

DAFTAR PUSTAKA

- Abed, É., An, I., Suliman, E., & Mahmoud, A. T. (2016). Impact of spirulina on nutritional status, haematological profile and anaemia status in malnourished children in the Gaza Strip: randomized clinical trial. *Maternal and Pediatric Nutrition*, 2(2). <https://doi.org/10.4172/2472-1182.1000110>
- Afifah, N. (2023). Pengaruh perbandingan terbung sorgum (*Sorgum bicolor*) dan tepung kacang hijau (*Vigna radiata* L.) terhadap karakteristik kue semprong gluten free (Skripsi). Bandung (ID): Universitas Pasundan.
- Aguero, J., Lora, J., Estrada, K., Concepcion, F., Nunez, A., Rodriguez, A., & Pino, J. A. (2003). Volatile components of a commercial sample of the blue-green algae *Spirulina platensis*. *Journal of Essential Oil Research*, 15(2), 114–117. <https://doi.org/10.1080/10412905.2003.9712085>
- Akhter, S., Alim, M.A., Badsha, M.R., Matin, A., Ahmad, M., Hoque, S.M.Z. (2020). Formulation and quality evaluation of instant mango drink powder. *Food Research*, 4,4, 1287-1296.
- AlFadhly, N. K. Z., Alhelfi, N., Altemimi, A. B., Verma, D. K., Cacciola, F., & Narayanankutty, A. (2022). Trends and Technological Advancements in the Possible Food Applications of Spirulina and Their Health Benefits: A Review. In *Molecules* (Vol. 27, Issue 17). MDPI. <https://doi.org/10.3390/molecules27175584>
- Aljobair, M. O., Albaridi, N. A., Alkuraieef, A. N., & AlKehayez, N. M. (2021). Physicochemical properties, nutritional value, and sensory attributes of a nectar developed using date palm puree and spirulina. *International Journal of Food Properties*, 24(1), 845–858. <https://doi.org/10.1080/10942912.2021.1938604>
- Ambarsari, I., Endrasari, R., Hidayah, R., Kandungan nutrisi dan kualitas sensoris produk minuman sereal sarapan berbasis flakes jagung, jait, dan sorgum. *Jurnal Penelitian dan Pascapanen Pertanian*, 17 (2), 108-116.
- American Association of Cereal Chemists. (2000). *Approved Methods of The American Association of Cerial Chemist* (10th ed.). AACC International.
- Amertaningtyas, D., Padaga, M. C., Sawitri, E., Umam, K., & Awwaly, A. (2010). Kualitas organoleptik (kerenyahan dan rasa) kerupuk rambak kulit kelinci pada teknik buang bulu yang berbeda. *Jurnal Ilmu dan Teknologi Hasil Ternak*, 5 (1), 18-2, ISSN : 1978 - 0303
- Amrinola, W., Widowati, S., Hariyadi, P. (2015). Metode pembuatan sorgum sosoh rendah tanin pada pembuatan nasi sorgum (*Sorghum bicolor* L.) instan. *Comtech*, 6 (1) , 9-19.
- Anggraeni, E. (2017). Hubungan Tingkat Kecukupan Energi Dan Protein Dengan Status Gizi Pada Anak Kelas V Sekolah Dasar Islam Terpadu. 180–184. Kediri : Akademi Gizi Karya Husada Kediri.
- AOAC (Association of Official Analytical Chemist). (1995). *Official Methods of Analysis of Association of Official Analytical Chemist*. AOAC International. Virginia USA.

- _____. (2005). *Official Methods of Analysis* (W. Horwitz & G. W. Latimer, Eds.; 18th ed.). AOAC International.
- _____. (2007). *Official Methods of Analysis* (18th ed.). AOAC International.
- Apostol, L., Belc, N., Gaceu, L., Oprea, O. B., & Popa, M. E. (2020). Sorghum flour: A valuable ingredient for bakery industry? *Applied Sciences* (Switzerland), 10(23), 1–16. <https://doi.org/10.3390/app10238597>
- Arif. (2016). Metode accelerated shelf life test (ASLT) dengan pendekatan arrhenius dalam pendugaan umur simpan sari buah nenas, papaya, dan cempedak. *Informastika Pertanian*, 5 (2), 189 -198.
- Ariyanto R.C., Dewi, E.M., Kurniasih, R.A. (2020). Pengaruh penambahan sari mentimun (*Cucumis sativus*) pada pembuatan *Spirulina platensis* bubuk terhadap karakteristik fisikokimia biskuit. *Jurnal Ilmu dan Teknologi Perikanan*, 4 (2), 85-92.
- Armaini. (2020). Mikroalga *Spirulina platensis* sebagai suplemen untuk meningkatkan gizi dan imunitas balita di posyandu anggrek 2 Kelurahan Seberang Padang, Kota Padang. *Jurnal Hilirisasi IPTEKS*, 3, 4. <http://hilirisasi.lppm.unand.ac.id>.
- Asnaini, S.A. (2016). Perilaku Konsumsi Fast Food pada Anak dengan Kelebihan Berat Badan di SD Islam Athirah I Kota Makassar (Skripsi). Makassar : Program studi Kesehatan Masyarakat, Fakultas Kedokteran.
- Awulachew, M. T. (2021). Food Product Shelf Stability Overview of Sourdough-risen Flatbread. *Journal of Food Technology & Nutrition Sciences*, 1–5. [https://doi.org/10.47363/JFTNS/2021\(3\)123](https://doi.org/10.47363/JFTNS/2021(3)123)
- Bakshi, A.S., Smith, D.E. (1983). Effect of fat content and temperature on viscosity in relation to pumping requirements of fluid milk products. *J. Dairy Sci*, 67, 1157-1160.
- Barakat, E.H., El-kewaisny, N.M., Salama, A.A. (2016). Chemical and nutritional evaluation of fortified biscuits with dried *Spirulina* algae. *Journal Food and Dairy Sci.*, 7 (3), 167-177.
- Bashir, S., Sharif M.K., Butt, M.S., Shahid, M. (2016). Functional properties and amino acid profile of *Spirulina platensis* protein isolates. *Pakistan Journal of Scientific and Industrial Research*, 59, (1), 12-19.
- Behestipour, H., Mortazavian, A. M., Mohammadi, R., Sohrabvandi, S., & Khosravi-Darani, K. (2013). Supplementation of spirulina platensis and chlorella vulgaris algae into probiotic fermented milks. *Comprehensive Reviews in Food Science and Food Safety*, 12(2), 144–154. <https://doi.org/10.1111/1541-4337.12004>
- BIS (Bureau of Indian Standard). (2006). Milk Cereal Based Complementary Foods Specification. ICS No. 67.100.99. New Delhi : Bureau of Indian Standard.
- BPOM (Badan Pengawasan Obat dan Makanan). (2012). Pedoman Informasi Dan Pembacaan Standar Bahan Tambahan Pangan Untuk Industri Pangan Siap Saji Dan Industri Rumah Tangga Pangan. Badan Pengawas Obat dan Makanan RI
- _____. (2016). Peraturan Badan Pengawas Obat dan Makanan Nomor 9 tahun 2016 tentang Acuan Label Gizi. Jakarta : Badan Pengawas Obat dan Makanan RI

