

DAFTAR PUSTAKA

- (AOAC) Association of Official Analytical Chemists. 1990. *Official Methods of Analysis*. Method 985.29. 15th (eds). Washington D.C
- Akbari, Sweeta and A.H. Nour. 2018. Emulsion Types, Stability Mechanisms and Rheology: A Review. *International Journal of Innovative Research and Scientific Studies* 1(1): 14-21.
- Alias, Abd Karim. 2012. *Food Colloids : Emulsions and Foams*. *Universiti Sains Malaysia* dalam Abd Karim Alias [Video Youtube]. Diakses melalui https://youtu.be/I_xCJp1sl8Y pada Kamis, 07 Mei 2020 pukul 0730 WIB.
- Amorim-Carrilho, K.T.; Cepeda A.; Fente C.; Regal P.. 2014. *Review of Methods for Analysis of Carotenoids*. *Trends Anal. Chem.* 56, 49-73.
- Anal, Anil Kumar; S. Shrestha and M. B. Sadiq. 2019. Biopolymeric-based Emulsions and Their Effects during Processing, Digestibility and Bioaccessibility of Bioactive Compounds in Food Systems. *Food Hydrocolloids* 87: 691-702. <https://doi.org/10.1016/j.foodhyd.2018.09.008>
- Andreu-Sevilla A.J.; Hartmann A.; Burlo F.; Poquet N.; Carbonell-Barrachina A.A.. 2009. *Health Benefits of Using RPO in Deep-Frying Potatoes: Low Acrolein Emissions and High Intake of Carotenoids*. *Food Sci Technol Int* 15(1): 15-22
- Atawodi S.E.; Yusufu L.M.D.; Atawodi J.C.; Asuku O.; Yakubu O.E.. 2011. *Phenolic Compounds and Antioxidant Potential of Nigerian Red Palm Oil (Elaeis guineensis)*. *Int J Biol* 3(2): 153-161.
- Bae E. K., dan Lee S. J. 2008. *Microencapsulation of avocado oil by spray drying using whey protein and maltodextrin*. *Journal of Microencapsulation*, 25(8): 549-560
- Bakowska-Barczak, Anna M.; Paul P. Kolodziejczyk. 2011. *Black Currant Polyphenols: Their Storage Stability and Microencapsulation*. *Journal of Industrial Crops and Products* 34 (2011) 1301-1309.
- Bakry, Amr M.; Shabbar A.; Barkat A.; Hamid M.; Mohamed Y.; Abouelwafa; Ahmed M.; Li Liang. 2016. *Microencapsulation of Oils: A Comprehensive Review of Benefits, Techniques, and Applications*. *Comprehensive Reviews in Food Science and Food Safety*. Volume 15
- Benade, A.J.S. 2013. *Chapter 21 - Red Palm Oil Carotenoids: Potential Role in Disease Prevention*. In: Watson R.R.; Preedy V.R., editors. *Bioactive Food as Dietary Interventions for Cardiovascular Disease*. San Diego: Academic Press. p 333-43.
- Bezerra, Marcos Almeida; R.E. Santelli; E.P. Oliveira; L.S. Villar; L.A. Escaleira. 2008. *Response Surface Methodology (RSM) as a Tool for Optimization in Analytical Chemistry*. *Journal of Talanta* 76: 965-977.

