

引用文献

- Akselrod S, Gordon D, Ubel FA, Shannon DC, Berger AC, Cohen RJ. (1981) Power spectrum analysis of heart rate fluctuation: a quantitative probe of beat-to-beat cardiovascular control. *Science*. 213: 220–222.
- Al-Ani M, Munir SM, White M, Townend J, Coote JH. (1996) Changes in R-R variability before and after endurance training measured by power spectral analysis and by the effect of isometric muscle contraction. *Eur. J. Appl. Physiol.* 74: 397–403.
- Barron JL, Noakes TD, Levy W, Smith C, Millar RP. (1985) Hypothalamic dysfunction in overtrained athletes. *J. Clin. Endocrinol. Metab.* 60(4): 803–806.
- Baxter C, Reilly T. (1983) Influence of time of day on all-out swimming. *Br. J. Sports Med.* 17: 122–127.
- Beaver WL, Wasserman K, Whipp BJ. (1986) A new method for detecting anaerobic threshold by gas exchange. *J. Appl. Physiol.* 60: 2020–2027.
- Bigger JT Jr., Fleiss JL, Steinman RC, Rolnitzky LM, Kleiger RE, Rottman JN. (1992) Frequency domain measures of heart period variability and mortality after myocardial infarction. *Circulation*. 85: 164–171.
- Brown TE, Beightol LA, Koh J, Eckberg DL. (1993) Important influence of respiration on human R-R interval power spectra is largely ignored. *J. Appl. Physiol.* 75: 2310–2317.
- Brundin T, Cernigliaro C. (1975) The effect of physical training on the sympathoadrenal response to exercise. *Scand. J. Clin. Lab. Invest.* 35: 525–530.

- Cabri J, Dewitte B, Clarys JP, Reilly T, Strass D. (1988) Circadian variation in blood-pressure responses to muscular exercise. *Ergonomics* 31: 1559-1565.
- Coats AJ, Adamopoulos S, Radaelli A, McCance A, Meyer TE, Bernardi L, Solda PL, Davey P, Ormerod O, Forfar C, Conway J, Sleight P. (1992) Controlled trial of physical training in chronic heart failure. Exercise performance, hemodynamics, ventilation, and autonomic. *Circulation*. 85: 2119-2131.
- Cooper KH. (1968) A means of assessing maximal oxygen intake. Correlation between field and treadmill testing. *JAMA*. 203: 201-204.
- Costill (1986) Inside Running, 1st Ed., Chap. 5, Benchmark Press, Indianapolis, pp 123-134.
- De Meersman RE. (1992) Respiratory sinus arrhythmia alteration following training in endurance athletes. *Eur. J. Appl. Physiol.* 64: 434-436.
- D. H. バーロー, M. ハーセン (高木俊一郎, 佐久間徹監訳), (1997) 一事例の実験デザイン-ケーススタディの基本と応用-, 改版, 第9章, 二瓶社, 東京, pp 195-222.
- Dressendorfer RH, Wade CE, Scuff JH. (1985) Increased morning heart rate in runners: a valid sign of overtraining? *Physician and sportsmedicine*. 13(8): 77-86.
- Edington ES. (1995) Randomization tests, 3 rd Ed. Marcel Dekker, New York.
- Ewing DJ, Neilson JM, Travis P. (1984) New method for assessing cardiac parasympathetic activity using 24 hour electrocardiograms. *Br. Heart. J.* 52: 396-402.

Frishman WH, Lazar EJ. (1990) Reduction of mortality, sudden death and non-fatal reinfarction with beta-adrenergic blockers in survivors of acute myocardial infarction: a new hypothesis regarding the cardioprotective action of beta-adrenergic blockade. Am. J. Cardiol. 66: 666-706.

Fry RW, Morton AR, Keast D. (1991) Overtraining in athletes. An update. Sports Med. 12: 32-65.

Goldsmith RL, Bigger JT Jr., Steinman RC, Fleiss JL. (1992) Comparison of 24-hour parasympathetic activity in endurance-trained and untrained young. J. Am. Coll. Cardiol. 20: 552-558.

Goldsmith RL, Bigger JT, Bloomfield DM, Steinman RC. (1997) Physical fitness as a determinant of vagal modulation. Med. Sci. Sports Exer. 29: 812-817.

Gooch AS, McConnell D. (1970) Analysis of transient arrhythmias and conduction disturbances occurring during submaximal treadmill exercise testing. Prog Cardiovasc Dis. 13: 293-307.

Guyton AC. (1991) Textbook of medical physiology, WB Saunders Company, Philadelphia.

