

## DAFTAR PUSTAKA

1. Husein Abdulsalam. Jogging bisa jadi salah satu latihan fisik untuk menangkal depresi. Diakses dari <https://tirto.id/mau-lari-dari-kenyataan-malah-ketagihan-jogging-cJW8>.
2. Lieberman DE, Bramble DM. The evolution of marathon running: capabilities in humans. *Sports Med.* 2007; 37(4-5): 288–290.
3. Nonie. 16.500 Pelari Ikut Electric Jakarta Marathon 2019. Diakses dari <https://petrominer.com/16-500-pelari-ikut-electric-jakarta-marathon-2019/>.
4. Tulus Wijanarko. 1500 Pelari Lomba KulineRun akan Menyusuri Pantai Kota Padang. Diakses dari <https://travel.tempo.co/read/1131348/1500-pelari-lomba-kulinerun-akan-menyusuri-pantai-kota-padang/full&view=ok>.
5. Pallarés JG, Morán-Navarro R, Ortega JF, Fernández-Elías V E, Mora-Rodriguez R. Validity and reliability of ventilatory and blood lactate thresholds in well-trained cyclists. *Plos One.* 2016; 11(9), e0163389. doi:10.1371/journal.pone.0163389
6. Buchheit M. Monitoring training status with HR measures: do all roads lead to Rome?. *Frontiers in Physiology.* 2014; 5. doi:10.3389/fphys.2014.00073
7. Vella CA, Allison MA, Cushman M, Jenny NS, Miles MP, Larsen B, et al. Physical activity and adiposity-related inflammation: the MESA. *Med Sci Sports Exerc.* 2017; 49: 915–21. doi: 10.1249/MSS.0000000000001179
8. Chapleau MW, Sabharwal R. Methods of assessing vagus nerve activity and reflexes. *Heart Fail Rev.* 2011; 16:109-127.
9. Vesterinen V, Nummela A, Äyrämö S, Laine T, Hynynen E, Mikkola, J., & Häkkinen, K. Monitoring training adaptation with a submaximal running test under field Conditions. *International Journal of Sports Physiology and Performance.* 2026; 11(3): 393–399. doi:10.1123/ijsp.2015-0366
10. Daanen H A , Lamberts R P, Kallen V L, Jin A, Van Meeteren N L. Systematic review on heart-rate recovery to monitor changes in training status in athletes. *International Journal of Sports Physiology and Performance.* 2012; 7(3): 251–260. doi:10.1123/ijsp.7.3.251
11. Lamberts R P, Swart J, Capostagno B, Noakes T D, & Lambert M I. Heart rate recovery as a guide to monitor fatigue and predict changes in performance parameters. *Scandinavian Journal of Medicine & Science in Sports.* 2010; 20: 449–457. doi:10.1111/j.16000838.2009.00977.x
12. De Assis Pereira P E, Piubelli Carrara V K, Mello Rissato G, Pereira Duarte, J M, Guerra R L, & Silva Marques de Azevedo P H. The relationship between the heart rate deflection point test and maximal lactate steady state. *The Journal of Sports Medicine and Physical Fitness.* 2015; 56: 1 –5.
13. Trimmel K, Sacha J, Huikuri HV. Heart rate variability: clinical applications and interaction between HRV and heart rate. *Frontiers Media SA.* 2015 okt 7; 17. ISBN 978-2-88919-652-4.
14. Poeling CP, Llewellyn TL. The effects of submaximal and maximal exercise on heart rate variability. *International Journal of Exercise Science.* 2019; 12(2): 9-14
15. Kiss O, Sydó N, Vargha P, Vágó H, Czibalmos C, Édes, E, Merkely B. Detailed heart rate variability analysis in athletes. *Clinical Autonomic Research.* 2016; 26(4): 245–252. doi:10.1007/s10286-016-0360-z.

16. Acharya UR, Joseph KP, Kannathal N, Lim CM, Suri JS. Heart rate variability: a review. *Med Biol Eng Comput.* 2006; 44: 1031–1051.
17. Moore KL, Dalley AF, Agur AMR, Moore ME. 2013. *Anatomi berorientasi klinis.* Edisi ke-5. Jakarta: Erlangga.
18. Guyton AC, Hall JE. 2014. *Buku Ajar Fisiologi Kedokteran.* Edisi 12. Jakarta : EGC, 1022.
19. Draghici AE, Taylor JA. The physiological basis and measurement of heart rate variability in humans. *Journal of Physiological Anthropology.* 2016; 35(1). doi:10.1186/s40101-016-0113-7 33.
