DAFTAR PUSTAKA

1. de Onis M, Branca F. Childhood stunting: A global perspective. Matern Child Nutr. 2016;12:12–26.
2. World Health Organization. World Health Statistics 2024. 2024.
3. Kementerian Kesehatan RI. Survei Status Gizi Indonesia 2022. 2022.
4. Millward DJ. Nutrition, infection and stunting: The roles of deficiencies of individual nutrients and foods, and of inflammation, as determinants of reduced linear growth of children. Nutr Res Rev. 2017;30(1):50–72.
5. Beal T, Tumilowicz A, Sutrisna A, Izwardy D, Neufeld LM. A review of child stunting determinants in Indonesia. Matern Child Nutr. 2018;14(4):1–10.
6. Laily LA, Indarjo S. Literature Review: Dampak Stunting terhadap Pertumbuhan dan Perkembangan Anak. HIGEIA (Journal Public Heal Res Dev. 2023;7(3):354–64.
7. Rukmawati S, Astutik P, Slamet PR. The Relationship Between Complementary Feeding and Stunting Eventsin 2 to 5 Years of Age. J Qual Public Heal. 2020;4(1):27–32.
8. Paramashanti BA, Benita S. Early introduction of complementary food and childhood stunting were linked among children aged 6-23 months. J Gizi Klin Indones. 2020;17(1):1.
9. World Health Organization. WHO Guideline for complementary feeding of infants and young children 6–23 months of age. 2023. 2023.
10. Fikri AM, Astuti W, Nurhidayati VA, Saliha F, Prameswari P. Protein intake recommendation for stunted children : An-update review. Artículo Orig Nutr Clín Diet Hosp. 2024;44(3):117–23.
11. Shertukde SP, Cahoon DS, Prado B, Cara KC, Chung M. Calcium Intake and Metabolism in Infants and Young Children: A Systematic Review of Balance Studies for Supporting the Development of Calcium Requirements. Adv Nutr. Oktober 2022;13(5):1529–53.
12. Hu X, Tian Z, Li X, Wang S, Pei H, Sun H, et al. Green, Simple, and Effective Process for the Comprehensive Utilization of Shrimp Shell Waste. ACS Omega. 2020;5(30):19227–35.
13. Nirmal NP, Santivarangkna C, Rajput MS, Benjakul S. Trends in shrimp processing waste utilization: An industrial prospective. Trends Food Sci Technol [Internet]. 2020;103(May):20–35.
14. De Gouy LP. The Soup Book: Over 700 Recipes [Internet]. Dover Publications; 2018.
15. Walls H, Pries A, Chotivichien S, Huynh P, Fahmida U, Blankenship J. Health first, convenience second: Caregiver perspectives of commercially produced complementary foods in five Southeast Asian capital cities. Matern Child Nutr. 2023;19(S2).
16. Bassetti E, Zehner E, Mayhew SH, Nasser N, Mulder A, Badham J, et al. Nutrient profiles of commercially produced complementary foods available in Cambodia, Indonesia and the Philippines. Public Health Nutr. 2022;25(10):2720–30.
17. Pries AM, Bassetti E, Badham J, Baker P, Blankenship J, Dunford EK, et al. Ultraprocessing and presence of additives in commercially produced complementary foods in seven Southeast Asian countries: a cross-sectional

study. Am J Clin Nutr [Internet]. 2024;120(2):310–9.
18. Liu Y, Zhang Z, Hu L. High efficient freeze-drying technology in food industry. Crit Rev Food Sci Nutr [Internet]. 2022;62(12):3370–88.
19. Nowak D, Jakubczyk E. The Freeze-Drying of Foods — The Characteristic of the Process Course and the Effect of Its Parameters on. Foods. 2020;9(1488):1–27.
20. Gaidhani KA, Harwalkar M, Bhambere D, Nirgude PS. Lyophilization/freeze drying–a review. World J Pharm Res. 2015;4(8):516–43.
21. Kementerian Kesehatan RI. Peraturan Menteri Kesehatan Republik Indonesia Nomor 2 Tahun 2020 tentang Standar Antropometri Anak. Jakarta; 2020.
