DAFTAR PUSTAKA

Abedinia, A., Ariffin, F., Huda, N., & Mohammadi Nafchi, A. (2018). Preparation and characterization of a novel biocomposite based on duck feet gelatin as alternative to bovine gelatin. *International Journal of Biological Macromolecules*, *109*, 855–862. https://doi.org/https://doi.org/10.1016/j.ijbiomac.2017.11.051

Adhayanti, I., & Ahmad, T. (2020). PENGARUH METODE PENGERINGAN TERHADAP KARAKTER MUTU FISIK DAN KIMIA SERBUK MINUMAN INSTAN KULIT BUAH NAGA. *Media Farmasi*, *16*, 57. https://doi.org/10.32382/mf.v16i1.1418

Akhriani, M., Fadhilah, E., & Kurniasari, F. (2016). Hubungan Konsumsi Minuman Berpemanis dengan Kejadian Kegemukan pada Remaja di SMP Negeri 1 Bandung (Correlation of Sweetened-Drink Consumption with Obesity Prevalence in Adolescence in State Secondary School 1 Bandung). *Indonesian Journal of Human Nutrition*, *3*, 29–40. https://doi.org/10.21776/ub.ijhn.2016.003.01.4

Ames, W. M. (1952). The conversion of collagen to gelatin and their molecular structures. *Journal of the Science of Food and Agriculture*, *3*, 454–463. https://api.semanticscholar.org/CorpusID:98674883

Angulo, L., souza silva, V., Vieira, J., Fakhouri, F., & Oliveira, R. (2024). Plant-Based Films for Food Packaging as a Plastic Waste Management Alternative: Potato and Cassava Starch Case. *Polymers*, *16*, 2390. https://doi.org/10.3390/polym16172390

Apriyanto, A., Compart, J., & Fettke, J. (2022). A review of starch, a unique biopolymer – Structure, metabolism and in planta modifications. *Plant Science*, *318*, 111223. https://doi.org/10.1016/j.plantsci.2022.111223

Arnon-Rips, H., & Poverenov, E. (2016). *Biopolymers-embedded nanoemulsions and other nanotechnological approaches for safety, quality, and storability enhancement of food products: active edible coatings and films* (pp. 329–363). https://doi.org/10.1016/B978-0-12-804306-6.00010-6

Arvanitoyannis, I., Psomiadou, E., Nakayama, A., Aiba, S., & Yamamoto, N. (1997). Edible films made from gelatin, soluble starch and polyols, Part 3. *Food Chemistry*, 60(4), 593-604, https://doi.org/10.1016/S0308-8146(97)00038-1.

Azizah, F., Nursakti, H., Ningrum, A., & Supriyadi, S. (2023). Development of Edible Composite Film from Fish Gelatin–Pectin Incorporated with Lemongrass Essential Oil and Its Application in Chicken Meat. *Polymers*, *15*, 2075. https://doi.org/10.3390/polym15092075

Azwar, E., Asmara, P., & Darni, Y. (2022). Karakterisasi Edible Film Dari Pati Jagung Dengan Plastisizer Gliserol Dan Filler CMC Sebagai Bahan Pengemas Makanan. *Jurnal Teknologi Dan Inovasi Industri (JTII)*, *3*. https://doi.org/10.23960/jtii.v3i1.40

Benlloch-Tinoco, M., Gentile, P., Taylor, L., & Girón-Hernández, J. (2024). Alginate Edible Films as Delivery Systems for Green Tea Polyphenols. *Food Hydrocolloids*, *158*, 110518. https://doi.org/10.1016/j.foodhyd.2024.110518

Bilbao-Sainz, C., de Jesús Avena-Bustillos, R., Wood, D. F., Williams, T., & Mchugh, T. H. (2010). Composite edible films based on hydroxypropyl methylcellulose reinforced with microcrystalline cellulose nanoparticles. *Journal of Agricultural and Food Chemistry*, *58 6*, 3753–3760. https://api.semanticscholar.org/CorpusID:20134768

Biswal, D., & Singh, R. (2004). Characterisation of carboxymethyl cellulose and polyacrylamide graft copolymer. *Carbohydrate Polymers*, *57*, 379–387. https://doi.org/10.1016/j.carbpol.2004.04.020

Bourtoom, T. (2008). Review Article Edible films and coatings: characteristics and properties. In *International Food Research Journal* (Vol. 15, Issue 3).

Bozkurt, S., Altay, Ö., Koç, M., & Ertekin, F. K. (2023). Gıda Sistemlerinde Yenilebilir Filmler ve Kaplamalar. *Turkish Journal of Agriculture - Food Science and Technology*, *11*(1), 1–9. https://doi.org/10.24925/turjaf.v11i1.1-9.5196

Cahyana, Y., Verrell, C., Kriswanda, D., Aulia, G., Yusra, N., Marta, H., Sukri, N., Safarov, J., & Abduvakhitovna, S. (2023). Properties Comparison of Oxidized

and Heat Moisture Treated (HMT) Starch-Based Biodegradable Films. *Polymers*, *15*, 2046. https://doi.org/10.3390/polym15092046

Cai, Z., Wu, J., Du, B., & Zhang, H. (2018). Impact of distribution of carboxymethyl substituents in the stabilizer of carboxymethyl cellulose on the stability of acidified milk drinks. *Food Hydrocolloids*, *76*, 150–157. https://doi.org/10.1016/j.foodhyd.2016.12.034

