



DAFTAR PUSTAKA

- Afoakwa, Emmanuel Ohene. (2010). *Chocolate Science and Technology*. Wiley.
<https://doi.org/10.1002/9781444319880>
- Afoakwa, Emmanuel Ohene. (2016). Sensory character and flavour perception of chocolates. 10.1002/9781118913758.ch10.
- Afoakwa, Emmanuel Ohene & Paterson, Alistair & Fowler, Mark & Vieira, Joselio. (2008). Effects of tempering and fat crystallisation behaviour on microstructure, mechanical properties and appearance in dark chocolate systems. *Journal of Food Engineering*. 89. 128-136. 10.1016/j.jfoodeng.2008.04.021.
- Afoakwa, E. O., Paterson, A., & Fowler, M. (2008a). Effects of particle size distribution and composition on rheological properties of dark chocolate. *European Food Research and Technology*, 226(6), 1259–1268. <https://doi.org/10.1007/s00217-007-0652-6>
- Afoakwa, E. O., Paterson, A., Fowler, M., & Vieira, J. (2008b). Modelling tempering behaviour of dark chocolates from varying particle size distribution and fat content using response surface methodology. *Innovative Food Science & Emerging Technologies*, 9(4), 527–533. <https://doi.org/10.1016/j.ifset.2008.02.002>
- Afoakwa, E. O., Paterson, A., Fowler, M., & Vieira, J. (2008c). Particle size distribution and compositional effects on textural properties and appearance of dark chocolates. *Journal of Food Engineering*, 87(2), 181–190. <https://doi.org/10.1016/j.jfoodeng.2007.11.025>
- Afoakwa, E. O., Paterson, A., Fowler, M., & Ryan, A. (2008d). Flavor formation and character in cocoa and chocolate: a critical review. *Critical Reviews in Food Science and Nutrition*, 48(9), 840-857.
- Afoakwa, E. O., Paterson, A., Fowler, M., & Vieira, J. (2009a). Fat bloom development and structure-appearance relationships during storage of under-tempered dark chocolates. *Journal of Food Engineering*, 91(4), 571–581. <https://doi.org/10.1016/j.jfoodeng.2008.10.011>
- Afoakwa, E. O., Paterson, A., Fowler, M., & Vieira, J. (2009c). Microstructure and mechanical properties related to particle size distribution and composition in dark chocolate. *International Journal of Food Science & Technology*, 44(1), 111–119. <https://doi.org/10.1111/j.1365-2621.2007.01677.x>
- Aguilera, J.M., & Stanley, D.W. (1999). Microstructural principles of food processing and engineering.
- Altimiras, P., Pyle, L., & Bouchon, P. (2007). Structure–fat migration relationships during storage of cocoa butter model bars: Bloom development and possible mechanisms. *Journal of Food Engineering*, 80(2), 600–610. <https://doi.org/10.1016/j.jfoodeng.2006.06.022>
- Ardakani, H. A., Mitsoulis, E., & Hatzikiriakos, S. G. (2014). Capillary flow of milk chocolate. *Journal of Non-Newtonian Fluid Mechanics*, 210, 56–65. <https://doi.org/10.1016/j.jnnfm.2014.06.001>
- Aris, S.E., & Jumiono, A. (2020). Faktor-Faktor Pasca Panen yang Memengaruhi Mutu Kakao. *Jurnal Ilmiah Pangan Halal*, 2(2): 73-78
- Badan Pusat Statistik. (2019). *Statistik Kakao Indonesia*.
- Badan Pusat Statistik. (2020). *Statistik Kakao Indonesia*.



- Barišić, V., Kopjar, M., Jozinović, A., Flanjak, I., Ačkar, Đ., Miličević, B., Šubarić, D., Jokić, S., & Babić, J. (2019). The chemistry behind chocolate production. *Molecules*, 24(17), 3163. <https://doi.org/10.3390/molecules24173163>
- Beckett, S. T. (1999). Conching. In S. T. Beckett (Ed.), *Industrial Chocolate Manufacture and Use* (3rd ed., pp. 1-81). Blackwell Science.
