

## DAFTAR PUSTAKA

- Ahmad, S. I. (2016) *Reactive Oxygen Species in Biology and Human Health.* United Kingdom: CRC Press Taylor & Francis Group.
- Alkhalfaf, M. I. et al. (2020) ‘Chemoprotective effects of inositol hexaphosphate against cyclophosphamide-induced testicular damage in rats’, *Scientific Reports.* Nature Publishing Group UK, 10(12599), pp. 1–13. doi: 10.1038/s41598-020-68608-9.
- Amirullah. (2015). ‘Populasi dan Sampel’, *Metode Penelitian Manajemen.* Malang: Bayumedia Publishing.
- Anindita, K. (2012). Pengaruh Pemberian Vitamin C terhadap Berat Testis, Jumlah Sel Leydig, dan Diameter Tubulus Seminiferus Mencit (Mus Musculus L) Jantan Dewasa yang Diinduksi Monosodium Glutamat. *Skripsi.* Fakultas Kedokteran Universitas Lampung.
- Armstrong, D. and Stratton, R. D. (2016) *Oxidative Stress and Antioxidant Protection/The Science of Free Radical Biology and Disease.* Canada: John Wiley & Sons, Inc.
- Bakhtiary, Z. et al. (2014) ‘Evaluation of antioxidant effects of crocin on sperm quality in cyclophosphamide treated adult mice.’, *Veterinary Research Forum,* 5(3), pp. 213–8. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/25568721%250>.
- Barret, K. E. et al. (2019) *Ganong’s Review of Medical Physiology 26th Edition.* United States: McGraw-Hill Education.
- Benedict, C., Shuk, E. and Ford, J. S. (2016) ‘Fertility Issues in Adolescent and Young Adult Cancer Survivors’, *Journal of Adolescent and Young Adult Oncology,* 5(1). doi: 10.1089/jayao.2015.0024.
- Brunton, L. L., Hilal-Dandan, R. and Knollmann, B. C. (2018) *The Pharmacological Basis of Therapeutics 13th Edition.* United States of America: McGraw-Hill Education.
- Chabner, B. A. and Longo, D. L. (2011) *Cancer Chemotherapy and Biotherapy: Principles and Practice.* Fifth Edit. Edited by J. W. Pine Jr. Philadelphia: Lippincott Williams & Wilkins.

- Chasapis, C. T. *et al.* (2012) 'Zinc and human health: An update', *Archives of Toxicology*. doi: 10.1007/s00204-011-0775-1.
- Chen, X. Y. *et al.* (2016) 'Follicle Loss and Apoptosis in Cyclophosphamide-Treated Mice: What's the Matter?', *International Journal of Molecular Sciences*. doi: 10.3390/ijms17060836..
- Chu, E. and DeVita, V. T. (2015) *Physicians' Cancer Chemotherapy Drug Manual 2015*. Burlington: Jones & Bartlett Learning.
- Colville, T. P. and Joanna, M. (2016) *Clinical Anatomy and Physiology for Veterinary Technicians*. 3rd edn, SpringerVerlag Berlin Heidelberg. 3rd edn. St. Louis, Missouri 63043: Elsevier, Inc.
- Costanzo, L. S. (2011) *BRS Physiology Fifth Edition*. Philadelphia: Lippincott Williams & Wilkins.
- Dan, D. *et al.* (2015) 'Cyclophosphamide: As bad as its reputation?: Long-term single centre experience of cyclophosphamide side effects in the treatment of systemic autoimmune diseases', *Swiss Medical Weekly*, 144. doi: 10.4414/smw.2014.14030.
- Emadi, A., Jones, R. J. and Brodsky, R. A. (2009) 'Cyclophosphamide and Cancer: Golden Anniversary', *Nature Reviews Clinical Oncology*. doi: 10.1038/nrclinonc.2009.146.
- García, J. J. *et al.* (2011) 'Acute exercise increases plasma total antioxidant status and antioxidant enzyme activities in untrained men', *Journal of Biomedicine and Biotechnology*. doi: 10.1155/2011/540458.
- Gardner, D. G. and Shoback, D. (2018) *Greenspan's Basic & Clinical Endocrinology 10th Edition*, McGraw-Hill. United States: McGraw-Hill Education.
- Gunawan, S. G *et al.* (2016) *Farmakologi dan Terapi*. ed. 6.Badan Penerbit FKUI. Jakarta
- Hall, J. E. and Guyton, A. C. (2020) *Guyton and Hall: Textbook of Medical Physiology 14th Edition*, Elsevier Inc. Philadelphia: Elyse O'Grady. doi: 10.1016/b978-1-4160-5452-8.00020-2.
- Halliwell, B. and Gutteridge, J. M. C. (2015) *Free Radicals in Biology and Medicine*.

