

Actiheart Bibliography

The bibliography contains references for published papers and abstracts from scientific meetings, in which the use of the Actiheart monitoring system has been reported.

2010

Assah, F.K., Ekelund, U., Brage, S., Wright, A., Mbanya, J.C. & Wareham, N.J. (2010). Accuracy and validity of a combined heart rate and motion sensor for the measurement of free-living physical activity energy expenditure in adults in Cameroon. *International Journal of Epidemiology* in press.

Brage, S., Assah, F., Pomeroy, J., Mbanya, J-C., Knowler, W., Franks, P., Ekelund, N. & Wareham, N. (2010). Self-Paced Walking Test as Alternative to Step Test for Field Calibration of Heart Rate to Energy Expenditure. A poster presented at the Third International Congress on Physical Activity and Public Health, Toronto, Canada, 2-5th June.

Bray, M.D., Pomeroy, J., Brage, S., Knowler, W.C., Franks, P.W., Luick, B., Hopkins, S. & Boyer, B.B. (2010). Accuracy of Actiheart Monitors in Determining Free-Living Energy Expenditure in Yup'ik Eskimos. A poster presented at the Third International Congress on Physical Activity and Public Health, Toronto, Canada, 2-5th June.

De Hollander, E., Wendel-Vos, W. & Schuit, J. (2010). Estimates of Physical Activity Guidelines in the Netherlands: Valid or Not? A poster presented at the Third International Congress on Physical Activity and Public Health, Toronto, Canada, 2-5th June.

Kerr, J., Raab, F., Ramirez, E., Norman, G. & Patrick, K. (2010). Integrating Multiple Sensors to Improve Assessment of Physical Activity in Time and Space. A poster presented at the Third International Congress on Physical Activity and Public Health, Toronto, Canada, 2-5th June.

Ridgway, C., van Sluijs, E., Goodyer, I., Halla, P. & Ekelund, U. (2010). Does Birth Weight Influence Physical Activity in Youth? A Meta-Analysis. A poster presented at the Third International Congress on Physical Activity and Public Health, Toronto, Canada, 2-5th June.

Takken, T. et al. (2010) [Calibration of the Actiheart accelerometer for the prediction of activity energy expenditure in children with chronic disease.](#) *European Journal of Clinical Nutrition*.

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Turner, J.E., Markovitch, D., Betts, J.A. & Thompson, D. (2010). [Nonprescribed physical activity energy expenditure is maintained with structured exercise and implicates a compensatory increase in energy intake.](#) *American Journal of Clinical Nutrition*.

2009

Arvidsson, D. (2009). [Physical activity and energy expenditure in clinical settings using multisensory activity monitors.](#) *Institute of Medicine, Sahlgrenska Academy at the University of Gothenburg*.

Barreira, T., Kang, M., Caputo, J., Farley, S. & Renfrow, M. (2009). Validation of the Actiheart Monitor for the Measurement of Physical Activity. *International Journal of Exercise Science* 2(1), pp. 60-71.

Bock, S., Steel, C., McLure, S., Moore, H., Cooley, D., Batterham, A. (2009). Deriving an Ecologically Valid Accelerometer Cut-Point for Free-Living Physical Activity In Children: An Exploratory Study. *Abstract presented to the 56th Annual Meeting of the American College of Sports Medicine.*

Dixon, N.C., Hurst, T.L., Talbot, D.C.S., Tyrell, R.M. & Thompson, D. (2009) [Active middle-aged men have lower fasting inflammatory markers but the postprandial inflammatory response is minimal and unaffected by physical activity status.](#) *Journal of Applied Physiology* 107, pp. 63-68

Finucane, F. (2009). [Obesity in Irish Youth: Epidemiology and Implications.](#) *Irish Journal of Medical Science.*

Ntoumanis, N. & Standage, M. (2009). [Motivation in physical education classes: A self-determination theory perspective.](#) *Theory and Research in Education* 7(2), pp. 194-202.

Reichert, F.F., Menezes, A.M., Kingdom Wells, J.C., Ekelund, E., Rodrigues, F.M. & Hallal, P.C. (2009). A methodological model for collecting high-quality data on physical activity in developing settings – the experience of the 1993 Pelotas (Brazil) Birth Cohort Study. *Journal of Physical Activity and Health* 6(3), pp. 380-366.

Steel, C., McLure, S., Moore, H., Cooley, D., Bock, S., & Batterham, A. (2009) Dissecting Physical Activity Behaviours in Children Using Objective Measures with Individual Calibration: An Exploratory Study. *Abstract presented to the 56th Annual Meeting of the American College of Sports Medicine.*

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Thompson, D., Batterham, A., Markovitch, D., Dixon, N., Lund, A. & Walhin, JP. (2009) Confusion & Conflict in Assessing the Physical Activity Status of Middle-aged Men. *PLoS ONE* 4(2): e4337.

