

DAFTAR PUSTAKA

- Aebersold, R. dan Mann, M., 2003, Mass spectrometry-based proteomics, Seattle, Washington, USA.
- Agu, P.C., Afiukwa, C.A., Orji, O.U., Ezeh, E.M., Ofoke, I.H., Ogbu, C.O., Ugwuja, E.I., dan Aja, P.M., 2023, Molecular docking as a tool for the discovery of molecular targets of nutraceuticals in diseases management, *Sci Rep*, 13:13398, .
- Ahmed, N., Raharjo, S., Swasono, R.T., dan Raharjo, T.J., 2022, The antibacterial peptides (AMPs) originated from tryptic hydrolysis of *Naja sumatrana* venom fractionated using cation exchange chromatography, *RJC*, 15, 2642–2653.
- Aluko, R.E., 2015, Antihypertensive peptides from food proteins, *Annu Rev Food Sci Technol*, 6, 235–262.
- Anonim, 2002, *World Health Organization*. Promoting rational use of medicines: core components, *WHO Policy Perspectives on Medicines*, 1–6.
- Appel, W., 1986, Chymotrypsin: Molecular and Catalytic Properties, *Clin. Biochem*, 19, 317.
- Atmawati, D.R., Andriana, Z., Swasono, R.T., dan Raharjo, T.J., 2022, Antibacterial peptide from solid phase extraction (SPE) fractionation on trypsin hydrolysis of jatropha (*Ricinus communis*) seed protein acid extract, *Rasayan Journal of Chemistry*, 15, 1288–1295.
- Bao, Y., Wang, J., Li, C., Li, P., Wang, S., dan Lin, Z., 2016, A preliminary study on the antibacterial mechanism of *Tegillarca granosa* hemoglobin by derived peptides and peroxidase activity, *Fish Shellfish Immunol*, 51, 9–16.
- Beg, Q.K., Sahai, V., dan Gupta, R., 2003, Statistical media optimization and alkaline protease production from *Bacillus mojavensis* in a bioreactor, *Process Biochemistry*, 39, 203–209.
- Betancourt, L.H., Sánchez, A., Pérez, Y., Fernandez de Cossio, J., Gil, J., Toledo, P., Iguchi, S., Aimoto, S., González, L.J., Padrón, G., Takao, T., dan Besada, V., 2011, Charge state-selective separation of peptides by reversible modification of amino groups and strong cation-exchange chromatography: Evaluation in proteomic studies using peptide-centric database searches, *J Proteomics*, 74, 2210–2213.
- Breinbauer, R., Vetter, I., dan Waldmann, H., 2002, From Protein Domains to Drug Candidates–Natural Products as Guiding Principles in the Design and Synthesis of Compound Libraries, *Angew. Chem. Int. Ed*, 41, 2878–2890.
- Brogden, K.A., 2005, Antimicrobial peptides: Pore formers or metabolic inhibitors in bacteria?, *Nat Rev Microbiol*, 3, 238–250.
- Budge, S., Zhou, L., Ghaly, A.E., Brooks, M.S., dan Dave, D., 2011, Extraction, purification and characterization of fish chymotrypsin: A Review, *Am. J. Biochem. Biotechnol*, 3, 104–123.
- Butler, M.S., 2008, Natural products to drugs: Natural product-derived compounds in clinical trials, *Nat Prod Rep*, 25, 475–516.
- Cao, J., Zhang, J., Cao, R., Li, W., Wang, G., Cui, L., dan Sun, L., 2023, Elucidation of alpha-amylase inhibition by natural shikimic acid derivates regarding the infrequent

- uncompetitive inhibition mode and structure–activity relationship, *Food Front*, 4, 2058–2069.
- Ceballos, L.S., Morales, E.R., de la Torre Adarve, G., Castro, J.D., Martínez, L.P., dan Sampelayo, M.R.S., 2009, Composition of goat and cow milk produced under similar conditions and analyzed by identical methodology, *Journal of Food Composition and Analysis*, 22, 322–329.
- Chan, K.C. dan Issaq, H.J., 2013, Fractionation of peptides by strong cation-exchange liquid chromatography, *Methods in Molecular Biology*, 1002, 311–315.
