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DAFTAR PUSTAKA

Abreu, A. P., R. Martins, and J. Nunes. 2023. Emerging applications of *Chlorella* sp. And Spirulina (*Arthrospira*) sp. Bioengineering: 10(8): 1-34.

Adjali, A. I. Clarot, Z. Chen, E. Marchioni. A. Boudier. 2022. Physicochemical degradation of phycocyanin and means to improve its stability: A short review. Journal of Pharmaceutical Analysis. 12(1): 406-414.

Ain, N., S.A. Sarah, N. Azmi, A. Bujang. S.R.A. Mutalib. 2023. Response surface methodology (RSM) identifies the lowest amount of chickenplasma protein (CPP) in surimi-based products with optimum protein solubility,cohesiveness, and whiteness. Journal of Food. 21(1): 646-655.

AlFadhly, N. K. Z., N. Alhelfi, A.B. Altemimi, D.K. Verma, F. Cacciola, and A. Narayanankutty. 2022. Trends and technological advancements in the possible food applications of spirulina and their health benefits: a review. Molecules. 27(17): 1-40.

Amdoun, R., L. Khelifi, M. Khelifi-Slaoui, S. Amroune, M. Asch, C. Assaf-Ducrocq, E. Gontier. 2018. The desirability optimization methodology; a tool to predict two antagonist responses in biotechnological systems: case of biomass growth and hyoscyamine content in elicited *datura starmonium* hairy roots. Iranian Journal of Biotechnology. 16(1): 11-19.

Andra Farm. 2019. Tabel Komposisi Pangan Indonesia (TKPI) 2019. https://www.andrafarm.com/ daftar-tkpi. Diakses tanggal 25 Juni 2026.

Anugriani, I., A. Salam, S. Amir, N. Jafar, Nurzakiah. 2022. Daya terima *cookies* substitusi tepung jewawut dan bekatul sebagai sumber energi protein. Jurnal Gizi Masyarakat Indonesia. 11(2): 74-164.

Argessa, G.D. 2025. Development and nutritional optimization of a healthy snack bar for children using locally available ingredients. Science Frontiers. 6(3): 34-56.

Arsenault, J.E., & K.H. Brown. 2017. Effects of protein or amino-acid supplementation on the physical growth of young children in low-income countries. Nutrition Reviews. 75(9): 699-717.

Arum, R. H., R. Syamsuri, W. Dewayani, Suryani, and E. Basri. 2021. Nutritional content and organoleptic properties of bread made from modified cornflour. IOP Conference Series: Earth and Environmental Science. 807(2): 1-7.

Asikin, A.N., I. Kusumaningrum, T. Hidayat. 2024. Chemical characteristics of butter cookies with knife-fish (*Chitalla* sp.) bone flour addition as a healthy snack of high calcium. Food Research. 8(2): 78-83.

Atukuri, J., B.B. Odong, J.H. Muyonga. 2019. Multi-response optimization of extrusion conditions of grain amaranth flour by response surface methodology. Food Science and Nutrition. 1(1): 4147-4160.

UNIVERSITAS
GADJAH MADA
Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Babashpour-Asl, M. & G. Eghlima. 2025. Detection of proximate, phytochemical compositions, phycocyanin andantioxidant activity of *Arthrospira platensis* (Spirulina). Applied Phycology. 6(1): 178-189.

Badan Pangan Nasional. 2026. Kebutuhan Terpenuhi Hingga Surplus, Indonesia Swasembada Jagung 2025. https://share.google/wP89O7pbuEC1BlR9j. Diakses pada tanggal 15 Juni 2026.

Badan Pengawas Obat dan Makanan (BPOM). 2019. Peraturan Badan Pengawas Obat dan Makanan Nomor 13 Tahun 2019 tentang Batas Maksimal Cemaran Mikroba dan Kimia dalam Pangan Olahan. Jakarta: Badan Pengawas Obat dan Makanan Republik Indonesia.

Badan Pengawas Obat dan Makanan (BPOM). 2019. Peraturan Badan Pengawas Obat dan Makanan Nomor 34 Tahun 2019 tentang Kategori Pangan. Jakarta: Badan Pengawas Obat dan Makanan Republik Indonesia.

