

REFERENCES

Aidley, D.J. (1978). **The physiology of excitable cells**. London: Cambridge University Press.

Arsac, L.M., Belli, A., Lacour, J-R. (1996). Muscle function during brief maximal exercise: accurate measurements on a friction-loaded cycle ergometry. In: **European Journal of Applied Physiology**, 74(1): 100-106.

Astrand, P.O., Rodahl, K. (1986). **Textbook of Work Physiology**. 3rd ed. New York: McGraw- Hill.

Barnett, C., Jenkins, D.G., Mackinnon, L.T. (1996). Relationship between gear ratio and 10-s sprint cycling on an air-braked ergometer. In: **European Journal of Applied Physiology**. 72(1): 509-514.

Bender, P.R., Martin, B.J. (1985). Maximal ventilation for exhausting exercise. In: **Journal of Medicine and Science for Sports and Exercise**. 17(1): 164.

Benecke, R., Conrad, B., Meinck, H.M., Hohne, J. (1983). Electromyographic analysis of bicycling on an ergometer for evaluation of spasticity of lower limbs in man. In: Desmedt, J.E. (Ed.), **Motor Control Mechanisms in Health and Disease**: 1035 -1045. New York: Raven Press.

Beneke, M., Beneke, G., Noakes, T., Reynolds, M. (1989). **The Lore of Cycling**. United Kingdom: Oxford University Press.

Berg , K. (1984). Aerobic function in female athletes. **Clinical Sports Medicine**. 3(1): 779-789.

Bemben , M.G., Grump, K.J., Massey, B.H. (1988). Assessment of technical accuracy of the Cybex II isokinetic dynamometer and analog recording system. In: **Journal of Orthopaedic and Sports Physical Therapy**. 10(1) 12-17.

Boning, D., Gonen, Y., Maassen, N. (1984). Relationship between work load, pedal frequency, and physical fitness. In: **International Journal for Sports and Medicine**. 5: 92-97.

Boutcher, S.H., Seip, R.L., Hetzler, R.K., Pierce, E.F., Snead, D., Weltman, A. (1989). The effects of specificity of training on rating of perceived exertion at the lactate threshold. In: **European Journal of Applied Physiology**. 59: 365-369.

Brandon, L.J., Boileau, R.A. (1987). The contribution of selected variables to middle and long distance run performance. In: **Journal for Sports Medicine and Physical Fitness**. 27: 157-164.

Brandon, L.J., Boileau, R.A. (1992). Influence of metabolic, mechanical and physique variables on middle distance running. In: **Journal for Sports Medicine and Physical Fitness**. 32: 1-9.

Brooke, J.D., Hoare, J., Rosenrot, P., Triggs, R. (1981). Computerized system for measurement of force exerted within each pedal revolution during cycling. In: **The Journal of Physiological Behaviour**. 26: 139-143.

Brown, D.A., Burgar, C.G., Kautz, S.A., Dairaghi, C.A., Dunn-Gabrielli, S. (1994). Improving lower extremity force symmetry in individuals with hemiplegia. In Taguchi, K., Igarashi, M., Mori, S. (Eds.), **Vestibular and neural front**. 263-266. Tokyo: Elsevier.

Burke, E.R. (1986). **Science of Cycling**. Champaign: Human Kinetics Publishers.

Burke, J., Thayer, R., Belcamino, M. (1994). Comparison of effects of two interval-training programmes on lactate and ventilatory thresholds. **Journal of Sport Medicine.** 28(1): 18-21.

Burkett, L.N., Darst, P.W. (1987). **Sport for Life: Cycling.** USA: Scott, Foresman and Company.

Buttelli, O., Vandewalle, H., Peres, G. (1996). The relationship between maximal power and maximal torque-velocity using an electronic ergometer. In: **European Journal of Applied Physiology.** 73: 479-483.

Capelli, C., Schena, F., Zamparo, P., Dal Monte, A., Faina, M., Prampero, P.E. (1997). Energetics of best performances in track cycling. In: **Medicine & Science in Sports and Exercise.** 614 - 624.

Cavanagh, P.R., Petak, K.L., Shapiro, R., Daly, D. (1974). Bilateral asymmetry in work output during cycle ergometer pedalling. In: **The Journal of Medicine and Science in Sports.** 6: 80-81.