Guzzetti S, Dassi S, Pecis M, Casati R, Masu AM, Longoni P, Tinelli M, Cerutti S, Pagani M, Malliani A. (1991) Altered pattern of circadian neural control of heart period in mild hypertension. J. Hypertens. 9: 831-838.

Hall EF, Duffy J, Dijk DJ, Czeisler CA. (1997) Interval between waketime and circadian

phase differs between morning and evening typs. Sleep Res. 26: 716.

Hayano J, Mukai S, Sakakibara M, Okada A, Takata K, Fujinami T. (1994) Effects of respiratory interval on vagal modulation of heart rate. Am. J. Physiol. 267: H33-40.

Hill DW, Cureton KJ, Collins MA, Grisham SC. (1988) Diurnal variations in responses to exercise of "morning types" and "evening types". J. Sports. Med. Phys. Fitness. 28: 213-219.

Hirsch JA, Bishop B. (1981) Respiratory sinus arrhythmia in humans: how breathing pattern modulates heart rate. Am. J. Physiol. 241: H620-629.

Horne JA, Ostberg O. (1976) A self-assessment questionnaire to determine morningness-eveningness in human circadian rhythms. Int. J. Chronobiol. 4: 97-110.

Howorka K, Pumprla J, Haber P, Koller-Strametz J, Mondrzyk J, Schabmann A. (1997) Effects of physical training on heart rate variability in diabetic patients with various degrees of cardiovascular autonomic neuropathy. Cardiovasc Res. 34: 206-214.

Imai K, Sato H, Hori M, Kusuoka H, Ozaki H, Yokoyama H, Takeda H, Inoue M, Kamada T. (1994) Vagally mediated heart rate recovery after exercise is accelerated in athletes but blunted in patients with chronic heart failure. J. Am. Coll. Cardiol. 24: 1529-1535.

Israel S. (1976) Zur Problematic des Überrainings internistischer und leistungsphysiologischer Sicht. Medicine and sport. 16: 51.

Jost J, Weiss M, Weicker H. (1990) Sympathoadrenergic regulation and the

adrenoceptor system. *J. Appl. Physiol.* 68: 897–904.

Katzenberg D, Young T, Finn L, Lin L, King DP, Takahashi JS, Mignot E. (1998) A CLOCK polymorphism associated with human diurnal preference. *Sleep*. 21: 569–576.

河野一郎, 和久貴洋, 香田泰子, 三輪一義, 山本純生, 古川拓生, 高山貴久子. (1992) POMS によるコンディション評価. *Pharma. Medica.* 10(4): 33–36.

Kuipers H, Keizer HA. (1988) Overtraining in elite athletes. Review and directions for the future. *Sports Med.* 6: 79–92.

熊田衛. (1993) 循環. 本郷利憲, 廣重力, 豊田順一, 熊田衛編. 標準生理学. 医学書院. 東京. pp 435–542.

Lehmann M, Dickhuth HH, Schmid P, Porzig H, Keul J. (1984) Plasma catecholamines, beta-adrenergic receptors, and isoproterenol sensitivity in endurance trained and non-endurance trained volunteers. *Eur. J. Appl. Physiol.* 52: 362–369.

Lehmann M, Foster C, Keul J. (1993) Overtraining in endurance athletes: a brief review. *Med. Sci. Sports Exerc.* 25: 854–862.

Malfatto G, Facchini M, Bragato R, Branzi G, Sala L, Leonetti G. (1996) Short and long term effects of exercise training on the tonic autonomic modulation of heart rate variability after myocardial infarction. *Eur. Heart J.* 17, 532–538.

Minors DS, Waterhouse JM. (1981) Endogenous and exogenous components of circadian rhythms when living on a 21-hour day. *Int. J. Chronobiol.* 8: 31–48.

Moore RY, Lenn NJ. (1972) A retinohypothalamic projection in the rat. *J. Comp. Neurol.* 146: 1-14.

Morgan WP, Brown DR, Raglin JS, O'Connor PJ, Ellickson KA. (1987) Psychological monitoring of overtraining and staleness. *Br. J. Sports Med.* 21: 107-114.

Muller JE, Tofler GH, Willlich SN, Stone PH. (1987) Circadian variation of cardiovascular disease and sympathetic activity. *J. Cardiovasc. Pharmacol.* 10 Suppl 2: S104-109.

中村好男, 山本義春. (1991) 健康維持・増進のための適正な運動強度の探索－自律神経系拮抗調節からみた無酸素性作業閾値の実用の意義についての検討－. *体力研究*. 77: 82-91.

大塚邦明, Cornelissen G, Halberg F. (1997) 心拍変動解析と自律神経. 診断と治療. 85: 1500-1506.

大塚邦明. (1998) 時間医学 (chronome) とヤヌス (Janus) 医学. メディカルレビュー社. 東京.