- Carandang, Emil V. 2004. *Coconut Oil : Uses and Issues on Its Health and Nutraceutical Benefits*. Philippine Coconut Research and Development Foundation.
- Carvajal, M. Q. X.; Diaz B. H. C.; Torres L. S. M.; Perez J. J. C.; Beltran L. A.; Aparicio A. J.; Lopez G. F. G. 2010. *Nanoencapsulation: a New Trend in Food Engineering Processing*. Food Eng Rev 2: 39-50.
- Cavalcanti RN, Santos DT, Meireles MAA. 2011. *Non-thermal stabilization mechanisms of anthocyanins in model and food systems: An overview*. Food Res Int 44(2):499–509
- Choo, Y.M.; Ng M.H.; Ma A.N.; Chuah C.H.; Hashim M.A.. 2005. *Application of Supercritical Fluid Chromatography in the Quantitative Analysis of Minor Components (Carotenes, Vitamin E, Sterols, and Squalene) from Palm Oil*. Lipids 40: 429-32
- Chuah, A. M.; Kuroiwa T.; Ichikawa S.; Kobayashi I.; Nakajima M. 2009. *Formation of Biocompatible Nanoparticles Via the Self-Assembly of Chitosan and Modified Lecithin*. Journal Food Science 74: N1-N8.
- Colombo, M.L.. 2010. *An Update on Vitamin E, Tocopherol and Tocotrienol-Perspectives*. Molecules 15, 2103-2113.
- Deladino, L.; Anbinder P. S.; Navarro A. S.; Martino M. N. 2008. *Encapsulation of Natural Antioxidants Extracted from Ilex paraguariensis*. Carbohydr Polym 71: 126-134.
- Edem, D.O.. 2002. *Palm Oil: Biochemical, Physiological, Nutritional, Hematological and Toxicological Aspects: A Review*. Plant Foods Hum. Nutr. 57, 319-341
- Evans, M.; I. Ratcliffe; and P.A. Williams. 2013. *Emulsion Stabilisation using Polysaccharide-Protein Complexes*. Current Opinion in Colloid and Interface Science 18: 272-28. <https://dx.doi.org/10.1016/j.cocis.2013.04.004>
- Feng, Jin; S. Wu; H. Wang; S. Liu. 2016. *Improved Bioavailability of Curcumin in Ovalbumin-Dextran Nanogels Prepared by Maillard Reaction*. Journal of Functional Foods 27: 55-68. <http://dx.doi.org/10.1016/j.jff.2016.09.002>
- Ferreira, S.L.C; R.E. Bruns; H.S. Ferreira; G.D. Matos; J.M. David; G.C. Brandao; E.G.P. da Silva; L.A. Portugal; P.S. dos Reis; A.S. Souza; W.N.L. dos Santos. 2007. *Box-Behnken Design: An Alternative for the Optimization of Analytical Methods*. Journal of Analytica Chimica Acta 597: 179-186.
- Frascareli, E.C.; V.M. Silva; R.V. Tonon; M.D. Hubinger. 2012. *Effect of Process Conditions on the Microencapsulation of Coffee Oil by Spray Drying*. Journal of Food Bioprod. Process. 90: 413-424.
- Gharsallaoui A, Roudaut G, Chambin O, Voilley A, Saurel R. 2007. *Applications of spray-drying in microencapsulation of food ingredients: An overview*. Food Res Int 40(9):1107–1121.