22. World Health Organization. Malnutrition [Internet].
23. Tahangnacca M, Amiruddin R, Ansariadi, Syam A. Model of stunting determinants: A systematic review. Enfermería Clínica [Internet]. 2020;30:241–5.
24. Saleh A, Syahrul S, Hadju V, Andriani I, Restika I. Role of Maternal in Preventing Stunting: a Systematic Review. Gac Sanit [Internet]. 2021;35:S576–82.
25. Manggala AK, Kenwa KWM, Kenwa MML, Sakti AAGDPJ, Sawitri AAS. Risk factors of stunting in children aged 24-59 months. Paediatr Indones. 2018;58(5):205–12.
26. Bahagia Febriani AD, Daud D, Rauf S, Nawing HD, Ganda IJ, Salekede SB, et al. Risk factors and nutritional profiles associated with stunting in children. Pediatr Gastroenterol Hepatol Nutr. 2020;23(5):457–63.
27. Rusliani N, Hidayani WR, Sulistyoningsih H. Literature Review: Faktor-Faktor yang Berhubungan dengan Kejadian Stunting pada Balita. Bul Ilmu Kebidanan dan Keperawatan. 2022;1(01):32–40.
28. Anwar S, Winarti E, Sunardi S. Systematic Review Faktor Risiko, Penyebab Dan Dampak Stunting Pada Anak. J Ilmu Kesehat. 2022;11(1):88.
29. Pratiwi R, Sari RS, Ratnasari F. Dampak status gizi pendek (stunting) terhadap prestasi belajar: A literature review. J Ilm Ilmu Keperawatan. 2021;12(2):10–23.
30. Ngo J, Ortiz-Andrellucchi A, Serra-Majem L. Malnutrition: Concept, Classification and Magnitude [Internet]. 1 ed. Encyclopedia of Food and Health. Elsevier Ltd.; 2015. 610–630 hal.
31. Nasriyah N, Ediyono S. Dampak kurangnya nutrisi pada ibu hamil terhadap risiko stunting pada bayi yang dilahirkan. J Ilmu Keperawatan dan Kebidanan. 2023;14(1):161–70.
32. Wulandari FC. Hubungan Status Gizi Ibu Saat Hamil Dengan Kejadian Stunting Pada Balita Usia 0-24 Bulan Di Puskesmas Kaligesing Purworejo. J Komun Kesehat (Edisi 23). 2021;12(02).
33. Fitriani H, Setya R A, Nurdiana P. Risk factors of maternal nutrition status during pregnancy to stunting in toddlers Aged 12–59 Months. 2020;
34. Shah R, Sabir S, Alhawaj AF. Physiology, breast milk. In: StatPearls [Internet]. Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia: StatPearls Publishing; 2024.
35. Azizah AM, Dewi YLR, Murti B. Meta-analysis: breastfeeding and its correlation with stunting. J Matern Child Heal. 2022;7(3 PP-Surakarta):334–345.
36. Umiyah A, Hamidiyah A. Exclusive Breastfeeding With Stunting. Str J Ilm Kesehat [Internet]. 1 November 2020;9(2 SE-Articles):471–7.

37. Barir B, Murti B, Pamungkasari EP. The Associations between Exclusive Breastfeeding, Complementary Feeding, and the Risk of Stunting in Children Under Five Years of Age: A Path Analysis Evidence from Jombang East Java. J Matern Child Heal. 2019;4(6):486–98.
38. Virginia A, Maryanto S, Anugrah RM. Hubungan Pemberian Mp-Asi Dan Usia Pertama Pemberian Mp-Asi Dengan Kejadian Stunting Pada Anak Usia 6-24 Bulan Di Desa Leyangan Kecamatan Ungaran Timur Kabupaten Semarang. J Gizi Dan Kesehat. 2020;12(27):29–39.
39. Triana NY, Haniyah S. Relationship of Exclusive Breastfeeding, Complementary Feeding and Nutritional Intake with Stunting in Children in Karanglewas Health Center. 2020;20(Icch 2019):74–8.