- Medicine*. Fifth Edit. United Kingdom: Oxford University Press. doi: 10.1016/0891-5849(91)90055-8.
- Harahap, Y. et al. (2015) ‘Analysis of O6-Methylguanine in Cancer Patient Blood during Administration of Cyclophosphamide Using Ultra High Performance Liquid Chromatography-Tandem Mass Spectrometry’, *Journal of Advances in Medical and Pharmaceutical Sciences*, 2(1), pp. 20–28. doi: 10.9734/jamps/2015/12953.
- Jalali, A. S., Hasanzadeh, S. and Malekinejad, H. (2012) ‘Crataegus monogyna Aqueous Extract Ameliorates Cyclophosphamide-Induced Toxicity in Rat Testis: Stereological Evidences’, *Acta Medica Iranica*, 50(1), pp. 1–8.
- Janvier Labs (2020) SWISS Mouse, Janvier Labs. Available at: [https://www.janvier-labs.com/en/fiche\\_produit/swiss\\_mouse/](https://www.janvier-labs.com/en/fiche_produit/swiss_mouse/)
- Jurowski, K. et al. (2014) ‘Biological consequences of zinc deficiency in the pathomechanisms of selected diseases’, *Journal of Biological Inorganic Chemistry*. doi: 10.1007/s00775-014-1139-0.
- Kanth, M. A. et al. (2014) ‘HISTOLOGICAL EFFECT OF ANTICANCER DRUG CYCLOPHOSPHAMIDE (CPA) ON TESTIS OF RATTUS rattus’, *Indo American Journal of Pharmaceutical Research*, 4(05).
- Katzung, B. G. (2018) *Basic & Clinical Pharmacology Fourteenth Edition, Basic and Clinical Pharmacology*. Edited by M. Weitz and P. Boyle. United States of America: McGraw-Hill Education.
- Kemenkes RI (2019) ‘Artikel Hari Kanker Sedunia 2019’, *Kemenkes RI*. Available at: <https://www.depkes.go.id/article/view/19020100003/hari-kanker-sedunia-2019.html>.
- Kumar, V., Abbas, A. K. and Aster, D. C. (2015) *Robbins & Cotran Pathologic Basis of Disease*. Ninth Edit. Philadelphia: Elsevier Inc.
- Laher, I. (2014) *Systems Biology of Free Radicals and Antioxidants*. Canada: Springer US. doi: 10.1007/978-3-642-30018-9.
- Li, Y. (2011) *Antioxidants in Biology and Medicine: Essentials, Advances, and Clinical Applications*. New York: Nova Science Publishers, Inc.
- Liu, L. et al. (2015) ‘Dehydroepiandrosterone-Regulated Testosterone

