

PAPERS (PEER REVIEWED)

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Rowland, T. W., Staab, J. S., Unnithan, V. B., Rambusch, J. M. and Siconolfi, S. F. Thoracic bioimpedance measurement of cardiac response to maximal exercise. *Journal of Cardiopulmonary Rehabilitation*. 1989; 9 (8): 311-315.

Rowland, T. W., Staab, J. S., Unnithan, V. B., Rambusch, J. M. and Siconolfi, S.F. Mechanical efficiency during cycling in pre-pubertal and adult males. *International Journal of Sports Medicine*. 1990; 11 (6): 452-455.

Unnithan, V. B. and Eston, R. G. Stride frequency and submaximal treadmill running economy in adults and children. *Pediatric Exercise Science*. 1990; 2 (2): 149-155.

Unnithan, V. B.

A comparison of the running economy between adults and children at four submaximal treadmill running speeds. Selected for microfiche publication - University of Oregon. 1990.

Rowland, T. W., Rambusch, J. M., Staab, J. S., Unnithan, V. B. and Siconolfi, S. F. Accuracy of Physical Working Capacity (PWC₁₇₀) in estimating aerobic fitness in children. *Journal of Sports Medicine and Physical Fitness*. 1993; 33: 184-188.

Unnithan, V. B., Thomson, K. J., Aitchison, T. C. and Paton, J. Y. β 2-agonists and running economy in pre-pubertal boys. *Pediatric Pulmonology*. 1994; 17: 378-382.

Rowland, T.W., Unnithan, V.B., MacFarlane, N.G., Gibson, N.G. and Paton, J.Y. Clinical manifestations of the "Athlete's Heart" in pre-pubertal male runners. *International Journal of Sports Medicine*, 1994; 15: 515-519.

Bar-Or, O., Unnithan, V. and Illescas, C.

Physiologic considerations in age-group swimming. Eds Miyashita, M., Mutoh, Y and Richardson, A.B. In *Medicine and Science in Aquatic Sports*. Med Sport Sci. Basel, Karger, 39, 199-205, 1994.

Bar-Or, O. and Unnithan, V.B.

Nutritional requirements of young soccer players. *Journal of Sports Sciences*. 1994, 12: S39-S42.

Unnithan, V. B., Wilson, J., Aitchison, T. C., Timmons, J. A. and Paton, J. Y. Validation of the Sensormedics (S2900Z) metabolic cart for pediatric exercise testing. *Canadian Journal of Applied Physiology* 1994; 19: 472-479.

Unnithan, V. B., Timmons, J. A. Paton, J. Y. and Rowland, T.W.
Physiologic correlates to running performance in pre-pubertal runners.
International Journal of Sports Medicine 1995; 16: 528-533.

***Hoofwijk, M., Unnithan, V.B. and Bar-Or, O.**
Maximal treadmill performance of children with cerebral palsy.
Pediatric Exercise Science 1995; 7: 305-313.

Unnithan, V.B., Murray, L.A., Timmons, J.A., Buchanan, D. and Paton, J.Y.
Reproducibility of cardiorespiratory measurements during submaximal and maximal
running in children. British Journal of Sports Medicine 1995; 29: 66-71.

Unnithan, V.B., Timmons, J.A., Brogan, R.T., Paton, J.Y. and Rowland, T.W.
Submaximal running economy in run-trained pre-pubertal boys. Journal of Sports
Medicine and Physical Fitness 1996; 36: 16-23.

Unnithan, V.B., Dowling, J.J., Frost, G., Volpe Ayub, B. and Bar-Or, O.
Cocontraction and phasic activity during gait in children with cerebral palsy. EMG and
Clinical Neurophysiology 1996; 36: 487-494.

Unnithan, V.B., Dowling, J.J., Frost, G., and Bar-Or, O. Role of cocontraction in
the O₂ cost of walking in children with cerebral palsy. Medicine and Science in
Sports and Exercise 1996; 28: 1498-1504.

Unnithan, V.B., Rowland, T.W., Cable, N.T. and Raine, N. Cardiac responses to
exercise in elite male junior cyclists (pp501-506). In Children and Exercise XIX.
Armstrong, N. , Kirby, B.J. and Welsman, J.R. (Eds). E & FN Spon, London, 1997.

Cable, N.T., Raine, N.M., Unnithan, V.B. and Rowland, T.W. Cardiovascular
adjustments following maximal exercise in elite male junior cyclists (pp507-513). In
Children and Exercise XIX. Armstrong, N. , Kirby, B.J. and Welsman, J.R. (Eds). E
& FN Spon, London, 1997.