- Charoenphun, N., Cheirsilp, B., Sirinupong, N., dan Youravong, W., 2013, Calcium-binding peptides derived from tilapia (*Oreochromis niloticus*) protein hydrolysate, *European Food Research and Technology*, 236, 57–63.
- Chaudhury, A., Duvoor, C., Reddy Dendi, V.S., Kraleti, S., Chada, A., Ravilla, R., Marco, A., Shekhawat, N.S., Montales, M.T., Kuriakose, K., Sasapu, A., Beebe, A., Patil, N., Musham, C.K., Lohani, G.P., dan Mirza, W., 2017, Clinical Review of Antidiabetic Drugs: Implications for Type 2 Diabetes Mellitus Management, *Front Endocrinol (Lausanne)*, 8, .
- Cheng, F., Han, L., Xiao, Y., Pan, C., Li, Y., Ge, X., Zhang, Y., Yan, S., dan Wang, M., 2019, D-Chiro-Inositol Ameliorates high fat diet-induced hepatic steatosis and insulin resistance via PKC ϵ -PI3K/AKT pathway, *J Agric Food Chem*, 67, 5957–5967.
- Corrêa, A.P.F., Daroit, D.J., Coelho, J., Meira, S.M., Lopes, F.C., Segalin, J., Risso, P.H., dan Brandelli, A., 2011, Antioxidant, antihypertensive and antimicrobial properties of ovine milk caseinate hydrolyzed with a microbial protease, *J Sci Food Agric*, 91, 2247–2254.
- Custodio, M.F., Goulart, A.J., Marques, D.P., Giordano, R.C., Giordano, R.L., dan Monti, R., 2005, Hydrolysis of cheese whey proteins with trypsin, chymotrypsin and carboxypeptidase a, *Alim. Nutr*, 16, 105–109.
- Daliri, E.B.M., Oh, D.H., dan Lee, B.H., 2017, Bioactive peptides, *Foods*, 6, 1–21.
- Dalziel, J.E., Dunstan, K.E., Dewhurst, H., Gendt, M. V, Young, W., dan Carpenter, E., 2020, Goat milk increases gastric emptying and alters caecal short chain fatty acid profile compared with cow milk in healthy rats, *RSC*, 1–3.
- Dephoure, N. dan Gygi, S.P., 2011, A solid phase extraction-based platform for rapid phosphoproteomic analysis, *Methods*, 54, 379–386.
- Dill, K.A., 1990, Dominant forces in protein folding, *Biochemistry*, 29, 7133–7155.
- Dittmar, T., Koch, B., Hertkorn, N., dan Kattner, G., 2008, A simple and efficient method for the solid-phase extraction of dissolved organic matter (SPE-DOM) from seawater, *Limnology and Oceanography*, 18–34.
- Dominguez, C., Boelens, R., dan Bonvin, A.M.J.J., 2003, HADDOCK: A protein-protein docking approach based on biochemical or biophysical information, *J Am Chem Soc*, 125, 1731–1737.
- Dujic, T., Causevic, A., Bego, T., Malenica, M., Velija-Asimi, Z., Pearson, E.R., dan Semiz, S., 2016, Organic cation transporter 1 variants and gastrointestinal side effects of metformin in patients with Type 2 diabetes, *Diabetic Medicine*, 33, 511–514.

- EFSA, 2004, Opinion of the Scientific Panel on Dietetic products, nutrition and allergies [NDA] on a request from the Commission relating to the evaluation of allergenic foods for labelling purposes, *EFSA Journal*, 2, .
- Elbein, A.D., 1991, Glycosidase inhibitors: inhibitors of N-linked oligosaccharide processing, *The FASEB Journal*, 5, 3055–3063.
- Erlista, G.P., Ahmed, N., Swasono, R.T., Raharjo, S., dan Raharjo, T.J., 2023, Proteome of monocled cobra (*Naja kaouthia*) venom and potent anti breast cancer peptide from trypsin hydrolyzate of the venom protein, *Saudi Pharmaceutical Journal*, 31, 1115–1124.
