

DAFTAR PUSTAKA

- Aayushii, G. *et al.* (2021) 'A Survey on Various Total Body Water Detection Techniques to Develop a Wearable Device', in, pp. 109–118. doi: 10.1007/978-981-16-0336-5_10.
- Abdulsalam, R. *et al.* (2022) 'Hydration status assessment and impinging factors among university students in the UAE.', *European review for medical and pharmacological sciences*, 26(18), pp. 6451–6458. doi: 10.26355/eurrev_202209_29744.
- Adan, A. (2012) 'Cognitive Performance and Dehydration', *Journal of the American College of Nutrition*, 31(2), pp. 71–78. doi: 10.1080/07315724.2012.10720011.
- Adinugroho, I. (2016) 'Memahami Mood dalam Konteks Indonesia: Adaptasi dan Uji Validitas Four Dimensions Mood Scale', *Jurnal Pengukuran Psikologi dan Pendidikan Indonesia*, 5, pp. 127–152. doi: 10.15408/jp3i.v5i2.10790.
- Agnoli, G. C. and Garutti, C. (1976) '[Renal water-electrolyte excretion and its control mechanisms. Current status of knowledge].', *Minerva medica*, 67(56), pp. 3673–702. Available at: <http://europepmc.org/abstract/MED/995312>.
- Alabdaly, Yamama and Medhat, O. (2023) 'Effect of Alkaline Drinking Water on Vitamin D3 Toxicity in Female Rats', *Egyptian Journal of Veterinary Sciences*, 54(1), pp. 109–116. doi: 10.21608/ejvs.2022.152903.1372.
- Allgrove, J. (2015) 'Physiology of Calcium, Phosphate, Magnesium and Vitamin D.', *Endocrine development*, 28, pp. 7–32. doi: 10.1159/000380990.
- Amaerjiang, N. *et al.* (2022) 'Dehydration Status Aggravates Early Renal Impairment in Children: A Longitudinal Study', *Nutrients*, 14(2), p. 335. doi: 10.3390/nu14020335.
- Andresen, M. C. *et al.* (2001) 'Cellular mechanisms of baroreceptor integration at the nucleus tractus solitarius.', *Annals of the New York Academy of Sciences*, 940, pp. 132–141. doi: 10.1111/j.1749-6632.2001.tb03672.x.
- Armstrong, L. E. *et al.* (1998) 'Urinary Indices during Dehydration, Exercise, and Rehydration', *International Journal of Sport Nutrition*, 8(4), pp. 345–355. doi: 10.1123/ijns.8.4.345.
- Asim, M. *et al.* (2019) 'Dehydration and volume depletion: How to handle the misconceptions.', *World journal of nephrology*, 8(1), pp. 23–32. doi: 10.5527/wjn.v8.i1.23.
- Augustin, R. and Mayoux, E. (2014) 'Mammalian Sugar Transporters', in *Glucose Homeostasis*. InTech. doi: 10.5772/58325.
- Bankir, L., Bichet, D. G. and Morgenthaler, N. G. (2017) 'Vasopressin: physiology, assessment and osmosensation', *Journal of Internal Medicine*, 282(4), pp. 284–297. doi: 10.1111/joim.12645.
- Bar-David, Y., Urkin, J. and Kozminsky, E. (2005) 'The effect of voluntary dehydration on cognitive functions of elementary school children', *Acta*

- Paediatrica*, 94(11), pp. 1667–1673. doi: 10.1080/08035250500254670.
- Barley, O. R., Chapman, D. W. and Abbiss, C. R. (2020) ‘Reviewing the current methods of assessing hydration in athletes.’, *Journal of the International Society of Sports Nutrition*, 17(1), p. 52. doi: 10.1186/s12970-020-00381-6.
- Başakçılardan-Kabakcı, S., İpekoğlu, A. N. and Talınlı, İ. (2007) ‘Precipitation of Urinary Phosphate’, *Environmental Engineering Science*, 24(10), pp. 1399–1408. doi: 10.1089/ees.2006.0136.
- Baumgarten, C. M. and Feher, J. J. (2001) ‘Osmosis and Regulation of Cell Volume’, in *Cell Physiology Source Book*. Elsevier, pp. 319–355. doi: 10.1016/B978-012656976-6/50113-X.
- Bedogni, G., Borghi, A. and Battistini, N. (2003) ‘Body water distribution and disease’, *Acta Diabetologica*, 40(1), pp. s200–s202. doi: 10.1007/s00592-003-0065-3.
- Bendaali, Y. *et al.* (2022) ‘Contribution of Grape Juice to Develop New Isotonic Drinks With Antioxidant Capacity and Interesting Sensory Properties’, *Frontiers in Nutrition*, 9. doi: 10.3389/fnut.2022.890640.
- Benelam, B. and Wyness, L. (2010) ‘Hydration and health: a review’, *Nutrition Bulletin*, 35(1), pp. 3–25. doi: 10.1111/j.1467-3010.2009.01795.x.
- Benton, D. and Young, H. A. (2015) ‘Do small differences in hydration status affect mood and mental performance?’, *Nutrition Reviews*, 73(suppl 2), pp. 83–96. doi: 10.1093/nutrit/nuv045.
- Berlin, D. A. and Bakker, J. (2015) ‘Starling curves and central venous pressure.’, *Critical care (London, England)*, 19(1), p. 55. doi: 10.1186/s13054-015-0776-1.
- Bhaskar, A. and Oommen, V. (2018) ‘A simple model for demonstrating the factors affecting glomerular filtration rate’, *Advances in Physiology Education*, 42(2), pp. 380–382. doi: 10.1152/advan.00195.2017.
- Bitoun, M. and Tappaz, M. (2000) ‘Gene expression of the transporters and biosynthetic enzymes of the osmolytes in astrocyte primary cultures exposed to hyperosmotic conditions’, *Glia*, 32(2), pp. 165–176. doi: 10.1002/1098-1136(200011)32:2<165::AID-GLIA60>3.0.CO;2-2.
- Black, C. N. *et al.* (2018) ‘Uric acid in major depressive and anxiety disorders’, *Journal of Affective Disorders*, 225, pp. 684–690. doi: 10.1016/j.jad.2017.09.003.
- Blanch, G. T. *et al.* (2013) ‘Inhibitory mechanism of the nucleus of the solitary tract involved in the control of cardiovascular, dipsogenic, hormonal, and renal responses to hyperosmolality’, *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 304(7), pp. R531–R542. doi: 10.1152/ajpregu.00191.2012.
- Bliss, R. M. (2010) ‘Health & nutrition’, *INFORM - International News on Fats, Oils and Related Materials*, 21(1), pp. 23–24. Available at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-76749162788&partnerID=40&md5=04de9a51fc6cecd6765e183cd30bd1c3>.

- Bloor, W. R. (1942) 'HANDBOOK OF NUTRITION: III', *Journal of the American Medical Association*, 119(13), p. 1018. doi: 10.1001/jama.1942.72830300003010.
- Bowdino, C. S., Owens, J. and Shaw, P. M. (2024) *Anatomy, Abdomen and Pelvis, Renal Veins, StatPearls*. StatPearls Publishing, Treasure Island (FL). Available at: <http://europepmc.org/books/NBK538298>.
- Boyle, G. J. (1987) 'Quantitative and Qualitative Intersections between the Eight State Questionnaire and the Profile of Mood States', *Educational and Psychological Measurement*, 47(2), pp. 437–443. doi: 10.1177/0013164487472015.
- Boyle, G. J. *et al.* (2015) 'Measures of Affect Dimensions', in Boyle, G. J., Saklofske, D. H., and Matthews, G. B. T.-M. of P. and S. P. C. (eds) *Measures of Personality and Social Psychological Constructs*. San Diego: Elsevier, pp. 190–224. doi: 10.1016/B978-0-12-386915-9.00008-5.
- BPOM (2016) 'Peraturan Badan Pengawas Obat dan Makanan Nomor 13 Tahun 2016 Tentang Pengawasan Klaim Pada Label dan Iklan Pangan Olahan'.
- BPOM (2019) 'Peraturan Kepala Badan Pengawas Obat dan Makanan Republik Indonesia Nomor 34 Tahun 2019 Tentang Kategori Pangan'.
- BPOM (2020) *SIARAN PERS : Lindungi Kesehatan Masyarakat dengan Sinergi Pengawasan Produk Air Minum Dalam Kemasan (AMDK)*. Available at: <https://www.pom.go.id/siaran-pers/lindungi-kesehatan-masyarakat-dengan-sinergi-pengawasan-produk-air-minum-dalam-kemasan-amdk> (Accessed: 6 March 2024).
- Brandão, M. L. *et al.* (2008) 'Different patterns of freezing behavior organized in the periaqueductal gray of rats: Association with different types of anxiety', *Behavioural Brain Research*, 188(1), pp. 1–13. doi: 10.1016/j.bbr.2007.10.018.
- Bruvold, W. H. and Daniels, J. I. (1990) 'Standards for Mineral Content in Drinking Water', *Journal AWWA*, 82(2), pp. 59–65. doi: <https://doi.org/10.1002/j.1551-8833.1990.tb06920.x>.
- Bulboacă, A. E. *et al.* (2017) 'Association between low thyroid-stimulating hormone, posterior cortical atrophy and nitro-oxidative stress in elderly patients with cognitive dysfunction', *Archives of Medical Science*, 5, pp. 1160–1167. doi: 10.5114/aoms.2016.60129.
- Campos-Bedolla, P. *et al.* (2014) 'Role of the Blood–Brain Barrier in the Nutrition of the Central Nervous System', *Archives of Medical Research*, 45(8), pp. 610–638. doi: 10.1016/j.arcmed.2014.11.018.
- Cannavo, A. *et al.* (2018) 'Aldosterone and Mineralocorticoid Receptor System in Cardiovascular Physiology and Pathophysiology', *Oxidative Medicine and Cellular Longevity*. Edited by C. Penna, 2018, pp. 1–10. doi: 10.1155/2018/1204598.
- Carrard, A. *et al.* (2021) 'Role of adult hippocampal neurogenesis in the antidepressant actions of lactate', *Molecular Psychiatry*, 26(11), pp. 6723–