- Gibbs, B. F.; Kermasha S.; Alli L.; Mulligan C. N. 1999. *Encapsulation The Food Industry: A Review*. International Journal of Food Science and Nutrition 50:213-224.
- Gouin, S. 2004. *Microencapsulation: Industrial Appraisal of Existing Technologies and Trends*. Trends Food Sci Technol 15:330-47.
- Gu, F.L.; J.M. Kim; S. Abbas; X.M. Zhang; S.Q. Xia; Z.X. Chen. 2010. Structure and Antioxidant Activity of High Molecular Weight Maillard Reaction Products from Casein-Glucose. Food Chemistry 120(2): 505-511
- Haerani. 2010. *Pemanfaatan Limbah Virgin Coconut Oil (Blondo)*. Jurnal MKMI Vol. 6, No. 4, hal 244-248.
- Hariyati, M.N. 2006. *Ekstraksi dan Karakterisasi Pektin dari Limbah Proses Pengolahan Jeruk Pontianak*. Fakultas Teknologi Pertanian, IPB: Bogor.
- Ji, Yan; X. Yang; Z. Ji; L. Zhu; N. Ma; D. Chen; X. Jia; J. Tang and Y. Cao. 2020. DFT-Calculated IR Spectrum Amide I, II and III Band Contributions of N-Methylacetamide Fine Components. ACS Omega 5: 8572-8578. <https://dx.doi.org/10.1021/acsomega.9b04421>
- Jiang, Peipei; Dong Xiang and Xibin Wang. 2016. *Effect of Different Treatment on the Properties of Coconut Milk Emulsions*. Journal of Food Science and Technology Research, 22 (1), 83-89.
- Jones, Owen G. and D.J. McClements. 2011. Recent Progress in Biopolymer Nanoparticle and Microparticle Formation by Heat-Treating Electrostatic Protein–Polysaccharide Complexes. Advanced in Colloid and Interface Science 167: 49-62. <https://doi.org/10.1016/j.cis.2010.10.006>
- Kan, Xuhui; G. Chen; W. Zhou; X. Zeng. 2021. Application of Protein-Polysaccharide Maillard Conjugates as Emulsifiers: Source, Preparation and Functional Properties. Food Research International 150: 110740. <https://doi.org/10.1016/j.foodres.2021.110740>
- Karouw, Steivie dan Rindengan. 2015. *Konsentrat Protein Krim Kelapa untuk Makanan Ringan*. Warta Penelitian dan Pengembangan Tanaman Industri Vol.21, No. 1. ISSN 0853-8204.
- Khan, Barkat Ali; N. Akhtar; H.M. Shoaib Khan; K. Waseem; T. Mahmood; A. Rasul; M. Iqbal and H. Khan. 2011. Basics of Pharmaceutical Emulsions: A Review. African Journal of Pharmacy and Pharmacology 5(25): 2715-2725. <https://doi.org/10.5897/ajpp11.698>
- Kwon, K.S.; Bae, D.; Park K.H.; Rhee, K.C. 1996. *Aqueous Extraction and Membrane Techniques Improve Coconut Protein Concentrate Functionality*. Journal of Food Science, 61, 753-756
- Lan, Yang; Jae-Bom Ohm; Bingcan Chen; Jiajia Rao. 2020. *Phase Behavior, Thermodynamic and Microstructure of Concentrated Pea Protein Isolate-Pectin Mixture: Effect of pH, Biopolymer Ratio and Pectin Charge Density*. Food Hydrocolloids 101: 105556.

- Leroux, J.; V. Langendorff; G. Schick; V. Vaishnav and J. Mazoyer. 2003. Emulsion Stabilizing Properties of Pectin. *Food Hydrocolloids* 17(4): 455-462. [http://dx.doi.org/10.1016/S0268-005X\(03\)00027-4](http://dx.doi.org/10.1016/S0268-005X(03)00027-4)
- Lesmes, Uri and D.J. McClements. 2012. Controlling Lipid Digestibility: Response of Lipid Droplets Coated by β -lactoglobulin-Dextran Maillard Conjugates to Simulated Gastrointestinal Conditions. *Food Hydrocolloids* 26: 221-230. <http://dx.doi.org/10.1016/j.foodhyd.2011.05.011>
- Li, Zheng and Liwei Gu. 2014. Fabrication of Self-Assembled (-)-Epigallocatechin Gallate (EGCG) Ovalbumin-Dextran Conjugate Nanoparticles and Their Transport across Monolayers of Human Intestinal Epithelial Caco-2 Cells. *Journal of Agricultural and Food Chemistry* 62: 1301-1309. <https://doi.org/10.1021/jf404621f>
- Liu, Z.Q.; Zhou, J.H.; Zeng Y.L.; Ouyang X.I.. 2004. *The Enhancement and Encapsulation of Agaricus bisporus Flavor*. *J Food Eng* 65: 391-6
- Manirakiza, P.; A. Covaci; P. Schepens. 2001. *Comparative Study on Total Lipid Determination Using Soxhlet, Roese-Gottlieb, Bligh & Dyer, and Modified Bligh & Dyer Extraction Methods*. *Journal of Food Compos. Anal.* 14: 93-100
- Mba, O.I.; Dumont M.J.; Ngadi M.. 2015. *Palm Oil: Processing, Characterization, and Utilization in the Food Industry - A Review*. *Food Biosci.* 10, 26-41.
- McClements, David Julian and Seid Mahdi Jafari. 2018. *Improving Emulsion Formation, Stability and Performance Using Mixed Emulsifiers: A Review*. *Journal of Advances in Colloid and Interface Science* 251: 55-79.
- McClements, David Julian. 2004. *Protein-Stabilized Emulsions*. *Current Opinion in Colloid and Interface Science* 9: 305-313
- Mehta, S.K. and G. Kaur. 2011. Microemulsions: Thermodynamic and Dynamic Properties. *Intech Open*. <https://doi.org/10.5772/12954>
- Mitidieri, Flavio E. and J. R. Wagner. 2002. *Coalescence of O/W Emulsions Stabilized by Whey and Isolate Soybean Proteins. Influence of Thermal Denaturation, Salt Addition and Competitive Interfacial Absorption*. *Journal of Food Research International* 35: 547-557
- Mukherjee, S. and Mitra A.. 2009. *Health Effects of Palm Oil*. *J Human Ecol* 26:197-203.
- Naik, A.; Raghavendra, S.N. and Raghavarao, K.S.M.S. 2012. *Production of Coconut Protein Powder from Coconut Wet Processing Waste and Its Characterization*. *Applied Biochemistry and Biotechnology* 167(5): 1290-302
- Neirynek, N.; Van der Meeren P.; Lukaszewicz-Lausecker M.; Cocquyt J.; Verbeken D.; Dewettinck K.. 2007. *Influence of pH and Biopolymer Ratio on Whey Protein-Pectin Interactions in Aqueous Solutions and in O/W Emulsions*. *Colloids and Surfaces A: Physicochem. Eng. Aspects* 298 (2007) 99-107.