Cerruti, P., Santagata, G., Gomez d'Ayala, G., Ambrogi, V., Carfagna, C., Malinconico, M., & Persico, P. (2011). Effect of a natural polyphenolic extract on the properties of a biodegradable starch-based polymer. *Polymer Degradation and Stability*, *96*(5), 839–846. https://doi.org/https://doi.org/10.1016/j.polymdegradstab.2011.02.003

Chiumarelli, M., & Hubinger, M. (2012). Stability, solubility, mechanical and barrier properties of cassava starch – Carnauba wax edible coatings to preserve fresh-cut apples. *Food Hydrocolloids*, *28*, 59–67. https://doi.org/10.1016/j.foodhyd.2011.12.006

Costa, E., Silva, S., Pereira, C., Ribeiro, A., Casanova, F., Freixo, R., Pintado, M., & Ramos, O. (2023). Carboxymethyl Cellulose as a Food Emulsifier: Are Its Days Numbered? *Polymers*, *15*, 2408. https://doi.org/10.3390/polym15102408

Darniadi, Sandi & Rachmat, Ridwan & Luna, Prima & Purwani, Winda & Sandrasari, Diny. (2020). Penentuan Umur Simpan Menggunakan Metode Accelerated Shelf Life Test (ASLT) pada Bubuk Minuman Instan Stroberi Foam-Mat Drying. *Jurnal Aplikasi Teknologi Pangan*, 9, 151-157. 10.17728/jatp.7539.

Dekeba, K., Satheesh, N., & Asfaw, W. (2023). Mechanical properties of tef starch based edible films: Development and process optimization. *Heliyon*, *9*, e13160. https://doi.org/10.1016/j.heliyon.2023.e13160

Denavi, G., Pérez-Mateos, M., Añón, M., Montero, P., Mauri, A., & Gomez-Guillen, M. (2009). Structural and functional properties of soy protein isolate and cod gelatin blend films. *Food Hydrocolloids*, *23*, 2094–2101. https://doi.org/10.1016/j.foodhyd.2009.03.007

Dhanapal, A., Rajamani, L., & Banu, M. (2012). Edible films from Polysaccharides. *Food Sci. Q. Manag*, *3*.

Diniyah, Nurud & Giyarto, Giyarto & Subagio, Achmad & Akhiriani, Resti. (2015). Pendugaan Umur Simpan "Beras Cerdas" Berbasis Mocaf, Tepung Jagung Menggunakan Metode Accelerated Shelf-Life Testing (ASLT) Pendekatan Arrhenius. *Warta Industri Hasil Pertanian*, 32, 1-8.

Duru, R., Ikpeama, E., & Amaka, I. (2019). Challenges and prospects of plastic waste management in Nigeria. *Waste Disposal & Sustainable Energy*, *1*. https://doi.org/10.1007/s42768-019-00010-2

Eca, K., Sartori, T., & Menegalli, F. C. (2014). Films and edible coatings containing antioxidants—A review. *Brazilian Journal of Food Technology*, *17*, 98–112. https://doi.org/10.1590/bjft.2014.017

Eze, O. F., Chatzifragkou, A., & Charalampopoulos, D. (2022). Properties of protein isolates extracted by ultrasonication from soybean residue (okara). *Food Chemistry*, *368*, 130837. https://doi.org/https://doi.org/10.1016/j.foodchem.2021.130837

Fahrullah, F., Kisworo, D., Bulkaini, Yulianto, W., Wulandani, B., Haryanto, H., Noersidiq, A., Maslami, V., Ulkiyah, K., Kartika, K., & Rahmawati, L. (2024). Optimization of the Thickness, Water Vapour Transmission Rate and Morphology of Protein-Based Films Incorporating Glycerol and Polyethylene Glycol Plasticizers. *Jurnal Ilmu-Ilmu Peternakan*, *34*, 11–20. https://doi.org/10.21776/ub.jiip.2024.034.01.02

Fahrullah, F., Radiati, L., Purwadi, P., & Rosyidi, D. (2020). The Physical Characteristics of Whey Based Edible Film Added with Konjac. *Current Research in Nutrition and Food Science Journal*, *8*, 333–339. https://doi.org/10.12944/CRNFSJ.8.1.31

Faisal, M., Gani, A., Mulana, F., & Daimon, H. (2016). Treatment and Utilization of Industrial Tofu Waste in Indonesia. *Asian Journal of Chemistry*, *28*, 501–507. https://doi.org/10.14233/ajchem.2016.19372

Farooq, S., Ahmad, M., & Ali, U. (2024). A review on marine collagen: sources, extraction methods, colloids properties, and food applications. *Collagen and Leather*. https://doi.org/10.1186/s42825-024-00152-y

Fauzan, H., Ningrum, A., & Supriyadi, S. (2023). Evaluation of a Fish Gelatin-Based Edible Film Incorporated with Ficus carica L. Leaf Extract as Active Packaging. *Gels*, *9*, 918. https://doi.org/10.3390/gels9110918

Feng, J.-Y., Wang, R., Thakur, K., Ni, Z.-J., Zhu, Y.-Y., Hu, F., Zhang, J., & Wei, Z.-J. (2021). Evolution of okara from waste to value added food ingredient: An account of its bio-valorization for improved nutritional and functional effects. *Trends in Food Science & Technology*, *116*. https://doi.org/10.1016/j.tifs.2021.08.011