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Despres, J. & Marzo, V. (2008). Abdominal Obesity and the Endocannabinoid System: From Basic Aspects to Clinical Management of Related Cardiometabolic Risk. *Informa Health Care Publications, USA.*

Ivarsson, M., Anderson, M., Akerstedt, T. & Lindblad, F. (2008). Playing a violent television game affects heart rate variability. *Acta Paediatrica* 98(1), pp. 166-172.

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Hagins, M., Moore, W. & Rundle, A. (2007). Does practicing hatha yoga satisfy recommendations for intensity of physical activity which improves and maintains health and cardiovascular fitness? *BMC Complementary and Alternative Medicine* 7(40).

Hagstromer, M. (2007). [Assessment of Health-Enhancing Physical Activity at Population Level.](#) *Karolinska Institutet, Stockholm, Sweden.*

Kang, M., Caputo, J., Farley, R., Barreira, T., Bettel, J. & Renfrow M. (2007). Validation of the Actiheart Monitor in the Laboratory Setting. *Abstract presented at the 54th Annual Meeting of the American College of Sports Medicine.*

Krueger, A. (2007). Validating the American Time Use Survey: Does anybody really know what they were doing yesterday? *University of Princeton presentation.*

Parish, L., Rudisill, M. & St. Onge, P. (2007). Mastery Motivational Climate: Influence on Physical Play and Heart Rate in African American Toddlers. *Research Quarterly for Exercise and Sport 78(3), pp. 171-178.*

Rowlands, A. & Eston, R. (2007). The measurement and interpretation of children's physical activity. *Journal of Sports Science and Medicine 6, pp. 270-276.*

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Batterham, A., Bock, S., Robson, C., Stokes, K. & Thompson, D. (2005). Development of Group Calibration Equations for a single piece Heart Rate & Accelerometry Instrument. *Abstract presented at the 52nd Annual Meeting of the American College of Sports Medicine.*

Brage, S., Brage, N., Ekelund, U., Franks, P., Froberg K, & Wareham, N (2005). Cross validation of intensity prediction equations for treadmill walking and running: The combined heart

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Brage, S., Brage, N., Ekelund, U., Luan, J., Franks, P., Froberg, K. & Wareham, N. (2005). Effect of combined movement and heart rate monitor placement on physical activity estimates during treadmill locomotion and free-living. *European Journal of Applied Physiology* 96, pp. 517-524.

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Brage, S., Brage, N., Franks, P., Ekelund, U., Wong, M., Anderson, L., Froberg, K. & Wareham, N. (2004). Branched equation modelling of simultaneous accelerometry and heart rate monitoring improves estimate of directly measured physical activity energy expenditure. *Journal of Applied Physiology* 96, pp. 343-351.

Ongoing Projects

These are ongoing projects where some part of the investigation is making use of Actihearts, either to measure the outcome directly or support an intervention with greater control.

Coe, C., Essex, M., Goldsmith, H., Pollak, S., Haggerty, K., Skinner, M., Vitacco, M., Maxler, C. [S.P.I.T. Lab Projects, UNO Based Projects: Sensation Seeking and A Real World Stressor: Hormonal and Autonomic Effects.](#)

Gold, C. [Effects of Music Therapy for Prison inmates: a pilot study, ISRCTN22518605](#)

Medical Research Council Epidemiology Unit [Investigating the Causes and Prevention of Diabetes and Obesity: Cameroon Study](#)

Butte, N. [Prediction of Energy Expenditure/Physical Activity In Children and Adolescents](#) *National Institute of Diabetes And Digestive And Kidney Diseases*

Casey, C. [Physiologic Responses to Simulated Care Activities in Older Surgical Patients](#) *National Institute of Nursing Research*

Gaesser, G. [A Wireless, Multimode, Artificial Neural Network-Based Physical Activity Monitor](#) *National Heart, Lung, and Blood Institute*

Hagins, M., Pappas, E., Spierer, D., Rundle, A. [Measurement of Physical Activity using Accelerometers](#) *Health and Wellness Institute, Long island University*

Tanjarsiri, S. [Creating the Pacific Islander Physical Activity Questionnaire \(PIPAQ\)](#) *National Cancer Institute*

Crespo, C. [Measurement of Physical Activity in Older Adults: Comparison of Heart Rate and Accelerometry](#) *Oregon Health & Science University*

Raffaelli, C. [Analysis of the energy expenditure of water based activities and of their effects on physical capacity and body composition after training](#) *Faculty of Exercise and Sports Science, University of Verona*

Goodper, I., Jones, P., Herbert, J., Croudace, T. [The Roots Study Project \(adolescent life\)](#) *Wellcome Trust*

Inskip, H. et al. [Southampton Women's Survey](#), *Medical Research Council Epidemiology Resource Centre*