

GAYA HIDUP ATLET PELATNAS BALAP SEPEDA INDONESIA

TESIS

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar Magister Pendidikan pada Program Studi Pendidikan Olahraga, Sekolah Pascasarjana, Universitas Pendidikan Indonesia



Oleh:

Syifa Shofia Viviany

2002591

**KONSENTRASI PENDIDIKAN JASMANI DAN OLAHRAGA
PROGRAM STUDI PENDIDIKAN OLAHRAGA
SEKOLAH PASCASARJANA
UNIVERSITAS PENDIDIKAN INDONESIA
2022**

LEMBAR HAK CIPTA

GAYA HIDUP ATLET PELATNAS BALAP SEPEDA INDONESIA

Oleh:

Syifa Shofia Viviany

UPI Bandung, 2022

Sebuah Tesis yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Magister Pendidikan (M.Pd) pada Sekolah Pascasarjana UPI

© Syifa Shofia Viviany 2022

Universitas Pendidikan Indonesia

Mei 2022

Hak cipta dilindungi undang-undang.

Tesis ini tidak boleh diperbanyak seluruhnya atau sebagian, dengan dicetak ulang, difoto copy, atau cara lainnya tanpa ijin penulis.

GAYA HIDUP ATLET PELATNAS BALAP SEPEDA INDONESIA

Syifa Shofia Viviany¹, Nuryadi², & Boyke Mulyana³

Universitas Pendidikan Indonesia, Bandung, Jawa Barat, Indonesia

syifa.shofia@icloud.com

ABSTRAK

Penelitian ini bertujuan untuk mengetahui gaya hidup atlet Pelatnas Balap Sepeda Indonesia seperti asupan gizi, pola makan, pola istirahat dan aktivitas atlet. Penelitian ini menggunakan metode penelitian kualitatif dengan proses triangulasi yaitu observasi, wawancara dan dokumentasi. Subjek penelitian dalam penelitian ini adalah atlet, ahli gizi, dan pelatih. Dari hasil penelitian di lapangan terungkap beberapa kesimpulan mengenai pola hidup atlet; *Pertama*, menunjukkan bahwa asupan nutrisi sangat berpengaruh terhadap performa atlet. *Kedua*, pola makan atlet diawasi oleh tim gizi dan diatur mengenai asupannya. *Ketiga*, atlet mengalami gangguan pola istirahat pada saat malam hari, namun saat ini atlet sedang dalam pengawasan dokter. *Keempat*, atlet mempunyai aktivitas lain di luar latihan untuk menghilangkan rasa jenuh.

Kata Kunci: Gaya Hidup, Asupan Nutrisi, Pola Makan, Pola Istirahat, Aktivitas di luar latihan.

THE LIFESTYLE OF INDONESIAN NATIONAL ATHLETE

Syifa Shofia Viviany¹, Nuryadi², & Boyke Mulyana³

Universitas Pendidikan Indonesia, Bandung, Jawa Barat, Indonesia

syifa.shofia@icloud.com

ABSTRACT

This study aims to determine the lifestyle of Indonesian Cycling training athletes such as nutritional intake, diet, rest patterns and athlete activities. This study uses a qualitative research method with a triangulation process, namely observation, interviews and documentation. The research subjects in this study were athletes, nutritionists, and coaches. From the results of research in the field revealed several conclusions regarding the athlete's lifestyle; First, it shows that nutritional intake is very influential on athlete performance. Second, the athlete's diet is monitored by the nutrition team and regulated regarding their intake. Third, athletes have disturbed rest patterns at night, but currently the athlete is under the supervision of a doctor. Fourth, athletes have other activities outside of training to relieve boredom.

Keywords: Lifestyle, Nutritional Intake, Diet, Rest Pattern, Activities outside of exercise.