Figueiredo, V., Justus, A., Pereira, D., Georgetti, S., Ida, E., & Kurozawa, L. (2019). Production of Hydrolysate of Okara Protein Concentrate with High Antioxidant Capacity and Aglycone Isoflavone Content. *Brazilian Archives of Biology and Technology*, *62*. https://doi.org/10.1590/1678-4324-2019180478

Flores, S., Famá, L., Rojas, A., Goyanes, S., & Gerschenson, L. (2007). Physical properties of tapioca-starch edible films: Influence of filmmaking and potassium sorbate. *Food Research International*, *40*, 257–265. https://doi.org/10.1016/j.foodres.2006.02.004

Fu, Y., Therkildsen, M., Aluko, R., & Lametsch, R. (2018). Exploration of collagen recovered from animal by-products as a precursor of bioactive peptides: Successes and challenges. *Critical Reviews in Food Science and Nutrition*, *59*, 0. https://doi.org/10.1080/10408398.2018.1436038

Galus (Kokoszka), S., & Kadzińska, J. (2016). Moisture Sensitivity, Optical, Mechanical and Structural Properties of Whey Protein-Based Edible Films Incorporated with Rapeseed Oil. *Food Technology and Biotechnology*, *54*, 78–89. https://doi.org/10.17113/ftb.54.01.16.3889

Galus (Kokoszka), S., & Lenart, A. (2019). Optical, mechanical, and moisture sorption properties of whey protein edible films. *Journal of Food Process Engineering*, *42*. https://doi.org/10.1111/jfpe.13245

Gennadios, A. (2002). Protein-based films and coatings. In *Protein-Based Films and Coatings*.

Gomez-Guillen, M., Pérez-Mateos, M., Gómez-Estaca, J., López-Caballero, E., Gimenez, B., & Montero, P. (2009). Fish gelatin: A renewable material for developing active biodegradable films. *Trends in Food Science & Technology*, *20*, 3–16. https://doi.org/10.1016/j.tifs.2008.10.002

Hamann, D., Puton, B. M. S., Comin, T., Colet, R., Valduga, E., Zeni, J., Steffens, J., Junges, A., Backes, G. T., & Cansian, R. L. (2022). Active edible films based on green tea extract and gelatin for coating of fresh sausage. *Meat Science*, *194*, 108966. https://doi.org/https://doi.org/10.1016/j.meatsci.2022.108966

Hamzah, F., Sitompul, F., Ayu, D., & Pramana, A. (2021). Effect of the Glycerol Addition on the Physical Characteristics of Biodegradable Plastic Made from Oil Palm Empty Fruit Bunch. *Industria: Jurnal Teknologi Dan Manajemen Agroindustri*, *10*, 239–248. https://doi.org/10.21776/ub.industria.2021.010.03.5

Haryati. (2015). Pendugaan Umur Simpan Menggunakan Metode Accelerated Shelf Life Testing (ASLT) dengan Pendekatan Arrhenius pada Produk Tape Ketan Hitam Khas Mojokerto Hasil Sterilisasi. *Jurnal Pangan dan Agroindustri*, 3(1), 156-165.

Homthawornchoo, W., Han, J., Kaewprachu, P., Romruen, O., & Rawdkuen, S. (2022). Green Tea Extract Enrichment: Mechanical and Physicochemical Properties Improvement of Rice Starch-Pectin Composite Film. *Polymers*, *14*, 2696. https://doi.org/10.3390/polym14132696

Hsu, K.-C. (2010). Purification of antioxidative peptides prepared from enzymatic hydrolysates of tuna dark muscle by-product. *Food Chemistry*, *122*(1), 42–48. https://doi.org/https://doi.org/10.1016/j.foodchem.2010.02.013

Indrarti, L., & Indriyati, I. (2017). Incorporation of citrus essential oils into bacterial cellulose-based edible films and assessment of their physical properties. *IOP Conference Series: Earth and Environmental Science*, *60*, 12018. https://doi.org/10.1088/1755-1315/60/1/012018

Ismail, N., & Abdullah, H. (2019). The extraction of gelatin from black tilapia fish skins with different acid concentration. *Journal of Physics: Conference Series*, *1150*, 12041. https://doi.org/10.1088/1742-6596/1150/1/012041

Isroi, I., Supeni, G., Eris, D. D., & Cahyaningtyas, A. A. (2018). Biodegradability of Cassava Edible Bioplastics in Landfill Soil and Plantation Soil. *Jurnal Kimia Dan Kemasan*, *40*(2), 129. https://doi.org/10.24817/jkk.v40i2.3596

Jahit, I., Nazmi, N., Sarbon, N., & Mohamad Isa, M. I. N. (2016). Preparation and physical properties of gelatin/CMC/chitosan composite films as affected by drying temperature. *International Food Research Journal*, *23*, 1068–1074.