Unnithan, V. Nutrition for the young footballer. Insight, Football
Association Coaches Journal. 1998; 1: 33.

Unnithan V. B., Clifford, C. and Bar-Or, O. Evaluation by Exercise Testing of the
Child with Cerebral Palsy. Sports Medicine 1998; 26(4): 239-251.

***Jones, M.A. and Unnithan, V.B.** The cardiovascular responses of male subjects to
kung fu techniques: Expert/Novice paradigm. Journal of Sports Medicine and
Physical Fitness 1998; 38: 323-329.

***Griffin, A. J., Unnithan, V. B. and Ridges, P.** The physiological effects of
swimming competition on 16-17 year-old elite female swimmers. Pediatric Exercise
Science 1999; 11: 22-31.

***Middlebrooke, A. R., Stephenson, G. and Unnithan, V. B.** An explorative study
into the relationship between increasing exercise intensity and visual function in

prepubertal male soccer players. *Pediatric Exercise Science* 1999; 11: 69-78.

Unnithan, V. and Griffin, A. Over-training in young football players. . *Insight, Football Association Coaches Journal*. 1999; 3: 52.

Kellis, E. and Unnithan, V.B. Co-activation of vastus lateralis and biceps femoris muscles in pubertal children and adults. *European Journal of Applied Physiology* 1999; 79: 504-511.

Unnithan, V.B., Dowling, J.J., Frost, G., and Bar-Or, O. Role of mechanical power estimates in the O₂ cost of walking in children with cerebral palsy. *Medicine and Science in Sports and Exercise* 1999; 31: 1703-1708.

Lange C, Unnithan V.B., Larkham E. and Latta, P. Maximizing the benefits of Pilates-inspired exercise for learning functional motor skills. *Journal of Bodywork and Movement Therapies* 4(2); 99-108: 2000.

Unnithan V.B. and Baxter-Jones. Invited chapter (**Nutrition for the Young Athlete**) for the International Olympic Committee Encyclopaedia of Sports Medicine, Editor R.J. Maughan, Blackwell Science Ltd, London, UK. pp 429-441, 2000.

Unnithan V.B., Veehof, S.H.E, Rosenthal, P., Mudge, C., O'Brien T.H. and Painter P. Fitness testing of pediatric liver transplant recipients. *Liver Transplantation* 7; 206-212: 2001.

Unnithan V. B., Veehof, S.H.E., Vella, C. and Kern, M. Is there a physiological basis for creatine usage in children and adolescents ? *Journal of Strength and Conditioning Research* 15 (4); 524-528: 2001.

Rowland, T., Unnithan, V.B., Fernhall, B., Baynard, T. and Lange C. Left ventricular response to dynamic exercise in young cyclists. *Medicine and Science in Sports and Exercise* 34 (4); 637-642: 2002.

Fernhall, B. and Unnithan, V.B. Physical activity, metabolic issues and assessment *Physical Medicine and Rehabilitation Clinics of North America* 13 (4): 925-947, 2002.

*** **Jones, M.A. Stratton, G., Reilly. T. and Unnithan, V.B.** Measurement error associated with spinal mobility measures in children with and without low-back pain. *Acta Paediatrica Scandinavica* 91: 1339-1343, 2002.

Maltais, D.,Unnithan, V.B., Wilk, B. and Bar-Or, O. Responses of children with cerebral palsy to arm-crank exercise in the heat. *Medicine and Science in Sports and Exercise* 36: 191-197, 2004.

Unnithan, V. B. and Maltais, D. *Pediatric Cerebral Palsy and Exercise. In Clinical Exercise Physiology: Application and Physiological Principles.* Editors LeMura and von Duvillard. Lippincot, Williams and Wilkins, pp 285-299, 2004.

*** **Jones, M.A. Stratton, G., Reilly. T. and Unnithan, V.B.** A school-based survey of recurrent non-specific low-back pain prevalence and consequences in children. *Health Education Research* 19: 284-289, 2004.

*** **Baynard, T., Unnithan, V.B., Pinetti, K., Fernhall, B.** Determination of ventilatory threshold in adolescents with mental retardation, with and without Down Syndrome. *Pediatric Exercise Science* 16: 126-137, 2004.

*** **Enright, S., Chatham, K., Ionescu, A., Unnithan, V.B. and Shale, D.J.** Inspiratory muscle training improves lung function and exercise capacity in adults with cystic fibrosis. *Chest* 126: 405-411, 2004.

