

DAFTAR PUSTAKA

- Abbey, L., Glover-Amengor, M., Atikpo, M.O., Atter, A., Toppe, J., 2017, "Nutrient content of fish powder from low value fish and fish byproducts", *Food Sci Nutr*, 5(3): 374–379.
- Allonby, J.I.H., Wilson, P.B., editors, 2018, *British poultry standards: complete specifications and judging points of all standardized breeds and varieties of poultry as compiled by the specialist affiliated breed clubs and recognized by the Poultry Club of Great Britain*, 7th ed. Chichester, UK ; Hoboken, NJ: John Wiley & Sons.
- Allouche-Fitoussi, D., Breitbart, H., 2020, "The Role of Zinc in Male Fertility", *IJMS*, 21(20): 7796.
- Astuti, P., Airin, C.M., Hana, R.A., Yuneldi, R.F., Sarmin, 2021, "The Effect of Natural Aromatase Blockers on the Testicle Weight, Size of Wattle and Histopathological of Testis In Bangkok", *BIO Web Conf.*, 33: 1–5.
- Astuti, P., Airin, C.M., Nurrurozi, A., Aidi, R., Hana, A., Hadi, S., Harimurti, H., 2020, "Potential Natural Aromatase Blockers on Enhance the Frequency and Sound Quality of Male Canaries", *E3S Web Conf.*, 151: 1–3.
- Astuti, P., Airin, C.M., Sarmin, S., Nururrozi, A., Harimurti, S., 2019, "Effect of shell as natural testosterone boosters in Sprague Dawley rats", *Vet World*, 12(10): 1677–1681.
- Balthazart, J., Baillien, M., Ball, G.F., 2001, "Rapid and Reversible Inhibition of Brain Aromatase Activity", *J Neuroendocrinol*, 13(1): 63–73.
- Balthazart, J., Baillien, M., Ball, G.F., 2005, "Interactions Between Kinases and Phosphatases in the Rapid Control of Brain Aromatase", *J Neuroendocrinol*, 17(9): 553–559.
- Balthazart, J., Baillien, M., Charlier, T.D., Ball, G.F., 2003, "Calcium-dependent phosphorylation processes control brain aromatase in quail: Brain aromatase phosphorylation and activity", *European Journal of Neuroscience*, 17(8): 1591–1606.
- Balunas, M.J., Su, B., Brueggemeier, R.W., Kinghorn, A.D., 2008, "Xanthenes from the Botanical Dietary Supplement Mangosteen (*Garcinia mangostana*) with Aromatase Inhibitory Activity", *J. Nat. Prod.*, 71(7): 1161–1166.
- Balunas, M.J., Su, B., Riswan, S., Fong, H.H.S., Brueggemeier, R.W., Pezzuto, J.M., Kinghorn, A.D., 2009, "Isolation and characterization of aromatase inhibitors from *Brassaiopsis glomerulata* (Araliaceae)", *Phytochemistry Letters*, 2(1): 29–33.

- Basualto-Alarcón, C., Varela, D., Duran, J., Maass, R., Estrada, M., 2014, "Sarcopenia and Androgens: A Link between Pathology and Treatment", *Front Endocrinol (Lausanne)*, 5: 217.
- Bechtel, P.J., Watson, M.A., Lea, J.M., Bett-Garber, K.L., Bland, J.M., 2019, "Properties of bone from Catfish heads and frames", *Food Sci Nutr*, 7(4): 1396–1405.
- Brooks, D.C., Coon V, J.S., Ercan, C.M., Xu, X., Dong, H., Levine, J.E., Bulun, S.E., Zhao, H., 2020, "Brain Aromatase and the Regulation of Sexual Activity in Male Mice", *Endocrinology*, 161(10): 1–15.
- Chakraborty, J., Hopkins, R., Parke, D.V., 1972, "Inhibition studies on the aromatization of androst-4-ene-3,17-dione by human placental microsomal preparations", *Biochem J*, 130(1): 19P-20P.