- Biosynthesis via Activation of the ERK1/2 Signaling Pathway in Primary Rat Leydig Cells’, *Cellular Physiology and Biochemistry*, 36(5), pp. 1778–1792. doi: 10.1159/000430150.
- Mahidin, M., Maulana, A. M. and Susiyadi, S. (2018) ‘PENGARUH PEMBERIAN EKSTRAK ETANOL DAUN KEMANGI (*Ocimum basilicum L.*) TERHADAP JUMLAH SEL SPERMATOGENIK TIKUS PUTIH (*Rattus norvegicus*) GALUR WISTAR JANTAN YANG DIINDUKSI MONOSODIUM GLUTAMAT’, *Herb-Medicine Journal.* doi: 10.30595/hmj.v1i1.2480.
- Malini, D. M. et al. (2020). ‘POTENSI REGENERASI SEL SERTOLI DAN SEL LEYDIG TIKUS (*Rattus norvegicus*) MODEL DIABETES PASCA PEMBERIAN EKSTRAK ETANOL KULIT BUAH JENGKOL (*Archidendron pauciflorum*)’. *Jurnal Pro-Life*, 7(2), 2579–7557. Available at: <http://ejournal.uki.ac.id/index.php/prolife/article/download/1955/1497/>
- Mescher, A. L. (2011) *Histologi Dasar Junqueira’s : Teks dan Atlas Edisi 12*, McGraw Hill. Edited by H. Hartanto. Jakarta: Penerbit Buku Kedokteran EGC. doi: 10.1017/CBO9781107415324.004.
- Mills, K. A., Chess-Williams, R. and McDermott, C. (2019) ‘Novel insights into the mechanism of cyclophosphamide-induced bladder toxicity: chloroacetaldehyde’s contribution to urothelial dysfunction in vitro’, *Archives of Toxicology*, 93(11), pp. 3291–3303. doi: 10.1007/s00204-019-02589-1.
- Netter, F. H. (2019) *Atlas of Human Anatomy*. Seventh Ed. Edited by J. T. Hansen. Philadelphia: Elsevier Inc.
- Nugroho, R. A. (2018) *Mengenal Mencit Sebagai Hewan Laboratorium*. Edited by A. H. Khanz. Samarinda: Mulawarman University Press. Available at: <https://repository.unmul.ac.id/handle/123456789/1305>.
- O’Toole, T. E. et al. (2009) ‘Acrolein Activates Matrix Metalloproteinases by Increasing Reactive Oxygen Species in Macrophages’, *Toxicology and Applied Pharmacology*. doi: 10.1016/j.taap.2009.01.024.
- Ogino, M. H. and Tadi, P. (2020) ‘Cyclophosphamide’, in *Treasure Island (FL): StatPearls*. USA: StatPearls Publishing LLC. Available at:

[https://www.ncbi.nlm.nih.gov/books/NBK553087/.](https://www.ncbi.nlm.nih.gov/books/NBK553087/)

- Park, K. R. *et al.* (2011) ‘ $\beta$ -Caryophyllene Oxide Inhibits Growth and Induces Apoptosis Through the Suppression of PI3K/AKT/mTOR/S6K1 Pathways and ROS-Mediated MAPKs Activation’, *Cancer Letters*, 312(2), pp. 178–188. doi: 10.1016/j.canlet.2011.08.001.
- Pavin, N. F. *et al.* (2018) ‘Tribulus terrestris Protects against Male Reproductive Damage Induced by Cyclophosphamide in Mice’, *Hindawi Oxidative Medicine and Cellular Longevity*, 2018(578191), p. 9. doi: 10.1155/2018/5758191.
- Payaran, K. O., Wantouw, B. and Tendean, L. (2014) ‘PENGARUH PEMBERIAN ZINK TERHADAP KUALITAS SPERMATOZOA PADA MENCIT JANTAN (*Mus musculus*)’, *Jurnal e-Biomedik*, 2(2), p. 5. doi: 10.35790/ebm.2.2.2014.5044.
- Pramesemara, I. G. N. (2015). ‘Pemberian growth hormone meningkatkan jumlah sel spermatogenesis, sel leydig, dan sel sertoli pada mencit (*mus musculus*) tua’. *Pasca UNUD*.
- Rani, V. and Singh Yadav, U. C. (2015) *Free Radicals in Human Health and Disease*. New Delhi: Springer India. doi: 10.1007/978-81-322-2035-0.
- Redza-Dutordoir, M. and Averill-Bates, D. A. (2016) ‘Activation of Apoptosis Signalling Pathways by Reactive Oxygen Species’, *Biochimica et Biophysica Acta - Molecular Cell Research*, 1863(12), pp. 2977–2992. doi: 10.1016/j.bbamcr.2016.09.012.
- Rink, L. (2011) *Zinc in Human Health*. USA: IOS Press, Inc.
- Rizvi, S. *et al.* (2014) ‘The role of Vitamin E in human health and some diseases’, *Sultan Qaboos University Medical Journal*.
- Roshanravan, N. *et al.* (2015) ‘Effect of zinc supplementation on insulin resistance, energy and macronutrients intakes in pregnant women with impaired glucose tolerance’, *Iranian Journal of Public Health*.
- Ross, M. H. and Pawlina, W. (2016) *Histology a Text and Atlas Seventh Edition*. Edited by C. Taylor. Philadelphia: Wolters Kluwer Health.
- Ruz, M. *et al.* (2013) ‘Zinc as a potential coadjuvant in therapy for type 2 diabetes’, *Food and Nutrition Bulletin*. doi: 10.1177/156482651303400210.