Badan Standardisasi Nasional. 2005. Makanan Pendamping Air Susu Ibu (MP-ASI) - Bagian 2: Biskuit: SNI 01-7111.2-2005. Jakarta: Badan Standardisasi Nasional.

Badan Standardisasi Nasional. 2011. Biskuit: SNI 2973:2011. Jakarta: Badan Standardisasi Nasional.

Baker, T.M., P. Lu, J.A. Parrella, H.R. Leggette. 2022. Consumer acceptance toward functional foods: a scoping review. Enviromental Research and Public Health. 19(3): 1-40.

Begum, N., F. Qi, F. Yang, Q.U. Khan, Faizan, Q. Fu, J. Li, X. Wang, X. Wang, J. Wang, R. Li, D. Liu, and W. Zhang. 2024. Nutritional composition and functional properties of *A. platensis*-derived peptides: a green and sustainable protein-rich supplement. Processes, 12(11): 1-27.

Bilgiçli, N., M. Kara, A. Elgün. N. Ertas, M.K. Demir. 2006. Determination of technologic and sensory properties of cookies preparedwith corn flour. Journal of Food Agriculture & Environment. 4(2): 109-111.

Blanch, G.P., & M.L.R. Castilo. 2021. Effect of baking temperature on the phenolic content and antioxidant activity of black corn (*Zea mays* L.) bread. Foods. 10(1): 1-8.

Bolanho, B.C., M.B. Egea, A.L.M. Jacome, I. Campos, J.C.M.D. Carvalho, E.D.G. Danesi. 2014. Antioxidant and nutritional potential of cookies enriched with Spirulina platensis and sources of fibre. Journal of Food and Nutrition Research. 53(2): 171-179.

Bopape, M., L.S. Taillie, R. Swart. 2022. Perceived effect of warning label on parental food purchasing and drivers of food selection among South African parents-An exploratory study. Frontier Public Health. 10(1): 1-12.

Çelekli, A., B. Özbal, H. Bozkurt. 2024. Challenges in functional food products with the incorporation of some microalgae. Foods. 13(5): 1-24.

UNIVERSITAS
GADJAH MADA
Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Chang, M., & K. Liu. 2024. *Arthrospira platensis* as future food: A review on functional ingredients, bioactivities and application in the food industry. International Journal of Food Science & Technology. 59(3): 1197–1212.

Cheevadhanarak, S., K. Paithoonrangsarid, P. Prommeenate, W. Kaewngam, A. Musigkain, S. Tragoonrung, S. Tabata, T. Kaneko, J. Chaijaruwanich, D. Sangsrakru, S. Tangphatsornruang, J. Chanprasert, S. Tongsima, K. Kusonmano, W. Jeamton, S. Dulsawat, A. Klanchui, T. Vorapreeda, V. Chumchua, C. Khannapho, C. Thammarongtham, V. Plengvidhya, S. Subudhi, A. Hongsthong, M. Ruengjitchatchawalya, A. Meechai, J. Senachak, M. Tanticharoen. 2012. Draft genome sequence of *Arthrospira platensis* C1 (PCC9438). Standards in Genomic Sciences. 6(1): 43-53.

Das, M., & A. Das. 2024. A comprehensive review on strategies for replacing saturated fats in bakery products. Discover. 4(156): 1-11.

Demak, P.U.K., E. Suryanto, J. Pontoh. 2017. Efek pemanggangan terhadap aktivitas antioksidan dan kandungan fenolik dari jagung manado kuning. Chemistry Progress. 10(1): 19-23.

Dessalles, D. 2024. The essential role of pediatric nutrition in childhood growth and development. Maternal and Pediatric Nutrition. 9(4): 1-2.

Dewi, N.K.K.S., I.W. Sudiarta, I.N. Rudianta. 2022. Substitution of corn flour and additional palm sugar to cookies characteristics. Sustainable Environment Agricultural Science. 6(1): 42-52.