6735. doi: 10.1038/s41380-021-01122-0.
- Cenaj, O. *et al.* (2021) 'Evidence for continuity of interstitial spaces across tissue and organ boundaries in humans', *Communications Biology*, 4(1), p. 436. doi: 10.1038/s42003-021-01962-0.
- Chalmers, J. A. *et al.* (2014) 'Anxiety Disorders are Associated with Reduced Heart Rate Variability: A Meta-Analysis', *Frontiers in Psychiatry*, 5. doi: 10.3389/fpsy.2014.00080.
- Cheuvront, S. N. *et al.* (2013) 'Physiologic basis for understanding quantitative dehydration assessment', *The American Journal of Clinical Nutrition*, 97(3), pp. 455–462. doi: 10.3945/ajcn.112.044172.
- Cheuvront, S. N. and Kenefick, R. W. (2014) 'Dehydration: Physiology, Assessment, and Performance Effects', in *Comprehensive Physiology*. Wiley, pp. 257–285. doi: 10.1002/cphy.c130017.
- Chrysafides, S. M., Bordes, S. J. and Sharma, S. (2024) *Physiology, Resting Potential, StatPearls*. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK538338/> (Accessed: 7 March 2024).
- Chycki, J. *et al.* (2018) 'Alkaline water improves exercise-induced metabolic acidosis and enhances anaerobic exercise performance in combat sport athletes', *PLOS ONE*. Edited by M. Toborek, 13(11), p. e0205708. doi: 10.1371/journal.pone.0205708.
- Clanton, T. (2005) 'Yet another oxygen paradox', *Journal of Applied Physiology*, 99(4), pp. 1245–1246. doi: 10.1152/jappphysiol.00609.2005.
- Clayton, D. J., Evans, G. H. and James, L. J. (2014) 'Effect of Drink Carbohydrate Content on Postexercise Gastric Emptying, Rehydration, and the Calculation of Net Fluid Balance', *International Journal of Sport Nutrition and Exercise Metabolism*, 24(1), pp. 79–89. doi: 10.1123/ijsnem.2013-0024.
- Coffin, A. *et al.* (2015) 'Radioanatomy of the retroperitoneal space', *Diagnostic and Interventional Imaging*, 96(2), pp. 171–186. doi: 10.1016/j.diii.2014.06.015.
- Crane, R. K. (1960) 'Intestinal absorption of sugars.', *Physiological reviews*, 40(4), pp. 789–825. doi: 10.1152/physrev.1960.40.4.789.
- Crhová, M. and Kapounková, K. (2020) 'Influence of long-term fasting and intermittent fasting on the cognitive abilities', *Studia sportiva*, 14(1), pp. 15–22. doi: 10.5817/StS2020-1-2.
- Cupples, W. A. (2007) 'Interactions contributing to kidney blood flow autoregulation', *Current Opinion in Nephrology & Hypertension*, 16(1), pp. 39–45. doi: 10.1097/MNH.0b013e3280117fc7.
- D'Anci, K. E. (2005) 'Hydration status and cognitive performance in young adults', *Nutrition in Clinical Care*, 8(4), pp. 163–166. Available at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-32244431831&partnerID=40&md5=63541cef39fd5e248110a84ebbf2a772>.
- Dampney, R. (2018) 'Emotion and the Cardiovascular System: Postulated Role of Inputs From the Medial Prefrontal Cortex to the Dorsolateral Periaqueductal Gray', *Frontiers in Neuroscience*, 12. doi: 10.3389/fnins.2018.00343.

- Demiselle, J. *et al.* (2020) 'Vasopressin and its analogues in shock states: a review', *Annals of Intensive Care*, 10(1), p. 9. doi: 10.1186/s13613-020-0628-2.
- Dergacheva, O., Boychuk, C. R. and Mendelowitz, D. (2013) 'Developmental changes in GABAergic neurotransmission to presympathetic and cardiac parasympathetic neurons in the brainstem', *Journal of Neurophysiology*, 110(3), pp. 672–679. doi: 10.1152/jn.01054.2012.
- Ding, J. *et al.* (2008) 'Retinal microvascular abnormalities and cognitive dysfunction: A systematic review', *The British journal of ophthalmology*, 92, pp. 1017–1025. doi: 10.1136/bjo.2008.141994.
- Edmonds, C. J., Crombie, R. and Gardner, M. R. (2013) 'Subjective thirst moderates changes in speed of responding associated with water consumption', *Frontiers in Human Neuroscience*, 7. doi: 10.3389/fnhum.2013.00363.
- El-Reshaid, W. and Abdul-Fattah, H. (2014) 'Sonographic assessment of renal size in healthy adults.', *Medical principles and practice : international journal of the Kuwait University, Health Science Centre*, 23(5), pp. 432–6. doi: 10.1159/000364876.
- El-Sharkawy, A. M., Sahota, O. and Lobo, D. N. (2015) 'Acute and chronic effects of hydration status on health', *Nutrition Reviews*, 73(suppl_2), pp. 97–109. doi: 10.1093/nutrit/nuv038.
- Enhörning, S. and Melander, O. (2018) 'The Vasopressin System in the Risk of Diabetes and Cardiorenal Disease, and Hydration as a Potential Lifestyle Intervention.', *Annals of nutrition & metabolism*, 72 Suppl 2, pp. 21–27. doi: 10.1159/000488304.
- Evans, G. H., Shirreffs, S. M. and Maughan, R. J. (2009) 'Postexercise rehydration in man: the effects of osmolality and carbohydrate content of ingested drinks', *Nutrition*, 25(9), pp. 905–913.
- Fagundes, C. P. *et al.* (2011) 'Sympathetic and parasympathetic activity in cancer-related fatigue: More evidence for a physiological substrate in cancer survivors', *Psychoneuroendocrinology*, 36(8), pp. 1137–1147. doi: 10.1016/j.psyneuen.2011.02.005.
- Falkson, S. R. and Bordoni, B. (2024) *Anatomy, Abdomen and Pelvis: Bowman Capsule, StatPearls*. StatPearls Publishing, Treasure Island (FL). Available at: <http://europepmc.org/books/NBK554474>.
- Faraco, G. *et al.* (2014) 'Water Deprivation Induces Neurovascular and Cognitive Dysfunction through Vasopressin-Induced Oxidative Stress', *Journal of Cerebral Blood Flow & Metabolism*, 34(5), pp. 852–860. doi: 10.1038/jcbfm.2014.24.
- Fedosova, N. U., Habeck, M. and Nissen, P. (2021) 'Structure and Function of Na,K-ATPase-The Sodium-Potassium Pump.', *Comprehensive Physiology*, 12(1), pp. 2659–2679. doi: 10.1002/cphy.c200018.
- Fenton, T. R. and Huang, T. (2016) 'Systematic review of the association between dietary acid load, alkaline water and cancer', *BMJ Open*, 6(6), p. e010438. doi: 10.1136/bmjopen-2015-010438.