Cavanagh, P.R., Sanderson, D.J. (1986). The biomechanics of cycling: Studies of the pedalling mechanics of elite pursuit riders. In: Burke E (ed), **Science of cycling.** Champaign: Human Kinetics.

Chu, D.A. (1995). **Power Tennis Training.** California: Human Kinetics.

Coast, J.R., Welch, H.G. (1985). Linear increase in optimal pedal rate with increased power output in ergometry. In: **European Journal of Applied Physiology.** 53: 339-342.

Coast, J.R., Cox, R.H., Welch, H.G. (1986). Optimal pedalling rate in prolonged bouts of cycle ergometry. In: **Journal of Medicine and Science in Sports and Exercise**. 18: 225-230.

Coen, B., Schwarz, L., Urhausen, A., Kindermann, W. (1991). Controll of training in middle- and long-distance running by means of the individual anaerobic threshold. In: **International Journal for Sports and Medicine**. 12: 519-524.

Conley, D. (1996). Movement Dynamics. In: **Journal of the American Podiatry Association**. 66: 720-723.

Conley, D., Krahenburt, G. (1980). Running economy and distance running performance of highly trained athletes. In: **Medicine and Science for Sports and Exercise**. 12: 357-360.

Cornwall, M.W. (1984). Biomechanics of non-contractile tissue. In: **Physical Therapy**. 64: 1869-1873.

Costa, M.M., Russo, A.K., Picarro, I.C., Barros Neto, T.L., Silva, A.C., Tarasantchi, J. (1989). Oxygen consumption and ventilation during constant-load exercise in runners and cyclists. In: **The Journal of Sports Medicine and Physical fitness**. 29(1): 36-44.

Coyle, E.F. (1979). Leg extension power and muscle fibre composition. In: **Journal of Medicine and Science for Sports and Exercise**. 11: 12.

Coyle, E.F., Cogan, A.R., Hopper, M.K., Walter, T.J. (1988). Determinants of endurance in well-trained cyclists. In: **Journal of Applied Physiology**. 64: 2622-2630.

Coyle, E.F., Feltner, M.E., Kautz, S.A., Hamilton, M.T., Montain, S.J., Baylor, A.M., Abraham, L.D., Petrek, G.W. (1991). Physiological and biomechanical factors associated with elite endurance cycling performance. In: **Medicine and Science in Sports and Exercise**. 23: 93-107.

Coyle, E.F., Sidossis, L.S., Horowitz, J.F., Beltz, J.D. (1992). Cycling efficiency is related to the percentage of type I muscle fibres. In: **Medicine and Science in Sports and Exercise**. 24: 782 -788.

Croissant, P.T., Boileau, R.A. (1984). Effect of pedal rate, brake load and power on metabolic responses to bicycle ergometer work. **Ergonomics**. 27: 691-700.

Daly, D.J., Cavanagh, P.R. (1976). Asymmetry in bicycle pedalling. **Medicine and Science in Sport**. 8 (3): 204-208.

Dassonville, J., Beillot, Y., Lessard, J., Andre, J.A.M., Le Pourcelet, C., Rochcongar, P., Carre, P. (1998). Blood lactate concentrations during exercise: effect of sampling site and exercise mode. In: **Journal of Sports and Medicine for Physical Fitness**, 38(1): 39-46.

Davis, J., Vodak, P., Wilmore, J., Vodak, J., Kurtz, P. (1976). Anaerobic threshold and maximal aerobic power for three modes of exercise. In: **Journal of Applied Physiology**. 41: 544-550.

Davis, J., Frank, M., Whipp, B., Wasserman, K. (1979). Anaerobic threshold alternations caused by endurance training in middle aged men. In: **Journal of Applied Physiology**. 46: 1039 - 1046.

Davis, R.R., Hull, M.L. (1981). Measurement of pedal loading in bicycling: II. Analysis and results. In: **The Journal of Biomechanics**. 14: 857-872.

Davis, J.A. (1985). Anaerobic threshold: review of the concept and directions for future research. In: **Medicine and Science in Sports and Exercise**. 17(1): 6-18.

Di Loughton. “**Provisional Results**”. <http://www.cycletour.org.za> (22 May 1999)

Drory, Y., Ohry, A., Brooks, M.E., Dolphin, D, Kellermann, J.J. (1990). Arm crank ergometry in chronic spinal cord injured patients. In: **Journal of Arch Physiology for Medicine and Rehabilitation**. 71: 389 - 392.