- Nelson, David. L. and Cox, Michael M. 2005. Principles of Biochemistry, Fourth Edition. Wisconsin: Lehninger
- Nooshkam, Majid and Ashkan Madadlou. 2016. Maillard Conjugation of Lactulose with Potentially Bioactive Peptides. Food Chemistry 192: 831-836. <http://dx.doi.org/10.1016/j.foodchem.2015.07.094>
- Nooshkam, Majid and Mehdi Varidi. 2020. Maillard Conjugate-based Delivery Systems for the Encapsulation, Protection, and Controlled Release of Nutraceuticals and Food Bioactive Ingredients: A Review. Food Hydrocolloids 100: 105389. <https://doi.org/10.1016/j.foodhyd.2019.105389>
- Nurhikmat, Asep. 2003. *Ekstraksi Pektin dari Apel Lokal: Optimalisasi pH dan Waktu Hidrolisis*. Balai Pengembangan Proses dan Teknologi Kimia-LIPI: Yogyakarta.
- Nurmiah, Sitti; R. Syarif; Sukarno; R. Peranginangin dan B. Nurtama. 2013. Aplikasi Response Surface Methodology pada Optimalisasi Kondisi Proses Pengolahan Alkali Treated Cottonii (ATC). JPB Kelautan dan Perikanan 8(1): 9-22.
- Okonkwo E.U.; Arowora K.A.; Ogundele B.A.; Omodara M.A.; Afolayan S.S.. 2012. *Storability and Quality Indices of Palm Oil in Different Packaging Containers in Nigeria*. J Stored Prod Postharvest Res 3(13):177-179
- Oliveira, F. C.; J.S. dos Reis Coimbra; E.B. de Oliveira; Abraham Damian G.Z. and E.E. Garcia Rojas. 2016. Food Protein-Polysaccharide Conjugates Obtained via the Maillard Reaction: A Review. Critical Reviews in Food Science and Nutrition 56(7): 1108-1125. <https://doi.org/10.1080/10408398.2012.755669>
- Onsaard, Ekasit; M. Vittayanont; S. Srigam; and D.J. McClements. 2005. Properties and Stability of Oil-in-Water Emulsions Stabilized by Coconut Skim Milk Proteins. Journal of Agricultural and Food Chemistry 53: 5747-5753. <https://doi.org/10.1021/jf050312r>
- Onsaard, Ekasit; M. Vittayanont; S. Srigam; and D.J. McClements. 2006. Comparison of Properties of Oil-in-Water Emulsions Stabilized by Coconut Cream Proteins with those Stabilized by Whey Protein Isolate. Food Research International 39: 78-86. <https://doi.org/10.1016/j.foodres.2005.06.003>
- Patil, U. and Benjakul, S. 2017. Characteristics of albumin and globulin from coconut meat and their role in emulsion stability without and with proteolysis. Food Hydrocolloids, 69: 220- 228
- Pearce, Kevin N and J.E. Kinsella. 1978. Emulsifying Properties of Proteins: Evaluation of a Turbidimetric Technique. Journal of Agricultural Food and Chemistry 26(3): 716-723. <https://doi.org/10.1021/jf60217a041>
- Perez-Alonso, C.; Baez-Gonzalez J.G.; Beristain C.I.; Vernon-Carter E.J.; Vizcarra-Mendoza M.G. 2003. *Estimation of the Activation Energy of Carbohydrate Polymers Blends as Selection Criteria for Their Use as Wall Material for Spray-Dried Microcapsules*. Carbohydrate Polymers 53: 197-203.