- Frame, A. A., Carmichael, C. Y. and Wainford, R. D. (2016) 'Renal Afferents', *Current Hypertension Reports*, 18(9), p. 69. doi: 10.1007/s11906-016-0676-z.
- Franz, S. *et al.* (2019) 'Creatinine excretion in consecutive urine samples after controlled ingestion of water', *Drug Testing and Analysis*, 11(3), pp. 435–440. doi: 10.1002/dta.2514.
- Furst, B. (2020) 'The Effect of Gravity and Upright Posture on Circulation', in *The Heart and Circulation*. Cham: Springer International Publishing, pp. 319–341. doi: 10.1007/978-3-030-25062-1_24.
- Geng, J. *et al.* (2018) 'Blood-Brain Barrier Disruption Induced Cognitive Impairment Is Associated With Increase of Inflammatory Cytokine', *Frontiers in Aging Neuroscience*, 10, p. 129. doi: 10.3389/fnagi.2018.00129.
- Giap, L. K. and Muthuraman, A. (2020) 'Health benefits of alkaline ionized water', *Rapp. De Pharm*, 6, pp. 616–621.
- Gisolfi, C. V *et al.* (1992) 'Intestinal water absorption from select carbohydrate solutions in humans.', *Journal of applied physiology (Bethesda, Md. : 1985)*, 73(5), pp. 2142–50. doi: 10.1152/jappl.1992.73.5.2142.
- Gisolfi, C. V, Lambert, G. P. and Summers, R. W. (2001) 'Intestinal fluid absorption during exercise: role of sport drink osmolality and [Na+].', *Medicine and science in sports and exercise*, 33(6), pp. 907–15. doi: 10.1097/00005768-200106000-00009.
- Goltzman, D., Mannstadt, M. and Marcocci, C. (2018) 'Physiology of the Calcium-Parathyroid Hormone-Vitamin D Axis', in, pp. 1–13. doi: 10.1159/000486060.
- Gonzalez, C. *et al.* (2023) 'Use of red grape juice (concentrated and treated by UHPH) as a base to produce isotonic drinks', *BIO Web of Conferences*. Edited by P. Roca, 68, p. 02024. doi: 10.1051/bioconf/20236802024.
- Gosling, J. A. and Dixon, J. S. (1974) 'Species variation in the location of upper urinary tract pacemaker cells.', *Investigative urology*, 11(5), pp. 418–23. Available at: <https://cir.nii.ac.jp/crid/1571698601172216704>.
- Goswami, N. *et al.* (2019) 'Lower Body Negative Pressure: Physiological Effects, Applications, and Implementation', *Physiological Reviews*, 99(1), pp. 807–851. doi: 10.1152/physrev.00006.2018.
- Goulet, E. D. B. *et al.* (2018) 'Impact of Mild Hypohydration on Muscle Endurance, Power, and Strength in Healthy, Active Older Men', *Journal of Strength and Conditioning Research*, 32(12), pp. 3405–3415. doi: 10.1519/JSC.0000000000001857.
- Grandjean, A. C. and Grandjean, N. R. (2007) 'Dehydration and Cognitive Performance', *Journal of the American College of Nutrition*, 26(sup5), pp. 549S–554S. doi: 10.1080/07315724.2007.10719657.
- Greger, R. (2000) 'Physiology of Renal Sodium Transport', *The American Journal of the Medical Sciences*, 319(1), pp. 51–62. doi: 10.1016/S0002-9629(15)40679-2.
- Grim, E. (1962) 'Water and electrolyte flux rates in the duodenum, jejunum, ileum

- and colon, and effects of osmolarity.’, *The American journal of digestive diseases*, 7, pp. 17–27. doi: 10.1007/BF02231926.
- Guang-Fen, Z., Jie, G. and Jian-Jun, Y. (2020) ‘The lateral Habenula: Role in Chronic Pain and Depression’, *Translational Perioperative and Pain Medicine*, 7(4). doi: 10.31480/2330-4871/126.
- Guerrieri, G. M. *et al.* (2016) ‘Sex differences in visuospatial abilities persist during induced hypogonadism’, *Neuropsychologia*, 81, pp. 219–229. doi: 10.1016/j.neuropsychologia.2015.12.021.
- Guyton, A. C. (1991) ‘Blood Pressure Control—Special Role of the Kidneys and Body Fluids’, *Science*, 252(5014), pp. 1813–1816. doi: 10.1126/science.2063193.
- Hahn, R. G., Grankvist, N. and Krizhanovskii, C. (2016) ‘Urinary Analysis of Fluid Retention in the General Population: A Cross-Sectional Study’, *PLOS ONE*. Edited by N. Ashton, 11(10), p. e0164152. doi: 10.1371/journal.pone.0164152.
- Hall, J. E. (2011) *Guyton and Hall Textbook of Medical Physiology*. 12th edn. Philadelphia: Elsevier.
- Hara, Y. *et al.* (2015) ‘Estrogen Effects on Cognitive and Synaptic Health Over the Lifecourse’, *Physiological Reviews*, 95(3), pp. 785–807. doi: 10.1152/physrev.00036.2014.
- Harmer, C. J. *et al.* (2012) ‘Negative ion treatment increases positive emotional processing in seasonal affective disorder’, *Psychological Medicine*, 42(8), pp. 1605–1612. doi: 10.1017/S0033291711002820.
- Harvey, P. D. (2012) ‘Clinical applications of neuropsychological assessment’, *Dialogues in Clinical Neuroscience*, 14(1), pp. 91–99. doi: 10.31887/DCNS.2012.14.1/pharvey.
- Hausmann, M. (2014) ‘Arts versus science — Academic background implicitly activates gender stereotypes on cognitive abilities with threat raising men’s (but lowering women’s) performance’, *Intelligence*, 46, pp. 235–245. doi: 10.1016/j.intell.2014.07.004.
- HÄUSSINGER, D. (1996) ‘The role of cellular hydration in the regulation of cell function’, *Biochemical Journal*, 313(3), pp. 697–710. doi: 10.1042/bj3130697.
- He, H. *et al.* (2020) ‘The Influence of Fluid Intake Behavior on Cognition and Mood among College Students in Baoding, China’, *Annals of Nutrition and Metabolism*, 76(Suppl. 1), pp. 63–64. doi: 10.1159/000515020.
- Henry, M. and Chambron, J. (2013) ‘Physico-Chemical, Biological and Therapeutic Characteristics of Electrolyzed Reduced Alkaline Water (ERAW)’, *Water*, 5(4), pp. 2094–2115. doi: 10.3390/w5042094.
- Herculano-Houzel, S. (2011) ‘Scaling of Brain Metabolism with a Fixed Energy Budget per Neuron: Implications for Neuronal Activity, Plasticity and Evolution’, *PLOS ONE*, 6(3), p. e17514. Available at: <https://doi.org/10.1371/journal.pone.0017514>.

- Hinghofer-Szalkay, H. *et al.* (1992) 'Biphasic blood volume changes with lower body suction in humans', *American Journal of Physiology-Heart and Circulatory Physiology*, 263(4), pp. H1270–H1275. doi: 10.1152/ajpheart.1992.263.4.H1270.
- Hogan, A. M. *et al.* (2006) 'Physiological correlates of intellectual function in children with sickle cell disease: hypoxaemia, hyperaemia and brain infarction', *Developmental Science*, 9(4), pp. 379–387. doi: <https://doi.org/10.1111/j.1467-7687.2006.00503.x>.
- Holtug, K., Hansen, M. B. and Skadhauge, E. (1996) 'Experimental Studies of Intestinal Ion and Water Transport', *Scandinavian Journal of Gastroenterology*, 31(sup216), pp. 95–110. doi: 10.3109/00365529609094565.
- Hooper, L. *et al.* (2014) 'Water-loss dehydration and aging', *Mechanisms of Ageing and Development*, 136–137, pp. 50–58. doi: 10.1016/j.mad.2013.11.009.
- Huang, Y. and Thathiah, A. (2015) 'Regulation of neuronal communication by G protein-coupled receptors', *FEBS Letters*, 589(14), pp. 1607–1619. doi: 10.1016/j.febslet.2015.05.007.
- Imenez Silva, P. H. and Mohebbi, N. (2022) 'Kidney metabolism and acid–base control: back to the basics', *Pflügers Archiv - European Journal of Physiology*, 474(8), pp. 919–934. doi: 10.1007/s00424-022-02696-6.
- Izzo, J. L. and Taylor, A. A. (1999) 'The sympathetic nervous system and baroreflexes in hypertension and hypotension', *Current Hypertension Reports*, 1(3), pp. 254–263. doi: 10.1007/s11906-999-0030-9.
- Jahnen-Dechent, W. and Ketteler, M. (2012) 'Magnesium basics.', *Clinical kidney journal*, 5(Suppl 1), pp. i3–i14. doi: 10.1093/ndtplus/sfr163.
- Jamkar, A., Khan, B. and Joshi, D. (2017) 'Anatomical study of renal and accessory renal arteries', *Saudi Journal of Kidney Diseases and Transplantation*, 28(2), p. 292. doi: 10.4103/1319-2442.202760.
- Jason, L. A. *et al.* (2013) 'Cognitive impairments associated with CFS and POTS', *Frontiers in Physiology*, 4. Available at: <https://www.frontiersin.org/journals/physiology/articles/10.3389/fphys.2013.00113>.
- John, S. and Thuluvath, P. J. (2015) 'Hyponatremia in cirrhosis: Pathophysiology and management', *World Journal of Gastroenterology*, 21(11), pp. 3197–3205. doi: 10.3748/wjg.v21.i11.3197.
- Johnson, J. N. *et al.* (2010) 'Postural Orthostatic Tachycardia Syndrome: A Clinical Review', *Pediatric Neurology*, 42(2), pp. 77–85. doi: <https://doi.org/10.1016/j.pediatrneurol.2009.07.002>.
- Joseph, D. *et al.* (2019) 'Structure and Gating Dynamics of Na⁺/Cl[–] Coupled Neurotransmitter Transporters', *Frontiers in Molecular Biosciences*, 6. doi: 10.3389/fmolb.2019.00080.
- Kalembang, J., Oka, A. A. G. and Widiana, I. G. R. (2020) 'The relationship between urine specific gravity, urine pH, and blood uric acid levels to the type