Eckermann,P., Millahn, H.P. (1967). Der einfluss der drehzahl auf der herzfrequenz und die sauerstoffaufnahme bei konstanterleistung am fahrradergometer. In: **International Arbeitsphysiology**. 23: 340-344.

Edwards, R.H.T., Young, A., Hosking, G.P., Jones, D.A. (1977). Human skeletal muscle function: description of tests and normal values. In: **Clinical Science and Medicine**. 52: 283-290.

Eisner, W.D., Bode, S.D., Nyland, J., Caborn, D.N.M. (1998). Electromyographic timing analysis of forward and backward cycling. In: **Journal of Medicine and Science in Sports and Medicine**. 18: 449-455.

Ennis, P. (1984). **Cycling: A source book**. London: Pelham Books LTD.

Ericson, M.O., Nisell, R. (1988). Efficiency of pedal forces during ergometer cycling. In: **Internasional Journal of Sports and Medicine**. 9: 118-122.

Faria, I.E., Cavanagh, P.R. (1978). **The physiology and biomechanics of cycling**. New York: John Wiley and Sons, Inc.

Farrel , M., Richards, J.G. (1986). Analysis of the reliability and validity of the isokinetic communicator exercise device. In: **Journal of Medicine and Science in Sports and Exercise**. 18: 44-49.

Farrell, S.W., Ivy, J.L. (1987). Lactate acidosis and the increase in V_E/VO_2 during incremental exercise. In: **The Journal of Applied Physiology**. 62, 1551-1555.

Foster, C., Crowe, M.P., Holum, D. (1995). The bloodless lactate profile. In: **Medicine and Science for Sports and Exercise**. 27: 927-933.

Fox, E., Bowers, R., Foss, M. (1993). **The Physiological Basis for Exercise and Sport**. USA, Wm. C. Brown Communications.

Fu , F.H., Stone, D.A. (1994). **Sport injuries: Mechanisms, Prevention, Treatment**. Baltimore: Williams & Wilkins.

Gaesser, G.A., Brooks, G.A. (1975). Muscular efficiency during steady-rate exercise: effects of speed and work rate. In: **The Journal of Applied Physiology**. 38: 1132-1139.

Gaesser , G.A., Brooks, G.A. (1984). Metabolic basis of excess post-exercise oxygen consumption: a review. In: **Journal of Medicine and Science in Sports and Exercise**. 16(1): 29-43.

Giuliani, C.A.(1990). Adult hemiplegic gait. In Smidt, G.L. (Ed.), **Gait in rehabilitation**: 253-266. New York : Churchill-Livingstone.

Glass, S.C., Knowlton, R,G,. Sanjabi, P.B. (1997). The effect of exercise induced glycogen depletion on the lactate, ventilatory and electromyographic thresholds. In: **Journal for Sports Medicine and Physical Fitness**. 37: 32-40.

Glass, S.C., Knowlton, R.G., Sanjabi, P.B. (1998). Identifying the integrated electromyographic threshold using different muscles during incremental cycling exercise. In: **The Journal of Sports Medicine and Physical Fitness**. 38(1): 47-52.

Gonzalez, H., Hull, M.L. (1989). Multivariable optimization of cycling biomechanics. In: **Journal of Biomechanics**. 11: 115--116.

Gregor, R.J. (1976). **A biomechanical analysis of lower limb action during cycling at four different loads**. Unpublished doctoral dissertation, The Pennsylvania State University, University Park.

Gregor, R.J., Cavanagh, P.R., Lafortune, M.A. (1985). Knee flexor moments during propulsion in cycling - A creative solution to Lombard's paradox. In: **Journal of Biomechanics**. 18(5): 307-316.

Hagberg, J.M., Mullin, J.P., Nagle, F.J. (1978). Oxygen consumption during constant-load exercise. In: **Journal of applied physiology**. 45: 381-384.

Hagberg, J.M., Mullin, J.P., Giese, M.D., Spitznagel, E. (1981). Effect of pedalling rate on submaximal exercise responses of competitive cyclists. In: **Journal of Applied Physiology**. 51: 447-451.