- Beckett, S. T. (2009). Non-Conventional Machines and Processes. In *Industrial Chocolate Manufacture and Use* (pp. 385–408). Wiley-Blackwell. <https://doi.org/10.1002/9781444301588.ch17>
- Beckett, S. T. (2008). *The Science of Chocolate 2nd Edition*. Cambridge, UK: The Royal Society of Chemistry, Publishing.
- Beckett, S. T. (Ed.). (2011). *Industrial Chocolate Manufacture and Use*. John Wiley & Sons.
- Beckett, S. T., Fowler, M. S., & Ziegler, G. R. (Eds.). (2017). *Beckett's Industrial Chocolate Manufacture and Use*. Wiley. <https://doi.org/10.1002/9781118923597>
- Böhme, B., Kretzschmar, R., Schneider, Y., Fiala, P., & Rohm, H. (2012). Effect of alcohol in starch-thickened fillings on the storage stability of dark chocolate pralines. *Journal of the American Oil Chemists' Society*, 89(3), 447–454. <https://doi.org/10.1007/s11746-011-1937-2>
- Bolenz, S., Thiessenhusen, T., & Schape, R. 2003. Influence of milk components on properties and consumer acceptance of milk chocolate. *European Food Research and Technology*, 216: 28–33.
- Braga, S. C. G. N., Oliveira, L. F., Hashimoto, J. C., Gama, M. R., Efraim, P., Poppi, R. J., & Augusto, F. (2018). Study of volatile profile in cocoa nibs, cocoa liquor and chocolate on production process using GC × GC-QMS. *Microchemical Journal*, 141, 353–361. <https://doi.org/10.1016/j.microc.2018.05.042>
- Briones, V., Aguilera, J. M., & Brown, C. (2006). Effect of surface topography on color and gloss of chocolate samples. *Journal of Food Engineering*, 77(4), 776–783. <https://doi.org/10.1016/j.jfoodeng.2005.08.004>
- Brown, A. C. (2010). *Understanding Food: Principles and Preparation*. Yorkshire: Wadsworth Publishing.
- Caligiani, A., Marseglia, A., & Palla, G. (2016). Cocoa: Production, Chemistry, and Use. In *Encyclopedia of Food and Health* (pp. 185–190). Elsevier. <https://doi.org/10.1016/B978-0-12-384947-2.00177-X>
- Castro-Alayo, E. M., Torrejón-Valqui, L., Medina-Mendoza, M., Cayo-Colca, I. S., & Cárdenas-Toro, F. P. (2022). Kinetics crystallization and polymorphism of cocoa butter throughout the spontaneous fermentation process. *Foods*, 11(12), 1769. <https://doi.org/10.3390/foods11121769>
- Cook, L. R., and Meursing, E. H. (1982). *Chocolate Production and Use*. Harcourt, Brace Jovanovich, Inc., New York.