- Permatasari, Siti; Pudji Hastuti; Bambang Setiaji; Chusnul Hidayat. 2015. *Sifat Fungsional Isolat Protein Blondo (Coconut Presscake) dari Produk Samping Pemisahan VCO (Virgin Coconut Oil) dengan Berbagai Metode*. Jurnal Agritech, Vol. 35, No.4.
- Rao, A.V. and Rao L.G. 2007. *Carotenoids and Human Health*. Pharmacol. Res. 55, 207-216.
- Ravichandran, Kavitha; R. Palaniraj; Nay Min Min Thaw Saw; Ahmed M. M. Gabr; Abdelrahman R. Ahmed; Dietrich Knorr; Iryna Smetanska. 2014. *Effects of Different Encapsulation Agents and Drying Process on Stability of Betalains Extract*. Journal Food Science Technology 51(9):2216–2221
- Ray, Moumita and D. Rousseau. 2013. *Stabilization of Oil-In-Water Emulsions Using Mixtures of Denaturated Soy Whey Proteins and Soluble Soybean Polysaccharides*. Journal of Food Research International 52: 298-307.
- Rodsamran, Patrathip and Rungsinee Sothornvit. 2018. *Physicochemical and Functional Properties of Protein Concentrate from By-product of Coconut Processing*. Journal of Food Chemistry 241: 364-371
- Sambanthamurthi, R.; Tan Y.A.; Sundram K.; Abeywardena M.; Sambandan T.G.; Rha C.; Sinskey A.J.; Subramaniam K.; Leow S.S.; Hayes K.C.; Wahid M.B.. 2011. *Oil Palm Vegetation Liquor: A New Source of Phenolic Bioactives*. Br J Nutr 106: 1655-63.
- Satria, Berry dan Ahda, Yusuf. 2008. *Pengolahan Limbah Kulit Pisang menjadi Pektin dengan Metode Ekstraksi*. Jurusan Teknik Kimia, Fakultas Teknik, Universitas Diponegoro: Semarang
- Schafroth, N.; Arpagaus C.; Jadhav U.Y.; Makne S.; Douroumis D.. 2012. *Nano and Microparticle Engineering of Water Insoluble Drugs Using A Novel Spray-Drying Process*. Colloid Surf B-Biointerfaces 90: 8-15
- Schmidt, U.S.; K. Schmidt; T. Kurz; H.-U. Endreß; H.P. Schuchmann. 2015. *Pectins of Different Origin and Their Performance in Forming and Stabilizing Oil-in-Water-Emulsions*. Food Hydrocolloids 46: 59-66. <https://dx.doi.org/10.1016/j.foodhyd.2014.12.012>
- Schmidt, U.S.; V.L. Pietsch; C. Rentschler; T. Kurz; H.-U. Endreß and H.P. Schuchmann. 2016. *Influence of the Degree of Esterification on the Emulsifying Performance of Conjugates Formed between Whey Protein Isolate and Citrus Pectin*. Food Hydrocolloids 56: 1-8. <http://dx.doi.org/10.1016/j.foodhyd.2015.11.015>
- Sekhon, BS. 2010. *Food Nanotechnology-an overview*. Journal Nanotechnology, Science Applications 3: 1-15.
- Shahidi F, Han XQ. 1993. *Encapsulation of food ingredients*. CritRev Food Sci Nutr 33:501–547.
- Sharif H.R.; Goff H.D.; Majeed H.; Liu F;Nsor-Atindana J.; Haider J.; Liang R.; Zhong F.. 2017. *Physicochemical Stability of β -carotene and α -tocopherol*