- Charlier, T.D., Cornil, C.A., Balthazart, J., 2013, "Rapid Modulation of Aromatase Activity in the Vertebrate Brain", *J Exp Neurosci*, 7: 31–37.
- Charlier, T.D., Cornil, C.A., Patte-Mensah, C., Meyer, L., Mensah-Nyagan, A.G., Balthazart, J., 2015, "Local modulation of steroid action: rapid control of enzymatic activity", *Front. Neurosci.*, 9: 1–9.
- Chen, T.T., Huang, C.C., Lee, T.Y., Lin, K.J., Chang, C.C., Chen, K.L., 2010, "Effect of castration and exogenous androgen implantation on muscle characteristics of male chickens", *Poultry Science*, 89(3): 558–563.
- Chinzorig, O., Hwang, I., 2018, "Mechanical texture profile of Hanwoo muscles as a function of heating temperatures", *J Anim Sci Technol*, 60(1): 22.
- Christou, M.A., Christou, P.A., Markozannes, G., Tsatsoulis, A., Mastorakos, G., Tigas, S., 2017, "Effects of Anabolic Androgenic Steroids on the Reproductive System of Athletes and Recreational Users: A Systematic Review and Meta-Analysis", *Sports Med*, 47(9): 1869–1883.
- Cinar, V., Baltaci, A.K., Mogulkoc, R., Kilic, M., 2009, "Testosterone Levels in Athletes at Rest and Exhaustion: Effects of Calcium Supplementation", *Biol Trace Elem Res*, 129(1–3): 65–69.
- Cinar, V., Polat, Y., Baltaci, A.K., Mogulkoc, R., 2011, "Effects of Magnesium Supplementation on Testosterone Levels of Athletes and Sedentary Subjects at Rest and after Exhaustion", *Biol Trace Elem Res*, 140(1): 18–23.
- Daragó, A., Klimczak, M., Stragierowicz, J., Stasikowska-Kanicka, O., Kilanowicz, A., 2020, "The Effect of Zinc, Selenium, and Their Combined Supplementation on Androgen Receptor Protein Expression in the Prostate Lobes and Serum Steroid Hormone Concentrations of Wistar Rats", *Nutrients*, 12(1): 153.

- Davey, R.A., Grossmann, M., 2016, "Androgen Receptor Structure, Function and Biology: From Bench to Bedside", *Clin Biochem Rev*, 37(1): 3–15.
- DeChick, A., Hetz, R., Lee, J., Speelman, D.L., 2020, "Increased Skeletal Muscle Fiber Cross-Sectional Area, Muscle Phenotype Shift, and Altered Insulin Signaling in Rat Hindlimb Muscles in a Prenatally Androgenized Rat Model for Polycystic Ovary Syndrome", *IJMS*, 21(21): 1–24.
- El Osta, R., Almont, T., Diligent, C., Hubert, N., Eschwège, P., Hubert, J., 2016, "Anabolic steroids abuse and male infertility", *Basic Clin Androl*, 26: 8.
- Endo, H., Tsunekawa, N., Kudo, K., Oshida, T., Motokawa, M., Sonoe, M., Wanghongsa, S., Tirawattanawanich, C., Phimpachanhvongsod, V., Sasaki, T., Yonezawa, T., Akishinomiya, F., 2021, "Comparative morphological study of skeletal muscle weight among the red jungle fowl (*Gallus gallus*) and various fowl breeds (*Gallus domesticus*)", *J Exp Zool B Mol Dev Evol*, jez.b.23111: 1–10.
- Fallah, A., Mohammad-Hasani, A., Colagar, A.H., 2018, "Zinc is an Essential Element for Male Fertility: A Review of Zn Roles in Men's Health, Germination, Sperm Quality, and Fertilization", *J Reprod Infertil*, 19(2): 69–81.
- Ferry, A., Schuh, M., Parlakian, A., Mgrditchian, T., Valnaud, N., Joanne, P., Butler-Browne, G., Agbulut, O., Metzger, D., 2014, "Myofiber Androgen Receptor Promotes Maximal Mechanical Overload-Induced Muscle Hypertrophy and Fiber Type Transition in Male Mice", *Endocrinology*, 155(12): 4739–4748.