- of urinary stones of patients with urolithiasis at Sanglah Hospital, Bali, Indonesia', *Intisari Sains Medis*, 11(2), pp. 566–570. doi: 10.15562/ism.v11i2.744.
- Kavouras, S. A. (2002) 'Assessing hydration status.', *Current opinion in clinical nutrition and metabolic care*, 5(5), pp. 519–524. doi: 10.1097/00075197-200209000-00010.
- Kemenkes (2010) 'Permenkes No 492 Tahun 2010 tentang Persyaratan Kualitas Air Minum'.
- Kemenkes, R. I. (2019) 'Peraturan Menteri Kesehatan Republik Indonesia nomor 28 tahun 2019 tentang angka kecukupan gizi yang dianjurkan untuk masyarakat Indonesia', *Jakarta, Kemenkes RI*.
- Kim, C. *et al.* (2018) 'Energy restriction in humans enhances adult hippocampal neurogenesis-associated memory and the longevity protein α -klotho', *Proceedings of the Nutrition Society*, 77(OCE4), p. E116. doi: 10.1017/S0029665118001222.
- Kirkland, A. E., Sarlo, G. L. and Holton, K. F. (2018) 'The role of magnesium in neurological disorders', *Nutrients*, 10(6), p. 730.
- Koepsell, H. (2020) 'Glucose transporters in the small intestine in health and disease.', *Pflugers Archiv: European journal of physiology*, 472(9), pp. 1207–1248. doi: 10.1007/s00424-020-02439-5.
- Komlosi, P., Bell, P. D. and Zhang, Z.-R. (2009) 'Tubuloglomerular feedback mechanisms in nephron segments beyond the macula densa', *Current Opinion in Nephrology & Hypertension*, 18(1), pp. 57–62. doi: 10.1097/MNH.0b013e32831daf54.
- Kovacs, E. M., Senden, J. M. and Brouns, F. (1999) 'Urine color, osmolality and specific electrical conductance are not accurate measures of hydration status during postexercise rehydration.', *The Journal of sports medicine and physical fitness*, 39(1), pp. 47–53. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/10230169>.
- Kozlowski, S. and Saltin, B. (1964) 'Effect of sweat loss on body fluids', *Journal of Applied Physiology*, 19(6), pp. 1119–1124. doi: 10.1152/jappl.1964.19.6.1119.
- Kriz, W. and Kaissling, B. (2008) 'Structural Organization of the Mammalian Kidney', in *Seldin and Giebisch's The Kidney*. Elsevier, pp. 479–563. doi: 10.1016/B978-012088488-9.50023-1.
- Kusuma, A. D. (2020) 'Penilaian Status Hidrasi', *Jurnal Ilmiah Kesehatan Sandi Husada*, 11(1), pp. 13–17. doi: 10.35816/jiskh.v11i1.196.
- Lang, F. *et al.* (1998) 'Functional Significance of Cell Volume Regulatory Mechanisms', *Physiological Reviews*, 78(1), pp. 247–306. doi: 10.1152/physrev.1998.78.1.247.
- Larsen, E. H. *et al.* (2014) 'Osmoregulation and Excretion', in *Comprehensive Physiology*. Wiley, pp. 405–573. doi: 10.1002/cphy.c130004.
- Lataro, R. M. *et al.* (2013) 'Increase in parasympathetic tone by pyridostigmine

- prevents ventricular dysfunction during the onset of heart failure', *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 305(8), pp. R908–R916. doi: 10.1152/ajpregu.00102.2013.
- Law, R. and Clow, A. (2020) 'Stress, the cortisol awakening response and cognitive function', in, pp. 187–217. doi: 10.1016/bs.irn.2020.01.001.
- LeBaron, T. W., Sharpe, R. and Ohno, K. (2022) 'Electrolyzed–Reduced Water: Review I. Molecular Hydrogen Is the Exclusive Agent Responsible for the Therapeutic Effects', *International Journal of Molecular Sciences*. doi: 10.3390/ijms232314750.
- Leiper, J. B. (2015) 'Fate of ingested fluids: factors affecting gastric emptying and intestinal absorption of beverages in humans', *Nutrition reviews*, 73(suppl_2), pp. 57–72.
- Levey, A. S. *et al.* (2019) 'Strengths and limitations of estimated and measured GFR', *Nature Reviews Nephrology*, 15(12), pp. 784–784. doi: 10.1038/s41581-019-0213-9.
- Li, L., Wang, Z. and Zuo, Z. (2013) 'Chronic Intermittent Fasting Improves Cognitive Functions and Brain Structures in Mice', *PLoS ONE*. Edited by Z. Xie, 8(6). doi: 10.1371/journal.pone.0066069.
- Li, S., Xiao, X. and Zhang, X. (2023) 'Hydration Status in Older Adults: Current Knowledge and Future Challenges', *Nutrients*, 15(11), p. 2609. doi: 10.3390/nu15112609.
- Li, W. *et al.* (2013) 'Elevation of Brain Magnesium Prevents and Reverses Cognitive Deficits and Synaptic Loss in Alzheimer's Disease Mouse Model', *Journal of Neuroscience*, 33(19), pp. 8423–8441. doi: 10.1523/JNEUROSCI.4610-12.2013.
- Lieberman, H. R. (2007) 'Hydration and Cognition: A Critical Review and Recommendations for Future Research', *Journal of the American College of Nutrition*, 26(sup5), pp. 555S–561S. doi: 10.1080/07315724.2007.10719658.
- Lieberman, H. R. (2012) 'Methods for assessing the effects of dehydration on cognitive function', *Nutrition reviews*, 70(suppl_2), pp. S143–S146.
- Liu, L. *et al.* (2023) 'Protective Effect of Alkaline Mineral Water on Calcium Oxalate-Induced Kidney Injury in Mice', *Evidence-Based Complementary and Alternative Medicine*. Edited by C. Di Giacomo, 2023(1). doi: 10.1155/2023/4559802.
- Liu, W. *et al.* (2021) 'Mechanisms, physiology, and recent research progress of gastric emptying.', *Critical reviews in food science and nutrition*, 61(16), pp. 2742–2755. doi: 10.1080/10408398.2020.1784841.
- Lorenzo, Serra-Prat and Yébenes (2019) 'The Role of Water Homeostasis in Muscle Function and Frailty: A Review', *Nutrients*, 11(8), p. 1857. doi: 10.3390/nu11081857.
- Lote, C. J. (2012) *Principles of Renal Physiology*. New York, NY: Springer New York. doi: 10.1007/978-1-4614-3785-7.
- Loutzenhiser, R. *et al.* (2006) 'Renal autoregulation: new perspectives regarding the