Dhal, S., A. Anis, H.M. Shaikh, A. Alhamidi, K. Pal. 2023. Effect of mixing time on properties of whole wheat flour-based cookie doughs and cookies. Foods. 12(5): 1-24.

Diniyyah, S.R., & T.S. Nindya. 2017. Asupan energi, protein dan lemak dengan kejadian gizi kurang pada balita usia 24-59 bulan di desa suci, Gresik. Amerta Nutrition, 1(4): 341–350.

Diniyah, N., S. Subagio, R.N.L. Sari, N. Yuwana. 2018. Sifat fisikokimia, dan fungsional pati dari mocaf (*modified cassava flour*) varietas Kaspro dan Cimanggu. 15(2): 80-90.

Donato, N.R. 2019. Production of Cookies Enriched With *Spirulina platensis* Biomass. Journal of Agriculture Studies. 7(4): 323-342.

Dulsawat, A. Klanchui, T. Vorapreeda, V. Chumchua, C. Khannapho, C. Thammarongtham, V. Plengvidhya, S. Subudhi, A. Hongsthong, M. Ruengjitchatchawalya, A. Meechai, J. Senachak, M. Tanticharoen. 2012. Draft genome sequence of *Arthrospira platensis* C1 (PCC9438). Standards in Genomic Sciences. 6(1): 43–53.

Elmaghriba, A. W., M.D. Candraningsih, and N. Ekantari. 2023. Cinnamon and amylum mucilage alter the physicochemical, sensory, and antioxidant activity of *Arthrospira platensis* granules. IOP Conference Series: Earth and Environmental Science. 1289(1): 1-15.

UNIVERSITAS
GADJAH MADA
Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Erinc, H., B. Mert, A. Tekin. 2018. Different sized wheat bran fibers as fat mimetic in biscuits: its effects on dough rheology and biscuit quality. Journal Food Science Technology. 55(10): 3960-3970.

Farris, S., & L. Piergiovanni. 2009. Optimization of manufacture of almond paste cookies using response surface methodology. Journal of Food Process Engineering. 32(1): 64–87.

Firmansyah, D. D. 2023. Pengaruh fortifikasi granula *Arthrospira platensis* pada *snack* bar terhadap karakteristik produk, preferensi, dan minat beli konsumen. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.

Fishbein, M., & I. Ajzen. 1975. Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Addison-Wesley, Reading, MA.

Fiqtinovri, S. M. (2020). Karakteritik Kimia dan Amilograf (*Modified Cassava Flour*) Singkong Gajah (*Manihot utilissima*). Jurnal Agroindustri Halal. 6(1): 049–056.

Fuadah, R.N., K. Amelia, K.F. Hana. 2025. Pengembangan finger food cookies menggunakan ubi jalar sebagai camilan sehat untuk balita. Indonesian Journal of Community Engagement. 2(1): 22-40.

García-Salirrosas, E.E., M. Escobar-Farfán, M. Guerra-Velásquez, I. Veas-González, L. Gómez-Bayona, R. Gallardo-Canales. 2025. Psychological determinants of healthy food purchase intention: an integrative model based on health consciousness. Nutrients. 17(7): 1140.

Gentscheva, G., K. Nikolova, V. Panayotova, K. Peycheva, L. Makedonski, P. Slavov, P. Radusheva, P. Petrova, and I. Yotkovska. 2023. Application of *Arthrospira platensi*s for medicinal purposes and the food industry: a review of the literature. Life. 13(3): 1-15.

Green, M., D.N. Hadihardjono, A.M. Pries, D. Izwardy, E. Zehner, S.L. Huffman. 2019. High proportions of children under 3 years of age consume commercially produced snack foods and sugar-sweetened. Maternal&Child Nutrition. 15(4): 1-14.

Gün, D., A. Çelekli, H. Bozkurt, S. Kaya. Optimization of biscuit enrichment with the incorporation of *Arthrospira platensis*: nutritional and sensory approach. Journal of Applied Phycology. 34(1): 1555-1563.