- Gaskins, A.J., Sundaram, R., Buck Louis, G.M., Chavarro, J.E., 2018, "Seafood Intake, Sexual Activity, and Time to Pregnancy", *The Journal of Clinical Endocrinology & Metabolism*, 103(7): 2680–2688.
- Geiger, A.E., Daughtry, M.R., Gow, C.M., Siegel, P.B., Shi, H., Gerrard, D.E., 2018, "Long-term selection of chickens for body weight alters muscle satellite cell behaviors", *Poultry Science*, 97(7): 2557–2567.
- Gharahdaghi, N., Phillips, B.E., Szewczyk, N.J., Smith, K., Wilkinson, D.J., Atherton, P.J., 2021, "Links Between Testosterone, Oestrogen, and the Growth Hormone/Insulin-Like Growth Factor Axis and Resistance Exercise Muscle Adaptations", *Front. Physiol.*, 11: 1–12.
- Gorgey, A.S., Abilmona, S.M., Sima, A., Khalil, R.E., Khan, R., Adler, R.A., 2020, "A secondary analysis of testosterone and electrically evoked resistance training versus testosterone only (TEREX-SCI) on untrained muscles after spinal cord injury: a pilot randomized clinical trial", *Spinal Cord*, 58(3): 298–308.

- Goss, P.E., Strasser, K., 2001, "Aromatase inhibitors in the treatment and prevention of breast cancer", *J Clin Oncol*, 19(3): 881–894.
- Hall, P.F., Chen, S., Nakajin, S., Shinoda, M., Shively, J.E., 1987, "Purification and characterization of aromatase from human placenta", *Steroids*, 50(1–3): 37–50.
- Hamdi, M.M., Mutungi, G., 2011, "Dihydrotestosterone stimulates amino acid uptake and the expression of LAT2 in mouse skeletal muscle fibres through an ERK1/2-dependent mechanism", *J Physiol*, 589(Pt 14): 3623–3640.
- Hanai, M., Esashi, T., 2012, "Effect of Dietary Protein Levels on Sex Hormones in Growing Male Rats Kept under Constant Darkness", *Exp. Anim.*, 61(5): 555–561.
- Hargrove, J.L., Greenspan, P., Hartle, D.K., Dowd, C., 2011, "Inhibition of Aromatase and α -Amylase by Flavonoids and Proanthocyanidins from *Sorghum bicolor* Bran Extracts", *Journal of Medicinal Food*, 14(7–8): 799–807.
- Haun, C.T., Mobley, C.B., Vann, C.G., Romero, M.A., Roberson, P.A., Mumford, P.W., Kephart, W.C., Healy, J.C., Patel, R.K., Osburn, S.C., Beck, D.T., Arnold, R.D., Nie, B., Lockwood, C.M., Roberts, M.D., 2018, "Soy protein supplementation is not androgenic or estrogenic in college-aged men when combined with resistance exercise training", *Sci Rep*, 8(1): 1–13.
- Hosogi, H., Nagayama, S., Kawamura, J., Koshiba, Y., Nomura, A., Itami, A., Okabe, H., Satoh, S., Watanabe, G., Sakai, Y., 2008, "Molecular insights into Peutz-Jeghers syndrome: two probands with a germline mutation of LKB1", *J Gastroenterol*, 43(6): 492–497.
- Huang, L.-T., Wang, J.-H., 2021, "The Therapeutic Intervention of Sex Steroid Hormones for Sarcopenia", *Front Med (Lausanne)*, 8: 11.
- Ioannidis, J., Taylor, G., Zhao, D., Liu, L., Idoko-Akoh, A., Gong, D., Lovell-Badge, R., Guioli, S., McGrew, M.J., Clinton, M., 2021, "Primary sex determination in birds depends on DMRT1 dosage, but gonadal sex does not determine adult secondary sex characteristics", *Proc Natl Acad Sci USA*, 118(10): 1–10.
