini, R. Laukkanen, H. Kimmunen	Technogym Research Center, Gambettola (IT); Polar Electro Oy, Kempele, Finland; University of Oulu Dept of Medicine, Oulu, Finland;	Training threshold determination based on heart rate variability on cardioVascular equipment	Cologne 24-28, July, 2001	ECSS	Abstract	Exercise physiology
K4b2	2001	J. E. McLaughlin, G. A. King, E. T. Howley, D. R. Bassett, B. E. Ainsworth	University of Tennessee, Knoxville (USA); University of South Carolina (USA)	Validation of the Cosmed K4b2 portable Metabolic System	2001; 22: 280-284	International Journal of Sport Medicine	Article	Validation
K4b2	2001	Brian B. Parr, Scott J. Strath, David R. Bassett, Jr., and Edward T. Howley	Exercise Science, University of South Carolina-Aiken, Aiken	Validation of the Cosmed K4b2 portable metabolic validation system	33(5) · May 2001	MSSE	Article	Validation
K4b2	2001	A. Dourado, M. Peduti Dal'Molin Kiss, L. Reeberg Stanganelli, A. Frisseli, L. Bobroff Daros	Universidade Estadual de Londrina, Cenesp-UEL, Brazil; Universidade de Sao Paulo Cenesp-USP, Brazil; Londrina Country Club, Brazil; Londrina Esporte Clube, Brazil	Validation of the yo-yo (shuttle run) intermittent test of aerobic resistance for soccer players	Cologne 24-28, July, 2001	ECSS	Abstract	Football
K4b2	2001	E. Berton, P. Francia, F. De Marco, P. Onorati, A. Rosato, R. Antonucci, M. Curione, S. Carlone, P. Palange	University "LA SAPIENZA" Rome, Italy; Dipartimento di medicina clinica, Seconda clinica medica	Ventilatory and metabolic adaptations to cycling (C) and walking (W) in patients with chronic heart failure (CHF)	2001 Berlin	ERS	Abstract	Cardiology
K4b2	2001	Veronique Billat, Jean Slawinski, Alexandre Demarle, P. Chassaing, Jean Pierre Koralsztein	Laboratoire d'etude de la motricité humaine, Université de Lille II (FR); Faculté des sciences du sport Ronchin (FR); Centre de médecine du sport CCAS, Paris (FR);	Very short (15s-15s) Interval-Training Around the Critical Velocity Allows Middle-Aged Runners to maintain VO2 max for 14 minutes	2001; 22: 201-208	International Journal of Sport Medicine	Article	Running
K4b2	2000	F. Rodriguez	Institut nacional d'Educao Fisica de Catalunya, Universtat de Barcelona, Spain	Cardio-respiratory aspects in swimming	2000, p.89	ECSS	Abstract	Swimming
K4b2	2000	G. Dupont, N. Blondel, V. Billat, S. Berthoin	Université de lille 2 (FR); Université de Lievin, (FR); CCAS Paris	Determination of the velocity which allows to sustain longer time at VO2 max in short intermittent runs (15s)	2000, p.245	ECSS	Abstract	Running
K4b2	2000	O. P. Keskinen, K. L. Keskinen, A. Mero	Dept of biology of physical activity, University of Jyväskylä, Finland	Effect of pool length during exercise testing in swimming	2000, p.393	ECSS	Abstract	Swimming
K4b2	2000	N. Blondel, P. M. Lepetre, M. Dabouca, V. Billat, S. Berthoin	Université de lille 2 (FR); UFR STAPS de Lievin, Université d'Artois, (FR); CCAS Paris	Effects of interval training at supra-maximal velocities on time limit versus velocity relationship	2000, p.166	ECSS	Abstract	Running
K4b2	2000	Guidetti L, Baldari C, Capranica L, Persichini C, Figura F	University Institute of Motor Sciences (IUSM) of Rome, Italy	Energy Cost and Energy Sources of Ball Routine in Rhythmic Gymnasts	2000 Apr;21(3):205-9.	Int J Sports Med.	Article	Dance & Music
K4b2	2000	J. Poortmans, C. Colinet, C. Lehner, M. Francaux	Université libre de bruxelles, Belgium, Université Catholique de loouvain, Belgium	Energy system utilization during wall climbing	2000,Vol32, N.5-S161	ACSM	Abstract	Climbing