- Safaris, R. A. (2018) Pengaruh Ekstrak Daun Kecombrang (*Etlingera Elatior*) terhadap Kualitas Sperma Mencit (*Mus Musculus*) Jantan yang Diinduksi Siklofosfamid. *Thesis*, Universitas Pendidikan Indonesia.
- Scudamore, C. L. (2014) *A Practical Guide to the Histology of the Mouse*. 1st, *Journal of Visual Languages & Computing*. UK: John Wiley & Sons, Ltd.
- Sherwood, L. (2016) *Human Physiology from Cells to Systems*. Ninth Edit. United States: Cengage Learning.
- Silva, A. et al. (2011) ‘Intracellular Reactive Oxygen Species are Essential for PI3K/Akt/mTOR-Dependent IL-7-Mediated Viability of T-Cell Acute Lymphoblastic Leukemia Cells’, *Leukemia*. doi: 10.1038/leu.2011.56.
- Tasi, Y. C. et al. (2013) ‘Characterization of 3-hydroxyisobutyrate dehydrogenase, HIBADH, as a sperm-motility marker.’, *Journal of Assisted Reproduction and Genetics*, 30(4), pp. 505–512. doi: 10.1007/s10815-013-9954-8.
- Team, H. J. (2017) ‘Human Testicles’, *Health Jade*, Seminiferous Tubule. Available at: <https://healthjade.com/wp-content/uploads/2017/10/seminiferous-tubule.jpg>
- Tolisiawaty, I. et al. (2014) ‘Gambaran Kesehatan Pada Mencit (*Mus musculus*) di Instalasi Hewan Coba’, *Jurnal Vektro Penyakit*, 8(1), pp. 27–32.
- Tortora, G. J. and Derrickson, B. (2014) *Principles of Anatomy & Physiology 14th Edition*, Wiley.
- Treuting, P. M., Dintzis, S. M. and Montine, K. S. (2018) *Comparative Anatomy and Histology Second Edition, Comparative Anatomy and Histology*. United States: Mica Haley. doi: 10.1016/C2009-0-61166-1.
- Wang, Y. et al. (2017) ‘Steroidogenesis in Leydig Cells: Effects of Aging and Environmental Factors’, *Reproduction*, 154(4), pp. R111–R122. doi: 10.1530/REP-17-0064.
- Yuniarifa, C. (2018). Perbedaan Efek Pemberian Kombinasi Vitamin C, Vitamin E, Glutation dan Zink Terhadap Jumlah Sel Sertoli, Jumlah Sel Leydig, Kualitas Sperma dan Ekspresi Caspase-3 pada Tikus Putih Jantan Galur Wistar (*Rattus norvegicus*) yang Diberi Paparan Asap Rokok. *Masters Thesis*,

*Fakultas Kedokteran UNISSULA.* Available at:  
<http://repository.unissula.ac.id/id/eprint/11280>

Zhao, C. Y. *et al.* (2018) ‘Nanotechnology for Cancer Therapy Based on Chemotherapy’, *Molecules*, 23(4). doi: 10.3390/molecules23040826.