20. Muda FL, Leicht AS. Short-term stability of resting heart rate variability: influence of position and gender. *Appl Physiol Nutr Metab.* 2011; 36 (2): 210-8.
21. Rose ML, VM Oigman G Masjid Fonseca ET. Arterial prehypertension and increased pulse pressure in adolescents: prevalence and related factors. *Arq Bras Cardiol.* 2006; 87 (1): 46-53.
22. Mcardle WD, Katch FI, Katch VL. *Exercise physiology: nutrition, energy, and human performance.* Philadelphia: Lippincot Williams & Wilkins. 2010.
23. Vanderlei LC ,Pastre CM, Freitas Jr, Godoy MF. Geometric index of heart rate variability in obese and eutrophic children. *Arq Bras Cardiol.* 2010; 95 (1): 35-40.
24. Naesilla, Argarini R, Mukono IS. High intensity interval training decreases resting systolic blood pressure but does not reduce diastolic blood pressure and resting pulse in normotensive healthy young adults. *Sport and Fitness Journal.* 2016; 4 (1).
25. Anderson R, Breunig K, Foundling P, Johnson R, Smith L, Sundstrom M. Body position and effect on heart rate, blood pressure, and respiration rate after induced acute mental stress. New York: University of Wisconsin-Madison. 2016.
26. Laterza M C, de Matos L D N J, Trombetta I C, Braga A M W, Roveda F, Rondon M U P B. Exercise training restores baroreflex sensitivity in never treated hypertensive patients. *Hypertension.* 2007; 49(6): 1298–1306. doi:10.1161/hypertensionaha.106.085548.
27. Linneberg A, Jacobsen R K, Skaaby T, Taylor A E, Fluharty M E, Jeppesen J L, Campbell, A. Effect of smoking on blood pressure and resting heart rate clinical perspective. *Circulation: Cardiovascular Genetics.* 2015; 8(6): 832–841. doi:10.1161/circgenetics.115.001225.
28. Torstveit, M. K., Fahrenholtz, I., Stenqvist, T. B., Sylta, Ø., & Melin, A. Within-day energy deficiency and metabolic perturbation in male endurance athletes. *International Journal of Sport Nutrition and Exercise Metabolism.* 2018; 28(4): 419–427. doi:10.1123/ijsnem.2017-0337.
29. Bompa TO, Haff GG. Periodization training for Sports: Theory and ISSN: 2302-688X. *Sport and Fitness Journal.* 2016; 4(2): 1-6.
30. Bickley LS. 2014. *Buku Ajar Pemeriksaan Fisik dan Riwayat Kesehatan (Andry Hartono, Penerjemah) (Edisi 8).* Jakarta: EGC.
31. Siwindro. Indeks referensi alternatif untuk memantau kelelahan variabilitas denyut Jantung (HRV). 2020. Diakses dari <https://www.garmin.com/id-ID/blog/indeks-referensi-alternatif-untuk-memantau-kelelahan-variabilitas-denyut-jantung-hrv/>.
32. Nicolaidis. muscle strength and flexibility in male marathon runners: the role of age, running speed and anthropometry. *Frontiers in Physiology.* 2019; 10(1301).

33. Etxegarai U, Insunza A, Larruskain J, Santos-Concejero J, Gil S M., Portillo E, Irazusta J. Prediction of performance by heart rate-derived parameters in recreational runners. *Journal of Sports Sciences*. 2018; 36(18): 2129–2137. doi:10.1080/02640414.2018.1442185.
34. Gordon. Physiological and training characteristics of recreational marathon runners. *open Access Journal of Sport Medicine*. 2017; 8.
35. Vernillo. Antropometric characteristics of top-class kenya marathon runners. *The journal of Sports Medicine and Physical Fitness*. 2013; 53(4).
36. Nystoriak MA, Bhatnagar A. Cardiovascular effects and benefits of exercise. *Front Cardiovasc Med*. 2018; 5. doi:10.3389/fcvm.2018.00135.