- Ernst, T., Frommer, W., Muller, L., Schmidt, D.D., dan Wingender, W., 1981, lecture delivered in Durham, see 1221, *Angew. Chem. Int. Ed. Engl*, 20, 744–761.
- Esfandi, R., Seidu, I., Willmore, W., dan Tsopmo, A., 2022, Antioxidant, pancreatic lipase, and α -amylase inhibitory properties of oat bran hydrolyzed proteins and peptides, *J Food Biochem*, 46.
- Evans, B.E., Rittle, K.E., Bock, M.G., Dipardo, R.M., Freidinger, R.M., Whitter, W.L., Gould, N.P., Lundell, G.F., Homnick, C.F., Veber, D.F., Anderson, P.S., Chang, R.S.L., Lotti, V.J., Cerino, D.J., Chen, T.B., King, P.J., Kunkel, K.A., Springer, J.P., dan Hirshfieldt, J., 1987, Design of Nonpeptidal Ligands for a Peptide Receptor: Cholecystokinin Antagonists 1229,.
- Evaristus, N.A., Wan Abdullah, W.N., dan Gan, C.Y., 2018, Extraction and identification of α -amylase inhibitor peptides from *Nephelium lappacheum* and *Nephelium mutabile* seed protein using gastro-digestive enzymes, *Peptides (N.Y.)*, 102, 61–67.
- Fadimu, G.J., Gill, H., Farahnaky, A., dan Truong, T., 2022, Improving the enzymolysis efficiency of lupin protein by ultrasound pretreatment: Effect on antihypertensive, antidiabetic and antioxidant activities of the hydrolysates, *Food Chem*, 383, .
- Famuwagun, A.A., Alashi, A.M., Gbadamosi, O.S., Taiwo, K.A., Oyedele, D., Adebooye, O.C., dan Aluko, R.E., 2021, Antioxidant and enzymes inhibitory properties of Amaranth leaf protein hydrolyzates and ultrafiltration peptide fractions, *J Food Biochem*, 45, .
- Feingold, K.R., 2024, Oral and injectable (Non-insulin) pharmacological agents for the treatment of type 2 diabetes, MDText.com, Inc., Darmouth, Massachusetts.
- Folx, J.E., 1970, Chymotrypsin c (Porcine pancreas), *J. Biol. Chem*, 181.
- Gagnaire, V. dan Léonil, J., 1998, Preferential sites of tryptic cleavage on the major bovine caseins within the micelle, *Lait*, 78, 471–489.
- Geiger, T., Velic, A., MacEk, B., Lundberg, E., Kampf, C., Nagaraj, N., Uhlen, M., Cox, J., dan Mann, M., 2013, Initial quantitative proteomic map of 28 mouse tissues using the SILAC mouse., *Mol Cell Proteomics*, 12, 1709–1722.
- Ghode, P. dan Jain, S.K., 2018, Structural Requirements for some 3-amino-N-substituted-4-(substituted phenyl) Butanamides as Dipeptidyl Peptidase-IV Inhibitors Using 3D-QSAR and Molecular Docking Approaches, *Indian J Pharm Sci*, 79, 974–986.
- Gong, H., Gao, J., Wang, Y., Luo, Q.W., Guo, K.R., Ren, F.Z., dan Mao, X.Y., 2020, Identification of novel peptides from goat milk casein that ameliorate high-glucose-induced insulin resistance in HepG2 cells, *J Dairy Sci*, 103, 4907–4918.

- Gong, L., Feng, D., Wang, T., Ren, Y., Liu, Y., dan Wang, J., 2020a, Inhibitors of α -amylase and α -glucosidase: Potential linkage for whole cereal foods on prevention of hyperglycemia, *Food Sci Nutr*, 8, 6320.
- Gong, L., Feng, D., Wang, T., Ren, Y., Liu, Y., dan Wang, J., 2020b, Inhibitors of α -amylase and α -glucosidase: Potential linkage for whole cereal foods on prevention of hyperglycemia, *Food Sci Nutr*, 8, 6320–6337.