DAFTAR ISI

LEMBAR HAK CIPTA.....	2
LEMBAR PENGESAHAN TESIS.....	Error! Bookmark not defined.
LEMBAR PERNYATAAN.....	Error! Bookmark not defined.
ABSTRAK.....	3
ABSTRACT.....	4
KATA PENGANTAR	Error! Bookmark not defined.
UCAPAN TERIMAKASIH	Error! Bookmark not defined.
DAFTAR ISI.....	5
DAFTAR TABEL.....	Error! Bookmark not defined.
DAFTAR GAMBAR	Error! Bookmark not defined.
BAB I PENDAHULUAN.....	Error! Bookmark not defined.
1.1. Latar Belakang Masalah.....	Error! Bookmark not defined.
1.2. Identifikasi Masalah	Error! Bookmark not defined.
1.3. Rumusan Masalah	Error! Bookmark not defined.
1.4. Tujuan Penelitian.....	Error! Bookmark not defined.
1.5. Manfaat Penelitian.....	Error! Bookmark not defined.
BAB II KAJIAN KEPUSTAKAAN.....	Error! Bookmark not defined.
2.1. Gaya Hidup	Error! Bookmark not defined.
2.1.1 Faktor Pendukung Gaya Hidup Sehat	Error! Bookmark not defined.
2.2. Ilmu Gizi Olahraga.....	Error! Bookmark not defined.
2.3. Kebutuhan Asupan Gizi	Error! Bookmark not defined.
2.4. Pola Makan.....	Error! Bookmark not defined.
2.5. Pola Istirahat.....	Error! Bookmark not defined.
2.5.1 Istirahat Aktif.....	Error! Bookmark not defined.
2.5.2 Istirahat Pasif	Error! Bookmark not defined.
2.6. Aktivitas Atlet	Error! Bookmark not defined.
2.6.1 Latihan	Error! Bookmark not defined.
2.6.2 Aktivitas di Luar Latihan.....	Error! Bookmark not defined.
2.7. Penelitian Relevan.....	Error! Bookmark not defined.
2.8. Kerangka Pemikiran.....	Error! Bookmark not defined.
BAB III METODE PENELITIAN	Error! Bookmark not defined.

3.1 Metode Penelitian.....	Error! Bookmark not defined.
3.2 Partisipan dan Tempat Penelitian	Error! Bookmark not defined.
3.2.1 Tempat Penelitian	Error! Bookmark not defined.
3.2.2 Partisipan Penelitian	Error! Bookmark not defined.
3.3 Karakteristik Subjek.....	Error! Bookmark not defined.
3.4 Teknik Pengumpulan Data	Error! Bookmark not defined.
3.5 Instrumen Penelitian.....	Error! Bookmark not defined.
3.6 Prosedur Penelitian.....	Error! Bookmark not defined.
3.7 Validitas dan Reliabilitas Penelitian Kualitatif	Error! Bookmark not defined.
3.7.1 <i>Credibility</i> (Uji Kredibilitas)	Error! Bookmark not defined.
3.7.2 <i>Transferability</i>	Error! Bookmark not defined.
3.7.3 <i>Dependability</i>	Error! Bookmark not defined.
3.7.4 <i>Confirmability</i>	Error! Bookmark not defined.
3.8 Analisis Data.....	Error! Bookmark not defined.
3.9 Isu Etik	Error! Bookmark not defined.
3.10 Limitasi Penelitian.....	Error! Bookmark not defined.
BAB IV HASIL PENELITIAN DAN PEMBAHASAN.....	Error! Bookmark not defined.
4.1 Hasil Penelitian Asupan Gizi Atlet	Error! Bookmark not defined.
4.1.1 Atlet Balap Sepeda (Responden 1).....	Error! Bookmark not defined.
4.1.2 Ahli Gizi (Responden 2).....	Error! Bookmark not defined.
4.1.3 Pelatih (Responden 3).....	Error! Bookmark not defined.
4.2 Hasil Penelitian Pola Makan	Error! Bookmark not defined.
4.2.1 Atlet Balap Sepeda (Responden 1).....	Error! Bookmark not defined.
4.2.2 Ahli Gizi (Responden 2).....	Error! Bookmark not defined.
4.2.3 Pelatih (Responden 3).....	Error! Bookmark not defined.
4.3 Hasil Penelitian Pola Istirahat	Error! Bookmark not defined.
4.3.1 Atlet Balap Sepeda(Responden 1).....	Error! Bookmark not defined.
4.3.2 Ahli Gizi (Responden 2).....	Error! Bookmark not defined.
4.3.3 Pelatih (Responden 3).....	Error! Bookmark not defined.
4.4 Hasil Penelitian Aktivitas Atlet.....	Error! Bookmark not defined.
4.4.1 Atlet Balap Sepeda (Responden 1).....	Error! Bookmark not defined.
4.4.2 Ahli Gizi (Responden 2).....	Error! Bookmark not defined.
4.4.3 Pelatih (Responden 3).....	Error! Bookmark not defined.