- protective and regulatory roles of the underlying mechanisms', *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 290(5), pp. R1153–R1167. doi: 10.1152/ajpregu.00402.2005.
- Lujan, H. L., Rivers, J. P. and DiCarlo, S. E. (2016) 'Complex and interacting influences of the autonomic nervous system on cardiac electrophysiology in conscious mice', *Autonomic Neuroscience*, 201, pp. 24–31. doi: 10.1016/j.autneu.2016.08.017.
- Lundberg, J. O., Weitzberg, E. and Gladwin, M. T. (2008) 'The nitrate-nitrite-nitric oxide pathway in physiology and therapeutics.', *Nature reviews. Drug discovery*, 7(2), pp. 156–167. doi: 10.1038/nrd2466.
- Machado-Vieira, R. *et al.* (2017) 'Increased Brain Lactate During Depressive Episodes and Reversal Effects by Lithium Monotherapy in Drug-Naive Bipolar Disorder', *Journal of Clinical Psychopharmacology*, 37(1), pp. 40–45. doi: 10.1097/JCP.0000000000000616.
- Magder, S. (2016) 'Volume and its relationship to cardiac output and venous return.', *Critical care (London, England)*, 20(1), p. 271. doi: 10.1186/s13054-016-1438-7.
- Mahmoud, R., Wainwright, S. R. and Galea, L. A. M. (2016) 'Sex hormones and adult hippocampal neurogenesis: Regulation, implications, and potential mechanisms', *Frontiers in Neuroendocrinology*, 41, pp. 129–152. doi: 10.1016/j.yfrne.2016.03.002.
- Maier, A. *et al.* (2023) 'Cognitive functioning in postural orthostatic tachycardia syndrome among different body positions: a prospective pilot study (POTSKog study)', *Clinical Autonomic Research*, 33(4), pp. 459–468. doi: 10.1007/s10286-023-00950-0.
- Mangan, C., Stott, M. C. and Dhanda, R. (2018) 'Renal physiology: blood flow, glomerular filtration and plasma clearance', *Anaesthesia & Intensive Care Medicine*, 19(5), pp. 254–257. doi: 10.1016/j.mpaic.2018.02.013.
- Mantantzis, K. *et al.* (2020) 'Dehydration predicts longitudinal decline in cognitive functioning and well-being among older adults.', *Psychology and Aging*, 35(4), pp. 517–528. doi: 10.1037/pag0000471.
- Masento, N. A. *et al.* (2014) 'Effects of hydration status on cognitive performance and mood', *British Journal of Nutrition*, 111(10), pp. 1841–1852. doi: 10.1017/S0007114513004455.
- Mathew, J., Sankar, P. and Varacallo, M. (2024) *Physiology, Blood Plasma, StatPearls*. StatPearls Publishing, Treasure Island (FL). Available at: <http://europepmc.org/books/NBK531504>.
- Matsuo, A. *et al.* (2019) 'Natriuretic peptides in human heart: Novel insight into their molecular forms, functions, and diagnostic use', *Peptides*, 111, pp. 3–17. doi: 10.1016/j.peptides.2018.08.006.
- Maughan, R. J. (1991) 'Fluid and electrolyte loss and replacement in exercise.', *Journal of sports sciences*, 9 Spec No, pp. 117–42. doi: 10.1080/02640419108729870.

- Maughan, R. J. *et al.* (2019) 'Sucrose and Sodium but not Caffeine Content Influence the Retention of Beverages in Humans Under Euhydrated Conditions', *International Journal of Sport Nutrition and Exercise Metabolism*, 29(1), pp. 51–60. doi: 10.1123/ijsnem.2018-0047.
- Mavani, G. P., DeVita, M. V. and Michelis, M. F. (2015) 'A Review of the Nonpressor and Nonantidiuretic Actions of the Hormone Vasopressin', *Frontiers in Medicine*, 2. doi: 10.3389/fmed.2015.00019.
- McCarron, D. A. *et al.* (2013) 'Normal Range of Human Dietary Sodium Intake: A Perspective Based on 24-Hour Urinary Sodium Excretion Worldwide', *American Journal of Hypertension*, 26(10), pp. 1218–1223. doi: 10.1093/ajh/hpt139.
- McCormick, J. A. and Ellison, D. H. (2015) 'Distal convoluted tubule.', *Comprehensive Physiology*, 5(1), pp. 45–98. doi: 10.1002/cphy.c140002.
- McDermott, B. P., Anderson, S. A., Armstrong, Lawrence E., *et al.* (2017) 'National Athletic Trainers' Association Position Statement: Fluid Replacement for the Physically Active', *Journal of Athletic Training*, 52(9), pp. 877–895. doi: 10.4085/1062-6050-52.9.02.
- McDermott, B. P., Anderson, S. A., Armstrong, Lawrence E., *et al.* (2017) 'National Athletic Trainers' Association Position Statement: Fluid Replacement for the Physically Active', *Journal of Athletic Training*, 52(9), pp. 877–895. doi: 10.4085/1062-6050-52.9.02.
- McMahon, R. S., Penfold, D. and Bashir, K. (2024) *Anatomy, Abdomen and Pelvis: Kidney Collecting Ducts, StatPearls*. StatPearls Publishing, Treasure Island (FL). Available at: <http://europepmc.org/books/NBK549766>.
- Medow, M. S. and Stewart, J. M. (2007) 'The Postural Tachycardia Syndrome', *Cardiology in Review*, 15(2). Available at: https://journals.lww.com/cardiologyinreview/fulltext/2007/03000/the_postural_tachycardia_syndrome.3.aspx.
- Meldrum, N. U. and Roughton, F. J. (1933) 'Carbonic anhydrase. Its preparation and properties.', *The Journal of physiology*, 80(2), pp. 113–42. doi: 10.1113/jphysiol.1933.sp003077.
- Merino, B. *et al.* (2019) 'Intestinal Fructose and Glucose Metabolism in Health and Disease', *Nutrients*, 12(1), p. 94. doi: 10.3390/nu12010094.
- Michel, C. C., Woodcock, T. E. and Curry, F.-R. E. (2020) 'Understanding and extending the Starling principle', *Acta Anaesthesiologica Scandinavica*, 64(8), pp. 1032–1037. doi: 10.1111/aas.13603.
- Mifsud, K. R. and Reul, J. M. H. M. (2018) 'Mineralocorticoid and glucocorticoid receptor-mediated control of genomic responses to stress in the brain', *Stress*, 21(5), pp. 389–402. doi: 10.1080/10253890.2018.1456526.
- Mironova, G. Y. *et al.* (2024) 'The conducted vasomotor response and the principles of electrical communication in resistance arteries', *Physiological Reviews*, 104(1), pp. 33–84. doi: 10.1152/physrev.00035.2022.
- Morand, C. *et al.* (2016) 'Prevention of syncopal-type reactions after whole blood

- donation: a cluster-randomized trial assessing hydration and muscle tension exercise', *Transfusion*, 56(10), pp. 2412–2421. doi: 10.1111/trf.13716.
- Moreno, I. L. *et al.* (2013a) 'Effects of an isotonic beverage on autonomic regulation during and after exercise', *Journal of the International Society of Sports Nutrition*, 10(1), p. 2. doi: 10.1186/1550-2783-10-2.
- Moreno, I. L. *et al.* (2013b) 'Effects of an isotonic beverage on autonomic regulation during and after exercise', *Journal of the International Society of Sports Nutrition*, 10(1). doi: 10.1186/1550-2783-10-2.
- Morganti, E. *et al.* (2016) 'Alkaline water better than plain water? A critical review', in *International Conference "Chemia", Book of Abstracts*. Ovidius University Press, p. 74.
- Morya, R., Kumar, K. and Kumar, P. (2018) 'Anatomical and Physiological Similarities of Kidney in Different Experimental Animals Used for Basic Studies', *Journal of Clinical & Experimental Nephrology*, 03(02). doi: 10.21767/2472-5056.100060.
- Mosqueda-Garcia, R. *et al.* (1997) 'Sympathetic and baroreceptor reflex function in neurally mediated syncope evoked by tilt.', *The Journal of Clinical Investigation*, 99(11), pp. 2736–2744. doi: 10.1172/JCI119463.
- Mount, C. A. and M Das, J. (2024) *Cerebral Perfusion Pressure, StatPearls*. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/27521192>.
- Mount, D. B. (2014) 'Thick Ascending Limb of the Loop of Henle', *Clinical Journal of the American Society of Nephrology*, 9(11), pp. 1974–1986. doi: 10.2215/CJN.04480413.
- Muñoz-Durango, N. *et al.* (2016) 'Role of the Renin-Angiotensin-Aldosterone System beyond Blood Pressure Regulation: Molecular and Cellular Mechanisms Involved in End-Organ Damage during Arterial Hypertension', *International Journal of Molecular Sciences*, 17(7), p. 797. doi: 10.3390/ijms17070797.
- Nadeem, T. and Elfakhrany, A. T. (2023) 'Impact of Postural Orthostatic Tachycardia Syndrome (POTS) on Physical Limitations and Cognitive Functioning', *Journal of Contemporary Healthcare Analytics*, 7(1), pp. 111–125. Available at: <https://publications.dlpress.org/index.php/jcha/article/view/23>.
- Nagami, G. T. (2016) 'Hyperchloremia – Why and how', *Nefrología (English Edition)*, 36(4), pp. 347–353. doi: 10.1016/j.nefro.2016.04.001.
- Narciso, L. *et al.* (2022) 'Natural Mineral Waters and Metabolic Syndrome: Insights From Obese Male and Female C57BL/6 Mice on Caloric Restriction', *Frontiers in Nutrition*, 9. doi: 10.3389/fnut.2022.886078.
- Navar, L. G. (2014) 'Physiology: hemodynamics, endothelial function, renin-angiotensin-aldosterone system, sympathetic nervous system.', *Journal of the American Society of Hypertension : JASH*, 8(7), pp. 519–524. doi: 10.1016/j.jash.2014.05.014.
- Nigam, S. K. *et al.* (2015) 'Handling of Drugs, Metabolites, and Uremic Toxins by