K4b2	2000	Scott J. Strath, David R. Bassett, Ann M. Swartz, William O'Brien, George A. King, Barbara E. Ainsworth	University of Tennessee, Knoxville (USA); University of South Carolina (USA)	Estimation of energy expenditure using CSA accelerometers at hip and wrist sites	2000,0195,S450-456	Medicine & Science in Sports & Exercise	Article	Wearables

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	2000	Scott J. Strath, David R. Bassett, Ann M. Swartz, William O'Brien, George A. King, Barbara E. Ainsworth	University of Tennessee, Knoxville (USA); University of South Carolina (USA)	Evaluation of heart rate as a method for assessing moderate intensity physical activity	2000,0195,S465-469	Medicine & Science in Sports & Exercise	Article	Exercise physiology
K4b2	2000	M. Faina, C. Benvenuti, C. Marini, S. Lupo, V. Palmieri	Institute of sport science CONI (Rome-Italy); University Institute of Motor science, Rome (IT); Chatolico University of sacred Hearth (Rome IT)	Functional model of female five-side soccer	2000, p.251	ECSS	Abstract	Football
K4b2	2000	Veronique Billat, Jean Slawinski, Valery Bocquet, Alexandre Demarle, Patrick Chassaing, Jean Pierre Koralsztein	Laboratoire d'etude de la motricité humaine, Université de Lille II (FR); Faculté des sciences du sport Ronchin (FR); Centre de médecine du sport CCAS, Paris (FR);	Intermittent runs at the velocity associated with maximal oxygen uptake enables subjects to remain at maximal oxygen uptake for a longer time than intense but submaximal runs	2000,81, 188-196	European Journal of Applied Physiology	Article	Running
K4b2	2000	V. Billat, Cyril Petitbois	University of Lille 2 (FR), Université Victor Segalen Bordeaux 2 (FR);	Le k4, les Nouveaux tests de Terrain Arrivent	2000, n.117, p. 82-83	Marathon V02	Article	Validation
K4b2	2000	Susan Sienko, Craig McDonald	Shriners Hospital For Children, OR (USA); University of California, Davis CA (USA);	Methodologies and considerations in the assesment of energy efficiency and the usefulness of energy measurements for intervention outcome assesment	2000	CGMAS - gait and clinic movement analysis society	Lecture	GAIT
K4b2	2000	Brian Dawson, Nick Randall, Kate Cowper	Dept. of human movement and exercise science, The University of Western Australia	Minimum Aerobic fitness standards and changes to current physical performance test battery	2000	Internal report of the UWA		Firefighter
K4b2	2000	V.Billat, M. Paevia, A. Demarle, J. Slawinski, C. Petitbois, J. P. Koralsztein	University of Lille 2 (FR), University of Porto (PT), Université Victor Segalen Bordeaux 2 (FR); CCAS Paris (FR)	Optimisation of Marathon Performance Through Testing	2000, p.28	ECSS	Abstract	Running
K4b2	2000	Lauren E. Ballard, Peter H. Brubaker, Gary D. Miller, Michael J. Berry	Dept of health and exercise science, Wake Forrest University, Wiston -Salem, NC (USA)	Oxygen consumption via Cosmed k4b2: Reliability and Implications for Exercise prescription	2000, vol.20, n.5, p.289	JCR AACVPR	Abstract	Validation
K4b2	2000	J. Chapman, D. Claxton, L. Donnan, M. Fysh	The Sport Science research institute, Sheffield Hallam University Sheffield (UK); The Royal Children's Hospital, Melbourne, Australia	Oxygen cost of walking at self-selected speeds in achondroplastic subjects	2000, p.202	ECSS	Abstract	GAIT