- Corton, R. C. I. G., Jordan, K. M., Suarez, J. A. I., Gesalan, U. Z. M., Carlet, C. J., & Valdez, A. G. (2022). Acceptability of Theobroma Cacao as an Alternative Tea. *ASEAN Journal of Agriculture and Food Engineering*, 1(1), 23 - 28. <https://ejournal.bumipublikasiusantara.id/index.php/ajafe/article/view/154>
- Dahlenborg, H., Millqvist-Fureby, A., & Bergenstähl, B. (2015). Effect of shell microstructure on oil migration and fat bloom development in model pralines. *Food Structure*, 5, 51–65. <https://doi.org/10.1016/j.foostr.2015.06.002>



- Dalal, E. N., & Natale-Hoffman, K. M. (1999). The effect of gloss on color. *Color Research & Application*, 24(5), 369–376. [https://doi.org/10.1002/\(SICI\)1520-6378\(199910\)24:5<369::AID-COL8>3.0.CO;2-A](https://doi.org/10.1002/(SICI)1520-6378(199910)24:5<369::AID-COL8>3.0.CO;2-A)
- Daud, A., Suriati., S., & Nuzulyanti, N. (2020). Kajian Penerapan Faktor yang Mempengaruhi Akurasi Penentuan Kadar Air Metode Thermogravimetri. *Lutjanus*, 24(2), 11 - 16. <https://doi.org/10.51978/jlpp.v24i2.79>
- Debaste, F., Kegelaers, Y., Liégeois, S., Amor, H. Ben, & Halloin, V. (2008). Contribution to the modelling of chocolate tempering process. *Journal of Food Engineering*, 88(4), 568–575. <https://doi.org/10.1016/j.jfoodeng.2008.03.019>
- Declerck, A., Nelis, V., Danthine, S., Dewettinck, K., & Van der Meeren, P. (2021). Characterisation of fat crystal polymorphism in cocoa butter by time-domain NMR and DSC deconvolution. *Foods*, 10(3), 520. <https://doi.org/10.3390/foods10030520>
- Deka, Kumud & MacMillan, Bryce & Ziegler, Gregory & Marangoni, Alejandro & Newling, Benedict & Balcom, Bruce. (2006). Spatial mapping of solid and liquid lipid in confectionery products using a 1D centric SPRITE MRI technique. *Food Research International*. 39. 365-371. [10.1016/j.foodres.2005.08.009](https://doi.org/10.1016/j.foodres.2005.08.009).
- Delbaere, C., Walle, D. V., Depypere, F., Gellynck, X., & Dewettinck, K. (2016). Relationship between chocolate microstructure, oil migration, and fat bloom in filled chocolates. *European Journal of Lipid Science and Technology*, 118(2): 1800 - 1826.
- DeMan, J. M. (1999). *Principles of Food Chemistry*, 3rd ed. Gaithersburg, Aspen Publishers Inc.
- Dias, J., Coelho, P., Alvarenga, N. B., Duarte, R. V., & Saraiva, J. A. (2018). Evaluation of the impact of high pressure on the storage of filled traditional chocolates. *Innovative Food Science & Emerging Technologies*, 45, 36–41. <https://doi.org/10.1016/j;ifset.2017.08.019>
- Do, T.-A. L., Hargreaves, J. M., Wolf, B., Hort, J., & Mitchell, J. R. (2007). Impact of particle size distribution on rheological and textural properties of chocolate models with reduced fat content. *Journal of Food Science*, 72(9), E541–E552. <https://doi.org/10.1111/j.1750-3841.2007.00572.x>
- Fasha, F. Y., & Artanti, G. D. (2022). *Jurnal Sains Boga Perbedaan Mutu Sensoris Chocolate Mousse yang Menggunakan Chocolate Compound dengan Cokelat Couverture*. 5(2): 118 - 126.
- Feeney, M., du Toit, G., Roberts, G., Sayre, P. H., Lawson, K., Bahnsen, H. T., Sever, M. L., Radulovic, S., Plaut, M., Lack, G., Chan, S., Fox, A., Abraham, M., Adam, M., Clough, L., Coverdale, L., Fisher, H., Henley, F., Hussain, S., ... Nelson, V. (2016). Impact of peanut consumption in the LEAP Study: Feasibility, growth, and nutrition. *Journal of Allergy and Clinical Immunology*, 138(4), 1108–1118. <https://doi.org/10.1016/J.JACI.2016.04.016>
- Fernandes, V. A., Müller, A. J., & Sandoval, A. J. (2013). Thermal, structural and rheological characteristics of dark chocolate with different compositions. *Journal of Food Engineering*, 116(1), 97–108. <https://doi.org/10.1016/j.jfoodeng.2012.12.002>
- Franke, K., Middendorf, D., Heinz, V., & Bindrich, U. (2022). Alcohol in praline fillings influences the water migration within the surrounding chocolate shell. *Journal of Food Engineering*, 315, 110805. <https://doi.org/10.1016/j.jfoodeng.2021.110805>



- Ghorgi, Z. B., Yeganezhad, S., Hesarinejad, M. A., Faezian, A., Kutsenkova, V., Gao, Z., Nishinari, K., Nepovinnykh, N. (2023). Fabrication of novel hybrid gel based on beeswax oleogel: Application in the compound chocolate formulation. *Food Hydrocolloids*, Vol. 140.