4.6 Pembahasan Hasil Penelitian	Error! Bookmark not defined.
4.6.1 Asupan Gizi	Error! Bookmark not defined.
4.6.2 Pola Makan	Error! Bookmark not defined.
4.6.3 Pola Istirahat	Error! Bookmark not defined.
4.6.4 Aktivitas Atlet.....	Error! Bookmark not defined.
4.6.5 Performa Atlet	Error! Bookmark not defined.
BAB V SIMPULAN, IMPLIKASI DAN REKOMENDASI	Error! Bookmark not defined.
5.1 Simpulan.....	Error! Bookmark not defined.
5.2 Implikasi.....	Error! Bookmark not defined.
5.3 Rekomendasi	Error! Bookmark not defined.
DAFTAR PUSTAKA	8
LAMPIRAN.....	Error! Bookmark not defined.

DAFTAR PUSTAKA

- Akkoyunlu, Y., Acet, M., & Karademir, T. (2017). Evaluation of Healthy Lifestyle Behaviour Level of Active Athletes and Sedentary Students Study at Physical Education and Sports College. *The Anthropologist*, 28(1–2), 99–106. <https://doi.org/10.1080/09720073.2017.1311663>
- Alwasilah, A. C., & Furqon. (2010). Indonesia: *The National Education System. Education*
- Alwasilah, A. Chaedar. (2017). *Membangun Kreativitas Menulis: Membenahi Pendidikan Bahasa di Perguruan Tinggi*. Komposisi: Jurnal Pendidikan Bahasa, Sastra, Dan Seni. <https://doi.org/10.24036/komposisi.v2i2.6442>
- Ami W. Anzilotti, MD. (2019). *Sport Drink and Energi Drinks*. <https://kidshealth.org/en/teens/sports-Energi-drinks>.
- Bahri, S. dkk. *Penanganan Rehidrasi Setelah Olahraga dengan Air Kelapa (Cocos Nucifera L.), Air Kelapa Ditambah Gula Putih, Minuman Suplemen, dan Air Putih*. *Jurnal Matematika & Sains*, 17.1 (2012): 22-26.
- Bardis, C. N., Kavouras, S. A., Arnaoutis, G., Panagiotakos, D. B., & Sidossis, L. S. 2013. *Mild Dehydration and Cycling Performance During 5-Kilometer Hill Climbing*. *Journal of Athletic Training*, 48(6), 741-747
- Ben Desbrow , Nicholas A Burd, etc. (2019). *Nutrition for Special Populations: Young, Female, and Masters Athletes (Journal) International Journal Of Sport Nutrition, Exercise and metabolism*
- Berardi, J.M. et al. 2006. *Postexercise Muscle Glycogen Recovery Enhanced with a Carbohydrate-Protein Supplement*. *Journal Medicine and Science in Sports and Exercise*, 38.6 (2006): 1106.
- Benardot, D. (2012). *Advanced Sports Nutrition*, 424. Retrieved
- Bloxham, S., & Porter, S. (2010). *Adventure sport physiology. In Journal of Adventure Education & Outdoor Learning (Vol. 10)*. <https://doi.org/10.1080/14729679.2010.505710>

- Bompa, T.O. 1994. *Theory and Methodology of Training, The Key of Athletic Performanc 3 th Ed.* Kandall/Hunt: Publishing Company
- Bompa, T.O. *Periodization: Theory and Methodology of Training (Fourth Edition)*. United States: Human Kinetics. 1999
- Buford, T. W., Rossi, S. J., Smith, D. B., & Warren, A. J. (2007). A comparison of periodization models during nine weeks with equated volume and intensity for strength. *Journal of Strength and Conditioning Research*, 21(4), 1245–1250. <https://doi.org/10.1519/R-20446.1>
- Casa, D.J. et al. *National Athletic Trainers Association Position Statement: Fluid Replacement for Athletes*. *Journal of Athletic Training* 35.2 (2000): 212.
- Chris Carmichael dan Edmund R. Burke. 2003. *Bugar dengan Bersepeda*. Jakarta: Divisi Buku Sport PT RajaGrafindo Persada Djoko
- Clifford and K. Maloney. *Nutrition for Athletes*. *Journal of Colorado State University*, 9362 Fact. Sheet No. 7/15.
- Creswell, J. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. In *Mycological Research* (Vol. 94, Issue 4, p. 522). [https://doi.org/10.1016/S0953-7562\(10\)80014-0](https://doi.org/10.1016/S0953-7562(10)80014-0)
- DepKes, R. I. (1994). *Pedoman Sanitasi Rumah Sakit di Indonesia*. Direktorat Jenderal P2M & PLP Dan Direktorat Jenderal Pelayanan Medik, Jakarta
- Devaney, D. J., Nesti, M. S., Ronkainen, N. J., Littlewood, M., & Richardson, D. (2018). *Athlete Lifestyle Support of Elite Youth Cricketers: An Ethnography of Player Concerns Within a National Talent Development Program*. *Journal of Applied Sport Psychology*, 30(3), 300–320. <https://doi.org/10.1080/10413200.2017.1386247>
- Deweese, B. H. et al. The training process : Planning for strength – power training in track and field . Part 1 : Theoretical aspects’. Elsevier B.V., 4(4), 2015.pp. 308–317. doi: 10.1016/j.jshs.2015.07.003
- Djoko Pekik Irianto. 2007. *Panduan Lengkap Keluarga dan Oahraga*. Yogyakarta: C.V Andi Offset