Hamley, E.J., Thomas, V. (1967). Physiological and postural factors in the calibration of the bicycle ergometer. In: **The Journal of Physiology**. 191: 55-57.

Hautier, C.A., Linossier, M-T., Belli, A., Lacour, J-R., Arsac, L.M. (1996). Optimal velocity for maximal power production in non-isokinetic cycling is related to muscle fibre type composition. In: **European Journal of Applied Physiology**. 74: 114-118.

Hawkins, D., Hull, M.L. (1990). A method of determining lower extremity muscle-tendon lengths during flexion/ extension movements. In: **The Journal of Biomechanics**. 23: 487-494.

Hawley, J.A. (1995). State of the art training guidelines for endurance performance. In: **The Journal of Sports Medicine**. November 1995, 7-11.

Heck, H. (1991). **Lactat in der Leistungsdiagnostik**. Hofmann, Schorndorf.

Heil, D.P., Derrick, T.R., Whittlesey, S. (1997). The relationship between preferred and optimal positioning during sub-maximal cycle ergometry. In: **European Journal of Applied Physiology**. 75: 160-165.

Henry, F.M. (1951). Aerobic oxygen consumption and alactic debt in muscular work. In: **Journal of Applied Physiology**. 3: 427-438.

Hintzy, F., Belli, A., Grappe, F. (1999). Optimal pedalling velocity characteristics during maximal and sub-maximal cycling in humans. In: **European Journal of Applied Physiology**. 79: 426-432.

Hoes, M.J.A.J.M., Binkhost, R.A., Smeekes-Kuyl, A.E.M.C., Vissers A.C.A. (1968). Measurement of forces exerted on pedal and crank during work on a bicycle ergometer at different loads. In: **International Zeitschrift fur Angewandte Physiologie Einschlieslich Arbeitphysiologie**. 26: 33-42.

Hoffmann, J.J., Loy, S.F., Shapiro, B.I., Holland, G.J., Vincent, W.J., Shaw, S., Thompson, D. (1993). Specificity effects of run versus cycle training on ventilatory threshold. In: **European Journal of Applied Physiology**. 67: 43-47.

Houtz, S.J., Fisher, F.J. (1959). An analysis of muscle action and joint excursion during exercise on a stationary cycle. In: **Journal of Bone Joint Surgery**. 41(A), 123-131.

Howell, D.C. (1992). **Statistical Methods for Psychology**. 3^{ed} ed. California: Duxbury Press.

Hull, M.L., Davis, R.R. (1981). Measurement of pedal loading in bicycling instrumentation. In: **The Journal of Biomechanics**. 14: 842-856.

Jones, N.L., Ersham, R.E. (1982). The anaerobic threshold. In: **Journal for Exercise and Sport**. 10: 49-83.

Kasch, A.V., Mitnoll, C., Forester, G.A. (1988) The maximum work and mechanical efficiency of human muscles and their most economical speed. In: **Journal of Physiology**. 67: 19-41.

Kendall, S.P., McCreary, E.K., Kendall, H.O. (1983). **Muscle, Testing and Function**. 3rd ed. Baltimore, USA: Williams and Williams.

Kenny, G.P., Reardon, F.D., Marion, A., Thoden, J.S. (1995). A comparative analysis of physical responses at sub-maximal workloads during different laboratory simulations of field cycling. In: **European Journal of Applied Physiology**. 71(5): 409-415.

Kindermann, W. (1985). **Laufbandergometrie im Spitzensport: Training und Sport zur Pravention und Rehabilitation in der technisierten Umwelt**. Berlin, Springer.

Kindermann, W., Simon, G., Keul, J. (1979). The significance of the aerobic-anaerobic determination of work load intensities during endurance training. In: **European Journal for Applied Physiology**. 42: 25-34.

Kohrt, W., O'Conner, J., Skinner, J. (1989). Longitudinal assessment of responses by triathletes to swimming, cycling and running. In: **Medicine and Science of Sports and Exercise**. 21: 569-575.

Kram, R. (1987). Comment on "on the relation between joint moments and pedalling rates". In: **Journal of Biomechanics**. 20: 554-555.

Krebs, P.S., Zinkgraf, S., Virgillo, S.J. (1986). Predicting competitive bicycling performance with training and physiological variables. In: **Journal for Sports Medicine and Physical Fitness**. 26: 323-330.