- Goto, Y. dan Fink, A.L., 1989, Conformational states of beta-lactamase: molten-globule states at acidic and alkaline pH with high salt, *Biochemistry*, 28, 945–952.
- Guerrera, I.C. dan Kleiner, O., 2005, Application of mass spectrometry in proteomics, *Biosci Rep*, 25, 71–93.
- Hebert, A.S., Richards, A.L., Bailey, D.J., Ulbrich, A., Coughlin, E.E., Westphall, M.S., dan Coon, J.J., 2014, The One Hour Yeast Proteome, *Molecular & Cellular Proteomics*, 13, 339–347.
- Herraziz, T. and Casal, V., 1995, Evaluation of solid-phase extraction procedures in peptide analysis, *J. Chromatogr. A*, 708, 209–221.
- Hipp, N.J., Groves, M.L., Custer, J.H., dan McMeekin, T.L., 1952, Separation of α -, β - and γ -Casein, *J Dairy Sci*, 35, 272–281.
- Hong, J., 2011, Role of natural product diversity in chemical biology, *Curr Opin Chem Biol*, 15, 350–354.
- Huang, Y., Richardson, S.J., Brennan, C.S., dan Kasapis, S., 2024, Mechanistic insights into α -amylase inhibition, binding affinity and structural changes upon interaction with gallic acid, *Food Hydrocoll*, 148, 109467.
- Hudáky, P., Kaslik, G., Venekei, I., dan Gráf, L., 1999, The differential specificity of chymotrypsin A and B is determined by amino acid 226, *Eur J Biochem*, 259, 528–533.
- Huppertz, T., Fox, P.F., dan Kelly, A.L., 2017, The caseins: Structure, stability, and functionality. In, *Proteins in Food Processing, Second Edition*. Elsevier, pp. 49–92.
- James, P. dan Numat, K., 2013, Polymerization of Peptide Polymers for Biomaterial Applications. In, *Polymer Science*. InTech.
- Jaziri, A.A., Sukoso, Mr., dan Firdaus, M., 2017, Karakteristik Protease Dari Ekstrak Kasar Khamir Laut Dan Aktivitasnya Dalam Menghidrolisis Protein Ikan Rucah, *JFMR-Journal of Fisheries and Marine Research*, 1, 78–87.
- Jeewanthi, R.K.C., Lee, N.K., dan Paik, H.D., 2015, Improved Functional Characteristics of Whey Protein Hydrolysates in Food Industry, *Korean J Food Sci Anim Resour*, 35, 350–359.
- Jordan, P.J. dan Morison, K.R., 2022, Pasteurisation of particles in milk, *Int Dairy J*, 128, .
- Kadziola, A., Abe, J.I., Svensson, B., dan Haser, R., 1994, Crystal and Molecular Structure of Barley α -Amylase, *J Mol Biol*, 239, 104–121.
- Kimball, M.E., Hsieh, D.S.T., dan Rha, C.K., 1981, Chymotrypsin Hydrolysis of Soybean Protein Determination of Extent of Hydrolysis, *J Agric Food Chem*, 872–874.
- Kostić, A., Milinčić, D.D., Stanisavljević, N.S., Gašić, U.M., Lević, S., Kojić, M.O., Lj. Tešić, Ž., Nedović, V., Barać, M.B., dan Pešić, M.B., 2021, Polyphenol

- bioaccessibility and antioxidant properties of in vitro digested spray-dried thermally-treated skimmed goat milk enriched with pollen, *Food Chem*, 351.
- Lahlou, M., 2013, The Success of Natural Products in Drug Discovery, *Pharmacology & Pharmacy*, 4, 17–31.
- Lamothe, S., Robitaille, G., St-Gelais, D., dan Britten, M., 2007, Short communication: Extraction of β -casein from goat milk, *J Dairy Sci*, 90, 5380–5382.
- Leni, G., Soetemans, L., Jacobs, J., Depraetere, S., Gianotten, N., Bastiaens, L., Caligiani, A., dan Sforza, S., 2020, Protein hydrolysates from alphitobius diaperinus and hermetia illucens larvae treated with commercial proteases, *J Insects Food Feed*, 6, 393–404.