- Jardí, F., Laurent, M.R., Kim, N., Khalil, R., De Bundel, D., Van Eeckhaut, A., Van Helleputte, L., Deboel, L., Dubois, V., Schollaert, D., Decallonne, B., Carmeliet, G., Van den Bosch, L., D’Hooge, R., Claessens, F., Vanderschueren, D., 2018, "Testosterone boosts physical activity in male mice via dopaminergic pathways", *Sci Rep*, 8(1): 1–14.

- Jaturasitha, S., Srikanthai, T., Kreuzer, M., Wicke, M., 2008, "Differences in Carcass and Meat Characteristics Between Chicken Indigenous to Northern Thailand (Black-Boned and Thai Native) and Imported Extensive Breeds (Bresse and Rhode Island Red)", *Poultry Science*, 87(1): 160–169.
- Johnson, S.E., Allen, R.E., 1993, "Proliferating cell nuclear antigen (PCNA) is expressed in activated rat skeletal muscle satellite cells", *J Cell Physiol*, 154(1): 39–43.
- Josiak, K., Jankowska, E.A., Piepoli, M.F., Banasiak, W., Ponikowski, P., 2014, "Skeletal myopathy in patients with chronic heart failure: significance of anabolic-androgenic hormones", *J Cachexia Sarcopenia Muscle*, 5(4): 287–296.
- Kambe, T., Matsunaga, M., Takeda, T., 2017, "Understanding the Contribution of Zinc Transporters in the Function of the Early Secretory Pathway", *IJMS*, 18(10): 1–18.
- Kambe, T., Tsuji, T., Hashimoto, A., Itsumura, N., 2015, "The Physiological, Biochemical, and Molecular Roles of Zinc Transporters in Zinc Homeostasis and Metabolism", *Physiological Reviews*, 95(3): 749–784.
- Kaneko, J.J., Harvey, J.W., Bruss, M., 2008, *Clinical biochemistry of domestic animals*, Amsterdam; London: Academic.
- Klein, B.G., 2013, *Cunningham's textbook of veterinary physiology*, 5th ed. St. Louis, Mo: Elsevier/Saunders.
- Koolman, J., Röhm, K.-H., 2013, *Color atlas of biochemistry*, 3rd ed., rev.updated. Stuttgart: Thieme.
- Kraemer, W.J., Looney, D.P., 2012, "Underlying Mechanisms and Physiology of Muscular Power", *Strength & Conditioning Journal*, 34(6): 13–19.
- Krause Neto, W., Silva, W. de A., Ciena, A.P., Nucci, R.A.B., Anaruma, C.A., Gama, E.F., 2017, "Effects of Strength Training and Anabolic Steroid in the Peripheral Nerve and Skeletal Muscle Morphology of Aged Rats", *Front. Aging Neurosci.*, 9: 1–12.
- Leeson, S., Summers, J.D., 2008, *Commercial poultry nutrition*, 3. ed., digitally repr. Nottingham: Nottingham Univ. Press.
- Lehninger, A.L., Nelson, D.L., Cox, M.M., 2013, *Lehninger principles of biochemistry*, 6th ed. New York: W.H. Freeman.
- Lephart, E.D., 2015, "Modulation of Aromatase by Phytoestrogens", *Enzyme Research*, 2015: 1–11.

- Lewis, C., 2013, *The illustrated guide to chickens: how to choose them - how to keep them*,.
- Li, D., Wang, Q., Shi, K., Lu, Y., Yu, D., Shi, X., Du, W., Yu, M., 2020, "Testosterone Promotes the Proliferation of Chicken Embryonic Myoblasts Via Androgen Receptor Mediated PI3K/Akt Signaling Pathway", *IJMS*, 21(3): 12.
- Major, A.T., Smith, C.A., 2016, "Sex Reversal in Birds", *SXD*, 10(5–6): 288–300.
- Meyer, A.S., 1955, "Conversion of 19-hydroxy-delta 4-androstene-3,17-dione to estrone by endocrine tissue", *Biochim Biophys Acta*, 17(3): 441–442.