Hair, J.F., J.J. Risher, M. Sarstedt, C.M. Ringle. 2019. When to use and how to report the results of PLS-SEM. European Business Review. 31(1): 2-24.

Hair, J.F., G.T.M. Hult, C.M.Ringle, M. Sarstedt, N.P. Danks, S. Ray. 2021. Partial least squares structural equation modeling (pls-sem) using R. gewerbestrasse. Springer International Publishing. Cham, Switzerland.

Hair, J., & A. Alamer. 2022. Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. Research Methods in Appied Linguistic. 1(1): 1-16.

UNIVERSITAS
GADJAH MADA
Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Hilger, J., T. Goerig, P. Weber, B. Hoeft, M. Eggersdorfer, N.C. Carvalho, U. Goldberger, K. Hoffman. 2015. Micronutrient intake in healthy toddlers: a multinational perspective. Nutrients. 7(8): 6938-6955.

Horstmann, S.W., K.M. Lynch, E.K. Arendt. 2017. Starch characteristics linked to gluten-free products. Foods. 6(4): 1-21.

Horvat, D., G. Šimi´c, G. Drezner, A. Lali´c, T. Ledenˇcan, M. Tucak, H. Plavši´c, L. Andri´c, Z. Zduni´c. 2020. Phenolic acid profiles and antioxidant activity of major cereal crops. Antioxidant. 9(1): 1-12.

Ibe, PC., Agu. HO, Ikegwu. TM, Ishiwu. CN, Emembolu. LN. 2025. Effect of dough thickness and baking temperatures on the proximate composition of optimized cookies from wheat-white yam flour using response surface methodology. Applied Food Research. 5(1): 1-18.

Indrianingsih, A. W., V.T. Rosyida, C. Darsih, W. Apriyana, A.C. Iwansyah, Y. Khasanah, A. Kusumaningrum, A. Windarsih, E.R.N. Herawati, D. Muzdalifah, and M.I. Sulistyowaty. 2024. Physicochemical properties, antioxidant activities, β-carotene content, and sensory properties of cookies from pumpkin (*Cucurbita moschata*) and modified cassava flour (*Manihot esculenta*). Bioactive Carbohydrates and Dietary Fibre. 31 (1): 1-8.

Istiqomah, A., S.K. Masmur, R.A. Amali, S. Tiawati. 2024. Peran gizi terhadap pertumbuhan dan perkembangan balita. Jurnal Kesehatan Masyarakat dan Ilmu Gizi. 2(2): 67-74.

Jannat, E., A.A. Arif, M. Hasan, A. Bin, and H.A. Rashid. 2016. Granulation techniques & its updated modules. The Parma Innovation Journal. 5(10): 134-141.

Kang, C., A. Han, B.J. Gu. 2026. Role of starch type in gel-like network formation of extruded meat analogs. Gels. 12(94): 1-20.

Kean, E.G., B.R. Hamaker, M.G. Ferruzzi. 2008. Carotenoid bioaccessibility from whole grain and degermed maize meal products. Journal of Agricultural and Food Chemistry. 56(1): 9918-9926.

Khamidah, A., and S.S. Antarlina. 2022. Corn flour substitution at pastry production. International Conference on Environmental Ecology of Food Security. 1107(1): 012058.

Kidane, S.W.2021. Application of response surface methodology in food process modeling and optimization. Response Surface Methodology in Engineering Science. 1(1): 1-21.

Kurozawa, L.E., K.J. Park, M.D. Hubinger. 2009. Effect of carrier agents on the physicochemical properties of a spray dried chicken meat protein hydrolysate. Journal of Food Engineering. 94(1): 326-333.

Landeng, P.J., E. Suryanto, L.I. Momuat. 2017. Komposisi proksimat dan potensi antioksidan dari biji jagung manado kuning (*Zea mays* L.) Chemistry Progress. 10(1): 33-39.