- FB, Ortega (2008). *Physical fitness in childhood and adolescence: a powerful marker of health*. [Online]. Diakses dari <http://scihub.tw/10.1038/sj.ijo.0803774>
- Fox, E.L., & Mathew, D.K. 1981. *The Physiological Basic of Physical Education and Athletics*. Philadelphia: Saunders Colege Publishing.
- Fox, E.L., Bower, R.W. & Foss, M.L. 1993. *The Physiological Basic of Physical Education and Athletics*, 5 th Ed. Dubuque: Wm. C. Brown Communication, Inc.
- Fraenkel, J. R. (2012). How to Design and Evaluate Research in Education. In Quarterly Review of Biology (Vol. 8, Issue 3) <https://doi.org/10.1086/393991>
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2013). *Design and Evaluate Research in Education. Climate Change 2013 - The Physical Science Basis* (Vol. 53). <https://doi.org/10.1017/CBO9781107415324.004>
- Gösele-Koppenburg, A. (2017). Cycling. In Foot and Ankle Sports Orthopaedics. https://doi.org/10.1007/978-3-319-15735-1_49
- Gregor, R.J. & Conconi, F. Eds., 2008. *Handbook of Sports Medicine and Science*, Road Cycling. John Wiley & Sons.
- Harsono.(2015). *Kepelatihan Olahraga Teori dan Metodologi*. Bandung.PT REMAJA ROSDAKARYA
- Harsono.(2018). *Latihan Kondisi Fisik Untuk Atlet Sehat Aktif*. Bandung.PT REMAJA ROSDAKARYA
- Hermanto, M. . (2017). *Tingkat Usaha Mengatasi Kejenuhan Latihan Pada Atlet Atletik Kelas Khusus Olahraga (Kko) Dan Atlet Pusat Pembinaan Dan Latihan Olahraga Pelajar (Pplp) Daerah Istimewa Yogyakarta*. Jurnal Ilmiah Bina Edukasi, 10(1), 1–12
- Howard, J., 2010. *Mastering Cycling*. New York: Human Kinetics.
- Ilaria St. Florian, MS, RD. (2018). *The 101 on Nutrition in Young Athletes*. <https://www.stamfordhealth.org/healthflash>
- Ilmu Keolahragaan Vol. 8. Staf edukatif di FIK Universitas Negeri Medan

Ivy, J.L. *Regulation of Muscle Glycogen Repletion, Muscle Protein Synthesis and Repair Following Exercise*. Journal of Sports Science and Medicine, 136 (3) (2004): 131-138.

Ivy, J.L., Res, P.T., Sprague, R.C. & Widzer, M.O. 2003. *Effect of a Carbohydrate-Protein Supplement on Endurance Performance During Exercise of Varying Intensity*. International Journal of Sport Nutrition and Exercise Metabolism, 13, pp. 382-395.

Jeukendrup, A.E. 2011. *Nutrition for Endurance Sports: Marathon, Triathlon, and Road Cycling*. Journal of Sports Sciences, 29(sup1), S91-S99.

Jeukendrup, A. E., & Martin, J. (2001). Improving cycling performance: How should we spend our time and money. *Sports Medicine*, 31(7), 559–569. <https://doi.org/10.2165/00007256-200131070-00009>

Jannah, M., Juriana, & dkk. (2017). *Psikologi Olahraga : Student Handbook*. PT Edukasi Pratama Madani.

Jamshed, S. (2014). *Qualitative research method - interviewing and observation*. 5(4), 4–5. <https://doi.org/10.4103/0976-0105.141942>

Jennifer Sacheck, Ph.D. and Nicole Schultz, M.S., MPH. *Optimal Nutrition for Youth Athletes: Food Sources and Fuel Timing*. National Youth Sports Health & Safety Institute.