40. World Health Organization. Complementary feeding [Internet]. [dikutip 19 September 2024].
41. Prakoso AD, Azmiardi A, Febriani GA, Anulus A. Studi Case Control : Pemantauan Pertumbuhan, Pemberian Makan Dan Hubungannya Dengan Stunting Pada Anak Panti Asuhan Di Kota Semarang. J Ilmu Kesehat Bhakti Husada Heal Sci J. 2021;12(2):160–72.
42. Badriyah L, Syafiq A. The Association Between Sanitation, Hygiene, and Stunting in Children Under Two-Years (An Analysis of Indonesia's Basic Health Research, 2013). Makara J Heal Res. 2017;21(2).
43. Devianto A, Dewi EU, Yustiningsih D. Hubungan Tingkat Pengetahuan Ibu Tentang Stunting Dengan Angka Kejadian Stunting di Desa Sanggrahan Prambanan Klaten. J Nurs Res Publ Media. 2022;1(2):81–8.
44. Masitah R. Pengaruh pendidikan gizi terhadap pengetahuan ibu berkaitan dengan stunting, ASI ekslusif dan MPASI. J Innov Res Knowl. 2022;2(3):673–8.
45. Kementerian Kesehatan RI. Buku Resep Makanan Lokal Bayi, Balita dan Ibu Hamil. Jakarta; 2023. 1–52 hal.
46. LaPelusa A, Kaushik R. Physiology, proteins. In: StatPearls [Internet]. Maulana Azad Medical College: StatPearls Publishing; 2024.
47. Fikawati S, Syafiq A, Ririyanti RK, Gemily SC. Energy and protein intakes are associated with stunting among preschool children in Central Jakarta, Indonesia: a case-control study. Malays J Nutr. 2021;27(1):81–91.
48. Kementerian Kesehatan RI. Peraturan Kesehatan Republik Indonesia Nomor 28 Tahun 2019 tentang Angka Kecukupan Gizi yang Dianjurkan untuk Masyarakat Indonesia. 2019.
49. Yu E, Sharma S. Physiology, calcium. In: StatPearls [Internet]. Mery Fitzgerald Hospital: StatPearls Publishing; 2024.
50. Jayusman DDK, Aritonang EY, Lubis Z. Comparison of Calcium and Iron Intake of Stunting and Non-Stunting Toddlers in Langkat Regency. Int J Res Rev. 2021;8(January):1.
51. Lestari W, Angkat AH. Micronutrients intake and exclusive breastfeeding as a risk factor for stunting among children aged 13–36 months old in Simpang Kiri, Subulussalam. In: Proceeding–Sari Mutiara Indonesia International Conference on Health. 2018. hal. 78–83.
52. Sebastian B, Yoga C, Viola I, Maulidina M, Fairruz ML, Zein R. Utilization of Shrimp Shells for Food. Glob Sci J [Internet]. 2022;10(11):743–8.
53. Singh SM, Siddhnath BR, Aziz A, Verma N, Chriwatkar BB. Shrimp waste powder–Potential as protein supplement. Int J Pure Appl Biosci. 2018;6(6):401–6.

54. Badan Standardisasi Nasional. SNI 01-4967-1999 Sup Krim Instan. 1999. hal. 8.
55. Moore JG. Drum dryers. In: Handbook of industrial drying. CRC Press; 2020. hal. 249–62.
56. Effendi SPU. Perbedaan Karakteristik Daya Terima serta Kandungan Gizi Sup Krim Segar dan Instan Berbasis Labu Kuning dan Wortel. Inst Pertan Bogor. 2015;
57. Haque MA, Adhikari B. Drying and denaturation of proteins in spray drying process. Handb Ind Dry. 2015;33(10):971–85.
58. Satriya MBB. Pengaruh Suhu Pengeringan Spray Dryer Dan Konsentrasi Gum Arab Terhadap Kualitas Serbuk Crude Albumin Ikan Gabus (Ophiocephalus striatus). Universitas Brawijaya; 2016.
59. World Health Organization. Infant and young child feeding : model chapter for textbooks for medical students and allied health professionals [Internet]. Geneva PP - Geneva: World Health Organization; 2009.