K4b2	2000	T. Troosters, R. Rabinovich, Jordi Villaro, A. Capitan, C. Villar, E. Gonzales, R. Rodriguez-Roisin, J. Roca	Katholieke Universiteit of Luoven (BE), EUIF Blanquerma, Universitat Ramon Llull, Barcellona (ES), Universitat de Barcellona (ES)	Oxygen uptake kinetics during a six minute walking test in COPD	2000	ERS	Abstract	Pneumology
K4b2	2000	E. Colantonio, E. Franchini, K. A. Matsushige, M. A. P. D. M. Kiss	Laboratory of sport performance, Physical education and sport school, University of Sao Paolo (Brazil)	Physiological and performance responses on two wingate bouts in adolescent athletes	2000, p.215	ECSS	Abstract	Exercise physiology
K4b2	2000	E. Hynnenen, K. Kalliokoski, K. Hakkinen, H. K. Rusko	KIHU - Research Institute for Olympic Sports, Jyväskylä, Finland; Neuromuscular research center & dept of biology and physical activity, Jyväskylä, Finland	Physiological comparison of classical vs free style skiing in adolescent cross-country skiers	2000, p.337	ECSS	Abstract	Skiing
K4b2	2000	P.O. Jarvinen, K. L. Keskinen, K. Hakkinen	Dept of biology of physical activity, University of Jyväskylä, Finland	Post-exercise oxygen consumption and stroke performance in national level triathletes and competitive swimmers	2000, p. 367	ECSS	Abstract	Swimming
K4b2	2000	S. Berthoin, N. Blondel, G. Dupont, P. Mary, P. Bacquaert	Univerité de Lille 2, France; Université de lievin, (FR); Institut Regional de biologie et de médecine du sport, Ronchin (FR)	Predicting sprint kinematic parameters from anaerobic field-tests	2000, p.159	ECSS	Abstract	Running
K4b2	2000	R. Baker, A. Haush, B. McDowell	Musgrave Park Hospital, Belfast, Ulster (UK); University of Ulster, Newtownabbey, Ulster	Reducing the variability of oxygen consumption measurements	2000	Gait & Posture	Article	GAIT
K4b2	2000	W.Mishchenko, A Suchanowski, R. Laskowski	Dept of theory of sport ans physiology, University school of Physical Education Gdansk, Poland	The determination of specialised training effects in high-level rowers on the basis of accounting specific features of cardio-respiratory response.	2000, p. 501	ECSS	Abstract	Rowing
K4b2	2000	A. Campbell, S. Enright, V. Unnithan	School of health sciences, Sheffield Hallam University, Sheffield (UK); School of Health care professions, University of Salford, Salford (UK); dept of exercise and sport science, University of S. Francisco (USA)	The effect of inspiratory muscle training on the measurement of resting energy expenditure in adult patients with cystic fibrosis and in healthy subjects	2000	ERS	Abstract	Pneumology
K4b2	2000	D. Bishop, S. Lawrence, M. Spencer, C. Rechichi	Western Australia institute of Sport, Perth Australia.	The relationship between VO2max, buffer capacity and repeated sprint ability (RSA) in elite female hockey players	2000, p.161	ECSS	Abstract	Hockey
K4b2	2000	T. Troosters, R. Rabinovich, Jordi Villaro, A. Capitan, C. Villar, E. Gonzales, R. Rodriguez-Roisin, J. Roca	Katholieke Universiteit of Luoven (BE), EUIF Blanquerma, Universitat Ramon Llull, Barcellona (ES), Universitat de Barcellona (ES)	The six minute walking test in COPD, a submaximal test?	2000	ERS	Abstract	Pneumology
K4b2	2000	Norberto Santos, V. Billat, Mario Paiva	Faculty of sport science, Université de Lille 2 (FR); University of Porto (PT);	Treino científico "da" primeiros passos	2000, 15/02, p.38-39	Record	Article	Exercise physiology
K4b2	2000	T. Held, R. Steiner, K. Hubner, B. Marti	Institute of Sport sciences, Federal Office of Sports, Magglingen, Switzerland	Validation of a new field test with self-selected running velocities to estimate endurance capacity in runners	2000, p. 320	ECSS	Abstract	Running