- _____. (2019a). Peraturan Badan Pengawas Obat dan Makanan Nomor 34 tahun 2019 tentang Kategori Pangan. Jakarta : Badan Pengawas Obat dan Makanan RI
- _____. (2019b). Peraturan Badan Pengawas Obat dan Makanan Nomor 22 tahun 2019 tentang Informasi Nilai Gizi pada Label Pangan Olahan. Jakarta : Badan Pengawas Obat dan Makanan RI
- _____. (2022). Peraturan Badan Pengawas Obat dan Makanan Nomor 1 tahun 2022 tentang Pengawasan Klaim pada Label dan Iklan Pangan Olahan. Jakarta.
- _____. (2023). Dukung Anak Cerdas Membaca Label Informasi Nilai Gizi. Diakses dari https://standarpangan.pom.go.id/dokumen/pedoman/KIE_Label_Gizi_Guru_Orang_Tua.pdf
- BPS (Badan Pusat Statistik). (2021). Impor Biji Gandum dan Meslin Menurut Negara Asal Utama. Jakarta : Badan Pusat Statistik.
- BSN (Badan Standardisasi Nasional). (1996). SNI 01-4270-1996. Minuman Susu Sereal. Jakarta (ID) : Badan Standardisasi Nasional
- Calligaris, S., Manzocco, L., Anese, M., & Nicoli, M. C. (2019). Accelerated shelf life testing. In *Food Quality and Shelf Life* (pp. 359–392). Elsevier. <https://doi.org/10.1016/B978-0-12-817190-5.00012-4>
- Cardoso, L. G., Lemos, P. V. F., de Souza, C. O., Oliveira, M. B. P. P., & Chinalia, F. A. (2022). Current advances in phytoremediation and biochemical composition of *Arthrospira* (*Spirulina*) grown in aquaculture wastewater. *Aquaculture Research*, 53(14), 4931–4943. <https://doi.org/10.1111/are.15996>
- Centeno, A. C. L., Aguiar, E., Santos, F., Queiroz, V., Conti-Silva, A., Krupa-Kozak, U., & Capriles, V. (2021). Defining whole grain sorghum flour and water levels to improve sensory and nutritional quality of gluten-free bread—a factorial design approach. *Applied Sciences (Switzerland)*, 11(17). <https://doi.org/10.3390/app11178186>
- Cezimbra, V. G., De Assis, M. a. A., De Oliveira, M. T., Pereira, L. J., Vieira, F. G. K., Di Pietro, P. F., Roberto, D. M. T., Geraldo, A. P. G., Soar, C., Rockenbach, G., Hansen, F., & De Fragas Hinnig, P. (2020). Meal and snack patterns of 7–13-year-old schoolchildren in southern Brazil. *Public Health Nutrition*, 24(9), 2542–2553. <https://doi.org/10.1017/s1368980020003808>
- Cheng, X., Ling, P., Iqbal, M. S., Liu, F., Xu, J., & Wang, X. (2023). Water adsorption properties of microalgae powders: Thermodynamic analysis and structural characteristics. *Journal of Stored Products Research*, 101. <https://doi.org/10.1016/j.jspr.2023.102093>
- Cheng, H., Zhu, R., Erichsen, H., Soerensen, J., Petersen, M.A., Skibsted, L.H. (2017). High temperature storage of infant formula milk powder for prediction of storage stability at ambient conditions. *International Dairy Journal*, 73, 166-174. <http://dx.doi.org/10.1016/j.idairyj.2017.05.007>
- Chaiklahan, R., Chirasuwan, N., Triratana, P., Loha, V., Tia, S., Bunnag, B. (2013). Polysaccharide extraction from *Spirulina* sp. and its antioxidant capacity.