37. Fagard RH. Exercise characteristics and the blood pressure response to dynamic physical training. *Med Sci Sports Exerc*. 2001; 33(6): 484-92 doi: 10.1097/00005768-200106001-00018.
38. Hardy ST, Loehr LR, Butler KR, Chakladar S, Chang PP, Folsom AR, et al. Reducing the blood pressure-related burden of cardiovascular disease: impact of achievable improvements in blood pressure prevention and control. *J Am Heart Assoc*. (2015) 4:e00 2276. doi: 10.1161/JAHA.115.002276.
39. Fagard RH. Exercise is good for your blood pressure: effects of endurance training and resistance training. *Clin Exp Pharmacol Physiol*. 2006; 33: 853–6. doi: 10.1111/j.1440-1681.2006.04453.
40. Zago AS, Park JY, Fenty-Stewart N, Kokubun E, Brown MD. Effects of aerobic exercise on the blood pressure, oxidative stress and eNOS gene polymorphism in pre-hypertensive older people. *Eur J Appl Physiol*. 2010; 110: 825–32. doi: 10.1007/s00421-010-1568-6.
41. Carter JR, Ray CA. Sympathetic neural adaptations to exercise training in humans. *Auton Neurosci*. 2015; 188:36–43. doi: 10.1016/j.autneu.2014.10.020.
42. Breisch EA, White FC, Nimmo LE, McKirnan MD, Bloor CM. Exercise-induced cardiac hypertrophy: a correlation of blood flow and microvasculature. *J Appl Physiol*. 1986; 60:1259–67. doi: 10.1152/jappl.1986.60.4.1259.
43. Borlaug BA, Lam CS, Roger VL, Rodeheffer RJ, Redfield MM. Contractility and ventricular systolic stiffening in hypertensive heart disease insights into the pathogenesis of heart failure with preserved ejection fraction. *J Am Coll Cardiol*. 2009; 54(4 ): 10–8. doi: 10.1016/j.jacc.2009.05.013.
44. Gibb AA, Epstein PN, Uchida S, Zheng Y, McNally LA, Obal D, et al. Exercise-induced changes in glucose metabolism promote physiological cardiac growth. *Circulation*. 2017; 136:2144–57. doi: 10.1161/CIRCULATIONAHA.117.028274 .
45. McMullen JR, Shioi T, Huang WY, Zhang L, Tarnavski O, Bisping E, et al. The insulin-like growth factor 1 receptor induces physiological heart growth via the phosphoinositide 3-kinase(p110alpha) pathway. *J Biol Chem*. 2004; 279: 4782–93. doi: 10.1074/jbc.M310405200 .
46. Esch BT, Scott JM, Haykowsky MJ, McKenzie DC, Warburton DE. Diastolic ventricular interactions in endurance-trained athletes during orthostatic stress. *Am J Physiol Heart Circ Physiol*. 2007; 293:H409–15. doi: 10.1152/ajpheart.00928.2006.
47. Wisloff U, Loennechen JP, Currie S, Smith GL, Ellingsen O. Aerobic exercise reduces cardiomyocyte hypertrophy and increases contractility, Ca<sup>2+</sup> sensitivity

- and SERCA-2 in rat after myocardial infarction. *Cardiovasc Res.* 2002; 54: 162–74. doi: 10.1016/S0008-6363(01)00565-X.
48. Wisloff U, Loennechen JP, Falck G, Beisvag V, Currie S, Smith G, et al. Increased contractility and calcium sensitivity in cardiac myocytes isolated from endurance trained rats. *Cardiovasc Res.* 2001; 50:495–508. doi: 10.1016/S0008-6363(01)00210-3.
  49. Marionneau C, Brunet S, Flagg TP, Pilgram TK, Demolombe S, Nerbonne JM. Distinct cellular and molecular mechanisms underlie functional remodeling of repolarizing K<sup>+</sup> currents with left ventricular hypertrophy. *Circ Res.* 2008; 102:1406–15. doi: 10.1161/CIRCRESAHA.107.170050 .
  50. Yang KC, Foeger NC, Marionneau C, Jay PY, McMullen JR, Nerbonne JM. Homeostatic regulation of electrical excitability in physiological cardiac hypertrophy. *J Physiol.* 2010; 588(24): 5015–32. doi: 10.1113/jphysiol.2010.197418.