Kyle, C.R., Burke, E. (1984). Improving the racing bicycle. **Mechanical Engineer**. 106: 35-45.

Lafortune, M.A., Cavanagh, P.R. (1980). Force effectiveness during cycling. In: **Medicine and Science in Sports**. 12: 95.

Lafortune, M.A., Cavanagh, P.R. (1983)(a). Effectiveness and efficiency during bicycle riding, in Matsui, H., Kobayashi, K. (1983). **Biomechanics VIII-B**. Champaign, IL, Human Kinetic Publishers. 928-936.

Lafortune, M.A., Cavanagh, P.R., Valiant, G.A., Burke, E.R. (1983)(b). A study of the riding mechanics of elite cyclists. In: **Medicine and Science in Sports and Exercise**. 15(2): 113.

Loat, C.E.R., Rhodes, E.C. (1993). Relationship between the lactate and ventilatory thresholds during prolonged exercise. In: **Journal for Sports Medicine**. 15: 104-115.

Loftin, M., Warren, B., Eason, R., Brandon, J. (1990). Influence of pedal rate on the signals of perceived exertion during leg cycling. In: **Journal of Human Movement Studies**. 19: 189-199.

Loftin, M., Warren, B. (1994). Comparison of a Simulated 16.1 km Time Trial, VO₂-max and Related factors in Cyclists with different Ventilatory Thresholds. In: **International Journal for Sports Medicine**. 15: 498-503.

Macdougall, J.D., Wenger, H.A., Green, H.J. (1991). **Physiological Testing of the High-Performance Athlete**. 2^{ed} ed. Illinois: Human Kinetic Books.

Maffulli, N., Testa, V., Capasso, G. (1994). Anaerobic threshold determination in master endurance runners. In: **The Journal of Sports Medicine and Physical Fitness**. 34(3): 242-249.

Mandroukas, K. (1990): Some effects of knee angle and foot placement in bicycle ergometer. In: **The Journal of Sports Medicine and Physical Fitness**. 30(2): 155-159.

Marieb, E.N. (1995). **Human Anatomy and Physiology**. Third edition. California: The Benjamin / Cummings Publishing Company

Marsh, A.P., Martin, P.E. (1996). Effect of cycling experience, aerobic power and power output on preferred and most economical cycling cadences. In: **Medicine and Science in Sports and Medicine**. 18: 1225-1232

Martin, B.J., Stager, J.M. (1981). Ventilation endurance in athletes and non-athletes. In: **Journal of Medicine and Science for Sports and Exercise**. 13: 21.

McArdle, W.D., Katch, F.I., Katch, V.L. (1991). **Exercise Physiology**. 3ed ed. Malvern: Lea & Febiger.

McArdle, W.D., Magel, J.R. (1970). Physical work capacity and maximal oxygen uptake in treadmill and bicycle exercise. In: **Medicine and Science in Sports and Exercise**. 2: 118-123.

McCartney, N., Heigenhauser, G.J.F., Jones, N.L. (1983)(a). Power output and fatigue of human muscle in maximal exercise. In: **Journal of Applied Physiology**. 55: 218-224.

McCartney, N., Heigenhauser, G.J.F., Sargeant, A.J., Jones, N.L.(1983)(b). A constant - velocity cycle ergometer for the study of dynamic muscle function. In: **The Journal of Applied Physiology**. 55: 212-217.

McLellan, T.M., Jacobs, I. (1989). Active recovery, endurance training, and the calculation of the individual anaerobic threshold. In: **Medicine and Science in Sport and Exercise**. 21(5): 586-592.

Meiring, J.H., Loots, G.P., Coetzee, H.L., Liebenberg, S.W., van Heerden, L., Jacobs, C.J. (1994). **Anatomie: vir medies-verwante studierigtings**. Pretoria: van Schaik Uitgewers.

Miller, F.R., Menfredi, T.G. (1987). Physiological and antropometric predictors of 15-kilometer time trial cycling performance time. In: **Journal of Sport and Exercise**. 58: 250-254.

Patterson, L.A., Spivey, W.E. (1992). Validity and Reliability of the LIDO active isokinetic system. In: **Journal of Orthopedic and Sports Physical Therapy**. 15: 32-26.