- Ghosh, V., Ziegler, G. R., & Anantheswaran, R. C. (2002). Fat, Moisture, and Ethanol Migration through Chocolates and Confectionary Coatings. *Critical Reviews in Food Science and Nutrition*, 42(6), 583–626. <https://doi.org/10.1080/20024091054265>
- Ghosh, V., Ziegler, G. R., & Anantheswaran, R. C. (2005). Moisture migration through chocolate-flavored confectionery coatings. *Journal of Food Engineering*, 66(2), 177–186. <https://doi.org/10.1016/j.jfoodeng.2004.03.012>
- Gibson, M., & Newsham, P. (2018). Chocolate/Cacao. In *Food Science and the Culinary Arts* (pp. 341–352). Elsevier. <https://doi.org/10.1016/B978-0-12-811816-0.00017-8>
- Glicerina, V., Balestra, F., Dalla Rosa, M., & Romani, S. (2016). Microstructural and rheological characteristics of dark, milk and white chocolate: A comparative study. *Journal of Food Engineering*, 169, 165–171. <https://doi.org/10.1016/j.jfoodeng.2015.08.011>
- Glicerina, V., Balestra, F., Rosa, M. D., & Romani, S. (2013). Rheological, textural and calorimetric modifications of dark chocolate during process. *Journal of Food Engineering*, 119(1), 173–179. <https://doi.org/10.1016/j.jfoodeng.2013.05.012>
- Gómez-Polo, C., Gómez-Polo, M., Celemín Viñuela, A., & Martínez Vázquez de Parga, J. A. (2015). A clinical study relating CIELCH coordinates to the color dimensions of the 3D-Master System in a Spanish population. *The Journal of Prosthetic Dentistry*, 113(3), 185–190. <https://doi.org/10.1016/j.prosdent.2014.09.013>
- Gong, A., Shi, A., Liu., H., Yu., H., Liu., L., Lin., W., & Wang, Q. (2018). Relationship of chemical properties of different peanut varieties to peanut butter storage stability. *J. Integr. Agric.*, 17: 1003 - 1010.
- Granato, D., & Mason, M. L. (2010). Instrumental color and sensory acceptance of soy-based emulsions: a response surface approach. *Ciencia e Technologia de Alimentos*, 30(4), 1090 - 1096. <https://doi.org/10.1590/S0101-20612010000400029>.
- Gutierrez, T. J. (2017). State-of-the-Art Chocolate Manufacture: A Review. *Comprehensive Reviews in Food Science and Food Safety*. 16: 1313 - 1344. <https://doi.org/10.1111/1541-4337.12301>
- Hambali, A. (2012). *SISTEM INFORMASI MANAJEMEN MUTU BIJI KAKAO PADA PERUSAHAAN EKSPORTIR THE MANAGEMENT INFOMATION SYSTEM OF COCOA BEAN QUALITY AT EXPORTER COMPANIES*.
- Hartel, R. W. (1999). Chocolate: fat bloom during storage. The influence of structural elements. *The Manufacturing Confectioner*, 79(5): 89 - 99.