  51. Mairbaurl H. Red blood cells in sports: effects of exercise and training on oxygen supply by red blood cells. *Front Physiol.* 2013; 4: 332. doi: 10.3389/fphys.2013.00332.
  52. Semenza GL. Regulation of oxygen homeostasis by hypoxia-inducible factor . *Physiology.* 2009; 24: 97–106. doi: 10.1152/physiol.00045.2008.
  53. Ribeiro F, Ribeiro IP, Goncalves AC, Alves AJ, Melo E, Fernandes R, et al. Effects of resistance exercise on endothelial progenitor cell mobilization in women. *Sci Rep.* 2017; 7:17880. doi: 10.1038/s41598-017-18156-6.
  54. Sarelius I, Pohl U. Control of muscle blood flow during exercise: local factors and integrative mechanisms. *Acta Physiol.* 2010; 199:349–65. doi: 10.1111/j.1748-1716.2010.02129.x.
  55. Laughlin MH, Yang HT, Tharp DL, Rector RS, Padilla J, Bowles DK. Vascular cell transcriptomic changes to exercise training differ directionally along and between skeletal muscle arteriolar trees. *Microcirculation.* 2017; 24:e12336. doi: 10.1111/micc.12336.
  56. Mobius WS, Uhlemann M, Adams V, Sandri M, Erbs S, Lenk K, et al. Coronary Collateral growth induced by physical exercise: results of the impact of intensive exercise training on coronary collateral circulation in patients with stable coronary artery disease (EXCITE) trial. *Circulation.* 2016; 133:1438–48; discussion 1448. doi: 10.1161/CIRCULATIONAHA.115.016442.
  57. Robinson AT, Franklin NC, Norkeviciute E, Bian JT, Babana JC, Szczurek MR, et al. Improved arterial flow-mediated dilation after exertion involves hydrogen peroxide in overweight and obese adults following aerobic exercise training. *J Hypertens.* 2016; 34:1309–16. doi: 10.1097/HJH.0000000000000946.
  58. Tyagi A, Cohen M. Yoga and heart rate variability: A comprehensive review of the literature. *Int. J. Yoga.* 2016; 9: 97–113.
  59. Tadic M, Cuspidi C, Grassi G. Heart rate as a predictor of cardiovascular risk. *Eur. J. Clin. Investig.* 2018; 48.
  60. Dahlan MS. 2016. *Langkah-Langkah Membuat Proposal Penelitian Bidang Kedokteran dan Kesehatan.* Jakarta: CV Sagung Seto.

61. Jensen UK, Saltin B, Ericson M, Storck N, Jensen UM. Pronounced resting bradycardia in male is associated with high heart rate variability. *Scan J Med Sci Sports*. 1997; 7: 274-278.
62. Azhar. Studi identifikasi sinyal ECG irama myocardial ischemia dengan pendekatan fuzzy logic. *Jurnal JUTI* . 2009; 7(4): 193–206.
63. Quer G, Gouda P, Galarnyk M, Topol E J, & Steinhubl S R. Inter- and intraindividual variability in daily resting heart rate and its associations with age, sex, sleep, BMI, and time of year: Retrospective, longitudinal cohort study of 92,457 adults. *PLOS ONE*. 2020;15(2), e0227709. doi:10.1371/journal.pone.0227709
64. Gordon D, Wightman S, Basevitch I, Johnstone J, Espejo-Sanchez C, Beckford C, Merzbach V. Physiological and training characteristics of recreational marathon runners. *Open Access Journal of Sports Medicine*. 2017; 8: 231–241. doi:10.2147/oajsm.s141657
65. Papathanasiou G, Georgakopoulos D, Papageorgiou E, Zerva E, Michalis L, Kalfakakou V, Evangelou A. Effects of smoking on heart rate at rest and during exercise, and on heart rate recovery, in young adults. *Hellenic J Cardiol*. 2013 May-Jun; 54(3):168-77.
66. Sydó N, Abdelmoneim S S, Mulvagh S L, Merkely B, Gulati M, Allison T G. Relationship Between Exercise Heart Rate and Age in Men vs Women. *Mayo Clinic Proceedings*. 2014; 89(12): 1664–1672. doi:10.1016/j.mayocp.2014.08.018)
67. Joe Walsh , Ian Timothy Heazlewood , Mike Climstein. Body Mass Index in Master Athletes: Review of the Literature. *J Lifestyle Med*. 2018 Jul;8(2):79-98. doi: 10.15280/jlm.2018.8.2.79. Epub 2018 Jul 31.