Pechar, G.S., McArdle, W.D., Katch, F.I., Magel, J.R., Deluca, J. (1974). Specificity of cardiorespiratory adaption to bicycle and treadmill running. In: **Journal of Applied Physiology**. 36: 753-756.

Perrin, D.H. (1993). **Isokinetic exercise and assessment**. Champaign: Human Kinetics Publishers.

Peterson, L., Renstrom, P. (1994). **Sports Injuries: Their prevention and treatment**. United Kingdom: Martin Dunitz Ltd.

Pierson-Carey, C.D., Brown, D.A., Dairaghi, C.A. (1997). Changes in Resultant Pedal Reaction Forces Due to Ankle Immobilization During Pedalling. In: **Journal of Applied Biomechanics**. 13 (3): 334-346.

Power Pedal (1998). **Power Pedal: A Powerful New Drive-System**. Canada: Vancouver (info@powerpedal.com)

Power Pedal I. (1993). **The power pedal drive**. World Power Bike Inc: Universitat Oldenburg.

Power Pedal II. "**Power Pedal Science**". info@powerpedal.com (10 May 1998).

Power Pedal III. "**Power Pedal Background**". info@powerpedal.com (12 June 1998). STS Power Pedal Corp. (1993). **The power pedal drive**. World Power Bike Inc: Universitat Oldenburg.

Powers, S., Deason, R., Bird, R., McKnight, T. (1983). Ventilatory threshold, running economy and distance running performance of trained athletes. In: **Journal of Exercise and Sport**. 54: 179-182.

Prilutsky, B.I. (1997). Work, Energy Expenditure, and efficiency of the Stretch-Shortening Cycle. In: **The Journal of Applied Biomechanics**. 13(4): 466-471.

Pugh, L.G.C.E. (1974). The relation of oxygen intake and speed in competition cycling and comparative observations on the bicycle ergometer. In: **Journal of Physiology**. 241: 795-808.

Redfield, R., Hull, M.L. (1986). On the relation between joint moments and pedalling rates at constant power in bicycling. In: **The Journal of Biomechanics**. 19: 317-329.

Robinson, E.P., Kjeldgaard, J.M. (1982). Improvement in ventilatory muscle function with running. In: **Journal of Applied Physiology** 52: 1400.

Rodgers, M.M. (1988). Dynamic biomechanics of the normal foot and ankle during walking and running. In: **Journal of Physical Therapy**. 68: 1822-1830.

Rosecrance, J.C., Giuliani, C.A. (1991). Kinematic analysis of lower-limb movements during ergometer pedalling in hemiplegic and non-hemiplegic subjects. In: **Journal of Physical Therapy**. 71: 334-343.

Rowland, T.W., Green, G.M. (1988). Physiological responses to treadmill exercise in females: adult-child differences. In: **Journal of Medicine and Science for Sports and Exercise**. 20: 474.

Roy, S.; Irvin, R. (1983). **Sports Medicine: Prevention, Evaluation, Management, and Rehabilitation**. New Jersey: Prentice-hall, Inc.

Sharkey, B.J. (1979). **Physiology of Fitness**. 3^{ed} ed. Champaign, Illinois, Human Kinetics Books.

Smidt, E. (1990). Aging and gait. In Smidt (Ed.), **Gait in rehabilitation**. New York: Churchill- Livingstone.

Snyder, A.C.T., Woulfe, T., Welsh, R., Foster, A. (1994). A Simplified approach to estimating the maximal lactate steady state. In: **International Journal for Sports Medicine**. 15: 27-31.

Swensen, T.C., Harnish, C.R., Beitman, L., Keller, B.A. (1998). Noninvasive estimation of the maximal lactate steady state in trained cyclists. In: **Journal of Medicine and Science in Sports and Exercise**. 18: 742-746.

Stegmann, H., Kindermann, W., Schnabel, A. (1981). Lactate kinetics and individual anaerobic threshold. In: **International Journal of Sports and Medicine**. 2:160-165.

Taylor, N.A.S., Sanders, R.H., Howick, E.I., Stanley, S.N. (1991). Static and dynamic assessment of the Biodex dynamometer. In: **European Journal of Applied Physiology**. 62: 180-188.

Thomas , J.R., Nelson, J.K. (1990). **Research Methods in Physical Activity**. 2nd ed. Champaign, Illinois: Human Kinetics Books.