- International Journal of Biological Macromolecules*, 58, 73-78.
<http://dx.doi.org/10.1016/j.ijbiomac.2013.03.046>
- Chow, C.Y., Skouw, S., Bech, A.C., Olsen, A., Bredie, W.L.P. (2022). A review on children's oral texture perception and preferences in foods. *Critical Reviews in Food Science and Nutrition*. DOI: 10.1080/10408398.2022.2136619
- Christwardana, M., Hadiyanto, MMA. (2013). Spirulina platensis :potensinya sebagai bahan pangan fungsional. *Jurnal Aplikasi Teknologi Pangan*, 2 (1), 1-4.
- Dana, L. M., Chapman, K., Dixon, H., Miller, C., Neal, B., Kelly, B., Ball, K., & Pettigrew, S. (2021). The relative importance of primary food choice factors among different consumer groups: A latent profile analysis. *Food Quality and Preference*, 94, 104199. <https://doi.org/10.1016/j.foodqual.2021.104199>
- Dhingra, D., Michael, M., Rajput, H., & Patil, R. T. (2012). Dietary fibre in foods: A review. In *Journal of Food Science and Technology* (Vol. 49, Issue 3, pp. 255–266). <https://doi.org/10.1007/s13197-011-0365-5>
- Dinkes (Dinas Kesehatan Kota Yogyakarta). (2022). Profil Kesehatan tahun 2022 Kota Yogyakarta. Yogyakarta : Pemerintah Kota Yogyakarta
- Dindu, M., Mazumdar, S.D., Maloo, S., Renu, Bhaskar. (2018). Standardization and formulation of sorghum based cookies and their nutritional composition. *Journal of Pharmacognosy and Phytochemistry*, 7 (2), 1836-1839.
- Dinpertan (Dinas Pertanian dan Pangan) Kabupaten Demak. (2022). Pengembangan Sorghum di Indonesia. <https://dinpertanpangan.demakkab.go.id/?p=5365>. Diakses pada : 16 November 2023
- Diraman, H., Koru, E., & Dibeklioglu, H. (2009). Fatty acid profile of Spirulina platensis used as a food supplement. *Israeli Journal of Aquaculture - Bamidegh*, 61(2), 134–142. <https://doi.org/10.46989/001c.20548>
- Ersyah, D., Jaziri, A.A., Setijawati, D. (2022). Effect of *Spirulina* (*Arthrospira platensis*) powder on the physicochemical and sensory characterization of dry noodle. *Journal of Aquaculture and Fish Health*, 11, 3, 277-288
- El Wakeel, M. (2007). Ultra structure and functional properties of some dry mixes of food. Faculty of Agriculture, Ain Shams University, Cairo, MSc. Thesis
- Elizabeth, R. (2010). Pengembangan Agroindustri Bahan Pangan untuk Peningkatan Nilai Tambah melalui Transformasi Kelembagaan di Pedesaan. *Iptek Tanaman Pangan*, 5, 1, 102-112
- Fana, M.P.N. (2022). Pendugaan umur simpan *snack bar* keju ricotta probiotik (*Lactobacillus plantarum* Dad-13) dengan Metode *Accelerated Shelf Life Test* (Skripsi). Yogyakarta : Fakutlta Teknologi Pertanian, Universitas Gadjah Mada.
- FAO. (2008). FAO Fisheries and Aquaculture Circular No.1034: A Review on Culture, Production and use of Spirulina as Food for Human and Feeds for Domestic Animals and Fish. Rome: Food Agricultural Organization.
- FAO/WHO. (2001). Joint Expert Consultation of Health and Nutritional Properties of Probiotics in Food Including Powder Milk with Lactic Acid Bacteria, October.

- _____. (2002a). Agricultural production statistics 2000–2021. Food Agricultural Organization.
- _____. (2002b). Food energy – methods of analysis and conversion factors. Report of a Technical Workshop, Rome, 3–6 December 2002. Food and Agriculture Organization of the United Nations.
- _____. (2002c). Guidelines for the evaluation of probiotics in food. Rep. a Jt. FAO/WHO Work. Gr. Draft. Guidel. Eval. Probiotics Food London, On.
- _____. (2011). Milk and Milk Products. Second Edition. Roma : FAO/WHO.
- Fellows, P. J. (2009). Dehydration. In *Food Processing Technology* (pp. 481–524). Elsevier. <https://doi.org/10.1533/9781845696344.3.481>
- Fradique, M., Batista, A. P., Nunes, M. C., Gouveia, L., Bandarra, N. M., & Raymundo, A. (2010). Incorporation of *Chlorella vulgaris* and *Spirulina maxima* biomass in pasta products. Part 1: Preparation and evaluation. *Journal of the Science of Food and Agriculture*, 90(10), 1656–1664. <https://doi.org/10.1002/jsfa.3999>
- Ghaly, A., A. Hammouda, and M.A. Hattab. (2015). Development and sensory evaluation of Spirulina chocolate chip oatmeal cookies. *International Journal of Bioprocess & Biotechnological Advancements*, 1: 63–73.
- Giyani, M., Duarsa, D.P., Ani, L.S. (2019). Status gizi, pola, konsumsi sarapan dan kudapan pada siswa SDN 3 Sesetan Denpasar. *Jurnal Medika Udayana*, 8 (6).
- Greis, M., Sainio, T., Katina, K., Nolden, A. A., Kinchla, A. J., Seppä, L., & Partanen, R. (2022). Physicochemical Properties and Mouthfeel in Commercial Plant-Based Yogurts. *Foods*, 11(7). <https://doi.org/10.3390/foods11070941>
- Guinard, J.-X. (2001). Sensory and consumer testing with children. *Food Science and Technology*, 11, 273–283
- Guritno, A., Aini, N., Dharmawati, M. S., & Rahayu, E. S. (2023). Development of ready-to-drink tea with Lactobacillus plantarum Dad-13 based on the vulnerability aspects of the production process. *Food Research*, 7(2), 143–153. [https://doi.org/10.26656/fr.2017.7\(2\).957](https://doi.org/10.26656/fr.2017.7(2).957)
- Habib, M.A.B., Parvin, M. (2008). A review on culture, production and use of *Spirulina* as food for humans and feeds for domestic animals and fish. Roma : FAO.
- Harris, G.K., Marshall, M. R. (2017). *Food Science Text Series Food Analysis*. Ash Analysis. pp. 287–297. www.springer.com/series/5999
- Herawati, H. (2008). Penentuan umur simpan pada produk pangan. *Jurnal Litbang Pertanian*, 27(4), 124–130
- Hoffman, A.C., Salgado, R.V., Dresler C., Faller, R.W., Bartlett, C. (2016). Flavour preferences in youth versus adults: a review. *Pubmed*. doi:10.1136/tobaccocontrol-2016-053192.
- Huda, L. F. (2021). *Penentuan Umur Simpan dan Analisis Cemaran Mikrobiologis pada Snack Bar Disubstitusi Isomalt bersalut Cokelat Probiotik Lactobacillus plantarum Dad-13* [Skripsi]. Universitas Gadjah Mada.
- Ibrahim, A., & Heppy Sriherfyna, F. (2015). Pengaruh suhu dan lama waktu ekstraksi terhadap sifat kimia dan fisik pada pembuatan minuman sari jahe