68. Bertelsen M L, Hansen M, Rasmussen S, Nielsen R O. How Do Novice Runners With Different Body Mass Index Commence a Self-Chosen Running Regime? *Journal of Orthopaedic & Sports Physical Therapy*. 2018; 1–23. doi:10.2519/jospt.2018.8169
69. Lindgren M, Robertson J, Adiels M, Schaufelberger M, Åberg M, Torén K, Rosengren A. Resting heart rate in late adolescence and long term risk of cardiovascular disease in Swedish men. *International Journal of Cardiology*. 2018; 259: 109–115. doi:10.1016/j.ijcard.2018.01.110
70. Freitas Júnior I F, Monteiro P A, Silveira L S, Cayres S U, Antunes B M, Bastos K N, Fernandes R A. Resting heart rate as a predictor of metabolic dysfunctions in obese children and adolescents. *BMC Pediatrics*. 2012; 12(1). doi:10.1186/1471-2431-12-5
71. Christofaro D G D, Casonatto J, Vanderlei L C M, Cucato G G, Dias R M R. Relationship between resting heart rate, blood pressure and pulse pressure in adolescents. *Arq Bras Cardiol*. 2017; 108(5):405-410.
72. Lopes T R, Oliveira D M, Simurro P B, Akiba H T, Nakamura F Y, Okano A H *et al*. No sex difference in mental fatigue effect on high-level runners' aerobic performance. *Medicine & Science in Sports & Exercise*, Publish Ahead of Print. 2020. doi:10.1249/mss.0000000000002346
73. Smorawiński J, Kaciuba-Uściłko H, Nazar K , Kubala P , Kamińska E , Ziemia AW , Adrian J , Greenleaf JE. Effects of three-day bed rest on metabolic, hormonal and circulatory responses to an oral glucose load in endurance or strength trained athletes and untrained subjects. *J Physiol Pharmacol*. 2000; 51(2): 279-89.

74. Dong J G. The role of heart rate variability in sports physiology. *Experimental and Therapeutic Medicine*. 2016; 11(5): 1531–1536. doi:10.3892/etm.2016.3104
75. Martinelli F S, Chacon-mikahil M P T, Martins LEB, Lima-filho E C, Golfetti R, Paschoal M A. Heart rate variability in athletes and nonathletes at rest and during head-up tilt. *Brazilian Journal of Medical and Biological Research*. 2005; 38: 639–647 ISSN 0100-879X.
76. Reimers A K, Knapp G, Reimers C D, Effects of exercise on the resting heart rate: a systematic review and meta-analysis of interventional studies. *J Clin Med*. 2018; 7: 503.
77. Pichot V, Roche F, Gaspoz J M, Enjolras F, Antoniadis A, Minini P, Barth L MY J C. Relation between heart rate variability and training load in middle-distance runners. *Medicine & Science in Sports & Exercise*. 2000; 32(10): 1729–1736. doi:10.1097/00005768-200010000-00011.
78. Cornelissen V A, Verheyden B, Aubert A E, Fagard R H. Effects of aerobic training intensity on resting, exercise and post-exercise blood pressure, heart rate and heart-rate variability. *Journal of Human Hypertension*. 2009; 24(3): 175–182. doi:10.1038/jhh.2009.51.
79. Wilmore JH, Costill DL, Kenney WL. 2008. *Physiology of Sport and Exercise*. Champaign: Human Kinetics.
80. Pearce EC. 2012. *Anatomi dan Fisiologi Untuk Paramedik*. Jakarta: PT Gramedia.
81. Bonnemeier H, Richardt G, Potratz J, et al. Circadian profile of cardiac autonomic nervous modulation in healthy subjects: differing effects of aging and gender on heart rate variability. *J Cardiovasc Electrophysiol*. 2003;14:791–9.
82. Motonaga K, Yoshida S., Yamagami F, Kawano T, Takeda E. Estimation of Total Daily Energy Expenditure and Its Components by Monitoring the Heart Rate of Japanese Endurance Athletes. *Journal of Nutritional Science and Vitaminology*. 2006; 52(5): 360–367. doi:10.3177/jnsv.52.360.