60. Puspita D, Merdekawati W, Rahangmetan NS. Pemanfaatan anggur laut (Caulerpa recemosa) dalam pembuatan sup krim instan. J Teknol Ind Pertan. 2019;29(1).
61. Polidori P, Spera DM, Sabatini A, Vincenzetti S. Comparison of nutritional characteristics of fresh and freeze-dried donkey milk. FOOD Sci Nutr Technol. 2019;4(1):1–9.
62. Riadi MS, Asni A, Kasmawati K. Fortifikasi Kulit Udang Vaname (Litopenaeus Vannamei) Pada Ekado. Semin Ilm Nas Fak Perikan dan Ilmu Kelaut Univ Muslim Indones [Internet]. 2021;1:48–60.
63. Rizkiyanda H, Liviawaty E, Rostini I, Pratama RI. Fortification of Shrimp Shell Flour as a Source of Calcium on the Preference Level of Bread. Asian J Fish Aquat Res. 2024;26(2):81–93.
64. Wirawan P. Utilization Flour Of White Shrimp Shell (Litopenaeus vannamei) As Flavor With Addition Of Dextrin And Aplication In Taro Chips. JOM. 2015;1.
65. Djalal M, Fathanah N, Hidayat SH, Ainani AF, Yolanda DS, Kasmira, et al. Utilization of shrimp shell as a substitute ingredient in mineral and protein enrichment of tempeh steak product. IOP Conf Ser Earth Environ Sci. 2023;1230(1).
66. Mandiri RT, Purnamayati L, Fahmi AS. Karakteristik Cone Es Krim Berbasis Tepung Cangkang Udang dengan Konsentrasi Karagenan yang Berbeda. J Pengolah Has Perikan Indones. 2022;25(2):202–3.
67. Banurea IR, Sasmitaloka KS, Sukasih E, Widowati S. Karakterisasi Nasi Instan yang Diproduksi dengan Metode Freeze Drying. War Ind Has Pertan. 2020;37(2):133.
68. Utami AS, Riani IG, Handayani MT. Karakteristik Pangan Lokal Instan "Burgo" Diproduksi Dengan Metode Ekonomis Freezing-Drying. J Pengemb Agroindustri Terap [Internet]. 2023;2(2).
69. Kementerian Kesehatan RI. Tabel Komposisi Pangan Indonesia. 2020.
70. Pratiwi N, Karnila R, Edison. Komposisi Kimia pada Tepung Kulit dan Kepala Udang Vanname (Litopenaeus vannamei). J Fak Perikan dan Kelaut. 2017;
71. Bassig RA, Obinque A V., Nebres VT, Delos Santos VH, Peralta DM, Madrid AJJ. Utilization of Shrimp Head Wastes into Powder Form as Raw Material for Value-Added Products. Philipp J Fish. 2021;28(2):181–90.
72. Su F, Huang B, Liu J. The carotenoids of shrimps (Decapoda: Caridea and

Dendrobranchiata) cultured in China. J Crustac Biol. 2018;38(5):523–30.
73. Pratama RI, Rostini I, Words K. Composition Of Volatile Compounds From Vaname Shrimp Waste Flavor Powder By Conventional. 2021;9(1):2173–80.
74. Suryanti S, Haryati S, Putra AN, Heryana R. Karakteristik Makanan Ringan Ekstrudat dari Kepala Udang Vannamei (Litopenaeus vannamei). J Pascapanen dan Bioteknol Kelaut dan Perikan. 2018;13(1):61.
75. Adiarsa R, Junianto, Pamungkas W, Pratama RI. Effect of Shrimp Shell Flour Substitution on Croissant Liking Level. Asian Food Sci J. 2023;22(4):24–32.
76. Dinda VK, Faridah A, Holinesti R. Analisis Kualitas Kerupuk Kulit Udang. J Home Econ Tour. 2017;15(2).
77. Maulina DE, Nurwati, Hasdar M. Utilization of Shrimp Waste (Litopenaeus vannamei) as Powdered Broth: Effects of Roasting Duration on Protein Content, Color Changes, and FTIR. Bantara J Anim Sci. 2024;6(1):20–8.