- Kidney Proximal Tubule Drug Transporters', *Clinical Journal of the American Society of Nephrology*, 10(11), pp. 2039–2049. doi: 10.2215/CJN.02440314.
- Nishikawa, H. *et al.* (2018) 'Extracellular Water to Total Body Water Ratio in Viral Liver Diseases: A Study Using Bioimpedance Analysis', *Nutrients*, 10(8), p. 1072. doi: 10.3390/nu10081072.
- Nishimaki, K. *et al.* (2018) 'Effects of Molecular Hydrogen Assessed by an Animal Model and a Randomized Clinical Study on Mild Cognitive Impairment', *Current Alzheimer Research*, pp. 482–492. doi: <http://dx.doi.org/10.2174/1567205014666171106145017>.
- Núñez, F., Maraver, M. J. and Colzato, L. S. (2020) 'Sex Hormones as Cognitive Enhancers?', *Journal of Cognitive Enhancement*, 4(2), pp. 228–233. doi: 10.1007/s41465-019-00156-1.
- Omone, O. M. *et al.* (2019) 'Hydration Assessment Among Foreign University Students', in *2019 IEEE 19th International Symposium on Computational Intelligence and Informatics and 7th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics (CINTI-MACRo)*. IEEE, pp. 000161–000168. doi: 10.1109/CINTI-MACRo49179.2019.9105318.
- Orts-Del'Immagine, A. *et al.* (2012) 'Properties of subependymal cerebrospinal fluid contacting neurones in the dorsal vagal complex of the mouse brainstem', *The Journal of Physiology*, 590(16), pp. 3719–3741. doi: 10.1113/jphysiol.2012.227959.
- Pałka, T. *et al.* (2023) 'The Influence of Various Hydration Strategies (Isotonic, Water, and No Hydration) on Hematological Indices, Plasma Volume, and Lactate Concentration in Young Men during Prolonged Cycling in Elevated Ambient Temperatures', *Biology*, 12(5), p. 687. doi: 10.3390/biology12050687.
- Palmer, B. F. (2015) 'Regulation of Potassium Homeostasis.', *Clinical journal of the American Society of Nephrology : CJASN*, 10(6), pp. 1050–1060. doi: 10.2215/CJN.08580813.
- Pan, J.-X. *et al.* (2018) 'Diagnosis of major depressive disorder based on changes in multiple plasma neurotransmitters: a targeted metabolomics study', *Translational Psychiatry*, 8(1), p. 130. doi: 10.1038/s41398-018-0183-x.
- Parsons-Smith, R. L., Terry, P. C. and Machin, M. A. (2017) 'Identification and Description of Novel Mood Profile Clusters', *Frontiers in Psychology*, 8. doi: 10.3389/fpsyg.2017.01958.
- Patel, P. and Ali, N. (2017) 'Mechanisms involved in regulation of Systemic Blood Pressure', *Archives of Clinical Hypertension*, 3, pp. 16–20. doi: 10.17352/ach.000014.
- Penggalih, M. *et al.* (2014) 'Prevalensi kasus dehidrasi pada mahasiswa Universitas Gadjah Mada', *J Gizi Klin Indones*, 11(2), p. 72.
- Penmatsa, A. and Gouaux, E. (2014) 'How LeuT shapes our understanding of the

- mechanisms of sodium-coupled neurotransmitter transporters', *The Journal of Physiology*, 592(5), pp. 863–869. doi: 10.1113/jphysiol.2013.259051.
- Pérez-Castillo, Í. M. *et al.* (2024) 'Compositional Aspects of Beverages Designed to Promote Hydration Before, During, and After Exercise: Concepts Revisited', *Nutrients*. doi: 10.3390/nu16010017.
- Perez, V., Alexander, D. D. and Bailey, W. H. (2013) 'Air ions and mood outcomes: a review and meta-analysis', *BMC Psychiatry*, 13(1), p. 29. doi: 10.1186/1471-244X-13-29.
- Perrier, E. *et al.* (2013) 'Hydration biomarkers in free-living adults with different levels of habitual fluid consumption', *British Journal of Nutrition*, 109(9), pp. 1678–1687. doi: 10.1017/S0007114512003601.
- Petersen, R. C. *et al.* (1999) 'Mild Cognitive Impairment: Clinical Characterization and Outcome', *Archives of Neurology*, 56(3), pp. 303–308. doi: 10.1001/archneur.56.3.303.
- Petraccia, L. *et al.* (2006) 'Water, mineral waters and health.', *Clinical nutrition (Edinburgh, Scotland)*, 25(3), pp. 377–385. doi: 10.1016/j.clnu.2005.10.002.
- Poli, A. *et al.* (2021) 'A Systematic Review of a Polyvagal Perspective on Embodied Contemplative Practices as Promoters of Cardiorespiratory Coupling and Traumatic Stress Recovery for PTSD and OCD: Research Methodologies and State of the Art', *International Journal of Environmental Research and Public Health*, 18(22), p. 11778. doi: 10.3390/ijerph182211778.
- Popkin, B. M., D'Anci, K. E. and Rosenberg, I. H. (2010) 'Water, hydration, and health', *Nutrition Reviews*, 68(8), pp. 439–458. doi: 10.1111/j.1753-4887.2010.00304.x.
- Popowski, L. A. *et al.* (2001) 'Blood and urinary measures of hydration status during progressive acute dehydration', *Medicine and Science in Sports and Exercise*, 33(5), pp. 747–753. doi: 10.1097/00005768-200105000-00011.
- Porges, S. W. (2022) 'Polyvagal Theory: A Science of Safety', *Frontiers in Integrative Neuroscience*, 16. doi: 10.3389/fnint.2022.871227.
- Potter, D. and Keeling, D. (2005) 'Effects of Moderate Exercise and Circadian Rhythms on Human Memory', *Journal of Sport and Exercise Psychology*, 27(1), pp. 117–125. doi: 10.1123/jsep.27.1.117.
- Pross, N. (2017) 'Effects of Dehydration on Brain Functioning: A Life-Span Perspective', *Annals of Nutrition and Metabolism*, 70(Suppl. 1), pp. 30–36. doi: 10.1159/000463060.
- Quattrini, S. (2016) 'Natural mineral waters: chemical characteristics and health effects', *Clinical Cases in Mineral and Bone Metabolism*, 13(3), pp. 173–180. doi: 10.11138/ccmbm/2016.13.3.173.
- Rahmawati, P. M., S, S. and Tri Noval Refansya, R. (2022) 'Effect of Music Therapy in Reduce the Level of Depression in the Elderly: Literature Review', *D'Nursing and Health Journal (DNHJ)*, 3(2), pp. 55–61. doi: 10.61595/dnursing.v3i2.421.
- Raisz, L. G. (1977) 'Bone Metabolism and Calcium Regulation', in *Metabolic Bone*

- Disease*. Elsevier, pp. 1–48. doi: 10.1016/B978-0-12-068701-5.50007-5.
- Rapoliènè, L. *et al.* (2016) ‘Stress and Fatigue Management Using Balneotherapy in a Short-Time Randomized Controlled Trial’, *Evidence-Based Complementary and Alternative Medicine*. Edited by A. Fioravanti, 2016(1). doi: 10.1155/2016/9631684.
- Refardt, J., Winzeler, B. and Christ-Crain, M. (2019) ‘Copeptin and its role in the diagnosis of diabetes insipidus and the syndrome of inappropriate antidiuresis’, *Clinical Endocrinology*, 91(1), pp. 22–32. doi: 10.1111/cen.13991.
- Rock, E. *et al.* (1995) ‘Magnesium deficiency in rats induces a rise in plasma nitric oxide’, *Magnesium research*, 8(3), pp. 237–242. Available at: <http://europepmc.org/abstract/MED/8845288>.
- Romero, C. A. and Carretero, O. A. (2019) ‘Tubule-vascular feedback in renal autoregulation’, *American Journal of Physiology-Renal Physiology*, 316(6), pp. F1218–F1226. doi: 10.1152/ajprenal.00381.2018.
- Roussel, R. *et al.* (2011) ‘Low Water Intake and Risk for New-Onset Hyperglycemia’, *Diabetes Care*, 34(12), pp. 2551–2554. doi: 10.2337/dc11-0652.
- Rowlands, D. S., Kopetschny, B. H. and Badenhurst, C. E. (2022) ‘The Hydrating Effects of Hypertonic, Isotonic and Hypotonic Sports Drinks and Waters on Central Hydration During Continuous Exercise: A Systematic Meta-Analysis and Perspective’, *Sports Medicine*, 52(2), pp. 349–375. doi: 10.1007/s40279-021-01558-y.
- Roy, A., Al-bataineh, M. M. and Pastor-Soler, N. M. (2015) ‘Collecting Duct Intercalated Cell Function and Regulation’, *Clinical Journal of the American Society of Nephrology*, 10(2), pp. 305–324. doi: 10.2215/CJN.08880914.
- Sa’idi, M. M. (2020) ‘Analisis Parameter Kualitas Air Minum (pH, ORP, TDS, DO, dan Kadar Garam) Pada Produk Air Minum Dalam Kemasan (AMDK)’. Available at: <https://dspace.uin.ac.id/123456789/28252>.
- Sadoshima, J. *et al.* (1996) ‘Tyrosine kinase activation is an immediate and essential step in hypotonic cell swelling-induced ERK activation and c-fos gene expression in cardiac myocytes.’, *The EMBO Journal*, 15(20), pp. 5535–5546. doi: 10.1002/j.1460-2075.1996.tb00938.x.
- Sarigul, N., Korkmaz, F. and Kurultak, İ. (2019) ‘A New Artificial Urine Protocol to Better Imitate Human Urine’, *Scientific Reports*, 9(1), p. 20159. doi: 10.1038/s41598-019-56693-4.
- Sata, Y. *et al.* (2018) ‘Role of the Sympathetic Nervous System and Its Modulation in Renal Hypertension’, *Frontiers in Medicine*, 5. doi: 10.3389/fmed.2018.00082.
- Saunamäki, T. *et al.* (2009) ‘Executive Dysfunction in Patients with Obstructive Sleep Apnea Syndrome’, *European neurology*, 62, pp. 237–242. doi: 10.1159/000232156.
- Saverino, A. *et al.* (2016) ‘The Role of Cognitive Factors in Predicting Balance and