UNIVERSITAS
GADJAH MADA
Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Leticia, C.G., C.Y. Trisnawati, T.E.W. Widyastuti, I. Srianta, I. Tewfik. 2022. Optimization of physicochemical and organoleptic properties of cookies made of modified cassava flour and mung bean flour. E3S Web of Conferences. 344(1): 04003

Marjanovi´c, B., M. Benkovi´c, T. Jurina, T.S. Cvetni´c, D. Vallinger, J.G. Kljusuri´c, A.J. Tušek. Bioactive compounds from *Spirulina* spp.—nutritional value, extraction, and application in food industry. Separations. 11(1): 1-22.

Marviana, F.E., R. Tsania, F.D. Saud, I. Muflihati, S. Suhendriani, R.M.D. Ujianto. 2022. Komparasi sifat kimia, fisik dan sensoris *cookies* berbahan baku tepung cangkang kerang. Jurnal Sains Boga. 5(2): 77-87.

Methe, P., S. Kawade, M. Oak. 2025. Exploring the texture and quality delight: cookies enhanced with coarse cereals–wheat composite flours. Cereal Research Communications. 53(4): 2545-2556.

Moharam, M.S., M.Y. El-Hawary, S.A. Awad, D.A. Amer. 2025. Development of functional ice cream fortified with spirulina (*Arthrospira platensis*): improvements in nutritional and antioxidant properties. Journal of Sustainable Agricultural and Environmental Science. 4(3): 95-102.

Molz, P., P.F. Czempik, G. Ramaswarny. 2025. Editorial: iron deficiency and excess: diagnosis, management and impact on human health. Frontiers in Nutrition. 12(1): 1-2.

Moradi, y., M. Ghaeni, and H. Hadaegh. 2024. Comparison of the effect of adding *Spirulina platensis* powder on sensory, physical, protein and iron properties of three different industrial products of bread, cake and layered sweets. Iranian Food Science and Technology. 20(1): 153-164.

Mrotek, E., A. Nervar, N.F. Ledo, S. Canziani, M. Bravi. 2024. Innovative solvent-based phycocyanin extraction from *Arthrospira platensis*. Chemical Engineering Transaction. 110(1): 337-342.

Nguyen, N., H.V. Nguyen, P.T. Nguyen, V.T. Tran, H.N. Nguyen, T.M.N. Nguyen, T.K. Cao, T.H. Nguyen. 2020. Some key factors a_ecting consumers' intentions to purchase functional foods: a case study of functional yogurts in vietnam. Foods. 9(24): 1-15.

Nurko, E., & E. Nakilcioğlu. 2025. Optimization of spirulina-enriched vegan cake formulation using response surface methodology. Food Sciences & Nutrition. 13(14): 1-11.

Oktaviani & M.H.W.A. Nugraha. 2025. Physicochemical and organoleptic characteristics of cookies made from mocaf and purple sweet potato flour with the addition of robusta coffee powder. Jurnal Ilmu Pertanian Indonesia. 30(3): 555-567.

Onacik-gür, S., A. Żbikowska, B. Majewska. 2018. Effect of spirulina (*Spirulina platensis*) addition on texturaland quality properties of cookies. Italian Journal of Food Science. 30(1): 1-12.

Özbal, B., A. Çelekli, D. Gün, H. Bozkurt. 2022. Effect of *Arthrospira platensis* incorporation on nutritional and sensory attributes of white chocolate. International Journal of

UNIVERSITAS GADJAH MADA
Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Gastronomy and Food Science. 28(1): 1-8.

Pan, J., K. Wu, D. Huang, S. Sun. 2025. Role of health-consciousness on purchase intention of health and wellness food: the serial mediating effect of attitude and desire. Nutrients. 17(5): 1-21.

Pérez-Carrillo, E., A. Frías-Escobar, K. Gutiérrez-Mendívil, S. Guajardo-Flores, S.O. Serna-Saldívar. 2017. Effect of maize starch substitution on physicochemical and sensory attributes of gluten-free cookies produced from nixtamalized flour. Journal of Food Processing. 2017(1): 1-6.

Pering, I.M.A.A. 2020. Kajian analisis jalur dengan structural equation modeling (sem) smart-pls 3.0. Jurnal Satyagraha. 3(2): 28-48.