John Creswell. (2008). *Metode penelitian kualitatif: jenis, karakteristik dan keunggulannya*. <https://doi.org/10.31219/osf.io/mfzuj>

Juliantine, Tite. Yudiana, Yunyun. & Subajah, Herman. (2007). *Teori Latihan*. Bandung: Universitas Pendidikan Indonesia

Juris, P. M. (2004). *Muscle and Exercise Physiology*. In Sports Medicine: A Comprehensive Approach: Second Edition. <https://doi.org/10.1016/B978-0-323-02345-0.50006-X>

Kala. Wati & Paul J. tranter. (2015) *Spatial and socio-demographic of South East Queensland students' schoo cycling*. [Online]. Diakses dar <https://scihub.tw/10.1016/j.jtrangeo.2015.07.005>

Komariah, Lilis (2017). *Kesehatan Olahraga*. Universitas Pendidikan Indonesia. Bandung: RedPoint

- Lambert MI, Viljoen W, Bosch A, Pearce AJ, Sayers M. General principles of training. In: Schweltnus MP, ed. *Olympic Textbook of Medicine in Sport*. Chichester, UK: Blackwell Publishing, 2008; 1–48.
- Leane Suniar. (2002). *Dukungan Zat-Zat Gizi Untuk Menunjang Prestasi Olahraga*. Jakarta: Kalamedia
- Learning, M., Analysis, N., & Wales, S. (2018). *An introduction to sports coaching: From science and theory to practice*. 185. Retrieved from <http://books.google.com/books?id=3j3dEbL05KUC&pgis=1>
- Lee, K. Y., & HS Lam, M. (2017). *Physical Activity Measurements in Sport Field: Objective or Subjective Measures? Sports Nutrition and Therapy*, 02(02). <https://doi.org/10.4172/2473-6449.1000122>
- Mahendra, Agus. (2017). *Teori Belajar Motorik*. Bandung: Universitas Pendidikan Indonesia
- Meyer, F., O'Connor, H., & Shirreffs, S. M. (2007). Nutrition for the young athlete. *Journal of Sports Sciences*, 25(SUPPL. 1), 73–82. <https://doi.org/10.1080/02640410701607338>
- Muis, M. A., Keolahragaan, S. I., Olahraga, F. I., & Surabaya, U. N. (2022). *Analisa Pola Tidur Tim Futsal Putri Kartini Yuk Lamongan Di Masa Pandemi Covid-19*. *Jurnal Kesehatan Olahraga*, 10, 93–104.
- Nedelec, M., Aloulou, A., Duforez, F., Meyer, T., & Dupont, G. (2018). *The variability of sleep among elite athletes*. *Sports medicine-open*, 4(1), 1–13.
- Netty Thamaria. (2017). *PENILAIAN STATUS GIZI* (Vol. 148).
- Nuryadi. (2011). *Siklus Kehidupan Atlet Olahraga Prestasi di Indonesia*. Bandung. Universitas Pendidikan Indonesia
- Notoatmodjo, Soekidjo, 2007. *Promosi Kesehatan dan Ilmu Perilaku*, Rineka Cipta, Jakarta
- Oja, Pekka. (2010). *Health benefits of cycling: systematic review*. [Online]. Diakses dari <https://sci-hub.tw/10.1111/j.1600-0838.2011.01299.x>
- Olahraga, J. P. (1984). *Modul Vii*. 117–139.
- Panggalih, M. (2007). *Gaya Hidup , Status Gizi Dan Stamina Atlet*. 23(4), 192–199.