- Lewis, R.J. dan Garcia, M.L., 2003, Therapeutic potential of venom peptides, *Nat Rev Drug Discov*, 2, 790–802.
- Li, D.F., Ding, H.C., dan Zhou, T., 2013, Covalent immobilization of mixed proteases, trypsin and chymotrypsin, onto modified polyvinyl chloride microspheres, *J Agric Food Chem*, 61, 10447–10453.
- Liang, X., Qian, G., Sun, J., Yang, M., Shi, X., Yang, H., Wu, J., Wang, Z., Zheng, Y., dan Yue, X., 2021, Evaluation of antigenicity and nutritional properties of enzymatically hydrolyzed cow milk, *Sci Rep*, 11:18623.
- Liao, Y., Weber, D., Xu, W., Durbin-Johnson, B.P., Phinney, B.S., dan Lönnerdal, B., 2017, Absolute Quantification of Human Milk Caseins and the Whey/Casein Ratio during the First Year of Lactation, *J Proteome Res*, 16, 4113–4121.
- Lombard-Banek, C., Moody, S.A., dan Nemes, P., 2016, High-sensitivity mass spectrometry for probing gene translation in single embryonic cells in the early frog (*Xenopus*) embryo, *Front Cell Dev Biol*, 4.
- Lopez-Aliaga, I., Alferez, M.J.M., Barrionuevo, M., Nestares, T., Sampelayo, M.R.S., dan Campos, M.S., 2003, Study of nutritive utilization of protein and magnesium in rats with resection of the distal small intestine. Beneficial effect of goat milk, *J Dairy Sci*, 86, 2958–2966.
- Meng, X.-Y., Zhang, H.-X., Mezei, M., dan Cui, M., 2011, Molecular docking: A powerful approach for structure-based drug discovery, *Curr Comput Aided Drug Des*, 7, 146–157.
- Miguel, M., Alonso, M.J., Salaices, M., Aleixandre, A., dan López-Fandiño, R., 2007, Antihypertensive, ACE-inhibitory and vasodilator properties of an egg white hydrolysate: Effect of a simulated intestinal digestion, *Food Chem*, 104, 163–168.
- Mishra, L.K., Sarkar, D., Zwinger, S., dan Shetty, K., 2017, Phenolic antioxidant-linked anti-hyperglycemic properties of rye cultivars grown under conventional and organic production systems, *J Cereal Sci*, 76, 108–115.
- Moghadam, M., Salami, M., Mohammadian, M., Emam-Djomeh, Z., Jahanbani, R., dan Moosavi-Movahedi, A.A., 2020, Physicochemical and bio-functional properties of walnut proteins as affected by trypsin-mediated hydrolysis, *Food Biosci*, 36, 100611.
- Mohd Rodhi, A., Yap, P.G., Olalere, O.A., dan Gan, C.Y., 2024a, Unveiling α -Amylase Inhibition: A Bioinformatics Perspective on Peptide Properties and Amino Acid Contributions, *J Mol Struct*, 1305, 137768.

- Möller, N.P., Scholz-Ahrens, K.E., Roos, N., dan Schrezenmeir, J., 2008, Bioactive peptides and proteins from foods: Indication for health effects, *Eur J Nutr*, 47, 171–182.
- Mora, L., Reig, M., dan Toldrá, F., 2014, Bioactive peptides generated from meat industry by-products, *Food Research International*, 65, 344–349.
- Morohashi, Y. dan Tomita, T., 2013, Protein trafficking and maturation regulate intramembrane proteolysis, *Biochim Biophys Acta Biomembr*, 1828, 2855–2861.
- Mudgil, P., Kamal, H., Priya Kilari, B., Mohd Salim, M.A.S., Gan, C.Y., dan Maqsood, S., 2021, Simulated gastrointestinal digestion of camel and bovine casein hydrolysates: Identification and characterization of novel anti-diabetic bioactive peptides, *Food Chem*, 353.
- Nelson, D.L. dan Cox, M.M., 2013, *Lehninger principles of biochemistry*, 6th ed. W.H. Freeman, New York.