- Novaković, S., Tomašević, I., 2017, "A comparison between Warner-Bratzler shear force measurement and texture profile analysis of meat and meat products: a review", *IOP Conf. Ser.: Earth Environ. Sci.*, 85: 012063.
- Pateiro, M., Munekata, P.E.S., Domínguez, R., Wang, M., Barba, F.J., Bermúdez, R., Lorenzo, J.M., 2020, "Nutritional Profiling and the Value of Processing By-Products from Gilthead Sea Bream (*Sparus aurata*)", *Mar Drugs*, 18(2): E101.
- Peralta, F., Huidobro-Toro, J., 2016, "Zinc as Allosteric Ion Channel Modulator: Ionotropic Receptors as Metalloproteins", *IJMS*, 17(7): 1–27.
- Piestun, Y., Patael, T., Yahav, S., Velleman, S.G., Halevy, O., 2017, "Early posthatch thermal stress affects breast muscle development and satellite cell growth and characteristics in broilers", *Poultry Science*, 96(8): 2877–2888.
- Pöllänen, E., Kangas, R., Horttanainen, M., Niskala, P., Kaprio, J., Butler-Browne, G., Mouly, V., Sipilä, S., Kovanen, V., 2015, "Intramuscular sex steroid hormones are associated with skeletal muscle strength and power in women with different hormonal status", *Aging Cell*, 14(2): 236–248.
- Puspita, U.E., Utomo, R.T., Perdamaian, A.B.I., Lesmana, I., Arijuddin, H., Erwanto, Y., Daryono, B.S., Saragih, H.T.S.G., 2016, "Effect of Varying Levels of Protein and Energy in Pre-starter Feeds on Pectoralis Muscle Development of Kampung Super Chicks (*Gallus gallus gallus*)", *Asian J. of Animal and Veterinary Advances*, 12(1): 31–37.
- Reich, T.E., Lindstedt, S.L., LaStayo, P.C., Pierotti, D.J., 2000, "Is the spring quality of muscle plastic?", *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 278(6): 1661–1666.
- Rikimaru, K., Ogawa, S., Komastu, M., Ishizuka, J., 2009, "Effects of Caponization on Meat Quality of Hinai-jidori Chicken", *J. Poult. Sci.*, 46(4): 345–350.

- Roberts, T.J., Eng, C.M., Sleboda, D.A., Holt, N.C., Brainerd, E.L., Stover, K.K., Marsh, R.L., Azizi, E., 2019, "The Multi-Scale, Three-Dimensional Nature of Skeletal Muscle Contraction", *Physiology (Bethesda)*, 34(6): 402–408.
- Rodríguez-Rosell, D., Pareja-Blanco, F., Aagaard, P., González-Badillo, J.J., 2018, "Physiological and methodological aspects of rate of force development assessment in human skeletal muscle", *Clin Physiol Funct Imaging*, 38(5): 743–762.
- de Ronde, W., de Jong, F.H., 2011, "Aromatase inhibitors in men: effects and therapeutic options", *Reprod Biol Endocrinol*, 9: 1–7.
- Rosati, L., Falvo, S., Chieffi Baccari, G., Santillo, A., Di Fiore, M.M., 2021, "The Aromatase–Estrogen System in the Testes of Non-Mammalian Vertebrates", *Animals*, 11(6): 1–12.
- Roselli, C.E., Liu, M., Hurn, P.D., 2009, "Brain aromatization: classic roles and new perspectives", *Semin Reprod Med*, 27(3): 207–217.
- Sankako, M.K., Garcia, P.C., Piffer, R.C., Dallaqua, B., Damasceno, D.C., Pereira, O.C.M., 2012, "Possible mechanism by which zinc protects the testicular function of rats exposed to cigarette smoke", *Pharmacol Rep*, 64(6): 1537–1546.
- Santen, R.J., Brodie, H., Simpson, E.R., Siiteri, P.K., Brodie, A., 2009, "History of Aromatase: Saga of an Important Biological Mediator and Therapeutic Target", *Endocrine Reviews*, 30(4): 343–375.