- merah (*Zingiber officinale* var. Rubrum) dengan kombinasi penambahan madu sebagai pemanis. In *Jurnal Pangan dan Agroindustri* (Vol. 3, Issue 2). Iklimia N. (2017). Gambaran pemilihan makanan jajanan pada anak usia sekolah dasar. *Jurnal Keperawatan BSI*, 5 (1), 8 -17
- Jannah, S. R., Rahayu, E. S., Yanti, R., Suroto, D. A., & Wikandari, R. (2022). Study of Viability, Storage Stability, and Shelf Life of Probiotic Instant Coffee Lactiplantibacillus plantarum Subsp. plantarum Dad-13 in Vacuum and Nonvacuum Packaging at Different Storage Temperatures. *International Journal of Food Science*, 2022. <https://doi.org/10.1155/2022/1663772>
- Jannah, S. R., Rahayu, E. S., Yanti, R., Suroto, D. A., & Wikandari, R. (2022). Study of Viability, Storage Stability, and Shelf Life of Probiotic Instant Coffee Lactiplantibacillus plantarum Subsp. plantarum Dad-13 in Vacuum and Nonvacuum Packaging at Different Storage Temperatures. *International Journal of Food Science*, 2022. <https://doi.org/10.1155/2022/1663772>
- Ji, J., Fitzpatrick, J., Cronin, K., Crean, A., Miao, S. (2016). Assessment of measurement characteristics for rehydration of milkprotein based powders. *Food Hydrocolloids*, 54, 151-161, imiting steps <http://dx.doi.org/10.1016/j.foodhyd.2015.09.027>
- Jocelyne, R. E., Béhiblo, K., & Ernest, A. K. (2020). Comparative Study of Nutritional Value of Wheat, Maize, Sorghum, Millet, and Fonio: Some Cereals Commonly Consumed in Côte d'Ivoire. *European Scientific Journal ESJ*, 16(21). <https://doi.org/10.19044/esj.2020.v16n21p118>.
- Joel, N., Deborah, A., Chris, U. (2013). Production and quality evaluation of cocoa products (plain cocoa powder and chocolate). *American Journal of Food and Nutrition*, 3 (1). 31-38. doi:10.5251/ajfn.2013.3.1.31.38
- Jung, F., Braune, S., Jung, C.H.G., Kruger-Genge, A., Waldeck, P., Petrick, I., Kupper, J. (2022). Lipophilic and hydrophilic compounds from *Arthrospira platensis* and its effect in tissue and blood cells-an overview. *Life*, 12,1497. <https://doi.org/10.3390/life12101497>
- Kamil, R. Z., Murdiati, A., Juffrie, M., & Rahayu, E. S. (2022). Gut Microbiota Modulation of Moderate Undernutrition in Infants through Gummy Lactobacillus plantarum Dad-13 Consumption: A Randomized Double-Blind Controlled Trial. *Nutrients*, 14(5). <https://doi.org/10.3390/nu14051049>
- Kamil, R. Z., Murdiati, A., Juffrie, M., Nakayama, J., & Rahayu, E. S. (2021). Gut microbiota and short-chain fatty acid profile between normal and moderate malnutrition children in Yogyakarta, Indonesia. *Microorganisms*, 9(1), 1–15. <https://doi.org/10.3390/microorganisms9010127>
- Kaur, R., Riar, C.S. (2019). Sensory, rheological and chemical characteristics during storage of set type full fat yoghurt fortified with barley β -glucan. *J Food Sci Technol*, 57(1):41-51. doi: 10.1007/s13197-019-04027-7
- Kemenkes (Kementrian Kesehatan). (2013). Peraturan Menteri Kesehatan Republik Indonesia tentang Pencantuman Informasi Kandungan Gula, Garam, dan Serta Pesan Kesehatan untuk Pangan Olahan dan Pangan Siap Saji (Nomor 30 tahun 2013). Jakarta

- _____. (2015). Laporan hasil riset kesehatan nasional 2015. Jakarta (ID): Badan Penelitian dan Pengembangan Kesehatan. Kementerian Kesehatan RI.
- _____. (2015). Pemenuhan Nutrisi sebagai Upaya Pencegahan Terjadinya Osteoporosis. Diakses dari: https://yankes.kemkes.go.id/view_artikel/1147/pemenuhan-nutrisi-sebagai-upaya-pencegahan-terjadinya-osteoporosis
- Koleoso, O.N., Ehigie, B.O., Akhigbe, K.O. (2014). Color preference amin children in a Nigerian Montessoru school. *Mediterranean Jpurnal of Social Sciences*, 5, 1, 325-332, doi:10.5901/mjss.2014.v5n1p325
- Koswara, S., & Diniari, A. (2015). Peningkatan Mutu dan Cara Produksi pada Industri Minuman Jahe Merah Instan di Desa Benteng, Ciampea, Bogor (Quality Improvement and Manufacturing Practices for Instant Red Ginger Beverage Industry in Benteng Village, Ciampea, Bogor). *Agrokreatif*, 1(2).
- Koyande A.K., Chew, K.W., Rambabu, K., Tao, Y., Chu, D., Show, P. (2019). Microalgae: A potential alternative to health supplementation for humans. *Food Science and Human Wellness*, 8, 16-24. <https://doi.org/10.1016/j.fshw.2019.03.001>
- Kusnandar, F., Suryani, S., & Budijanto, S. (2020). Karakteristik Fungsional, Fisik dan Sensori Sereal Sarapan Jagung yang Disubstitusi Bekatul. *Jurnal Aplikasi Teknologi Pangan*, 9(3), 108–117. <https://doi.org/10.17728/jatp.7517>
- Kyaw, Z.Y., Yu S.Y., Cheow C.S., Dzulkifly M.H. (2001). The effect of pressure cooking on the microstructure and expansion of fish crackers (keropak). *Journal of Food Quality*, 24(3), 181–194. <https://doi.org/10.1111/j.1745-4557.2001.tb00601>.
- Labuza, T. P., & Hyman, C. R. (1998). Moisture migration ad control in multi-domain foods. *Trends in Food Science and Technology*, 9, 47-55.
- Laureati, M., Sandvik, P., L. Almli, V., Sandell, M., Zeinstra, G. G., Methven, L., Wallner, M., Jilani, H., Alfaro, B., & Proserpio, C. (2020). Individual differences in texture preferences among European children: Development and validation of the Child Food Texture Preference Questionnaire (CFTPQ). *Food Quality and Preference*, 80, 103828. [10.1016/j.foodqual.2019.103828](https://doi.org/10.1016/j.foodqual.2019.103828)
- Lemeshow, S., Hosmer, D. W., Klar, J., & Lwanga, S. K. (1997). *Besar Sampel Dalam Penelitian Kesehatan*. Gadjah Mada University Press.
- Lestari, W.N., Wulandari, Y.W., Widiyanti, Y.A., Nuraini, V. (2021). Perubahan tingkat kesukaan konsumen berdasarkan parameter sensoris pada produk intip yang disimpan dengan perbedaan suhu dan lama penyimpanan. *Jitipari*, 6, , 64-74
- Letras, P., Oliveira, S., Varela, J., Nunes, M. C., & Raymundo, A. (2022). 3D printed gluten-free cereal snack with incorporation of Spirulina (*Arthrospira platensis*) and/or *Chlorella vulgaris*. *Algal Research*, 68. <https://doi.org/10.1016/j.algal.2022.102863>
- Lucas, B. F., de Moraes, M. G., Santos, T. D., & Costa, J. A. V. (2017). Effect of spirulina addition on the physicochemical and structural properties of