Pradana, M.P., M.P Bimantio, R.A. Widyowanti. 2025. Pengaruh metode pengeringan dan penambahan ekstrak daun binahong terhadap karakteristik biskuit. Journal of Enggineering Science. 1(2): 128-140.

Prasetiyo, H., S. Purwaningsih, I. Setyaningsih, M. Nurilmala, U. Uju, and K. Tarman. 2024. Off- odour Identification from Volatile Organic Compounds (VOCs) of Spirulina. BIO Web of Conferences. 92(1): 1-8.

Priatama, A.J.H., R. Arifianti, R.R.M. Dai. 2024. Pengaruh kualitas produk terhadap minat beli pada bakara cafe & kitchen Depok. Jurnal Lentera Bisnis. 13(2): 1270-1284.

Podgórska-Kryszczuk, I. 2024. Effect of Arthrospira platensis (Spirulina) Fortification on Physicochemical, Nutritional, Bioactive, Textural, and Sensory Properties of Vegan Basil Pesto. Nutrients. 16(17): 1-13.

Raharjo, S. 2021. Pengaruh penambahan granula *Arthrospira platensis* dan gula stevia terhadap karakteristik cookies rendah kalori. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.

Raharjo, S., & N. Ekantari. 2023. Physical, chemical and sensory properties of cookies added with *Arthrospira platensis* granules and stevia sugar. IOP Conference Series: Earth and Environmental Science. 1289(1): 1-15.

Rezai, G. P.K. Teng, Z. Mohamed, M.N. Shamsudin. 2012. Functional food knowledge and perceptions among young consumers in Malaysia. International Journal of Economics and Management Engineering. 6(3): 307-312.

Ribardo, C., & T.T Allen. 2003. An alternative desirability function for achieving 'six sigma' quality. Quality And Reliability Engineering Internasional. 227-240.

Rifky, M., K. Dissanayake, D. Maksumova, S. Shosalimova, A. Shokirov, M. Jesfar, K. Zokirov, and M. Samadiy. 2024. Incorporation of barley and corn flour as a functional ingredients in bakery products: Review. E3S Web of Conferences. 537(1): 1-7.

Şahin, O. I. (2020). Functional and sensorial properties of cookies enriched with spirulina and dunaliella biomass. Journal of Food Science and Technology. 57(10): 3639–3646.

UNIVERSITAS
GADJAH MADA
Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Saraswati, I. G. A. A. I. 2019. Pengaruh Penambahan Gula Stevia Komersial pada Oatmeal Cookies yang Difortifikasi Spirulina platensis. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.

Scheuer, P.M., Mattioni, B., Santos, I.R., Di Luccio, M., Zibetti, A.W., Miranda, M.Z., Francisco, A. 2016. Response surface methodology assessment of the effect of whole wheat flour and fat replacer levels on bread quality. International Food Research Journal. 23(05): 2079-2087.

Septyadi, M.A.K., M Salamah, S. Nujiyatillah. 2022. *Literature review* keputusan pembelian dan minat beli konsumen pada smartphone: harga dan promosi. 3(1): 301-313.

Seyidoglu N., S. Inan, and C. Aydin. 2017. A Prominent Superfood: *Spirulina platensis*. Superfood and Functional Food—The Development of Superfoods and Their Roles as Medicine. InTech: London, UK.

Shanmugam, S. 2015. Granulation techniques and technologies: recent progresses. BioImpacts. 5(1): 55-63.

Silva, T.J., D. Barrera-Arellano, A.P.B. Ribeiro. 2021. Margarines: Historical approach, technological aspects, nutritional profile, and global trends. Food Research International. 147(1): 1-12.

Silva-Paz, R.J., R.R. Silva-Lizárraga, N.C. Jamanca-Gonzales, A. Eccoña-Sota. 2024. Evaluation of the physicochemical and sensory characteristics of gluten-free cookies. Frontiers in Nutrition. 10(1304117): 1-8.

Singh, P., R. Singh, A. Jha, P. Rasane, A.K. Gautam. 2015. Optimization of a process for high fibre and high protein biscuit. Journal Food Science Technology. 52(3): 1394-1403.