- Fall Risk in a Neuro-Rehabilitation Setting', *PLOS ONE*, 11, p. e0153469. doi: 10.1371/journal.pone.0153469.
- Schmidt-Nielsen, B. (1975) 'Comparative physiology of cellular ion and volume regulation', *Journal of Experimental Zoology*, 194(1), pp. 207–219. doi: 10.1002/jez.1401940114.
- Scholey, A. B. and Kennedy, D. O. (2004) 'Cognitive and physiological effects of an "energy drink": an evaluation of the whole drink and of glucose, caffeine and herbal flavouring fractions.', *Psychopharmacology*, 176(3–4), pp. 320–330. doi: 10.1007/s00213-004-1935-2.
- Scott, R. P. and Quaggin, S. E. (2015) 'The cell biology of renal filtration', *Journal of Cell Biology*, 209(2), pp. 199–210. doi: 10.1083/jcb.201410017.
- Setiawan, H. Y. (2016) *Pengaruh Lingkungan Kerja Alami pada Performa dan Tingkat Stress Software Engineer, Studi Kasus di Bali Camp*. Universitas Atma Jaya Yogyakarta. Available at: <http://e-journal.uaajy.ac.id/id/eprint/8904>.
- Shafira, M. (2019) 'Perbedaan Pengaruh Air Alkali Dengan Air Mineral Terhadap Status hidrasi Dan PH Urin Pada Mahasiswa Fakultas Farmasi Universitas Padjadjaran', *Farmaka*, 17(1), pp. 15–21. doi: <https://doi.org/10.24198/jf.v17i1.15175.g11565>.
- Shaker, J. L. and Deftos, L. (2000a) 'Calcium and Phosphate Homeostasis.', in Feingold, K. R. et al. (eds). South Dartmouth (MA).
- Shaker, J. L. and Deftos, L. (2000b) *Calcium and Phosphate Homeostasis*, Endotext. MDText. com, Inc. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/35497793>.
- Shi, X. et al. (1995) 'Effects of carbohydrate type and concentration and solution osmolality on water absorption.', *Medicine and science in sports and exercise*, 27(12), pp. 1607–15. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/8614315>.
- Shi, X. et al. (2000) 'Gastric emptying of cold beverages in humans: effect of transportable carbohydrates.', *International journal of sport nutrition and exercise metabolism*, 10(4), pp. 394–403. doi: 10.1123/ijsnem.10.4.394.
- Shi, X. et al. (2017) 'Effect of Different Osmolalities, CHO Types, and [CHO] on Gastric Emptying in Humans', *Medicine & Science in Sports & Exercise*, 49(5), pp. 1015–1021. doi: 10.1249/MSS.0000000000001176.
- Shi, X. and Passe, D. H. (2010) 'Water and Solute Absorption From Carbohydrate-Electrolyte Solutions in the Human Proximal Small Intestine: A Review and Statistical Analysis', *International Journal of Sport Nutrition and Exercise Metabolism*, 20(5), pp. 427–442. doi: 10.1123/ijsnem.20.5.427.
- Shin, D. H. et al. (2020) 'Bicarbonate permeation through anion channels: its role in health and disease', *Pflügers Archiv - European Journal of Physiology*, 472(8), pp. 1003–1018. doi: 10.1007/s00424-020-02425-x.
- Shinba, T. (2017) 'Major depressive disorder and generalized anxiety disorder show different autonomic dysregulations revealed by heart-rate variability analysis in first-onset drug-naïve patients without comorbidity', *Psychiatry and*

- Clinical Neurosciences*, 71(2), pp. 135–145. doi: 10.1111/pcn.12494.
- Shirahata, S., Hamasaki, T. and Teruya, K. (2012) ‘Advanced research on the health benefit of reduced water’, *Trends in Food Science & Technology*, 23(2), pp. 124–131. doi: 10.1016/j.tifs.2011.10.009.
- Shrimanker, I. and Bhattarai, S. (2024) *Electrolytes*, *StatPearls*. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/28506519>.
- Sitter, T. *et al.* (1998) ‘High glucose increases prostaglandin E2 synthesis in human peritoneal mesothelial cells’, *Journal of the American Society of Nephrology*, 9(11), pp. 2005–2012. doi: 10.1681/ASN.V9112005.
- Sohn, J.-W. (2013) ‘Ion channels in the central regulation of energy and glucose homeostasis’, *Frontiers in Neuroscience*, 7. doi: 10.3389/fnins.2013.00085.
- Speller, A. M. and Moffat, D. B. (1977) ‘Tubulo-vascular relationships in the developing kidney.’, *Journal of anatomy*, 123(Pt 2), pp. 487–500. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/858697>.
- Spurney, C. F. *et al.* (2020) ‘The Subnuclear Distribution of 5-HT1A Receptors in the Human Nucleus of the Solitary Tract and Selected Structures of the Caudal Medulla’, *McGill Journal of Medicine*, 3(2). doi: 10.26443/mjm.v3i2.547.
- Stachenfeld, N. S. *et al.* (2018) ‘Water intake reverses dehydration associated impaired executive function in healthy young women’, *Physiology & Behavior*, 185, pp. 103–111. doi: 10.1016/j.physbeh.2017.12.028.
- Stanula, A. *et al.* (2014) ‘The role of aerobic capacity in high-intensity intermittent efforts in ice-hockey.’, *Biology of sport*, 31(3), pp. 193–199. doi: 10.5604/20831862.1111437.
- Staruschenko, A., Ilatovskaya, D. V. and Hallows, K. R. (2020) ‘Fundamentals of Epithelial Na⁺ Absorption’, in, pp. 291–336. doi: 10.1007/978-3-030-52780-8_9.
- Stojilkovic, S. S. *et al.* (2000) ‘Calcium Ions as Intracellular Messengers’, in *Principles of Molecular Regulation*. Totowa, NJ: Humana Press, pp. 149–185. doi: 10.1007/978-1-59259-032-2_9.
- Strazzullo, P. and Leclercq, C. (2014) ‘Sodium.’, *Advances in nutrition (Bethesda, Md.)*, 5(2), pp. 188–190. doi: 10.3945/an.113.005215.
- Suarez-Roca, H. *et al.* (2021) ‘Baroreceptor Modulation of the Cardiovascular System, Pain, Consciousness, and Cognition.’, *Comprehensive Physiology*, 11(2), pp. 1373–1423. doi: 10.1002/cphy.c190038.
- Suchy-Dicey, A. M. *et al.* (2016) ‘Tubular Secretion in CKD’, *Journal of the American Society of Nephrology*, 27(7), pp. 2148–2155. doi: 10.1681/ASN.2014121193.
- Sunardi, D. *et al.* (2022) ‘Health effects of alkaline, oxygenated, and demineralized water compared to mineral water among healthy population: a systematic review’, *Reviews on Environmental Health*. doi: 10.1515/reveh-2022-0057.
- Sutehall, S. *et al.* (2020) ‘Addition of an Alginate Hydrogel to a Carbohydrate Beverage Enhances Gastric Emptying’, *Medicine & Science in Sports &*