Timmer, C.A.W. (1991). Cycling Biomechanics: A Literature Review. In: **Journal of Sport Physiology**. 14(3): 106-113.

Thorstensson, A. (1976). Muscle strength , fibre types and enzyme activities in man. In: **Medicine and Science in Sport**. 8 (3): 216-221.

Urhausen, A., Coen, B., Weiler, B., Kindermann, W. (1993). Individual Anaerobic Threshold and Maximum Lactate Steady State. In: **International Journal of Sports and Medicine**. 14: 134-139.

Van der Plas, R. (1989). **The Bicycle Fitness Book**. USA: Bicycle Books.

Powers, S., Deason, R., Bird, R., McKnight, T. (1983). Ventilatory threshold, running economy and distance running performance of trained athletes. In: **Journal of Exercise and Sport**. 54: 179-182.

Prilutsky, B.I. (1997). Work, Energy Expenditure, and efficiency of the Stretch-Shortening Cycle. In: **The Journal of Applied Biomechanics**. 13(4): 466-471.

Pugh, L.G.C.E. (1974). The relation of oxygen intake and speed in competition cycling and comparative observations on the bicycle ergometer. In: **Journal of Physiology**. 241: 795-808.

Redfield, R., Hull, M.L. (1986). On the relation between joint moments and pedalling rates at constant power in bicycling. In: **The Journal of Biomechanics**. 19: 317-329.

Robinson, E.P., Kjeldgaard, J.M. (1982). Improvement in ventilatory muscle function with running. In: **Journal of Applied Physiology** 52: 1400.

Rodgers, M.M. (1988). Dynamic biomechanics of the normal foot and ankle during walking and running. In: **Journal of Physical Therapy**. 68: 1822-1830.

Rosecrance, J.C., Giuliani, C.A. (1991). Kinematic analysis of lower-limb movements during ergometer pedalling in hemiplegic and non-hemiplegic subjects. In: **Journal of Physical Therapy**. 71: 334-343.

Rowland, T.W., Green, G.M. (1988). Physiological responses to treadmill exercise in females: adult-child differences. In: **Journal of Medicine and Science for Sports and Exercise**. 20: 474.

Roy, S.; Irvin, R. (1983). **Sports Medicine: Prevention, Evaluation, Management, and Rehabilitation**. New Jersey: Prentice-hall, Inc.

Rushall, B.S., Potgieter, J.R. (1987). **Die sielkunde van suksesvolle mededinging in uithouvermoë sportsoorte**. Pretoria: Suid-Afrikaanse Vereniging vir Sportwetenskap, Liggaamlike Opvoedkunde en Rekreasie.

Schneider, D.A., Lacroix, K.A., Atkinson, G.R., Troped, P.J., Pollack, J. (1989). Ventilatory threshold and maximal oxygen uptake during cycling and running in triathletes. In: **Medicine and Science in Sports and Exercise**. 22(2): 257-264.

Schneider, D.A., Pollack, J. (1991). Ventilatory threshold and Maximal Oxygen Uptake during Cycling and Running in Female Triathletes. In: **International Journal for Sports and Medicine**. 12: 379-383.

Schulman, S.P., Gerstenblith, G. (1989). Cardiovascular changes with aging: The response to exercise. In: **Journal of cardiopulmonary Rehabilitation**. 19: 12.

Schwartz, R.E., Asnis, P.D., Cavanaugh, J.T., Asnis, S.E., Simmons, J.E., Lasinski, P.J. (1991). Short Crank Cycle Ergometry. In: **The Journal of Orthopedic and Sport Physical Therapy**. 13(2): 95-100.

Scott, R.P. (1889). **Cycling, art, energy and locomotion**. Philadelphia: J.B. Lippincott.

Seabury, J.J., Adams, W.C., Ramey, M.R. (1977). Influence of pedalling rate and power output on energy expenditure during bicycle ergometry. In: **Ergonomics**. 20: 491-198.

Sharkey, B.J. (1979). **Physiology of Fitness**. 3^{ed} ed. Champaign, Illinois, Human Kinetics Books.

Smidt, E. (1990). Aging and gait. In Smidt (Ed.), **Gait in rehabilitation**. New York: Churchill- Livingstone.

Snyder, A.C.T., Woulfe, T., Welsh, R., Foster, A. (1994). A Simplified approach to estimating the maximal lactate steady state. In: **International Journal for Sports Medicine**. 15: 27-31.