- Ningsih, D.R., Raharjo, T.J., Haryadi, W., dan Wikandari, R., 2023, Antifungal activity and identification of bioactive peptide from Etawa crossbreed goat (*Capra hircus*) milk protein hydrolyzed using trypsin enzyme, *Arabian Journal of Chemistry*, 16, 105249.
- Orhan, E., Orhan, G., dan Gurkas, E., 2011, An overview on natural cholinesterase inhibitors-a multi-targeted drug class-and their mass production, *Reviews in Medicinal Chemistry*, 11, 836–842.
- Padhi, S., Nayak, A.K., dan Behera, A., 2020, Type II diabetes mellitus: a review on recent drug-based therapeutics, *Biomedicine and Pharmacotherapy*, 131.
- Park, Y., 2006, General characteristics of goat milk fat, *Goat Milk: Chemistry and Nutrition*. Blackwell publisher.
- Payan, F., 2004, Structural basis for the inhibition of mammalian and insect α -amylases by plant protein inhibitors, *Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics*, 1696, 171–180.
- Pinzi, L. dan Rastelli, G., 2019, Molecular docking: Shifting paradigms in drug discovery, *Int J Mol Sci*, 20.
- Poole, C.F., 2012, Principles and practice of Solid-Phase Extraction, *Comprehensive Sampling and Sample Preparation*., Elsevier, Detroit, MI, USA.
- Potluri, H., Prasanth, D.S.N.B.K., dan Atmakuri, L.R., 2021, In vivo Antinociceptive Effect of Methanolic Extract of *Ipomoea marginata* Desr. in Rodents as well as In silico Molecular Docking of Some Phytoconstituents from the Plant, *Indian J Pharm Sci*, 83, 732–741.
- Pradeep, P.M. dan Sreerama, Y.N., 2018, Phenolic antioxidants of foxtail and little millet cultivars and their inhibitory effects on α -amylase and α -glucosidase activities, *Food Chem*, 247, 46–55.
- Premakumara, G.A.S., Abeysekera, W.K.S.M., Ratnasooriya, W.D., Chandrasekharan, N. V., dan Bentota, A.P., 2013, Antioxidant, anti-amylase and anti-glycation potential of brans of some Sri Lankan traditional and improved rice (*Oryza sativa* L.) varieties, *J Cereal Sci*, 58, 451–456.
- Prosser, C.G., 2021, Compositional and functional characteristics of goat milk and relevance as a base for infant formula, *J Food Sci*, 86, 257–265.

- Prosser, C.G., McLaren, R.D., Frost, D., Agnew, M., dan Lowry, D.J., 2008, Composition of the non-protein nitrogen fraction of goat whole milk powder and goat milk-based infant and follow-on formulae, *Int J Food Sci Nutr*, 59, 123–133.
- Roncada, P., Piras, C., Soggiu, A., Turk, R., Urbani, A., dan Bonizzi, L., 2012, Farm animal milk proteomics, *J Proteomics*, 75, 4259–4274.
- Rutherford, S.M., 2010, Methodology for determining degree of hydrolysis of proteins in hydrolysates: A Review, *JAOAC Int*, 93, 1515–1522.
- Rutherford, S.M., Moughan, P.J., Lowry, D., dan Prosser, C.G., 2008, Amino acid composition determined using multiple hydrolysis times for three goat milk formulations, *Int J Food Sci Nutr*, 59, 679–690.
- Sahoo, R.N., Pattanaik, S., Pattnaik, G., Mallick, S., dan Mohapatra, R., 2022, Review on the use of Molecular Docking as the First Line Tool in Drug Discovery and Development, *Indian J Pharm Sci*, 84, 1334–1337.
- Schiano, M.E., Sodano, F., Cassiano, C., Fiorino, F., Seccia, S., Rimoli, M.G., dan Albrizio, S., 2022, Quantitative Determination of Bisphenol A and Its Congeners in Plant-Based Beverages by Liquid Chromatography Coupled to Tandem Mass Spectrometry, *Foods*, 11, .
- Schönbächler, M. dan Fehr, M.A., 2013, Basics of Ion Exchange Chromatography for Selected Geological Applications,. In, *Treatise on Geochemistry: Second Edition*. Elsevier Inc., pp. 123–146.