78. Wirawan P. Pemanfaatan tepung cangkang udang putih (Litopenaeus vannamei) sebagai flavor dengan penambahan dekstrin dan aplikasinya pada keripik talas. JOM Pekanbaru Fak Perikan dan Ilmu Kelautan, Univ Riau. 2015;
79. Atika S, Handayani L. Pembuatan Bubuk Flavour Kepala Udang Vannamei (Litopenaus vannamei) Sebagai Pengganti MSG (Monosodium glutamat). Pros SEMDI-UNAYA (Seminar Nas Multi Disiplin Ilmu UNAYA) [Internet]. 2019;3(1):18–26.
80. Andreliska T, Aji M, Wahyuni HS. Effect of Additional Shrimp Shell Flour on Characteristics and Acceptance of Cookies. 2022;3(June):12–7.
81. Gallo M, Naviglio D, Armone Caruso A, Ferrara L. Applications of chitosan as a functional food [Internet]. Novel Approaches of Nanotechnology in Food. Elsevier Inc.; 2016. 425–464 hal.
82. Nurazizah. Penggunaan Kitosan Sebagai Bahan Pengawet pada Siup Nanas (Ananas comosus (L.) Merr). J Online Mhs Fak Pertan Univ Riau. 2014;1(1).
83. Lomba K, Asni A, Kasmawati. Fortifikasi Kulit Udang Vaname (Litopenaeus vannamei) pada Kerupuk Sagu. J Pelagis. 2023;1(1):41–51.
84. Khoirin Maghfiroh, Iva Nur Halimah. Optimalisasi Peningkatan Protein dan Kualitas Organoleptik Mie Basah Melalui Fortifikasi Tepung Udang Rebon (Acetes erytharaeus). J Nat Sci Learn. 2022;1(1):22–9.
85. Bella S, Wiranda Y, Ilhamy FA. Cream Soup Instan Substitusi Tepung Cangkang Udang dalam Upaya Meningkatkan Kadar Kalsium sebagai Selingan MP-ASI. 2024;3(September):191–8.
86. Lestari FW, Artanti GD. Pengaruh Substitusi Tepung Limbah Udang Pada Stik Keju Terhadap Daya Terima Konsumen. J Andaliman J Gizi Pangan, Klin dan Masy. 2021;1(2):1–12.
87. Kusnandar F. Kimia Pangan Komponen Makro. Jakarta Timur: Bumi Aksara; 2020. 298 hal.
88. AOAC. Official Methods of Analysis. 18 ed. AOAC International; 2006.
89. Aprillia NI, Sari DI. Karakteristik kimia, organoleptik dan mikrobiologi kerupuk kulit kepala udang dengan penambahan daun kelor. J Sains dan Teknol Pangan. 2025;10(1):8166–83.
90. Judprasong K, Tangsuphoom N, Dechapinan S, On-Nom N. Calcium from Pacific White Shrimp (Litopeneaus vannamei) Shells: Properties and Function as Fortificant in Soy Milk Vitamin D in foods View project Food Composition Database View project Calcium from Pacific White Shrimp (Litopeneaus vannamei) Shells: Pro. Food Appl Biosci J [Internet]. 2017;5(3):176–95.
91. Chen CC, Hsieh JF, Jen F. Sensorial Characterization of Foods Before and After

Freeze-drying Rhodiola crenulata View project. Austin Food Sci [Internet]. 2016;1(6):1–5.
92. Jakubczyk E, Jaskulska A. The effect of freeze-drying on the properties of Polish vegetable soups. Appl Sci. 2021;11(2):1–21.
93. González-Peña MA, Ortega-Regules AE, Anaya de Parrodi C, Lozada-Ramírez JD. Chemistry, Occurrence, Properties, Applications, and Encapsulation of Carotenoids—A Review. Plants. 2023;12(2):1–22.
94. Baltaci C, Şidim M, Akşit Z. Effects of spray and freeze-drying methods on aroma compounds, sensory characteristics, physicochemical composition, antioxidant and antimicrobial properties of instant sage (Salvia rosifolia Sm.) tea. Turkish J Anal Chem. 2022;4(1):19–30.