**** **Mika, A., Unnithan, V.B. and Mika, P.** Changes in thoracic kyphosis and in back muscle strength in women with bone loss due to osteoporosis. *Spine* 30(2):241-246, 2005.

*** **Jones, M.A. Stratton, G., Reilly. T. and Unnithan, V.B.** Non-specific low-back pain in children part I: a systematic review of prevalence and impact. **In Press: European Spine Journal**

*** **Jones, M.A. Stratton, G., Reilly. T. and Unnithan, V.B.** Biological risk indicators of recurrent non-specific low-back pain in children. *British Journal of Sports Medicine* 39: 137-140, 2005

*** **Jones, M.A. Stratton, G., Reilly. T. and Unnithan, V.B.** A school-based survey of recurrent non-specific low-back pain prevalence and consequences in children. *Health Education Research* 19: 284-289, 2004.

Unnithan V.B. and Goulopoulou, S. Nutrition for the Pediatric Athlete. *Current Sports Medicine Reports* 3: 206-211, 2004.

Maltais, D., Wilk, B., Unnithan, V.B. and Bar-Or, O. Responses of children with cerebral palsy to treadmill walking exercise in the heat. *Medicine and Science in Sports and Exercise* 36: 1674-1681, 2004.

Unnithan, V.B. and Wilk, B. An explorative investigation into the effect of upper limb dominance on the forearm sweating pattern in children and adolescents with cerebral palsy: *Pediatric Exercise Science* 17: 182-189, 2005.

Potter, C. R. and Unnithan, V.B. Interpretation and implementation of oxygen uptake kinetics studies in children with spastic cerebral palsy. *Developmental Medicine and Child Neurology* 47: 353-357, 2005.

Unnithan, V.B., Nevill, A., Lange, G., Eppel, J., Fischer, M. and Hebestreit, H. Applicability of an allometric muscle power equation to children, adolescents and young adults of extreme body size. *Journal of Sports Medicine and Physical Fitness* 46: 202-208, 2006

*** **Enright, S., Unnithan, V.B. and Davies, D.** Reproducibility of measurements of inspiratory work capacity in cystic fibrosis patients. *Respiratory Physiology and*

Neurobiology 150: 35-43, 2006.

*****Enright, S., Unnithan, V.B. and Davies, D.** Effect of high intensity inspiratory muscle training on lung volumes, diaphragm thickness and exercise capacity in healthy subjects. *Physical Therapy* 86: 345-354, 2006.

******Mika, P., Spodaryk, K., Cencora, A., Unnithan, V.B. and Mika, A.** Experimental model of pain-free treadmill training in patients with claudication. *American Journal of Physical Medicine and Rehabilitation* 84: 756-762, 2005.

Unnithan, V.B., Kenne, E.M., Logan, L., Collier, S. and Turk, M. The effect of partial body weight support on the energy cost of walking in children with spastic cerebral palsy. *Pediatric Exercise Science* 18: 11-21, 2006.

Unnithan V.B., Houser, W. and Fernhall, B. Evaluation of the energy cost of playing a dance simulation video game in overweight and non-overweight children and adolescents. *International Journal of Sports Medicine* 27: 804-809, 2006.

****Goulopoulou, S., Heffernan, K.S., Fernhall, B., Yates, G., Baxter-Jones, A.D. G. and Unnithan, V.B.** Heart Rate Variability During Recovery from a Wingate Test in Adolescent Males. *Medicine and Science in Sports and Exercise* 38: 875-881, 2006.

*****Chen, J.L. Unnithan, V. & Kennedy, C.** Exploring Chinese Children's Physical and Sedentary Activity. *Asian Journal of Nursing* 9: 17-25, 2006.

*****Chen, J, Unnithan, V, Kennedy, C, Wall, D. and Yeh, C.** Predictors of increased body mass index. *Progress in Cardiovascular Nursing* 22: 138-144, 2007.

Unnithan, V.B. Invited Review of Oded Bar-Or's musculoskeletal research. *Pediatric Exercise Science* 18: 156-159, 2006.

******Mika, P., Mika, A., Fernhall, B. and Unnithan, V.B.** Comparison of recovery strategies on muscle performance after fatiguing exercise. *American Journal of Physical Medicine and Rehabilitation* 86: 474-481, 2007.