K4b2	2000	A. De Lorenzo, G. Cenname	Università Tor Vergata Facoltà di Medicina e Chirurgia , Dipartimento di Neuroscienze, Rome Italy	Validazione di un calorimetro telemetrico portatile	2000		Thesis	Validation
K4b2	2000	Mitchell W. Craib, Julie L. Turner, David E. Kaminsky, Alan T. Arnholt, Alan P. Jung, Max Shute, David C. Nieman	Department of Health, Leisure and Exercise Science, Appalachian State University (USA)	Validity and reliability of the Cosmed K4b2 portable metabolic system	2000			Validation
K4b2	2000	Scott J. Strath, David R. Bassett, Ann M. Swartz, William O'Brien, George A. King, Barbara E. Ainsworth	University of Tennessee, Knoxville (USA); University of South Carolina (USA)	Validity of four motion sensors in measuring moderate intensity physical activity	2000,0195,S471-479	Medicine & Science in Sports & Exercise	Article	Wearables
K4b2	2000	G. Tortorella, D. Manari, V. Guiducci, U. Guiducci	Unità Operativa di Cardiologia, Arcispedale Santa Maria Nuova, Reggio Emilia (IT)	Valutazione Integrata Cardiopolmonare durante test dei 6 minuti di cammino (6MWT): esperienza in un gruppo di pazienti affetti da scompenso cardiaco	2000 May, vol1, suppl.1	Italian Hearth Journal	Abstract	Cardiology
K4b2	2000	Paolo Palange, Silvia Forte, Paolo Onorati, Felice Manfredi, Pietro Serra, S. Carlone	Dipartimento di Medicina Clinica, University of Rome "La Sapienza" (IT); CNR Rome (IT)	Ventilatory and metabolic adaptations to walking and cycling in patients with COPD	2000, 88, 1715-1720	J. Appl. Physiol.	Article	Pneumology
K4b2	2000	B. Ruby, G. Ledbetter and D. Armstrong	University of Montana, Mesa State College, National Naval Medical Center.	Wildland Firefighter Load Carriage: Effects on Transit Time and Physiological Responses During Simulated Escape Route Evacuation	Fall 2000. No.2	Wildland Firefighter Health & Safety report	Article	Firefighter
K4b2	1999	Shin-Jye Wu, Mao-Jiun J. Wang	National Tsing-Hua University, Taiwan	Acceptable Workload and acceptable working time	1999	Chinese Inst. of Industrial Engineers National Conference	Article	Ergonomics

Product	Year	Author	Institute	Title	Ref.	Journal/Meeting	Format	Topic
K4b2	1999	K. Baum, S. Hoy, F. Fischer, D. Leyk; O. Schmidt; D. Efeld	Department of Physiology, German Sport University Cologne, Cologne, GERMANY	Comparison between the physiological response to roller skiing and in-line skating in biathletes	April 1999 - Volume 31 - Issue 4 - pp 595-598	Medicine & Science in Sports & Exercise	Article	Skating
K4b2	1999	G. B. Mirri, M. Faina, F. Felici, A. Rosponi	CONI Institute of sport science, Rome (IT); University of Rome "La Sapienza", Institute of Human Physiology	Comparison between VO2 slow component at sea level and at high altitude	1999, vol.31.n.5, art.813	Medicine & Science in Sports & Exercise	Abstract	Altitude
K4b2	1999	Walsh D. D., Widman L, Ong E. K.	University of California, Davis (USA)	Energy cost of locomotion during walking, running, and wheelchair locomotion in children using a portable metabolic cart	1999 (Suppl. 80, Vol. 41:37)	Developmental Medicine and Child Neurology	Abstract	GAIT
K4b2	1999	Craig McDonald, Denise D. Walsh, Lana Widman, Erik K. Ong , Sandra A Walsh	University of California, Davis (USA)	Energy Cost of Locomotion in Boys with Duchenne Muscular Dystrophy Measured with a portable metabolic cart	1999	NASGMA	Abstract	GAIT