Jeya Shakila, R., Jeevithan, E., Varatharajakumar, A., Jeyasekaran, G., & Sukumar, D. (2012). Comparison of the properties of multi-composite fish gelatin films with that of mammalian gelatin films. *Food Chemistry*, *135*(4), 2260–2267. https://doi.org/https://doi.org/10.1016/j.foodchem.2012.07.069

Karakoyun, O., & Keskin, S. (2023). Effects of gelatin concentration and co-plasticizer type on physical, mechanical and microstructural properties of corn starch-gelatin composite edible films. *The Annals of the University Dunarea de Jos of Galati. Fascicle VI - Food Technology*, *47*, 140–153. https://doi.org/10.35219/foodtechnology.2023.1.09

Kaynarca, G., Kamer, D., GÜMÜŞ, T., & Sagdic, O. (2022). Characterization of Poly(vinyl alcohol)/gelatin films made with winery solid by-product (vinasse) extract. *Food Packaging and Shelf Life*. https://doi.org/10.1016/j.fpsl.2022.101013

Kharisma, K., & Khairi, A. (2022). Pengaruh Jenis Kemasan Plastik dan Lama Waktu Penyimpanan Terhadap Karakteristik Fisikokimia Jelly drink Jeruk Pomello (Citrus maxima). *Jurnal Keteknikan Pertanian Tropis Dan Biosistem*, *10*, 84–91. https://doi.org/10.21776/ub.jkptb.2022.010.01.10

Khonakdar, H. A., Morshedian, J., Mehrabzadeh, M., Wagenknecht, U., & Jafari, S. H. (2003). Thermal and shrinkage behaviour of stretched peroxide-crosslinked high-density polyethylene. *European Polymer Journal*, *39*, 1729–1734. https://doi.org/10.1016/S0014-3057(03)00076-4

Kimia, J., & Matem, F. (2011). BIODEGRADABLE PL POLYETHYLENE (LDPE) Susilawa. In *Jurnal Natural* (Vol. 11, Issue 2).

Krochta. J. M., Balwin, E. A. and Niperos-Carriedo, M. O. (1994). (Eds.). *Edible Coatings and Films to Improve Food Quality*, p. 201-277. Lancaster. Basel: Technomic Publishing.

Krochta and De Mulder Johnston. (1997). Edible and Biodegradable Polymers Film: Changes & Opportunities. *Food Technology*, 51.

Kumalla, L. M., & Bagus Hermanto, M. (2013). Uji Performansi Pengering Semprot Tipe Buchi B-290 Pada Proses Pembuatan Tepung Santan Performance Test of Spray Dryer Type Buchi B-290 in The Making of Coconut's Milk Flour. In *Jurnal Bioproses Komoditas Tropis* (Vol. 1, Issue 1).

Kurniawan, H., Bintoro, N., & W.K., J. N. (2018). PENDUGAAN UMUR SIMPAN GULA SEMUT DALAM KEMASAN DENGAN PENDEKATAN ARRHENIUS (Shelf Life Prediction of Palm Sugar on Packaging using Arrhenius Equation). *Jurnal Ilmiah Rekayasa Pertanian Dan Biosistem*, *6*(1), 93–99. https://doi.org/10.29303/jrpb.v6i1.68

Kusnadhi, F.F. (2003). Formulasi Produk Minuman Instan Lingzhi-Jahe Effervescent. *Skripsi*. Fakultas Teknologi Pertanian. IPB. Bogor.

Kwak, H. W., Woo, H., Kim, I.-C., & Lee, K. (2017). Fish gelatin nanofibers prevent drug crystallization and enable ultrafast delivery. *RSC Adv.*, *7*, 40411–40417. https://doi.org/10.1039/C7RA06433K

Legowo, A.M., Nurwantoro & Sutaryo. (2007). *Buku Ajar Analisis Pangan*. Universitas Diponegoro, Semarang.

Lin, D., Zheng, Y., Wang, X., Huang, Y., Ni, L., Chen, X., Wu, Z., Huang, C., Yi, Q., Li, J., Qin, W., Zhang, Q., Chen, H., & Wu, D. (2020). Study on physicochemical properties, antioxidant and antimicrobial activity of okara soluble dietary fiber/sodium carboxymethyl cellulose/thyme essential oil active edible composite films incorporated with pectin. *International Journal of Biological Macromolecules*, *165*, 1241–1249. https://doi.org/https://doi.org/10.1016/j.ijbiomac.2020.10.005

Liu, H. Y., Han, J., & Guo, S. D. (2009). Characteristics of the gelatin extracted from Channel Catfish (Ictalurus Punctatus) head bones. *LWT - Food Science and Technology*, *42*(2), 540–544. https://doi.org/https://doi.org/10.1016/j.lwt.2008.07.013

Loo, C., & Sarbon, N. (2020). Chicken skin gelatin films with tapioca starch. *Food Bioscience*, *35*, 100589. https://doi.org/10.1016/j.fbio.2020.100589

López de Lacey A.M., López-Caballero M.E., & Montero P. (2014). Agar films containing green tea extract and probiotic bacteria for extending fish shelf-life. *Food Science and Technology*, 55(2), 559-564.

Martin, D. W. (1981). *Harper's Review of Biochemistry*, 18th ed, Los Altos, California 94022, Lange Medsical Publicatins.

Martua Ibrahim, A., & Heppy Sriherfyna, F. (2015). Effect of Temperature and Extraction Time on Physicochemical Properties of Red Ginger (Zingiber officinale var. Rubrum) Extract with The Additional of Honey Combination as Sweetener for Functional Drink.*Jurnal Pangan dan Agroindustri*, 3(2).