- Exercise*, 52(8), pp. 1785–1792. doi: 10.1249/MSS.0000000000002301.
- Swartz, E. M. *et al.* (2014) ‘Ghrelin increases vagally mediated gastric activity by central sites of action’, *Neurogastroenterology & Motility*, 26(2), pp. 272–282. doi: 10.1111/nmo.12261.
- Swenson, E. R. (2018) ‘Does Aerobic Respiration Produce Carbon Dioxide or Hydrogen Ion and Bicarbonate?’, *Anesthesiology*, 128(5), pp. 873–879. doi: 10.1097/ALN.0000000000002125.
- Szinnai, G. *et al.* (2005) ‘Effect of water deprivation on cognitive-motor performance in healthy men and women’, *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 289(1), pp. R275–R280. doi: 10.1152/ajpregu.00501.2004.
- Tiberghien, P. *et al.* (2017) ‘Donor fainting: risks factors and prevention strategies’, *ISBT Science Series*, 12(4), pp. 450–454. doi: 10.1111/voxs.12378.
- Tobin, J. M. (2021) ‘Toward an Electrical Analog of the Cardiovascular System in Hemorrhage’, *Cardiovascular Engineering and Technology*, 12(5), pp. 526–529. doi: 10.1007/s13239-021-00545-8.
- Toxqui, L. and Vaquero, M. (2016) ‘An Intervention with Mineral Water Decreases Cardiometabolic Risk Biomarkers. A Crossover, Randomised, Controlled Trial with Two Mineral Waters in Moderately Hypercholesterolaemic Adults’, *Nutrients*, 8(7), p. 400. doi: 10.3390/nu8070400.
- Trindade, M., Oigman, W. and Fritsch Neves, M. (2017) ‘Potential Role of Endothelin in Early Vascular Aging.’, *Current hypertension reviews*, 13(1), pp. 33–40. doi: 10.2174/1573402113666170414165735.
- Truijen, J., Bundgaard-Nielsen, M. and van Lieshout, J. J. (2010) ‘A definition of normovolaemia and consequences for cardiovascular control during orthostatic and environmental stress’, *European Journal of Applied Physiology*, 109(2), pp. 141–157. doi: 10.1007/s00421-009-1346-5.
- Turnberg, L. A. (1970) ‘Electrolyte absorption from the colon.’, *Gut*, 11(12), pp. 1049–54. doi: 10.1136/gut.11.12.1049.
- Tzeng, Y.-C. and Ainslie, P. N. (2014) ‘Blood pressure regulation IX: cerebral autoregulation under blood pressure challenges’, *European Journal of Applied Physiology*, 114(3), pp. 545–559. doi: 10.1007/s00421-013-2667-y.
- Ussing, H. H. (1949) ‘Transport of Ions Across Cellular Membranes’, *Physiological Reviews*, 29(2), pp. 127–155. doi: 10.1152/physrev.1949.29.2.127.
- Valdez, P. (2019) ‘Circadian Rhythms in Attention.’, *The Yale journal of biology and medicine*, 92(1), pp. 81–92. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/30923475>.
- Valverde, M. G. *et al.* (2022) ‘Biomimetic models of the glomerulus’, *Nature Reviews Nephrology*, 18(4), pp. 241–257. doi: 10.1038/s41581-021-00528-x.
- Vedel, A. G. *et al.* (2016) ‘Perfusion Pressure Cerebral Infarct (PPCI) trial - the importance of mean arterial pressure during cardiopulmonary bypass to prevent cerebral complications after cardiac surgery: study protocol for a randomised controlled trial.’, *Trials*, 17(1), p. 247. doi: 10.1186/s13063-016-

1373-6.

- Velardo, J. T. (1981) 'Histology of the Ureter', in *The Ureter*. New York, NY: Springer New York, pp. 13–54. doi: 10.1007/978-1-4612-5907-7_2.
- Venkatakrishna, S. S. B. *et al.* (2023) 'Kidney Anatomy and Physiology BT - Advanced Clinical MRI of the Kidney: Methods and Protocols', in Serai, S. D. and Darge, K. (eds). Cham: Springer International Publishing, pp. 3–12. doi: 10.1007/978-3-031-40169-5_1.
- Verbalis, J. G. (2010) 'Brain volume regulation in response to changes in osmolality', *Neuroscience*, 168(4), pp. 862–870. doi: 10.1016/j.neuroscience.2010.03.042.
- Voglis, G. and Tavernarakis, N. (2006) 'The role of synaptic ion channels in synaptic plasticity', *EMBO reports*, 7(11), pp. 1104–1110. doi: 10.1038/sj.embor.7400830.
- Wang, J. *et al.* (2014) 'A critical review of transport through osmotic membranes', *Journal of Membrane Science*, 454, pp. 516–537. doi: 10.1016/j.memsci.2013.12.034.
- Wang, J. *et al.* (2023) 'HSPA12A controls cerebral lactate homeostasis to maintain hippocampal neurogenesis and mood stabilization', *Translational Psychiatry*, 13(1), p. 280. doi: 10.1038/s41398-023-02573-5.
- Watso, J. C. and Farquhar, W. B. (2019) 'Hydration Status and Cardiovascular Function', *Nutrients*, 11(8), p. 1866. doi: 10.3390/nu11081866.
- Weiss, B. D. (2017) 'Electrolytes: Foreword.', *FP essentials*, 459, p. 2. Available at: <http://europepmc.org/abstract/MED/28806045>.
- Weledji, E. P., Eyongeta, D. and Ngounou, E. (2019) 'The anatomy of urination: What every physician should know', *Clinical Anatomy*, 32(1), pp. 60–67. doi: 10.1002/ca.23296.
- Whitney, E. *et al.* (2011) *Understanding nutrition*. Available at: https://dro.deakin.edu.au/articles/book/Understanding_nutrition/20971096.
- Woodcock, T. (2024) 'Fluid Physiology Part 1: Volume and Distribution of Water and Its Major Solutes Between Plasma, the Interstitium and Intracellular Fluid', in *Rational Use of Intravenous Fluids in Critically Ill Patients*. Cham: Springer International Publishing, pp. 47–74. doi: 10.1007/978-3-031-42205-8_2.
- Yamanaka, R., Shindo, Y. and Oka, K. (2019) 'Magnesium Is a Key Player in Neuronal Maturation and Neuropathology', *International Journal of Molecular Sciences*, 20(14), p. 3439. doi: 10.3390/ijms20143439.
- Yoshimura, M., Conway-Campbell, B. and Ueta, Y. (2021) 'Arginine vasopressin: Direct and indirect action on metabolism', *Peptides*, 142, p. 170555. doi: 10.1016/j.peptides.2021.170555.
- Young, S. N. (2007) 'Folate and depression--a neglected problem.', *Journal of psychiatry & neuroscience : JPN*. Canada, pp. 80–82.
- Zehra, T., Cupples, W. A. and Braam, B. (2021) 'Tubuloglomerular Feedback Synchronization in Nephrovascular Networks.', *Journal of the American*

- Society of Nephrology : JASN*, 32(6), pp. 1293–1304. doi: 10.1681/ASN.2020040423.
- Zhang, J. *et al.* (2021) ‘Effects of Water Restriction and Supplementation on Cognitive Performances and Mood among Young Adults in Baoding, China: A Randomized Controlled Trial (RCT)’, *Nutrients*, 13(10), p. 3645. doi: 10.3390/nu13103645.
- Zhang, J. F. *et al.* (2019) ‘The total fluids intake, volume of urine and hydration status among young adults from Hebei Province in spring.’, *Zhonghua yu fang yi xue za zhi [Chinese journal of preventive medicine]*, 53(4), pp. 355–359. doi: 10.3760/cma.j.issn.0253-9624.2019.04.005.
- Zhang, J. L. *et al.* (2013) ‘Functional MRI of the kidneys’, *Journal of Magnetic Resonance Imaging*, 37(2), pp. 282–293. doi: 10.1002/jmri.23717.
- Zhang, N. *et al.* (2017) ‘Hydration, Fluid Intake, and Related Urine Biomarkers among Male College Students in Cangzhou, China: A Cross-Sectional Study—Applications for Assessing Fluid Intake and Adequate Water Intake’, *International Journal of Environmental Research and Public Health*, 14(5), p. 513. doi: 10.3390/ijerph14050513.
- Zhang, N. *et al.* (2019) ‘Effects of Dehydration and Rehydration on Cognitive Performance and Mood among Male College Students in Cangzhou, China: A Self-Controlled Trial’, *International Journal of Environmental Research and Public Health*, 16(11), p. 1891. doi: 10.3390/ijerph16111891.
- Zhang, X.-Y. and Ai, H.-B. (2004) ‘Progress in the study on the nucleus ambiguus’, *Chinese Journal of Neuroscience*, 20(2), pp. 180–186. Available at: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-1842809988&partnerID=40&md5=79e9a3873c48ef8b4428f230598b2dae>.
- Zheltova, A. A. *et al.* (2016) ‘Magnesium deficiency and oxidative stress: an update’, *BioMedicine*, 6(4), p. 20. doi: 10.7603/s40681-016-0020-6.
- Zhu, J. *et al.* (2021) ‘Baihe Jizihuang Tang Ameliorates Chronic Unpredictable Mild Stress-Induced Depression-Like Behavior: Integrating Network Pharmacology and Brain-Gut Axis Evaluation’, *Evidence-Based Complementary and Alternative Medicine*. Edited by S. Aazza, 2021, pp. 1–20. doi: 10.1155/2021/5554363.
- Zhuo, J. L. and Li, X. C. (2013) ‘Proximal Nephron’, in *Comprehensive Physiology*. Wiley, pp. 1079–1123. doi: 10.1002/cphy.c110061.