- Singh, B.P., Aluko, R.E., Hati, S., dan Solanki, D., 2022, Bioactive peptides in the management of lifestyle-related diseases: Current trends and future perspectives, *Crit Rev Food Sci Nutr*, 62, 4593–4606.
- Song, J.J., Wang, Q., Du, M., Ji, X.M., dan Mao, X.Y., 2017, Identification of dipeptidyl peptidase-IV inhibitory peptides from mare whey protein hydrolysates, *J Dairy Sci*, 100, 6885–6894.
- Stephanopoulos, G.N., Aristidou, A.A., dan Nielsen, J., 1998, Regulation of Metabolic Pathways, *Metab Eng*, 147–202.
- Stock, N.L., 2017, Introducing Graduate Students to High-Resolution Mass Spectrometry (HRMS) Using a Hands-On Approach,.
- Tan, S.Y., Mei Wong, J.L., Sim, Y.J., Wong, S.S., Mohamed Elhassan, S.A., Tan, S.H., Ling Lim, G.P., Rong Tay, N.W., Annan, N.C., Bhattamisra, S.K., and Candasamy, M., 2019, Type 1 and 2 diabetes mellitus: A review on current treatment approach and gene therapy as potential intervention, *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 13, 364–372.
- Tapal, A. dan Tikun, P.K., 2018, Nutritional and nutraceutical improvement by enzymatic modification of food proteins,. In, *Enzymes in Food Biotechnology: Production, Applications, and Future Prospects*. Elsevier, pp. 471–481.
- Thammarat, K., Leena, N., Punnanee, S., dan Soottawat, 2015, Functional and Antioxidative properties of Bambara groundnut (*Voandzeia subterranea*) protein hydrolysates,.
- Thévenot, J., Cauty, C., Legland, D., Dupont, D., dan Floury, J., 2017, Pepsin diffusion in dairy gels depends on casein concentration and microstructure, *Food Chem*, 223, 54–61.
- Tsabouri, S., Douros, K., dan Priftis, K.N., 2014, Send Orders for Reprints to reprints@benthamscience.net Cow's Milk Allergenicity,.

- Uhlig, Helmut. dan Linsmaier-Bednar, E.M., 1998, Industrial enzymes and their applications, 454.
- Vocadlo, D.J. and Davies, G.J., 2008, Mechanistic insights into glycosidase chemistry, *Curr Opin Chem Biol*, 12, 539–555.
- Vorob'ev, M.M. dan Kochetkov, K.A., 2016, Determination of kinetic parameters for casein hydrolysis by chymotrypsin using two ranges of substrate concentration, *Int Dairy J*, 61, 76–84.
- Wali, A., Yanhua, G., Ishimov, U., Yili, A., Aisa, H.A., dan Salikhov, S., 2020, Isolation and Identification of Three Novel Antioxidant Peptides from the Bactrian Camel Milk Hydrolysates, *Int J Pept Res Ther*, 26, 641–650.
- Walther, T.C. dan Mann, M., 2010, Mass spectrometry-based proteomics in cell biology, *Journal of Cell Biology*, 190, 491–500.
- Wang, L., Wang, N., Zhang, W., Cheng, X., Yan, Z., Shao, G., Wang, X., Wang, R., dan Fu, C., 2022, Therapeutic peptides: current applications and future directions, *Signal Transduction and Targeted Therapy* 2022 7:1, 7, 1–27.
- Warner, R.C., 1944, Separation of α - and β -Casein, *J Am Chem Soc*, 66, 1725–1731.
- Wickramaratne, M.N., Punchihewa, J.C., dan Wickramaratne, D.B.M., 2016, In-vitro alpha amylase inhibitory activity of the leaf extracts of adenanthera pavonina, *BMC Complement Altern Med*, 16, .
- Wild, S., Bchir, M.B., Roglic, G., Green, A., Sicree, R., dan King, H., 2004, Global Prevalence of Diabetes Estimates for the year 2000 and projections for 2030, .