Miftahul. (2022). Pemurnian Gliserol. *Jurnal Jejaring Matematika Dan Sains*, *4*(2), 35–40. https://doi.org/10.36873/jjms.2022.v4.i2.706

Mihalca, V., Kerezsi, A., Weber, A., Gruber-Traub, C., Schmucker, J., Vodnar, D., Francisc, D., Socaci, S., Fărcaş, A., Mureşan, C., Suharoschi, R., & Pop, O. L. (2021). Protein-Based Films and Coatings for Food Industry Applications. *Polymers*, *13*, 769. https://doi.org/10.3390/polym13050769

Müller, C., Laurindo, J., & Yamashita, F. (2009). Effect of cellulose fibers addition on the mechanical properties and water vapor barrier of starch-based films. *Food Hydrocolloids - FOOD HYDROCOLLOID*, *23*, 1328–1333. https://doi.org/10.1016/j.foodhyd.2008.09.002

Munawaroh, H. S. H., Gumilar, G. G., Berliana, J. D., Aisyah, S., Nuraini, V. A., Ningrum, A., Susanto, E., Martha, L., Kurniawan, I., Hidayati, N. A., Koyande, A. K., & Show, P.-L. (2022). In silico proteolysis and molecular interaction of tilapia (Oreochromis niloticus) skin collagen-derived peptides for environmental remediation. *Environmental Research*, *212*, 113002. https://doi.org/https://doi.org/10.1016/j.envres.2022.113002

Muslimah, S., Warkoyo, W., & Winarsih, S. (2021). Studi Pembuatan Edible Film Gel Okra (Abelmoschus esculentus L.) dengan Penambahan Pati Singkong. *Food Technology and Halal Science Journal*, *4*, 94–108. https://doi.org/10.22219/fths.v4i1.15826

Nielsen, S. (2017). *Food Analysis*. https://doi.org/10.1007/978-3-319-45776-5

Ningrum, A., Perdani, A., Supriyadi, S., Munawaroh, H., Aisyah, S., & Susanto, E. (2021). Characterization of Tuna Skin Gelatin Edible Films with Various Plasticizers-Essential Oils and Their Effect on Beef Appearance. *Journal of Food Processing and Preservation*, *45*. https://doi.org/10.1111/jfpp.15701

Ningrum, A., Wardani, D., Vanidia, N., Manikharda, Sarifudin, A., Kumalasari, R., Ekafitri, R., Kristanti, D., Setiaboma, W., & Munawaroh, H. (2023). Evaluation of Antioxidant Activities from a Sustainable Source of Okara Protein Hydrolysate Using Enzymatic Reaction. *Molecules*, *28*, 4974. https://doi.org/10.3390/molecules28134974

Nitsuwat, S., Zhang, P., Ng, K., & Fang, Z. (2021). Fish gelatin as an alternative to mammalian gelatin for food industry: A meta-analysis. *LWT*, *141*, 110899. https://doi.org/10.1016/j.lwt.2021.110899

Noraida, L., Bintang, M., & Pontjo, B. (n.d.). *Ekstrak dan Fraksi N-heksana Teh Hijau sebagai Antiproliferasi Sel Kanker Payudara MCM-B2 In Vitro (N-hexane Extract and Fraction of Green Tea as Antiproliferation of MCM-B2 Breast Cancer Cells In Vitro)*.

Novita, D. & Rahmadhia, S. (2021). SIFAT FISIKO-KIMIA KEMASAN BERBASIS GELATIN DENGAN VARIASI PENAMBAHAN GLISEROL DAN EKSTRAK DAUN KERSEN (Muntingia calabura). *Jurnal Teknologi Pangan*. 15. 10.33005/jtp.v15i2.2940.

Nurdiani, R., Yufidasari, H., & Sherani, J. (2019). Effect of Pectin on the Characteristics of Edible Film from Skin Gelatin of Red Snapper (Lutjanus argentimaculatus). *Jurnal Pengolahan Hasil Perikanan Indonesia*, *22*, 174. https://doi.org/10.17844/jphpi.v22i1.25896

Oh, J.H., Wang, B., Field, P.D., Aglan, H.A. (2004). Characteristics of edible films made from dairy proteins and zein hydrolysate cross-linked with

transglutaminase. *International Journal of Food Science and Technology*. 39:287–294. https://doi.org/10.1111/j.1365-2621.2004.00783.x

Oliveira, R. (2012). Quantification of catechins and caffeine from green tea (Camellia sinensis) infusions, extract, and ready-to-drink beverages. *Food Science and Technology (Campinas)*, *32*, 163–166. https://doi.org/10.1590/S0101-20612012005000009

Palupi, N.S., F. Kusnandar, D.R. Adawiyah, dan D. Syah. (2010). Penentuan Umur Simpan dan Pengembangan Model Diseminasi dalam Rangka Percepatan Adopsi Teknologi Mi Jagung Bagi UKM. *Jurnal Manajemen IKM*. 5(1): 42-52.