- Santos, H.O., Teixeira, F.J., 2020, "Use of medicinal doses of zinc as a safe and efficient coadjutant in the treatment of male hypogonadism", *Aging Male*, 23(5): 669–678.
- Saragih, H.T., Muhamad, A.A.K., Alfianto, A., Viniwidihastuti, F., Untari, L.F., Lesmana, I., Widyatmoko, H., Rohmah, Z., 2019, "Effects of *Spirogyra jaoensis* as a dietary supplement on growth, pectoralis muscle performance, and small intestine morphology of broiler chickens", *Vet World*, 12(8): 1233–1239.
- Saro, C., Mateo, J., Caro, I., Carballo, D.E., Fernández, M., Valdés, C., Bodas, R., Giráldez, F.J., 2020, "Effect of Dietary Crude Protein on Animal Performance, Blood Biochemistry Profile, Ruminant Fermentation Parameters and Carcass and Meat Quality of Heavy Fattening Assaf Lambs", *Animals*, 10(11): 2177.
- Scanes, C.G., 2011, *Fundamentals of animal science*, Clifton Park, NY: Delmar Cengage Learning.

- Schiaffino, S., Dyar, K.A., Ciciliot, S., Blaauw, B., Sandri, M., 2013, "Mechanisms regulating skeletal muscle growth and atrophy", *FEBS J*, 280(17): 4294–4314.
- Schiffer, L., Arlt, W., Storbeck, K.-H., 2018, "Intracrine androgen biosynthesis, metabolism and action revisited", *Mol Cell Endocrinol*, 465: 4–26.
- Schwarz, W.C., Kruggel, W.G., Brodie, H.J., 1973, "Studies on the mechanism of estrogen biosynthesis. 8. The development of inhibitors of the enzyme system in human placenta", *Endocrinology*, 92(3): 866–880.
- Seale, P., Sabourin, L.A., Girgis-Gabardo, A., Mansouri, A., Gruss, P., Rudnicki, M.A., 2000, "Pax7 Is Required for the Specification of Myogenic Satellite Cells", *Cell*, 102(6): 777–786.
- Sherwood, L., Klandorf, H., Yancey, P.H., 2013, *Animal physiology: from genes to organisms*, 2nd ed. Belmont, CA: Brooks/Cole.
- Sinha-Hikim, I., Taylor, W.E., Gonzalez-Cadavid, N.F., Zheng, W., Bhasin, S., 2004, "Androgen Receptor in Human Skeletal Muscle and Cultured Muscle Satellite Cells: Up-Regulation by Androgen Treatment", *The Journal of Clinical Endocrinology & Metabolism*, 89(10): 5245–5255.
- Swerdloff, R.S., Dudley, R.E., Page, S.T., Wang, C., Salameh, W.A., 2017, "Dihydrotestosterone: Biochemistry, Physiology, and Clinical Implications of Elevated Blood Levels", *Endocr Rev*, 38(3): 220–254.
- Symeon, G.K., Mantis, F., Bizelis, I., Kominakis, A., Rogdakis, E., 2010, "Effects of caponization on growth performance, carcass composition, and meat quality of medium growth broilers", *Poult Sci*, 89(7): 1481–1489.
- Tang, D., Liu, X., Chen, K., Li, Z., Dai, Y., Xu, J., Zhang, H.-T., Gao, X., Liu, L., 2020, "Cytoplasmic PCNA is located in the actin belt and involved in osteoclast differentiation", *Aging (Albany NY)*, 12(13): 13297–13317.
- Taylor, K.M., Hiscox, S., Nicholson, R.I., Hogstrand, C., Kille, P., 2012, "Protein Kinase CK2 Triggers Cytosolic Zinc Signaling Pathways by Phosphorylation of Zinc Channel ZIP7", *Sci. Signal.*, 5(210): 14.
- Toppe, J., Albrektsen, S., Hope, B., Aksnes, A., 2007, "Chemical composition, mineral content and amino acid and lipid profiles in bones from various fish species", *Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology*, 146(3): 395–401.