- extruded snacks. *Food Science and Technology (Brazil)*, 37(Special Issue), 16–23. <https://doi.org/10.1590/1678-457X.06217>
- Lucas, B.F, Rosa, A.P.C, Carvalho, L., Morais, M., Santos, T.D., Costa, J.A.V. (2019). Snack bars enriched with *Spirulina* for schoolchildren nutrition. *Food Science and Technology*, 1-7, <https://doi.org/10.1590/fst.06719>
- Maturin, L., & Peeler, J. T. (2001). *BAM Chapter 3: Aerobic Plate Count*. FDA.
- Mayasari, R. (2019). Pengaruh Penambahan *Spirulina platensis* dengan Konsentrasi Berbeda terhadap Kualitas Permen Jelly dari Karagenan dan Konjak. (Skripsi). Malang (ID) : Universitas Brawijaya.
- McKevith, B. (2004). Nutritional aspects of cereals. In *Nutrition Bulletin* (Vol. 29, Issue 2, pp. 111–142). Blackwell Publishing Ltd. <https://doi.org/10.1111/j.1467-3010.2004.00418.x>
- Mishra, P., Prasad, M., & Yadav, N. (2017). Development of synbiotic weaning food supplemented with spirulina grown under precise/mild stress conditions. *Food and Feed Research*, 44(2), 101–113. <https://doi.org/10.5937/ffr1702101m>
- Mudgil, D. (2017). The Interaction Between Insoluble and Soluble Fiber. In *Dietary Fiber for the Prevention of Cardiovascular Disease: Fiber's Interaction between Gut Microflora, Sugar Metabolism, Weight Control and Cardiovascular Health* (pp. 35–59). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-805130-6.00003-3>
- Mujiastuti, N.E. (2018). Optimasi Proporsi Sorgum: Kecambah Kacang Tunggak untuk Menghasilkan Produk Breakfast Cereal Rendah Indeks Glikemik (Skripsi). Malang (ID) : Fakultas Teknologi Pertanian, Universitas Brawijaya
- Mursalin, Nizori, A., Rahmayani, I. (2019). Sifat fisiko-kimia kopi seduh instan liberika tunggal Jambi yang diproduksi dengan metode kokristalisasi. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 3 (1), 71-77
- Nakib, D. M. El, Ibrahim, M. M., Mahmoud, N. S., Rahman, E. N. A. El, & Ghaly, A. E. (2019). Incorporation of *Spirulina* (*Athrospira platensis*) in Traditional Egyptian Cookies as a Source of Natural Bioactive Molecules and Functional Ingredients: Preparation and Sensory Evaluation of Nutrition Snack for School Children. *European Journal of Nutrition & Food Safety*, 372–397. <https://doi.org/10.9734/ejnfs/2019/v9i430084>
- Negara, H.P., Lelana, I.Y.B., Ekantari, N. (2014). Pengkayaan β -karoten pada cokelat batang dengan penambahan *Spirulina platensis*. *Jurnal Perikanan*, 1, 17-28.
- Nemukondeni, N., Mbajiorgu, C. A., Hassan, Z. M., Sebola, N. A., Manyelo, T. G., Bodede, O., & Mabelebele, M. (2022). Physical characteristics, nutritional composition and phenolic compounds of some of the sorghum landraces obtained in South Africa. *Food Research*, 6(4), 312–328. [https://doi.org/10.26656/fr.2017.6\(4\).555](https://doi.org/10.26656/fr.2017.6(4).555)
- Nidejovi. (2020). Teknik Budidaya dan Pemanfaatan Mikroalga. [Online] Available at: <http://www.limnologi.lipi.go.id/newsdetail.php?id=1057> [Accessed 20 Januari 2021].