Pagliaro, M., & Rossi, M. (2008). The Future of Glycerol: New Usages for a Versatile Raw Material. In *RSC Green Chemistry Book Series* (Vol. 5). https://doi.org/10.1039/9781847558305

Pérez-Gago, M., & Rhim, J.-W. (2013). Edible Coating and Film Materials: Lipid Bilayers and Lipid Emulsions. *Innovations in Food Packaging: Second Edition*, 325–350. https://doi.org/10.1016/B978-0-12-394601-0.00013-8

Priyantol, G., Sari, G., Basuni Hamzahl StafPengajar Fakultas Pertanian dan Program Pascasarjana Unsri, dan, Teknologi Hasil Pertanian, A. P., & Pertanian, F. (n.d.). *Profil Mutu dan Laju Perubahan Mutu Tepung Kecambah Kacanmg. .. .. (Gatot Priyanto, dkk) PROFIL DAN LAJU PERUBAHAN MUTU TEPUNG KECAMBAH KACANG HIJAU SELAMA PENYIMPANAN*.

Puspitasari, E., Malin Sutan, S., & Lastriyanto, A. (2020). Pendugaan Umur Simpan Keripik Kelapa (Cocos nucifera L.) Menggunakan Metode Accelerated Shelf-Life Testing (ASLT) Model Pendekatan Persamaan Arrhenius. *Jurnal Keteknikan Pertanian Tropis Dan Biosistem*, *8*, 36–45. https://doi.org/10.21776/ub.jkptb.2020.008.01.04

Rahman, M., Mat, K., Ishigaki, G., & Akashi, R. (2021). A review of okara (soybean curd residue) utilization as animal feed: Nutritive value and animal performance aspects. *Animal Science Journal*, *92*. https://doi.org/10.1111/asj.13594

Rahmi, Q., Wulandari, E., & Gumilar, J. (2022). Pengaruh Konsentrasi Gliserol pada Gelatin Kulit Kelinci terhadap Kadar Air, Ketebalan Film, dan Laju Transmisi Uap Air Edible Film. *Jurnal Teknologi Hasil Peternakan*, *3*, 19. https://doi.org/10.24198/jthp.v3i1.39444

Rahmiatiningrum, N., Sukardi, S., & Warkoyo, W. (2019). Study of Physical Characteristic, Water Vapor Transmission Rate and Inhibition Zones of Edible Films from Aloe vera (Aloe barbadensis) Incorporated with Yellow Sweet Potato Starch and Glycerol. *Food Technology and Halal Science Journal*, *2*, 195. https://doi.org/10.22219/fths.v2i2.12985

Ramadani Fitri, N., & Puspitarini Siswanto, A. (2023). Formulation of instant powder drink combination of red ginger and banana peel. *Materials Today: Proceedings*, *87*, 101–105. https://doi.org/https://doi.org/10.1016/j.matpr.2023.02.379

Ratnayani, K., Ratnayani, O., & Pane, I. A. (2022). Antioxidant Activity and Amino Acid Composition of Okara Protein Hydrolysate. *KnE Life Sciences*, *7*(3), 352–357. https://doi.org/10.18502/kls.v7i3.11140

Rhim, J.-W., & Shellhammer, T. H. (2005). Chapter 21: Lipid-based edible films and coatings. In *Innovations in Food Packaging* (pp. 362–383). https://doi.org/10.1016/B978-012311632-1/50053-X

Ross-Murphy, S. B. (1992). Structure and rheology of gelatin gels : recent progress. *Polymer*, *33*, 2622–2627. https://api.semanticscholar.org/CorpusID:95815657

Saberi, B., Vuong, Q. V, Chockchaisawasdee, S., Golding, J. B., Scarlett, C. J., & Stathopoulos, C. E. (2016). *Mechanical and physical properties of pea starch edible films in the presence of glycerol*. *40*(6), 1339–1351. https://doi.org/10.1111/jfpp.12719

Samaranayaka, A., & Li-Chan, E. (2011). Food-derived peptidic antioxidants: A review of their production, assessment, and potential applications. *Journal of Functional Foods*, *3*, 229–254. https://doi.org/10.1016/j.jff.2011.05.006

Saxena, S., & Rai, S. (2020). Okara: A Low-Cost Adsorbent for Textile Waste Water Treatment. *Research Biotica*, *2*, 26–29. https://doi.org/10.54083/ResBio.2.2.2020.26-29

Silva, M.J., Sanches, A.O., Medeiros, E.S., Mattoso, L.H.C., McMahan, C.M., & Malmonge, J.A. (2014). Nanocomposites of natural rubber and polyaniline-modified cellulose nanofibrils, *J Therm. Anal. Calorim*, 117, 387-92.

Sudaryati H.P., T. Mulyani. S., dan E.R. Hansyah. (2010). Sifat Fisik dan Mekanis Edible Film dari Tepung Porang (Amorphopallus oncophyllus) dan Karboksil metil selulosa. *Jurnal Teknologi Pertanian*, 11 (3), 196-210.

Suderman, N., Sarbon, N., & Mohamad Isa, M. I. N. (2016). Effect of drying temperature on the functional properties of biodegradable CMC-based film for potential food packaging. *International Food Research Journal*, *23*, 1075–1084.