- Wilhelm, M., Schlegl, J., Hahne, H., Gholami, A.M., Lieberenz, M., Savitski, M.M., Ziegler, E., Butzmann, L., Gessulat, S., Marx, H., Mathieson, T., Lemeer, S., Schnatbaum, K., Reimer, U., Wenschuh, H., Mollenhauer, M., Slotta-Huspenina, J., Boese, J.H., dan Bantscheff, M., 2014, Mass-spectrometry-based draft of the human proteome, *Nature*, 509, 582–587.
- Wong, C.Y., Al-Salami, H., dan Dass, C.R., 2017, Potential of insulin nanoparticle formulations for oral delivery and diabetes treatment, *Journal of Controlled Release*, 264, 247–275.
- Wu, I.L., Turnipseed, S.B., Andersen, W.C., dan Madson, M.R., 2020, Analysis of peptide antibiotic residues in milk using liquid chromatography-high resolution mass spectrometry (LC-HRMS), *Food Addit Contam Part A Chem Anal Control Expo Risk Assess*, 37, 1264–1278.
- Xiao, Z., Storms, R., dan Tsang, A., 2006, A quantitative starch-iodine method for measuring alpha-amylase and glucoamylase activities, *Anal Biochem*, 351, 146–148.
- Yang, X., Li, C., Yang, Q., Ji, J., Jiang, X., Liu, C., Sun, F., Wang, X., dan Dou, S., 2024, Analysis of the effects of differently charged peptides on α -amylase and their interaction mechanisms, *Bioorg Chem*, 153, .
- Yi, D., Lin, Q., dan Johns, P.W., 2021, Estimation of Degree of Hydrolysis of Protein Hydrolysates by Size Exclusion Chromatography, *Food Anal Methods*, 14, 805–813.
- Yoshioka, Y., Namiki, D., Makiuchi, M., Sugaya, K., Onose, J. ichi, Ashida, H., dan Abe, N., 2016, Vialinin A and thelephantin G, potent inhibitors of tumor necrosis factor-

- α production, inhibit sentrin/SUMO-specific protease 1 enzymatic activity, *Bioorg Med Chem Lett*, 26, 4237–4240.
- Zanutto-Elgui, M.R., Vieira, J.C.S., Prado, D.Z. do, Buzalaf, M.A.R., Padilha, P. de M., Elgui de Oliveira, D., dan Fleuri, L.F., 2019, Production of milk peptides with antimicrobial and antioxidant properties through fungal proteases, *Food Chem*, 278, 823–831.
- Zhang, Y., Chen, R., Ma, H., dan Chen, S., 2015a, Isolation and Identification of Dipeptidyl Peptidase IV-Inhibitory Peptides from Trypsin/Chymotrypsin-Treated Goat Milk Casein Hydrolysates by 2D-TLC and LC-MS/MS, *J Agric Food Chem*, 63, 8819–8828.
- Zhang, Y., Chen, R., Ma, H., dan Chen, S., 2015b, Isolation and Identification of Dipeptidyl Peptidase IV-Inhibitory Peptides from Trypsin/Chymotrypsin-Treated Goat Milk Casein Hydrolysates by 2D-TLC and LC-MS/MS, *J Agric Food Chem*, 63, 8819–8828.
- Zhang, Y., Fonslow, B.R., Shan, B., Baik, M.C., dan Yates, J.R., 2013, Protein analysis by shotgun/bottom-up proteomics, *Chem Rev*, 113, 2343–2394.
- Zheng, W., Han, B., E, S., Sun, Y., Li, X., Cai, Y., dan Zhang, Y., 2020, Highly-sensitive and reflective glucose sensor based on optical fiber surface plasmon resonance, *Microchemical Journal*, 157, 105010.
- Zhou, J.Y., Dann, G.P., Shi, T., Wang, L., Gao, X., Su, D., Nicora, C.D., Shukla, A.K., Moore, R.J., Liu, T., Camp, D.G., Smith, R.D., dan Qian, W.J., 2012, Simple sodium dodecyl sulfate-assisted sample preparation method for LC-MS-based proteomics applications, *Anal Chem*, 84, 2862–2867.