- Nopiani, Y., Ayu, D.F., Rossi, E., Zalfiatri, Y., Nurhajjah, S. (2023). Pengaruh tepung ampas kedelai dalam pembuatan *flakes* ubi jalar merah. *Jurnal Teknologi Pertanian*, 23, 2, 95-104.
- Novidahlia, N., Kusumaningrum, I., Intan Pamela, A., Teknologi Pangan dan Gizi, J., & Ilmu Pangan Halal, F. (2020). Karakteristik fisikokimia dan sensori minuman sereal instan dari sorgum (*Sorgum bicolor*) dan tepung tempe. *Jurnal Agroindustri Halal*, 6 (2), 181-188.
- Nuraenah, N., Deviarini, I. M., Fitriyani, E., Studi, P., Pengolahan, T., Perikanan, H., Kelautan, J. I., Perikanan, D., Pontianak, N., Yani, J. J. A., Laut, B., & Barat, K. (2022). Karakteristik Snack Ekstrusi dengan Penambahan Grit Ikan Gabus (*Channa striata*) Characteristics of Snack Extruded With Grit of Snakehead Fish (*Channa striata*). *Jurnal Galung Tropika*, 11(1), 31–44. <https://doi.org/10.31850/jgt.v11i1.854>
- Nurhidajah, N., Pranata, B., & Yonata, D. (2021). Pemodelan persamaan Arrhenius untuk memprediksi umur simpan penyedap rasa cangkang rajungan *AGROINTEK*, 15(2), 566–573. <https://doi.org/10.21107/agrointek.v15i2.9720>
- Nwaoha, I.E.M., Onweluzo, J.C. (2013). Functional properties of sorghum (*S. bicolor* L.) – pigeonpea (*Cajanus cajan*) flour blends and storage stability of a flaked breakfast formulated from blends. *Pakistan Journal of Nutrition*, 12, (4), 382-397.
- Oktavia, F., Dwi Argo, B., Lutfi. (2014). Hidrolisis Enzimatik Ampas Tebu (Bagasse) Memanfaatkan Enzim Selulase dari Mikrofungi *Trichoderma reesei* dan *Aspergillus niger* Sebagai Katalisator dengan Pretreatment Microwave. In *Jurnal Keteknikan Pertanian Tropis dan Biosistem* (Vol. 2, Issue 3).
- Oliveira, S., Sousa, I., & Raymundo, A. (2022). Printability evaluation of *Chlorella vulgaris* snacks. *Algal Research*, 68. <https://doi.org/10.1016/j.algal.2022.102879>
- Oliveira, T. T., Miranda dos Reis, I., Bastos de Souza, M., da Silva Bispo, E., Fonseca Maciel, L., Druzian,veir J. I., Lordelo Guimarães Tavares, P. P., de Oliveira Cerqueira, A., dos Santos Boa Morte, E., Abreu Glória, M. B., Lima Deus, V., & Radomille de Santana, L. R. (2021). Microencapsulation of *Spirulina* sp. LEB-18 and its incorporation in chocolate milk: Properties and functional potential. *LWT*, 148. <https://doi.org/10.1016/j.lwt.2021.111674>
- Onacik-Gür, S., Żbikowska, A., & Majewska, B. (2018). Effect of *Spirulina* (*Spirulina platensis*) addition on textural and quality properties od cookies. In *Ital. J. Food Sci* (Vol. 30).
- Palanivelu, J., Thanigaivel, S., Vickram, S., Dey, N., Mihaylova, D., & Desseva, I. (2022). Probiotics in Functional Foods: Survival Assessment and Approaches for Improved Viability. *Applied Sciences*, 12(1), 455. <https://doi.org/10.3390/app12010455>
- Pirenantyo, P., Limantara, L. (2008). Pigmen *Spirulina* sebagai senyawa antikanker. *Indonesian Jpurnal of Cancer*. 4, 155-163.
- Pontieri, P., Troisi, J., Calcagnile, M., Bean, S. R., Tilley, M., Aramouni, F., Boffa, A., Pepe, G., Campiglia, P., Del Giudice, F., Chessa, A. L., Smolensky, D.,

- Aletta, M., Alifano, P., & Del Giudice, L. (2022). Chemical Composition, Fatty Acid and Mineral Content of Food-Grade White, Red and Black Sorghum Varieties Grown in the Mediterranean Environment. *Foods*, 11(3). <https://doi.org/10.3390/foods11030436>
- Potter, N. N., & Hotchkiss, J. H. (1998). *Food Science* (5th ed.). Aspen Publisher.
- Puspawati, N. N., Nuraida, L., Adawiyah D.R. "Survival of freeze-dried *Lactobacillus rhamnosus* R21 in the presence skim milk as protectant during storage". 4th International Conference in Biosciences and Biotechnology. Bali : Udayana University Press, 2013, 196-202.
- Puspawati, N. N., Nuraida, L., Adawiyah D.R. "Survival of freeze-dried *Lactobacillus rhamnosus* R21 in the presence skim milk as protectant during storage". 4th International Conference in Biosciences and Biotechnology. Bali : Udayana University Press, 2013, 196-202.
- Quann, E. E., & Adams, D. (2013). Impact on milk consumption and nutrient intakes from eliminating flavored milk in elementary schools. *Nutrition Today*, 48(3), 127–134. <https://doi.org/10.1097/nt.0b013e3182941d6a>
- Raczyk, M., Polanowska, K., Kruszewski, B., Grygier, A., & Michałowska, D. (2022). Effect of *Spirulina (Arthrospira platensis)* Supplementation on Physical and Chemical Properties of Semolina (*Triticum durum*) Based Fresh Pasta. *Molecules*, 27(2). <https://doi.org/10.3390/molecules27020355>
- Rahayu, E. S., & Utami, T. (2019). Probiotik dan Gut Microbiota. PT Kanisius.
- Rahayu, E. S., Cahyanto, M. N., Sarwoko, M.-A., Haryono, P., Windiarti, L., Sutriyanto, J., Kandarina, I., Nurfiani, S., Zulaichah, E., & Utami, T. (2016). Effects of consumption of fermented milk containing indigenous probiotic *Lactobacillus plantarum* Dad-13 on the fecal microbiota of healthy Indonesian volunteers. *International Journal of Probiotics and Prebiotics*, 11(2), 91–98. www.newcenturyhealthpublishers.com.
- Rahayu, E. S., Rusdan, I. H., Athennia, A., Kamil, R. Z., Pramesi, P. C., Marsono, Y., Utami, T., & Widada, J. (2019). Safety Assessment of Indigenous Probiotic Strain *Lactobacillus plantarum* Dad-13 Isolated from Dadih Using Sprague Dawley Rats as a Model . American Journal of Pharmacology and Toxicology, 14(1), 38–47. <https://doi.org/10.3844/ajptsp.2019.38.47>.
- Rahayuning, D. (2004). Formulasi *Flakes Triple Mixed* Ubi Jalar-Kecambah Kedelai-*Wheat Germ* sebagai Produk Sarapan Fungsional untuk Anak-anak (Skripsi). Bogor (ID) : Fakultas Teknologi Pertanian, Institut Pertanian Bogor
- Rahmadani, A. (2022) Substitusi Tepung Terigu dengan Tepung Sorgum (*Sorghum bicolor* (L.) Moench) terhadap Karakteristik Mutu Roti Manis Ubi Jalar Ungu (*Ippomea batatas* L. Poiret) (Skripsi). Padang (ID) : Universitas Andalas
- Rehal, J., Sharma, S., & Nagi, H. (2012). Breakfast Cereals-An Overview Breakfast Cereals-An Overview Breakfast Cereals-An Overview. <https://www.researchgate.net/publication/335083051>
- Rewthong, O., Soponronnarit, S., Taechapairoj, C., Tungtrakul, P., & Prachayawarakorn, S. (2011). Effects of cooking, drying and pretreatment methods on texture and starch digestibility of instant rice. *Journal of Food*