- Hartel, R. W., von Elbe, J. H., & Hofberger, R. (2018). *Confectionery Science and Technology*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-61742-8>
- Hřívna, L., Machálková, L., Burešová, I., Nedomová, Š., & Gregor, T. (2021). Texture, color, and sensory changes occurring in chocolate bars with filling during storage. *Food Science & Nutrition*, 9(9), 4863–4873. <https://doi.org/10.1002/fsn3.2434>



- Jaćimović, S., Popović-Djordjević, J., Sarić, B., Krstić, A., Mickovski-Stefanović, V., & Pantelić, N. (2022). Antioxidant Activity and Multi-Elemental Analysis of Dark Chocolate. *Foods*, 11(10). <https://doi.org/10.3390/foods11101445>
- Kamphuis, H. J. (2017). Production of cocoa mass, cocoa butter and cocoa powder. *Beckett's Industrial Chocolate Manufacture and Use*, 50 - 71. <https://doi.org/10.1089/ars.2010.3697>.
- Keijbets, E. L., Chen, J., & Vieira, J. (2010). Chocolate demoulding and effects of processing conditions. *Journal of Food Engineering*, 98(1), 133–140. <https://doi.org/10.1016/j.jfoodeng.2009.12.019>
- Khoidir, S. I. (2023). Karakteristik Fisik, Kimia, dan Sensoris Biji Kakao Criollo, Forastero, dan Trinitario: Review. *Journal of Comprehensive Science*, 2(3), 1 - 23.
- Kongor, J.E., Hinneh, M., Walle, D.V., Afoakwa, E.O., Boeckx, P., Dewettinck, K. (2016). Factors influencing quality industry variation in cocoa (*Theobroma cacao* L.) bean flavour profile - a review. *Food Res. Int.*, 82 : 44 - 52.
- Latif, R. (2013). Chocolate/cocoa and Human Health: A Review. *Netherlands Journal of Medicine*. 71(2), 63 - 68.
- Lee, J. Y., Kim, H. Y., & Lee, K. W. (2010). Effect of sugar substitution with erythritol on the quality characteristics of Danish cookies. *Food Science and Biotechnology*, 19(6), 1467-1472.
- Liang, B., Hartel, R. W. (2004). Effects of milk powders in milk chocolate. *Journal of Dairy Science*, 87(1): 20 - 31.
- Lipp, M., & Anklam, E. (1998). Review of cocoa butter and alternative fats for use in chocolate—Part A. Compositional data. *Food Chemistry*, 62(1), 73–97. [https://doi.org/10.1016/S0308-8146\(97\)00160-X](https://doi.org/10.1016/S0308-8146(97)00160-X)
- Makwakwa, T. A., Moema, D., Nyoni, H., & Msagati, T. A. M. (2023). Ranking of dispersive-extraction solvents pairs with TOPSIS for the extraction of mifepristone in water samples using dispersive liquid-liquid microextraction. *Talanta Open*, 7, 100206. <https://doi.org/10.1016/j.talo.2023.100206>
- Maleky, F., Kadivar, M., & Shahedi, M. (2012). Effect of tempering on the physical and sensory properties of dark chocolate. *Journal of Food Science and Technology*, 49(6), 724-729.
- Manley, D. (2000). *Technology of Biscuits, Crackers, and Cookies 3rd Edition*. Woodhead Publishing Series in Food Science, Technology and Nutrition.
- Marty-Terrade, S., & Marangoni, A. G. (2012). Impact of Cocoa Butter Origin on Crystal Behavior. *Cocoa Butter and Related Compounds*, 245 - 274. <https://doi.org/10.1016/B978-0-9830791-2-5.50014-1>
- Marvig, C. L., Kristiansen, R. M., Madsen, M. G., & Nielsen, D. S. (2014). Identification and characterisation of organisms associated with chocolate pralines and sugar syrups used for their production. *International Journal of Food Microbiology*, 185, 167–176. <https://doi.org/10.1016/j.ijfoodmicro.2014.05.017>
- Meng, C. C., Jalil, A. M. M., & Ismail, A. (2009). Phenolic and theobromine contents of commercial dark, milk and white chocolates on the Malaysian market Molecules. 14: 200-9.