- Enriched Nanoemulsions: Influence of Carrier Oil, Emulsifier and Antioxidant*. Colloids Surfaces A Physicochem. Eng. Asp. 529, 550-559.
- Silvan, Jose M.; S.H. Assar; C. Srey; M.D. del Castillo, J.M. Ames. 2011. Control of the Maillard Reaction by Ferulic Acid. Food Chemistry 128: 208-213. <http://dx.doi.org/10.1016/j.foodchem.2011.03.047>
- Spivey, Angela. 2010. A Matter of Degrees: Advancing Our Understanding of Acrylamide. Environmental Health Perspective 118(4): A160-A167. <https://doi.org/10.1289/ehp.118-a160>
- Tachaprutinun, A.; Udomsup, T.; Luadthong, C.; Wanichwecharungruang, S. 2009. *Preventing The Thermal Degradation of Astaxanthin Through Nanoencapsulation*. International Journal of Pharmaceutics. 374 (1-2), 119-124.
- Tan LH, Chan LW, Heng PW. 2005. *Effect of oil loading on microspheres produced by spray drying*. J Microencapsulation 22:253-259.
- Thaiphanit, S. and Anprung, P. 2016. Physicochemical and emulsion properties of edible protein concentrate from coconut (*Cocos nucifera* L.) processing by-products and the influence of heat treatment. Food Hydrocolloids, 52: 756-765.
- Thaiphanit, Somruedee; G. Schleining and P. Anprung. 2016. Effects of Coconut (*Cocos nucifera* L.) Protein Hydrolysates Obtained from Enzymatic Hydrolysis on the Stability and Rheological Properties of Oil-in-Water Emulsions. Food Hydrocolloids 60: 252-264. <https://doi.org/10.1016/j.foodhyd.2016.03.035>
- Tonon, R.V.; Grosso C.R.F.; Hubinger M.D.. 2011. *Influence of Emulsion Composition and Inlet Air Temperature on the Microencapsulation of Flaxseed Oil by Spray drying*. Food Res Int 44:282-9.
- Troise, A. Dario and V. Fogliano. 2013. Reactants Encapsulation and Maillard Reaction. Trends in Food Science and Technology 33: 63-67. <http://dx.doi.org/10.1016/j.tifs.2013.07.002>
- Troise, A. Dario. 2018. Analytical Strategies to Depict the Fate of the Maillard Reaction in Foods. Current Opinion in Food Science 19:15-22. <https://doi.org/10.1016/j.cofs.2017.12.005>
- Tuhuloula, Abubakar; L. Budiyaniti; E.N. Fitriana. 2013. *Karakterisasi Pektin dengan Memanfaatkan Limbah Kulit Pisang Menggunakan Metode Ekstraksi*. Jurnal Konversi, Vol.2, No. 1.
- Turchiuli, C.; Jimenez Munguia M.T.; Hernandez Sanchez M.; Cortes Ferre H.; Dumoulin E.. 2014. *Use of Different Supports for Oil Encapsulation in Powder by Spray drying*. Powder Technol 255: 103-8.
- Usaid, Adheeb; Premkumar J. and T.V. Ranganathan. 2014. Emulsion and its Applications in Food Processing – A Review. International Journal of Engineering Research and Applications 4(4): 241-248