Suhag, R., Kumar, N., Trajkovska Petkoska, A., & Upadhyay, A. (2020). Film formation and deposition methods of edible coating on food products: A review. *Food Research International*, *136*, 109582. https://doi.org/10.1016/j.foodres.2020.109582

Sui Chin, S., Han Lyn, F., & Nur Hanani, Z. A. (2017). Effect of Aloe vera (Aloe barbadensis Miller) gel on the physical and functional properties of fish gelatin films as active packaging. *Food Packaging and Shelf Life*, *12*, 128–134. https://doi.org/https://doi.org/10.1016/j.fpsl.2017.04.008

Sultana, A., Saha, U., Shahab, S., & Islam, M. (2024). A Comprehensive Nutritional and Compositional Investigation of Instant Mango and Orange Soft Drink Powders in Dhaka City, Bangladesh. *International Journal of Research and Innovation in Applied Science*, *IX*, 294–304. https://doi.org/10.51584/IJRIAS.2024.904021

Sumedi, E., Widodo, Y., & Sandjaja, N. F. N. (2013). POLA KONSUMSI ANAK UMUR 6 BULAN – 12 TAHUN DI INDONESIA. *GIZI INDONESIA*, *36*, 131. https://doi.org/10.36457/gizindo.v36i2.141

Suryanti, S., Hadi, S., & Peranginangin, R. (2006). Ekstraksi Gelatin dari Tulang Ikan Kakap Merah (Lutjanus sp) secara Asam. *Jurnal Pascapanen Dan Bioteknologi Kelautan Dan Perikanan*, *1*, 27. https://doi.org/10.15578/jpbkp.v1i1.228

Susilawati, Mustafa, I., dan Maulina, Desi. (2011). Biodegradable Plastic From A Mixture Of Low Density Polyethylene (LLDPE) And Cassava Starch with The Addition Of Acrylic Acid. *Jurnal Natural*. 11(2), 69-73.

Sutra, L., & Salihat, R. (2020). KARAKTERISTIK EDIBLE FILM DARI PATI JAHE GAJAH (Zingiber officinale) DENGAN PERBANDINGAN GELATIN KULIT IKAN TUNA. *Journal of Scientech Research and Development*, *2*, 34–45. https://doi.org/10.56670/jsrd.v2i2.13

Sutrisno, E., Ningrum, A., Supriyadi, S., Munawaroh, H. S. H., Aisyah, S., & Susanto, E. (2020). Characterization of tuna (Thunnus albacares) skin gelatin edible film incorporated with clove and ginger essential oils and different surfactants. *Food Research*, *5*, 440–450. https://doi.org/10.26656/fr.2017.5(2).285

Syarif, R. dan Halid, H.1993. *Teknologi Penyimpanan Pangan*. Penerbit Arcan. Jakarta. Kerjasama dengan Pusat Antar Universitas Pangan Dan Gizi IPB.

Taghian, L., Mosilhey, S., Abdel-Samie, M., & Hareedy, L. (2019). PROLONGING OF ORANGE JUICE SHELF LIFE VIA GREEN TEA ADDITION. *Sinai Journal of Applied Sciences*, *8*, 19–34. https://doi.org/10.21608/sinjas.2019.79076

Tharanathan, R. N. (2003). Biodegradable films and composite coatings: past, present and future. *Trends in Food Science & Technology*, *14*(3), 71–78. https://doi.org/https://doi.org/10.1016/S0924-2244(02)00280-7

Tkaczewska, J., Morawska, M., Kulawik, P., & Zając, M. (2018). Characterization of carp (Cyprinus carpio) skin gelatin extracted using different pretreatments method. *Food Hydrocolloids*, *81*, 169–179. https://doi.org/https://doi.org/10.1016/j.foodhyd.2018.02.048

Trilaksani, W., Nurilmala, M., & Hani, S. (2012). EKSTRAKSI GELATIN KULIT IKAN KAKAP MERAH (Lutjanus sp.) DENGAN PROSES PERLAKUAN ASAM. *Jurnal Pengolahan Hasil Perikanan Indonesia*, *15*(3), 240–251. https://doi.org/10.17844/jphpi.v15i3.21436

Tyagi, P., Salem, K., Hubbe, M., & Pal, L. (2021). Advances in barrier coatings and film technologies for achieving sustainable packaging of food products – A

review. *Trends in Food Science & Technology*, *115*, 461–485. https://doi.org/10.1016/j.tifs.2021.06.036

Uddin, S., Hossain, M. A., Suresh, S., Al Amin, M., & Johan, M. (2021). Halal and Kosher gelatin: Applications as well as detection approaches with challenges and prospects. *Food Bioscience*, *44*, 101422. https://doi.org/10.1016/j.fbio.2021.101422

Ulfah, R. M. (2022). PENGARUH KONSUMSI MINUMAN SERBUK INSTAN RASA JERUK TERHADAP PELEPASAN FLUOR BAHAN RESTORASI GLASS IONOMER CEMENT. Tersedia dari http://scholar.unand.ac.id/121200/.

Umaraw, P., Munekata, P. E. S., Verma, A. K., Barba, F. J., Singh, V. P., Kumar, P., & Lorenzo, J. (2020). Edible films/coating with tailored properties for active packaging of meat, fish and derived products. *Trends in Food Science and Technology*, *98*, 10–24. https://api.semanticscholar.org/CorpusID:214365283

V, A. K., Hasan, M., Mangaraj, S., M, P., Verma, D. K., & Srivastav, P. P. (2022). Trends in Edible Packaging Films and its Prospective Future in Food: A Review. *Applied Food Research*. https://api.semanticscholar.org/CorpusID:248620544

V R Castro, F., Andrade, M., Sanches-Silva, A., Vaz, M. F., & Vilarinho, F. (2019). The Contribution of a Whey Protein Film Incorporated with Green Tea Extract to Minimize the Lipid Oxidation of Salmon (Salmo salar L.). *Foods*, *8*, 327. https://doi.org/10.3390/foods8080327