- U-chupaj, J., Malila, Y., Gamonpilas, C., Kijroongrojana, K., Petracci, M., Benjakul, S., Visessanguan, W., 2017, "Differences in textural properties of cooked caponized and broiler chicken breast meat", *Poultry Science*, 96(7): 2491–2500.

- Ulfah, M., Perwitasari, D., Jakaria, J., Muladno, M., Farajallah, A., 2015, "Breed Determination for Indonesian Local Chickens Based on Matrilineal Evolution Analysis", *International J. of Poultry Science*, 14(11): 615–621.
- Ulfah, M., Perwitasari, D., Jakaria, J., Muladno, M., Farajallah, A., 2017, "Multiple maternal origins of Indonesian crowing chickens revealed by mitochondrial DNA analysis", *Mitochondrial DNA Part A*, 28(2): 254–262.
- Wattanachant, S., Benjakul, S., Ledward, D.A., 2004, "Composition, Color, and Texture of Thai Indigenous and Broiler Chicken Muscles", *Poultry Science*, 83(1): 123–128.
- Weil, S., Rozenboim, I., Degen, A.A., Dawson, A., Friedländer, M., Rosenstrauch, A., 1999, "Fertility decline in aging roosters is related to increased testicular and plasma levels of estradiol", *Gen Comp Endocrinol*, 115(1): 23–28.
- Weng, K., Huo, W., Li, Y., Zhang, Y., Zhang, Y., Chen, G., Xu, Q., 2022, "Fiber characteristics and meat quality of different muscular tissues from slow- and fast-growing broilers", *Poultry Science*, 101(1): 1–8.
- Wulandari, P., Kusumasari, S., 2019, "Effect of extraction methods on the nutritional characteristics of milkfish (*Chanos chanos* Forsskal) bone powder", *IOP Conf. Ser.: Earth Environ. Sci.*, 383: 1–5.
- Yamasaki, S., Sakata-Sogawa, K., Hasegawa, A., Suzuki, T., Kabu, K., Sato, E., Kurosaki, T., Yamashita, S., Tokunaga, M., Nishida, K., Hirano, T., 2007, "Zinc is a novel intracellular second messenger", *Journal of Cell Biology*, 177(4): 637–645.
- Yuneldi, R.F., Airin, C.M., Saragih, H.T.S.S.G., Astuti, P., 2021a, "Application of Natural Aromatase Blocker Towards the Level of Testosterone in Rooster Layer [*Gallus gallus gallus* (Linn., 1758)]", *KEM*, 884: 251–255.
- Yuneldi, R.F., Astuti, P., Saragih, H.T.S., Airin, C.M., 2021b, "Anadara granosa shell powder improves the metabolism, testosterone level, and sound frequency of Pelung chickens", *Vet World*, 14(6): 1564–1571.
- Zamir, A., Ben-Zeev, T., Hoffman, J.R., 2021a, "Manipulation of Dietary Intake on Changes in Circulating Testosterone Concentrations", *Nutrients*, 13(10): 3375.
- Zamir, A., Ben-Zeev, T., Hoffman, J.R., 2021b, "Manipulation of Dietary Intake on Changes in Circulating Testosterone Concentrations", *Nutrients*, 13(10): 3375.
- Zhang, X., Guan, T., Yang, B., Chi, Z., Wang, Z.-Y., Gu, H.F., 2018, "A novel role for zinc transporter 8 in the facilitation of zinc accumulation and regulation

of testosterone synthesis in Leydig cells of human and mouse testicles", *Metabolism*, 88: 40–50.

Zhao, H., Zhou, L., Li, L., Coon V, J., Chatterton, R.T., Brooks, D.C., Jiang, E., Liu, L., Xu, X., Dong, Z., DeMayo, F.J., Stulberg, J.J., Tourtellotte, W.G., Bulun, S.E., 2018, "Shift from androgen to estrogen action causes abdominal muscle fibrosis, atrophy, and inguinal hernia in a transgenic male mouse model", *Proc Natl Acad Sci U S A*, 115(44): E10427–E10436.