- Engineering*, 103(3), 258–264.
<https://doi.org/10.1016/j.jfoodeng.2010.10.022>
- Riskesdas (Riset Kesehatan Dasar). (2018). Badan Penelitian dan Pengembangan Kesehatan, Kementerian Kesehatan Republik Indonesia.
- Roberts, M., Tolar-Peterson, T., Reynolds, A., Wall, C., Reeder, N., & Rico Mendez, G. (2022). The Effects of Nutritional Interventions on the Cognitive Development of Preschool-Age Children: A Systematic Review. In *Nutrients* (Vol. 14, Issue 3). MDPI. <https://doi.org/10.3390/nu14030532>
- Saharan, V., & Jood., S. (2017). Nutritional Composition of *Spirulina platensis* powder and its Acceptability in Food Products. *International Journal of Advanced Research*, 5(6), 2295–2300.
<https://doi.org/10.21474/IJAR01/4671>
- Şahin, O. I. (2019). Effect of Spirulina Biomass Fortification for Biscuits and Chocolates. *Turkish Journal of Agriculture - Food Science and Technology*, 7(4), 583–587. <https://doi.org/10.24925/turjaf.v7i4.583-587.2204>
- Salmeán, G.G., Fabila-Castillo, L., & Chamorro-Cevallos, G. (2015). Nutritional and toxicological aspects of Spirulina (Arthrospira). *Nutricion Hospitalaria*, 32(1), 34–40. <https://doi.org/10.3305/nh.2015.32.1.9001>
- Santivarangkna, C., Aschenbrenner, M., Kulozik, U., & Foerst, P. (2011). Role of Glassy State on Stabilities of Freeze-Dried Probiotics. *Journal of Food Science*, 76(8), R152–R156. <https://doi.org/10.1111/j.1750-3841.2011.02347.x>
- Santoso, E. B., Basito, I., Si, M., Sc, M., Teknologi, J., Pertanian, H., & Pertanian, F. (2013). Pengaruh penambahan berbagai jenis dan konsentrasi susu terhadap sifat sensoris dan sifat fisikokimia puree labu kuning (*Cucurbita moschata*) *Jurnal Teknosains Pangan*, 2(3). www.ilmupangan.fp.uns.ac.id
- Sari, M., Sitoayu, L., Gifari, N., Nuzrina, R., Arjuna Utara Nomor, J., Jeruk, K., Barat, J., & Jakarta, D. (2020). Analysis of Energy Intake, Macronutrient, Vitamin C, Iron, Zinc and BMI/A Based Cognitive Levels in Grade 5 Student at SD Duri Kepa 13 Pagi West Jakarta. <https://doi.org/10.22435/mgmi.v12i1.2810>
- Sarwar. (2013). The importance of cereals (Poaceae: Gramineae) nutrition in human health: A review. *Journal of Cereals and Oilseeds*, 4(3), 32–35. <https://doi.org/10.5897/jco12.02>
- Sedjati, S., Yudiati, E., Suryono. (2012). Profil pigmen polar dan non polar mikroalga laut *Spirulina* sp. dan potensinya sebagai pewarna alami. *Ilmu Kelautan*, 17 (3), 176–181.
- Setyani, Z. C., Widyaningsih, T. D., & Ali, D. Y. (2022). Pengaruh suhu dan lama penyimpanan terhadap karakteristik fisik dan kimia susu bubuk edamame. *Jurnal Teknologi Pangan*, 16(2), 18–30.
- Sholitan, N. W. (2017). *Proses Produksi Sereal Flakes Sorgum sebagai Substitusi Tepung Terigu*. Universitas Sebelas Maret.
- Shehata, A.E., El-Magdoub, M.N.I., Kamal, T.M., Mohamed, H.A. (2008). Enzymatic preparation of low-phenylalanine formula derived from skim milk hydrolysate for phenyl ketonuric patients. *Egypt J. Med. Hum. Genet.* 9, 1, 51–69.