95. Fallah AM, Putri RM, Yuliani W, Wagiman, Falah MAF. Physical quality of freeze-dried strawberries (Fragaria x ananassa var. Mencir). IOP Conf Ser Earth Environ Sci. 2023;5(2):85–93.
96. Baltaci C, Erkmen Bostanci D, Altintaş R, Dalkiran Y, Akdoğan A, Okan OT. Physicochemical Properties, Antioxidant Capacity and Sensory Acceptability of Instant Rosehip Teas Prepared by Spray-Drying and Freeze-Drying Methods. Polish J Food Nutr Sci. 2024;74(3):244–54.
97. Omah E, Ajoiyi R, Nwankwo C. Proximate composition and sensory properties of freeze-dried Nigerian soups. Agro-Science. 2015;14(1):37.
98. Liu W, Zhang M, Devahastin S, Wang W. Establishment of a hybrid drying strategy for instant cream mushroom soup based on starch retrogradation behavior. Int J Biol Macromol [Internet]. 2020;147:463–72.
99. Dega A. Perbandingan Karakteristik Fisiokimia dan Sensori Bubur Pisang Instan dengan Metode Pengeringan Freeze Drying untuk Olahragawan. Universitas Katolik Soegijapranata; 2017.
100. Yuliana A, Nurdianti L, Shaleha RR, Wildan RA. Pembuatan Serbuk Instan Minuman Probiotik Labu Kuning (Cucurbita moschata) dengan variasi jenis susu. Pros Semin Nas Disem Penelit. 2023;3(September):2964–6154.
101. Tarigan IL. Dasar-Dasar Kimia Air Makanan dan Minuman. Malang: Media Nusa Creative; 2019.
102. Uli R, Getsemani Y, Moentamaria D, Kimia JT, Malang PN, Soekarno J, et al. Pengaruh Kadar Air Terhadap Masa Simpan Olahan Pangan Dengan Teknologi Sterilisasi Suhu Tinggi. 2024;10(9):849–58.
103. Siti Mahirah Y, Rabeta MS, Antora RA. Effects of different drying methods on the proximate composition and antioxidant activities of Ocimum basilicum leaves. Food Res. 2018;2(5):421–8.
104. Ibrahim AH, Khalifa SA. Effect of freeze-drying on camel's milk nutritional properties. Int Food Res J. 2015;22(4):1438–45.
105. Jia Z, Zhou J, Wang W, Liu D, Zheng X, Hu M, et al. Optimization of Vacuum Freeze-Drying Process and Quality Evaluation of Stropharia rugosoannulata. Appl Sci. 2024;14(22):1–14.
106. Kabeer S, Nagamanniammai G. Effect of freeze and vacuum drying on the retention of nutrient content of brown rice (Oryza sativa) porridge. Int J Nutr Pharmacol Neurol Dis [Internet]. 2023;13(4).
107. Akther F, Alim MA, Nasrin NA, Khan M, Gomes DN, Suhan M, et al. Effects of different drying methods on the proximate composition, antioxidant activity, and phytochemical content of Hibiscus sabdariffa L. Calyx. Food Chem Adv [Internet]. 2023;3(November):100553.
108. Falodun AI, Ayo-Omogie HN, Awolu OO. Effect of Different Drying

Techniques on the Resistant Starch, Bioactive Components, Physicochemical and Pasting Properties of Cardaba Banana Flour. Acta Univ Cibiniensis Ser E Food Technol. 2019;23(1):35–42.
109. Akilu M, Lawal YM, Bello S, Kusfa AA, Lawal A. Evaluation Of Nutrients Retention Of Perishable Foods Using The Principle Of Freeze-Drying, Sabon-Gari, Kaduna State. Nigeria.
110. Irwan WS. Pengaruh Sup Labu Kuning Instan terhadap Asupan Gizi, Tekanan Darah, dan Skor Konstipasi Lansia.
111. Badan Pengawas Obat dan Makanan. Peraturan Badan Pengawas Obat dan Makanan Nomor 20 Tahun 2021 Tentang Perubahan Atas Peraturan Badan Pengawas Obat dan Makanan Nomor 31 Tahun 2018 Tentang Label Pangan Olahan. 2021.