- Penggalih, M.H.S.T., Hardiyanti, M., Sani, F.I. (2015). Perbedaan perubahan tekanan darah dan denyut jantung pada berbagai intensitas latihan atlet Balap Sepeda. 3(2)
- Pertiwi, A. B., & Murbawani, E. A. (2012). Pengaruh Asupan Makan (Energi, Karbohidrat, Protein Dan Lemak) Terhadap Daya Tahan Jantung Paru (Vo2 Maks) Atlet Sepak Bola. *Journal of Nutrition College*, 1(1), 199–208. <https://doi.org/10.14710/jnc.v1i1.677>
- Pisarek, A., Guszowska, M., Zagórska, A., & Lenartowicz, M. (2011). Characteristics of athletes' approach to the question of physical health and health behaviors: Do athletes lead healthy lifestyles? *Journal of Applied Sport Psychology*, 23(4), 459–473. <https://doi.org/10.1080/10413200.2011.594851>
- Ruangmanotam, L. (2016). *Relationships Between Boredom And Avoidance Behaviors From Training Of The Athletes*. *Journal of Sports Science and Technology*, 16(1), 139–149.
- Russell R. Pate (1988). The Evolving Definition of Physical Fitness. [Online]. Diakses dari <http://sci-hub.tw/10.1080/00336297.1988.10483898>
- Sabar Surbakti. 2010. *Asupan Bahan Makanan dan Gizi Bagi Atlet Renang*. Jurnal Ilmu Keolahragaan Vol. 8. Staf edukatif di FIK Universitas Negeri Medan
- Sajoto, M. 1988. *Pembinaan Kondisi Fisik dalam Olahraga*. Jakarta: Depdikbud Dirjen Pendidikan Tinggi Proyek Pengembangan Lembaga Pendidikan Tenaga Kependidikan.
- Santosa, Giriwijoyo & Sidik, Dikdik Zafar. (2012). *Ilmu Faal Olahraga*. Bandung: Remaja Rosdakarya
- Saputra, Y. M., & Sultoni, K. (2019). *Strategy for Improving Sport Services through Bachelor of Sports Development Support Drivers to West Java Health in 2020*. 335 (ICESSHum 2019), 304–309. <https://doi.org/10.2991/icesshum19.2019.49>
- Sidik, D.Z., Imanudin. I., dan Mujiyanto, S. (2010). “Dampak Pelatihan Harness Terhadap Peningkatan Kemampuan Dinamis Anaerobik dan Aerobik”. 1-22
- Sidwells, C. 2006. *7 Weeks Cycling for Fitness*, New York: DK Publishing, Inc. New York, 10014, United States.
- Sin, T. H. (2016). *Persiapan Mental Training Atlet dalam menghadapi Pertandingan*. *Jurnal Performa Olahraga*, 1(01), 61–73.

- Stone, M. H., O'Bryant, H., & Garhammer, J. (1981). A hypothetical model for strength training. *The Journal of Sports Medicine and Physical Fitness*, 21(4), 342–351.
- Subardjah, Herman. 2000. *Psikologi Olahraga*. Depdikbud. Jakarta
- Sugiarto. 2012. *Hubungan Asupan Energi, Protein, dan Konsumsi Suplemen dengan Tingkat Kebugaran*. Semarang. Jurnal Media Ilmu Keolahragaan Vol.2 No.2 Tahun 2012: 94-95.
- Sugiyono. (2016). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Suhardjo, Laura Jane.H, Brady J. Deaton, dan Judy A. Driskel. 1986. *Pagan, Gizi dan Pertanian*. Jakarta: UI-Press
- Tarigan, Beltasar. (2012). *Optimalisasi Pendidikan Jasmani dan Olahraga Berlandaskan Ilmu Faal Olahraga*. Bandung: Eidos
- Wainwright, B., Cooke, C. B., & O'Hara, J. P. (2017). *The validity and reliability of a sample of 10 Wattbike cycle ergometers*. *Journal of Sports Sciences*, 35(14), 1451–1458. <https://doi.org/10.1080/02640414.2016.1215495>
- World Health Organization (WHO). 2013. *Noncommunicable disease and mental health*. www.who.int (sitasi 1 Juni 2022).
- Wibisana, M. I. N. (2018). *Pengaruh Pemberian Xanthone Kulit Manggis Terhadap Kadar Asam Laktat Pada Aktivitas Fisik Submasimal*. *Jendela Olahraga*, 3(1), 22–30. <https://doi.org/10.26877/jo.v3i1.2029>
- Williams, C. (2014). *Data Analysis and Research for Sport and Exercise Science*. *Data Analysis and Research for Sport and Exercise Science*. <https://doi.org/10.4324/9780203642245>
- Williams, T. D. *et al.* Comparison of Periodized and Non-Periodized Resistance Training on Maximal Strength : A Meta-Analysis Data were extracted and independently coded by two', *Sports Medicine*. Springer International Publishing. 2017. doi: 10.1007/s40279-017-0734-y
- Wilson, C. (2007). *Best Practice in PERFORMANCE COACHING*

Yin, R. K. (2010). *Qualitative research from Start to Finish*. Yin, R. K. (2015). Case study research: Design and methods.

Zahra, S., & Muhlisin, M.-. (2020). Nutrisi Bagi Atlet Remaja. *Jurnal Terapan Ilmu Keolahragaan*, 5(1), 81–89. <https://doi.org/10.17509/jtikor.v5i1.25097>