- Meyer, J. (2009). Manufacturing processes: production of chocolate shells. In *Science and Technology of Enrobed and Filled Chocolate, Confectionery and Bakery Products* (pp. 414–426). Elsevier. <https://doi.org/10.1533/9781845696436.3.414>



- Miele, N.A., Borriello, A., Fidaleo, M., Masi, P., Cavella, S. (2020). Modeling grinding kinetics of fat based anhydrous pastes. *J. Food Eng.* 268, 109732.
- Minife, B. W. (1989). *Chocolate, Cocoa, and Confectionery: Science and Technology*. Van Nostrand Reinhold, New York, NY.
- Mohd Rozallli, Norazatul Hanim & Chin, Nyuk & Yusof, Y.A.. (2015). Particle Size Distribution of Natural Peanut Butter and Its Dynamic Rheological Properties. *International Journal of Food Properties.* 18. 150409085503007. 10.1080/10942912.2014.971184.
- Nisa, N. H., Saputro, A. D., Kusumawardani, I. N. S., Fadilah, M. A. N., Setiowati, A. D., & Rahayoe, S. (2023). The appearance and textural characteristic of couverture praline chocolate filled with carrageenan-based hydrogel. *IOP Conference Series: Earth and Environmental Science*, 1200(1). <https://doi.org/10.1088/1755-1315/1200/1/012018>
- Ostrowska-Ligęza, E., Marzec, A., Górska, A., Wirkowska-Wojdyła, M., Bryś, J., Rejch, A., & Czarkowska, K. (2019). A comparative study of thermal and textural properties of milk, white and dark chocolates. *Thermochimica Acta*, 671, 60–69. <https://doi.org/10.1016/j.tca.2018.11.005>
- Pastor, Clara & Santamaría, J. & Chiralt, Amparo & Aguilera, J.. (2007). Gloss and Colour of Dark Chocolate During Storage. *Food Science and Technology International - FOOD SCI TECHNOL INT.* 13. 27-34. 10.1177/1082013207075664.
- Pajin, Biljana & Karlović, Đerd & Omorjan, Radovan & Sovilj, Verica & Antić, Danka. (2007). Influence of filling fat type on praline products with nougat filling. *European Journal of Lipid Science and Technology.* 109. 1203 - 1207. 10.1002/ejlt.200700044.
- Prasetya, A. Y., Rosjadi, F., & Setyaningrum, I. (2019). Perbandingan Daya Saing Ekspor Kakao Indonesia, Pantai Gading, dan Ghana 2003-2013. *CALYPTRA*, 8(1): 2178 - 2198.
- Ramlah, S., & Sampe Barra, A. L. (2018). Karakteristik dan Citarasa Cokelat Putih dari Lemak Kakao Non Deodorisasi dan Deodorisasi. *Jurnal of Food Processing and Preservation*, 33(5): 571 - 589.
- Raoufi, N., Tehrani, M. M., Farhoosh, R., & Golmohammadzadeh, S. (2012). The effects of adding water and glycerol polyricinoleate on the texture, appearance, and sensory qualities of compound milk chocolate. *European Journal of Lipid Science and Technology*, 114(2), 1390 - 1399. <https://doi.org/10.1002/ejlt.201100408>
- Rodriguez Furlán, L. T., Baracco, Y., Lecot, J., Zaritzky, N., & Campderrós, M. E. (2017). Effect of sweetener combination and storage temperature on physicochemical properties of sucrose free white chocolate. *Food Chemistry*, 229, 610–620. <https://doi.org/10.1016/j.foodchem.2017.03.002>
- Rogers, M. A., Tang, D., Ahmadi, L., & Marangoni, A. G. (2008). Fat Crystal Networks. In *Food Materials Science* (pp. 369–414). Springer New York. https://doi.org/10.1007/978-0-387-71947-4_17
- Saputro, A. D., Kusuma, H. S., & Wijana, I. D. P. (2021). Physical characteristics of chocolate made from cocoa bean fermented at different durations. *IOP Conference Series: Earth and Environmental Science*, 653(1), 012039.