Vinhal, G., Silva-Pereira, M., Teixeira, J., Barcia, M., Pertuzatti, P., & Stefani, R. (2020). Gelatine/PVA copolymer film incorporated with quercetin as a prototype to active antioxidant packaging. *Journal of Food Science and Technology*, *58*, 1–9. https://doi.org/10.1007/s13197-020-04853-0

Voss, G., Osorio, H., Valente, L., & Pintado, M. (2019). Impact of thermal treatment and hydrolysis by Alcalase and Cynara cardunculus enzymes on the functional and nutritional value of Okara. *Process Biochemistry*, *83*. https://doi.org/10.1016/j.procbio.2019.05.010

Vuong, Q., Golding, J., Stathopoulos, C., Nguyen, M., & Roach, P. (2011). Optimizing conditions for the extraction of catechins from green tea using hot water. *Journal of Separation Science*, *34*, 3099–3106. https://doi.org/10.1002/jssc.201000863

Wang, Z., Mhaske, P., Farahnaky, A., Kasapis, S., & Majzoobi, M. (2022). Cassava starch: Chemical modification and its impact on functional properties and digestibility, a review. *Food Hydrocolloids*. https://api.semanticscholar.org/CorpusID:246357853

Wardani, L. A. (2012) *Validasi Penentuan Kadar Vitamin C Pada Minuman Buah Kemasan Dengan Spektrofotometri Uv-Visible*, Universitas Indonesia.

Warkoyo, W., Haris, M., & Wahyudi, V. (2022). The Physical, Mechanical, Barrier Characteristics, and Application of Edible Film from Yellow Sweet Potato and Aloe Vera Gel. *AgriTECH*, *42*, 390. https://doi.org/10.22146/agritech.68633

Wayan Sukma Putri, N., Hanggaeni Dyah Puspaningrum, D., & Gusti Ayu Wita Kusumawati, I. (2024). *UTILIZATION OF OKARA FLOUR AND THE ADDITION OF MORINGA FLOUR IN COOKIES AS A FULFILLMENT OF CHILDREN'S FIBER PEMANFAATAN TEPUNG OKARA DAN PENAMBAHAN TEPUNG DAUN KELOR PADA COOKIES SEBAGAI PEMENUHAN SERAT ANAK* (Vol. 3, Issue 1). https://jurnal.undhirabali.ac.id/index.php/jakasakti/index

Wijayani, K., Darmanto, Y. S., & Susanto, E. (2021). KARAKTERISTIK EDIBLE FILM DARI GELATIN KULIT IKAN YANG BERBEDA. *Jurnal Ilmu Dan Teknologi Perikanan*, *3*, 59–64. https://doi.org/10.14710/jitpi.2021.11412

Wu, J., Chen, S., Ge, S., Miao, J., Li, J., & Zhang, Q. (2013). Preparation, properties and antioxidant activity of an active film from silver carp (Hypophthalmichthys molitrix) skin gelatin incorporated with green tea extract. *Food Hydrocolloids*, *32*, 42–51. https://doi.org/10.1016/j.foodhyd.2012.11.029

YOKOMIZO, A., TAKENAKA, Y., & TAKENAKA, T. (2002). Antioxidative Activity of Peptides Prepared from Okara Protein. *Food Science and Technology Research - FOOD SCI TECHNOL RES*, *8*, 357–359. https://doi.org/10.3136/fstr.8.357

Yulianti, C. (2024, September 11). "Indonesia Jadi Penyumbang Sampah Plastik Terbesar ke-2 di Dunia, Ini Penyebabnya". kompas.com. Diakses pada 21 Januari 2025 melalui https://www.detik.com/edu/detikpedia/d 7536226/indonesia-jadi-penyumbang-sampah-plastik-terbesar-ke-2-di dunia-ini-penyebabnya.

Yuliastuti, Definingsih. (2022). FORMULASI DAN EVALUASI SEDIAAN SERBUK INSTAN KOMBINASI JAHE EMPRIT (Zingiber officinale Rosc var. amarum) DAN SECANG (Caesalpinia sappan L.). *Jurnal Jamu Kusuma*. 2. 76-82. 10.37341/jurnaljamukusuma.v2i2.45.

Yuniastri, R., Ismawati, I., & Ayu Fajarianingtyas, D. (2020). UMUR SIMPAN KOPI LENGKUAS INSTAN MENGGUNAKAN METODE ACCELERATED SHELF LIFE TESTING (ASLT) DENGAN PENDEKATAN PERSAMAAN ARRHENIUS. *BUANA SAINS*, *19*, 31. https://doi.org/10.33366/bs.v19i2.1746

Zaddana, C., Almasyhuri, & Meida, U. (2021). FORMULASI DAN AKTIVITAS ANTIOKSIDAN SERBUK MINUMAN INSTAN SARI BUAH TOMAT (Solanum lycopersicum). *FITOFARMAKA: Jurnal Ilmiah Farmasi*. https://api.semanticscholar.org/CorpusID:237893970

Zhong, Q.-P., & Xia, W.-S. (2008). Physicochemical Properties of Edible and Preservative Films from Chitosan/Cassava Starch/Gelatin Blend Plasticized with Glycerol. *Food Technology and Biotechnology*, *46*.