Spinola, M.P., A.R. Mendes, J.A.M. Prates. 2024. Chemical composition, bioactivities, and applications of spirulina (*limnospira platensis*) in food, feed, and medicine. Food. 13(22): 1-17.

Suarni. 2009. Prospek pemanfaatan tepung jagung untuk kue kering (cookies). Jurnal Litbang Pertanian. 28(2): 63-71.

Surmita, S., R. Sekartini, A. Kekalih, D.N. Chandra. 2025. The role of dietary diversity and other factors to stunting among infants and toddlers in West Java, Indonesia. Egyptian Pediatric Association Gazette. 73(71): 1-11.

Suroto, K.S., Z. Fanani, B.A. Nugroho. 2012. Faktor yang mempengaruhi keputusan pembelian susu formula anak (balita) di Kota Malang. Buana Sains. 12(2): 79-84.

Kementrian Kesehatan Republik Indonesia. 2025. Survei Status Gizi Indonesia (SSGI) 2024 dalam Angka. Jakarta: Kementrian Kesehatan Republik Indonesia.

Taşğin, E. 2017. Macronutrients and micronutrients in nutrition. International Journal of Innovative Research and Reviews. 1(1): 10-15.

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Optimasi Konsentrasi Granula Arthrospira platensis dan Tepung Jagung Menggunakan Metode Response Surface Methodology Terhadap Nilai Gizi Cookies Balita serta Minat Beli Konsumen
Ummu Fadillah, Dr. Nurfitri Ekantari, S.Pi., M.P.
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Thomas S.S. 2010. The Role Of Parry Organic Spirulina In Health Management. India: Parry Nutraceuticals, Division of EID Parry (India) Ltd. Chennai, India.

Tilahun, M., E. Berhan, G. Tesfaye. 2023. Determinants of consumers' purchase intention on digital business model platform: evidence from Ethiopia using partial least square structural equation model (pls-sem) technique. Journal of Innovation and Entrepreneurship. 12(50): 1-28.

Tirado-Kulieva, V.A., M. Sánchez-Chero, M. Villegasyarlequé, G.F.V. Aguilar, G. Carrión-Barco. A.G.Y.S. Cruz, J. Sánchez-Chero. 2021. An overview on the use of response surface methodology to model and optimize extraction processes in the food industry. Current Research in Nutrition and Food Science. 9(3): 745-754.

Uddin, A.H., R.S. Khalid, M. Alaama, A.M. Abdualkader, A. Kasmuri, S.A. Abbas. 2016. Comparative study of three digestion methods for elemental analysis in traditional medicine products using atomic absorption spectrometry. Journal of Analytical Science and Technology. 7(6): 1-7.

Wu, H., T. Li, J. Lv, Z. Chen, J. Wu, N. Wang, H. Wu, and W. Xiang. 2021. Growth and biochemical composition characteristics of *Arthrospira platensis* induced by simultaneous nitrogen deficiency and seawater-supplemented medium in an outdoor raceway pond in winter. Foods. 10(12): 1-14.

Yolmeh, M., & S. M. Jafari. 2017. Applications of response surface methodology in the food industry processes. Food and Bioprocess Technology. 10(3): 413–433.

Yuliana, R. Holinesti, N. Tasrif, I. Rahayu, A.N. Hasanah, Helmizar, H. Hidayanti, Y. F. Naserd, and S. Halipah. 2025. Formulation, nutritional profile, and sensory acceptability of cookies incorporating locally sourced ingredients as complementary foods for toddlers: A strategy for stunting prevention. Food Chemistry Advances. 7(1): 1-9.

Zaidi, R., K. Yousaf, H. Janjua, and K. Abbas. 2025. Spirulina as a functional food ingredient: physical and chemical properties of supplemented cookies. Middle East Research Journal of Agriculture and Food Science. 5(02): 12–20.

Zlateva, D., P. Ivanova, R. Chochkov, D. Stefanova. 2020. Effect of *Spirulina platensis* and kelp on the antioxidant activity of wheat bread. Food Technology. 9(3): 636-650.