K4b2	1999	Boyd R, Fatone S, Rodda J, Olesch C, Starr R, Cullis E, Gallagher D, Carlin JB, Natrass GR, Graham K.	Hugh Williamson Gait Laboratory, Royal Children's Hospital, Parkville,Victoria, Australia	High or low technology measurements of energy expenditure in clinical gait analysis?	1999 Oct;41(10):676-82	Dev Med Child Neurol.	Article	GAIT
K4b2	1999	S. Soeder, M. Niessen, U. Hartmann, U. Hoffmann, W. Hallmann	German Sport University, Cologne (DE);	Validity and reliability of Two portable Spirometric Systems compared to the results of a mass Flow Meter	1999, 20	International Journal of Sport Medicine	Abstract	Validation
K4b2	1998	M. Faina, M. De Angelis, F. Anquillar	CONI Institute of sport science, Rome (IT);	Comparison of VO2 kinetics at onset of actual and laboratory simulated rowing performance	1998, p.279	ECSS	Abstract	Exercise physiology
K4b2	1998	S. Forte, P. Palange, P. Onorati, V. Paravati, G. De Rocco, P. Serra, S. Carlone	University of Rome "La Sapienza", dept of clinical medicine (IT); CNR Roma (IT);	Relationship between peak oxygen uptake (VO2 peak) and VO2 time constant during maximal and moderate exercise in COPD	1998,P1926, p. 287s	ERS	Abstract	Pneumology
K4b2	1998	P. Onorati, S. Forte, P. Palange, G. De Rocco, P. Serra, S. Carlone	University of Rome "La Sapienza", dept of clinical medicine (IT); CNR Roma (IT);	Reliability of Breath-by breath measurement of O2 uptake (VO2) and CO2 production (VCO2) by a portable telemetric system	1998, P2774, p.425s	ERS	Abstract	Validation
K4b2	1998	V. Billat, B. Petit, J. P. Koralzstein	Laboratoire Science du sport, Université Paris 5 (FR); CCAS Paris (FR);	VO2 slow component for a severe exercise is not correlated with time to fatigue but depends on type of exercise(cycling vs running) and is not influenced by cadence	1998, p.14	ECSS	Abstract	Exercise physiology
K4b2	1997	G. Castellano, S. Nardi, G. Gaudi	Corpo Veterinario dell'esercito, Infermeria Quadrupedi Presidiaria, Rome (IT); CONI Rome (IT);	Horse telemetry gas collection mask: field evaluation of athletic performances.	1997	WEVA	Article	Equine
K4b2	1997	De Vito G.; Di Filippo L.; Rodio A.; Felici F.; Madaffari A.	Human Physiology Institute, University "La Sapienza", Rome, Italy	Is the Olympic Boardsailor an Endurance Athlete?	1997, vol. 18, no4, pp. 281-284	International Journal of Sport Medicine	Article	Sailing
K4b2	1996	E. Melanson, L. Edward; P.S. Freedson; R. Webb; S. Jungbluth, N. Kozlowski	Department of Exercise Science, University of Massachusetts, Amherst, MA, USA	Exercise responses to running and in-line skating at self-selected paces	February 1996 - Volume 28 - Issue 2 - pp 247-250	Medicine & Science in Sports & Exercise	Article	Skating
K4b2		Yongwon Jang , Dae-Sik Lee , Seunghwan Kim	Electronics and Telecommunications Research Institute in Korea, Daejeon 34129, Korea	Development of Calorie Tracking Algorithm for Children and Comparison with Commercialized Product	2017, 1(4), 595	Proceedings	Article	Wearables
K4b2		Michal Garnys, Gabrys Tomasz, Urszula Smatlan-Gabrys, Lidia Stanisz, Remigiusz Rzepka, Marek Galinski, Artur Lukaszewicz	4SportLab Warsaw, Poland	Programming training loads MTB cyclists during first 7-days of the stay in conditions of high-altitude hypoxia	Vol. 6(3), 28-29	J Sci Cycling.	Article	Cycling
K4b2		de Jesus K, Guidetti L, de Jesus K, Vilas-Boas JP, Baldari C, Fernandes RJ	Centre of Research, Education, - Innovation and Intervention in Sport, Faculty of Sport, -University of Porto, Porto, Portugal.	Which are the best VO2 sampling intervals to characterize low to severe swimming intensities?	2014 Nov; 35(12):1030-6.	Int J Sports Med.	Article	Swimming