- Siahbalaei, R., Kavooosi, G., Noroozi, M. (2021). Protein nutritional quality, amino acid profile, anti-amylase and anti-glucosidase properties of microalgae: Inhibition and mechanisms of action through in vitro and in silico studies. *Food Science and Technology*, 150, <https://doi.org/10.1016/j.lwt.2021.112023>
- Singh, P., Singh, R., Jha, A., Rasane, P., & Gautam, A. K. (2015). Optimization of a process for high fibre and high protein biscuit. *Journal of Food Science and Technology*, 52(3), 1394–1403. <https://doi.org/10.1007/s13197-013-1139-z>
- Suarni, S. (2016). Peranan Sifat Fisikokimia Sorgum dalam Diversifikasi Pangan dan Industri serta Prospek Pengembangannya. *Jurnal Penelitian Dan Pengembangan Pertanian*, 35(3), 99. <https://doi.org/10.21082/jp3.v35n3.2016.p99-110>
- Suarni. (2004). Evaluasi Sifat Fisik dan Kandungan Kimia Biji Sorgum setelah Penyosohan. *Jurnal Stigma*, 12(1), 88–91.
- Subagio, H., & Aqil, M. (2013). Pengembangan Produksi Sorgum di Indonesia. *Seminar Nasional Inovasi Dan Teknologi Pertanian*, 199–214.
- Sumaryati, B.T., Utami, T., Suparmo. (2009). Pengaruh infeksi *Escherichia coli* dan pemberian *Lactobaacillus plantarum* Dad-13 terhadap microbiota feses tikus wistar. *Agrotech*, 29, 4, 165-170.
- Supriyadi, D. (2012). *Pengaruh Rasio Amilosa-Amilopektin dan Kadar Air terhadap Kerenyahan dan Kekerasan Model Produk Gorengan (Tesis)*. [Tesis]. Institut Pertanian Bogor.
- Susila, B. A. (2005). Keunggulan mutu gizi dan sifat fungsional sorgum. Prosiding Seminar Nasional Teknologi Inovatif Pascapenelitian untuk Pengembangan Industri Berbasis Pertanian.
- Swaninda, A., Safitri D. A., Septriana. (2019). Pengaruh penyuluhan gizi tentang sarapan pagi melalui permainan ular tangga terhadap asupan zat gizi makro (energi, protein, lemak, dan karbohidrat) pada siswa kelas V di SD Negeri Bhayangkara, Yogyakarta. *Seminar Nasional UNRIYO*.
- Swanson, D., Block, R., & Mousa, S. A. (2012). Omega-3 fatty acids EPA and DHA: Health benefits throughout life. In *Advances in Nutrition* (Vol. 3, Issue 1, pp. 1–7). <https://doi.org/10.3945/an.111.000893>
- Syafutri M.I., Pratama, F., Saputra, D. (2006). Sifat fisik dan kimia buah mangga (*Mangifera indica* L.) selama penyimpanan dengan berbagai metode pengemasan. *Jurnal Teknologi dan Industri Pangan*, 17 (1): 1-11.
- Tamime, A.Y. (2009). Dried milk products. Dairy powders and concentrated milk products. Blackwell Pub. Ltd. Oxford. Hal 231–245
- Tang, G., & Suter, P. M. (2011). Vitamin A, nutrition, and health values of Algae: Spirulina, chlorella, and dunaliella. *Journal of Pharmacy and Nutrition Sciences*, 1(2), 111–118. <https://doi.org/10.6000/1927-5951.2011.01.02.04>
- Tang, G., Suter, P.M. (2011). Vitamin A, nutrition, and health values of algae : *Spirulina, Chlorella, Dunaliella*. *Journal of Pharmacy and Nutrition Sciences*, 1, 111-118.
- Tiefenbacher, F. K. (2017). Technology of main ingredients-water and flours. Wafer and Waffle (Chapter 2).

- Merril, A.L., Watt, B.K. (1955). Energy Value of Foods Basis and Derivation. Agriculture handbook no. 74. United States Department of Agriculture. <https://www.ars.usda.gov/arsuserfiles/80400535/data/classics/usda%20handbook%2074.pdf>
- United State Department of Agriculture. (2011, October 4). Wheat flour, whole-grain, soft wheat
- Vissotto, F.Z., Jorge, L.C., Makita, G.T., Rodrigues, M.I., Menegalli, F.C. (2010). Influence of the process parameters and sugar granulometry on cocoa beverage powder steam agglomeration. *Journal of Food Engineering*, 97, 283-291, doi:10.1016/j.jfoodeng.2009.10.013
- Vivek, K., Mishra, S., Pradhan, R.C., Nagarajan, M., Kumar, P.K., Singh, S.S., Manvi, D., Gowda, N.N. (2023). A comprehensive reviews on microencapsulation of probiotics : technology, carriers, and current trends. *Applied Food Research*, 3, 1, 1-16, <https://doi.org/10.1016/j.afres.2022.100248>
- Wang, J., Ji, H. (2019). Influence of probiotics on dietary protein digestion and utilization in the Gastrointestinal tract. *Current Protein and Peptide Science*, 20 (2), 125-131. doi : 10.2174/1389203719666180517100339
- Widyastuti, Y., & Febrisiantosa, A. (2013). Milk and Different Types of Milk Products. In *Advances in Food Science and Nutrition* (pp. 49–68). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118865606.ch3>
- Wijanarti, S., Ambarwati, G., Sabarisman, I. (2019). Shelf life determination of pegagan (*Centella asiatica*) chips using accelerated shelf-life testing (ASLT) method. *Agroindustrial Journal*, 6(1), 396-404
- Wijanarti, S., Ambarwati, G., Sabarisman, I. (2019). Shelf life determination of pegagan (*Centella asiatica*) chips using accelerated shelf-life testing (ASLT) method. *Agroindustrial Journal*, 6(1), 396-404
- Winarno. (1997). *Kimia Pangan dan Gizi*. Gramedia Pustaka Utama
- Wu, S., Cronin, K., Fitzpatrick, J., Miao, S. (2021). Updating insights into the rehydration of dairy-based powder and the achievement of functionality. *Critical Reviews in Food Science and Nutrition*. DOI: 10.1080/10408398.2021.1904203
- Xiong, Y., Zhang, P., Warner, R.D., Fang, Z. (2019). Sorghum grain: from genotype, nutrition, and phenolic profile to its health benefits and food applications. *Comprehensive Reviews in Food Science and Food Safety*, 18, 2025-2046, doi: 10.1111/1541-4337.12506
- Yasmin dan Mandanijah. (2010). Perilaku penjaja pangan jajanan anak sekolah terkait gizi dan keamanan pangan di Jakarta dan Sukabumi. *Jurnal Gizi Pangan*, 5, 148-157, doi: 10.25182/jgp.2010.5.3.148-157
- Yulianti, I.D., Walanda, D.K., Said, I. (2015). Analisis kalium, kalsium, dan natrium dalam buah merah asal Kabupaten Poso sebagai alternatif peluruh batu ginjal. *J. Akad Kim*, 4 (1), 50-55.
- Yusuf, S. (2011). Psikologi Perkembangan Anak dan Remaja. Bandung (ID) : PT. Remaja Rosdakarya
- Ziena, H. M., Rozan, M. A., & Ghozlan, H. E. (2020). Utilization of Spirulina (*Arthrospira Platensis*) in The Production of Functional Biscuits and its

Effect on Product Quality. *Alexandria Science Exchange Journal*, 41(4), 447–453. <https://doi.org/10.21608/asejaiqsae.2020.123819>