*****Enright, S., Chatham, K., Ionescu, A. Unnithan, V.B. and Shale, D.J.** The influence of body composition, inspiratory muscle function and diaphragm thickness in adult patients with cystic fibrosis. *Journal of Cystic Fibrosis* 6, 384-390, 2007

Takken, T., Van Brussell, M., Wittink, H. Schoenmakers, M., Unnithan, V., Verschuren, O., Gorter, J. W. and Van der Net, J. Inspanning en chronische ziekten op de kindertijd, van Laboratorium naar praktijk [Exercise and chronic childhood disease: from laboratory to practice]. *Geneeskunde en Sport, Vol 39, Issue 5 (october) 2006.* page 206-211.

Unnithan, V.B., Baynard, T., Potter, C.R., Heffernan, K., Kelly, E. E., Yates, G. and Fernhall, B. An exploratory study of cardiac function and oxygen uptake during cycle ergometry in overweight children. *Obesity* 15, 2673-2682, 2007.

*****Chen, J, Unnithan, V, Kennedy, C, and Yeh, C.** Correlates of Physical fitness and activity in Taiwanese children. *International Nursing Review* 55: 81-88, 2008.

Unnithan, V.B., Katsimanis, G., Evangelinou, C., Kosmas, C., Kandrali, I. and Kellis, E. Effect of strength and aerobic training in children with cerebral palsy. *Medicine and Science in Sports and Exercise* 39: 1902-1909, 2007.

*****Jones, M.A., Stratton, G., Reilly, T. and Unnithan, V.** The efficacy of exercise as an intervention to treat recurrent non-specific low-back pain in adolescents aged 14-16 years. *Pediatric Exercise Science* 19: 349-359, 2007.

*****Jones, M.A., Stratton, G., Reilly, T. and Unnithan, V.** Recurrent non-specific low-back pain in adolescents: the role of exercise. *Ergonomics* 50: 1680-1688, 2007.

****Kenne, E. M. and Unnithan, V.B.** Knee and ankle strength and lower extremity power in adolescent female ballet dancers: *Journal of Dance Medicine and Science* 12; 59-65, 2008.

Baynard, T, Pitetti, K.H., Guerra, M., Unnithan, V and Fernhall, B. Age-related changes in aerobic capacity in individuals with mental retardation: A 20-year Review. *Medicine and Science in Sports and Exercise* 40; 1984-1989, 2008.

*****Giné-Garriga, M., Guerra, M., Marí-Dell'Olmo, M, Martin, C. and Unnithan, V. B.** Sensitivity of a modified version of the 'Timed- Get Up and Go' test to predict fall risk in the elderly: A Pilot Study *Archives of Gerontology.* 49; e60-e66, 2009.

Unnithan, V.B., Holohan, J., Rowland, T., Fernhall B., Wiegler, J and Pendergast, D. Aerobic cost in elite female adolescent swimmers *International Journal of Sports Medicine.* 30; 194-199, 2009.

Rowland, T., Garrard, M., Marwood, S., Guerra, M., Roche, D. and Unnithan, V. Myocardial performance during progressive exercise in athletic adolescent males. *Medicine and Science in Sports and Exercise.* 41; 1721-1728, 2009.

Marwood, S., Roche, D., Rowland, T., Garrard, M., Unnithan, V.B. Faster pulmonary oxygen uptake kinetics in trained versus untrained male adolescents. *Medicine and Science in Sports and Exercise.* 42; 127-134, 2010.

*****Giné-Garriga, M., Guerra, M., Manini, T. M., Marí-Dell'Olmo, M. and Unnithan, V. B.** Measuring balance, lower extremity strength and gait in the elderly: Construct validation of an instrument. *Archives of Gerontology and Geriatrics.* 51; 199-204, 2010.

Roche, D., Rowland, T., Garrard, M., Marwood, S. and Unnithan, V.B. Skin

microvascular reactivity in trained adolescents. *European Journal of Applied Physiology*. 108; 1201-1208, 2010.

Rowland, T., Unnithan, V., Roche, D., Garrard, M., Holloway, K., Sandoval, J. and Marwood S. Sex influence on Myocardial Function with Exercise in Adolescents In Press: *American Journal of Human Biology*.

*****Giné-Garriga, M., Guerra, M., Pages, E., Manini, T. M., Jiménez, R. and Unnithan, V. B.** The effect of functional circuit training on physical frailty in frail older adults: a randomized control trail. In Press: *Journal of Aging and Physical Activity*.

*****Enright, S. and Unnithan, V.B.** The effect of inspiratory muscle training intensities on pulmonary function and exercisecapacity in subjects who are healthy: A randomized control trial. In Press:*Physical Therapy*.