Swensen, T.C., Harnish, C.R., Beitman, L., Keller, B.A. (1998). Noninvasive estimation of the maximal lactate steady state in trained cyclists. In: **Journal of Medicine and Science in Sports and Exercise**. 18: 742-746.

Stegmann, H., Kindermann, W., Schnabel, A. (1981). Lactate kinetics and individual anaerobic threshold. In: **International Journal of Sports and Medicine**. 2:160-165.

Taylor, N.A.S., Sanders, R.H., Howick, E.I., Stanley, S.N. (1991). Static and dynamic assessment of the Biodex dynamometer. In: **European Journal of Applied Physiology**. 62: 180-188.

Thomas, J.R., Nelson, J.K. (1990). **Research Methods in Physical Activity**. 2nd ed. Champaign, Illinois: Human Kinetics Books.

Timmer, C.A.W. (1991). Cycling Biomechanics: A Literature Review. In: **Journal of Sport Physiology**. 14(3): 106-113.

Thorstensson, A. (1976). Muscle strength, fibre types and enzyme activities in man. In: **Medicine and Science in Sport**. 8 (3): 216-221.

Urhausen, A., Coen, B., Weiler, B., Kindermann, W. (1993). Individual Anaerobic Threshold and Maximum Lactate Steady State. In: **International Journal of Sports and Medicine**. 14: 134-139.

Van der Plas, R. (1989). **The Bicycle Fitness Book**. USA: Bicycle Books.

Viitasalo, J.T., Luhtanen, P., Rahkila, P., Rusko, H. (1985). Electromyographic activity related to aerobic and anaerobic threshold in ergometer bicycling. In: **Journal of Physiology**. 124: 287-293.

Walsh, M.L., Banister, E.W. (1988). Possible mechanisms of the anaerobic threshold. In: **The Journal of Sports Medicine**. 5: 269-302.

Wasserman, K., Mellroy, M.B. (1964). Detecting the threshold of anaerobic metabolism in cardiac patients during exercise. In: **American Journal of Cardiology**. 14: 844-852.

Wasserman, K., Whipp, B., Koyal, S., Beaver, W. (1973). Anaerobic threshold and respiratory gas exchange during exercise. In: **Journal of Applied Physiology**. 35: 236-243.

Whipp, B.J., Wasserman, K. (1972). Oxygen kinetics for various intensities of constant-load work. In: **Journal of Applied Physiology**. 33: 351-256.

Withers, R.T., Sherman, W.M., Miller, J.M. (1981). Specificity of the anaerobic threshold in endurance trained cyclists and runners. In: **European Journal for Applied Physiology**. 47: 93-104.

APPENDIX A

ABBREVIATIONS

HT (HR)	=	HEART RATE (beats per minute)
VO ₂ -MAX	=	MAXIMUM OXYGEN CONSUMPTION (mlO ₂ /kg/min)
RQ	=	RESPIRATORY QUOSIENT
RR	=	RESPIRATORY RATE (beats per minute)
VE	=	MINUTE VENTILATION (litres per minute)
VT	=	TIDAL VOLUME (ml)
MET	=	METABOLIC EQUIVALENT (litres per minute)
VD (AT)	=	ANAEROBIC THRESHOLD (beats per minute)
La	=	LACTATE (mmol)
VE/VO ₂	=	BREATHING EQUIVALENT (litres)
VO ₂ /HT	=	OXYGEN PULSE (mlO ₂ per heartbeat)

APPENDIX A

ABBREVIATIONS

HT (HR)	=	HEART RATE (beats per minute)
VO ₂ -MAX	=	MAXIMUM OXYGEN CONSUMPTION (mlO ₂ /kg/min)
RQ	=	RESPIRATORY QUOSIENT
RR	=	RESPIRATORY RATE (beats per minute)
VE	=	MINUTE VENTILATION (litres per minute)
VT	=	TIDAL VOLUME (ml)
MET	=	METABOLIC EQUIVALENT (litres per minute)
VD (AT)	=	ANAEROBIC THRESHOLD (beats per minute)
La	=	LACTATE (mmol)
VE/VO ₂	=	BREATHING EQUIVALENT (litres)
VO ₂ /HT	=	OXYGEN PULSE (mlO ₂ per heartbeat)