- Vhangani, Lusani Norah and Jessy Van Wyk. 2013. Antioxidant Activity of Maillard Reaction Products (MRPs) Derived from Fructose-Lysine and Ribose-Lysine Model Systems. *Food Chemistry* 137(1-4): 92-98. <https://doi.org/10.1016/j.foodchem.2012.09.030>
- Vhangani, Lusani Norah and Jessy Van Wyk. 2016. Antioxidant Activity of Maillard Reaction Products (MRPs) in a Lipid-Rich Model System. *Food Chemistry* 208: 301-308. <http://dx.doi.org/10.1016/j.foodchem.2016.03.100>
- Wagoner, Ty; B. Vardhanabhuti and E.A. Foegeding. Designing Whey Protein-Polysaccharide Particles for Colloidal Stability. *Annual Review of Food Science and Technology* 7: 93-116. <http://doi.org/10.1146/annurev-food-041715-033315>
- Walstra, P. 1993. Principles of Emulsion Formation. *Chemical Engineering Science* 48(2): 333-349
- Wang, He-Ya; H. Qian and Wei-Rong Yao. 2011. Melanoidins Produced by the Maillard Reaction: Structure and Biological Activity. *Food Chemistry* 128: 573-584. <http://dx.doi.org/10.1016/j.foodchem.2011.03.075>
- Weiss, J.; Decker E. A.; McClements D.J.; Kristbergsson K.; Helgason T.; Awad T. 2008. *Solid Lipid Nanoparticles as Delivery System for Bioactive Food Components*. *Food Biophysics* 3: 146-154.
- Winarno, F. G. 2004. *Kimia Pangan dan Gizi*. Jakarta: Gramedia
- Wooster, T.J. and M.A. Augustin. 2006. β -lactoglobulin-Dextran Maillard Conjugates: Their Effect on Interfacial Thickness and Emulsion Stability. *Journal of Colloid and Interface Science* 303: 564-572
- Wu, Shuping; J. Hu; L. Wei; Y. Du; X. Shi; L. Zhang. 2014. Antioxidant and Antimicrobial Activity of Maillard Reaction Products from Xylan with Chitosan/ Chitooligomer/ Glucosamine Hydrochloride/ Taurine Model Systems. *Food Chemistry* 148: 196-203. <http://dx.doi.org/10.1016/j.foodchem.2013.10.044>
- Xu, Duoxia; X. Wang; J. Jiang; F. Yuan and Y. Gao. 2012. Impact of Whey Protein-Beet Pectin Conjugation on the Physicochemical Stability of β -Carotene Emulsions. *Food Hydrocolloids* 28: 258-266. <https://doi.org/10.1016/j.foodhyd.2012.01.002>
- Yang, M.H.; Yuan, S.S.; Huang Y.F.; Lin P.C.; Lu, C.Y.; Chung T.W.; and Tyan, Y.C. 2014. *A Proteomic View to Characterize the Effect of Chitosan Nanoparticle to Hepatic Cells: Is Chitosan Nanoparticle an Enhancer of PI3K/ AKT1/mTOR Pathway?*. *BioMed Research International* 789591:1-9.
- Yang, Yuexi; S.W. Cui; J. Gong; Q. Guo; Q. Wang; Y. Hua. 2015. A Soy Protein-Polysaccharides Maillard Reaction Product Enhanced the Physical Stability of Oil-in-Water Emulsions Containing Citral. *Food Hydrocolloids* 48: 155-164. <https://dx.doi.org/10.1016/j.foodhyd.2015.02.004>
- Yin, T.; Park, J. W. and Xiong, S. 2015. *Physicochemical Properties of Nano Fish*

Bone Prepared by Wet Media Milling. LWT – Food Science and Technology, 64:367-373.

Zbicinski, I.; Delag A.; Strumillo C.; Adamiec J.. 2002. *Advanced Experimental Analysis of Drying Kinetics in Spray drying.* Chem Eng J 86: 207-16.

Zhang, Qing; Y. Zhou; W. Yue; W. Qin and H. Dong. 2021. Nanostructures of Protein-Polysaccharide Complexes or Conjugates for Encapsulation of Bioactive Compounds. Trends in Food Science and Technology 109: 169-196. <https://doi.org/10.1016/j.tifs.2021.01.026>

Zuidan NJ, Nedovic VA. 2010. *Encapsulation Technologies for Food Ingredients and Food Processing.* Springer, New York.