Ohman EM, Butler J, Kelly J, Horgan J, O'Malley K. (1987) Beta-adrenoceptor adaptation to endurance training. *J. Cardiovasc. Pharmacol.* 10: 728-731.

Pagani M, Lombardi F, Guzzetti S, Rimoldi O, Furlan R, Pizzinelli P, Sandrone G, Malfatto G, Dell'Orto S, Piccaluga E, Sandrone G, Malfatto G, Dell'Orto S, Piccaluga E, Turiel M, Baselli G, Cerutti S, Malliani A. (1986) Power spectral analysis of heart rate and arterial pressure variabilities as a marker of sympatho-vagal interaction in man and conscious dog. *Circ. Res.* 59(2): 178-193.

Perini R, Orizio C, Comande A, Castellano M, Beschi M, Veicsteinas A. (1989) Plasma norepinephrine and heart rate dynamics during recovery from submaximal exercise in man. *Eur. J. Appl. Physiol.* 58: 879-883.

Pomeranz B, Macaulay RJ, Caudill MA, Kutz I, Adam D, Gordon D, Kilborn KM, Barger AC, Shannon DC, Cohen RJ, H Benson. (1985) Assessment of autonomic function in humans by heart rate spectral analysis. *Am. J. Physiol.* 248: H151-153.

Reilly T, Robinson G, Minors DS. (1984) Some circulatory responses to exercise at different times of day. *Med. Sci. Sports Exer.* 16: 477-482.

Reilly T. Human circadian rhythms and exercise. (1990) *Crit. Rev. Biomed. Eng.* 18: 165-180.

Saeki Y, Atogami F, Takahashi K, Yoshizawa T. (1997) Reflex control of autonomic function induced by posture change during the menstrual cycle. *J Auton. Nerv. Syst* 1: 66-69.

Seals DR, Chase PB. (1989) Influence of physical training on heart rate variability and baroreflex circulatory control. *J. Appl. Physiol.* 66: 1886-1895.

Smith ML, Ellenbogen KA, Eckberg DL, Szentpetery S, Thames MD. (1989) Subnormal heart period variability in heart failure: effect of cardiac transplantation. *J. Am. Coll. Cardiol.* 14: 106-111.

Somers VK, Conway J, Johnston J, Sleight P. (1991) Effects of endurance training on baroreflex sensitivity and blood pressure in borderline hypertension. *Lancet.* 337: 1363-1368.

Stephan FN, Zucker I. Circadian rhythms in drinking behavior and locomotor activity of rats are eliminated by hypothalamic lesions. (1972) Proc. Natl. Acad. Sci. U.S.A. 69: 1583-1586.

Sugishita Y, Matsuda M, Iida K, Koshinaga J, Ueno M. (1983) Sudden cardiac death at exertion. Japanese circulation journal 47: 562-572.

高田秀臣. (1992) オーバートレーニングにおける自律神経. 臨床スポーツ医学. 9: 893-895.

田中健, 相沢忠範, 加藤和三, 中野元, 五十嵐正樹, 上野孝志, 広沢弘三郎, 日下部きよ子. (1989) I-123 Metaiodobenzylguanidine (MIBG) による percutaneuous transluminal coronary thrombolysis (PTCR) 例における心筋交感神経機能の評価. 核医学. 25: 1425-1429.

田辺晃久, 寺尾保, 中野昭一. (1993) 若年スポーツ選手の心拍変動—Power Spectral Analysis による自律神経機能の評価. 東海大学スポーツ医科学雑誌. 5: 44-49.

田宮聰, 田宮裕子, 中原俊夫, 更井啓介. (1990) 質問紙を用いた朝型-夜型の判定法に関する検討. 心身医. 30: 532-537.

徳留省悟. (1990) 最近5年間のスポーツ中の突然死の実態. 村山正博編. 運動と突然死. 文光堂. 東京. pp 67-85.

Victor RG, Seals DR, Mark AL. (1987) Differential control of heart rate and sympathetic nerve activity during dynamic exercise. Insight from intraneuronal recordings in humans. J. Clin. Invest. 79: 508-516.

Yamamoto Y, Hughson RL, Peterson JC. (1991) Autonomic control of heart rate during exercise studied by heart rate variability spectral analysis. *J. Appl. Physiol.* 71: 1136-1142.

Yasue H, Omote S, Takizawa A, Nagao M, Miwa K, Tanaka S. (1979) Circadian variation of exercise capacity in patients with Prinzmetal's variant angina: role of exercise-induced coronary arterial spasm. *Circulation*. 59: 938-948.

Wheeler T, Watkins PJ. (1973) Cardiac denervation in diabetes. *Br. Med. J.* 4: 584-586.