- Saputro, A. D., Nur Fadilah, M. A., Keegen Bangun, S., Rahayoe, S., Wahyu Karyadi, J. N., Setiowati, A. D., & Setiowati, A., D. (2022). Physical Characteristic of Heat Resistant Chocolate Formulated with Konjac Glucomanan and Xanthan Gum-Based Hydrogel at Various Fat Content during Period of Crystal Growth (Maturation). *Jurnal Teknik Pertanian Lampung (Journal of Agricultural Engineering)*, 11(4), 658. <https://doi.org/10.23960/jtep-1.v11i4.658-670>
- Saputro, A. D., Van de Walle, D., Aidoo, R. P., Mensah, M. A., Delbaere, C., De Clercq, N., Van Durme, J., & Dewettinck, K. (2017). Quality attributes of dark chocolates formulated with palm sap-based sugar as nutritious and natural alternative sweetener. *European Food Research and Technology*, 243(2), 177–191. <https://doi.org/10.1007/s00217-016-2734-9>
- Shah, A. B., Jones, G. P., & Vasiljevic, T. (2010). Sucrose-free chocolate sweetened with Stevia rebaudiana extract and containing different bulking agents - effects on physicochemical and sensory properties. *International Journal of Food Science & Technology*, 45(7), 1426–1435. <https://doi.org/10.1111/j.1365-2621.2010.02283.x>
- Shourideh, M., Taslimi, A., Azizi, MH., & Mohammadifar, MA. (2012). Effects of D-tagatose and inulin on some physicochemical, rheological and sensory properties of dark chocolate. *International Journal of Bioscience, Biochemistry and Bioinformatics*, 314–319. <https://doi.org/10.7763/IJBBB.2012.V2.124>
- Simonot, L., & Elias, M. (2003). Color change due to surface state modification. *Color Research & Application*, 28(1), 45–49. <https://doi.org/10.1002/col.10113>
- Siregar, S. Z., Saputro, A. D., Edi, Fadilah, M. A. N., Susanti, D. Y., & Setiowati, A. D. (2023). The impact of shell formation duration during manual tempering process on the hardness and melting point of couverture praline chocolate. *IOP Conference Series: Earth and Environmental Science*, 1200(1). <https://doi.org/10.1088/1755-1315/1200/1/012017>
- Slettengren, K. (2010). Crack Formation in Chocolate Pralines. *Master of Science Thesis in the Master Degree Programme Biotechnology*. <https://publications.lib.chalmers.se/records/fulltext/131122.pdf>
- Stauffer, M. B. (2017). Quality control and shelf life. In *Beckett's Industrial Chocolate Manufacture and Use* (pp. 532–554). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118923597.ch23>
- Stortz, T. A., & Marangoni, A. G. (2011). Heat resistant chocolate. *Trends in Food Science & Technology*, 22(5), 201–214. <https://doi.org/10.1016/j.tifs.2011.02.001>
- Subandrio, Nasori, A. S., Astuti, & Manalu, L. P. (2018). Aplikasi Proses Tempering Untuk Optimasi Titik Leleh Cokelat Hitam Produk Pengolahan Pintas. *Jurnal Teknologi Industri Pertanian*, 28(3), 262 – 268. <https://doi.org/10.23961/j.tek.ind.pert.2018.28.3.262>.
- Sub Direktorat Statistik Tanaman Perkebunan. (2018). *STATISTIK KAKAO INDONESIA 2018 Indonesian Cocoa Statistics 2018* (S. D. S. T. Perkebunan (ed.)). Badan Pusat Statistik. <https://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf>
- Sudibyo, A., Besar, B., & Agro, I. (2012). PERAN COKELAT SEBAGAI PRODUK PANGAN DERIVAT KAKAO YANG MENYEHATKAN (THE ROLE OF CHOCOLATE AS HEALTHY COCOA-DERIVED FOODS PRODUCTS). In *Jurnal Riset Industri* (Vol. 1).
- Sumahamijaya, I. (2011). *Che Around Us : Chocolate*. <https://magarimagazine.com//>



- Suryani, E., Susanto, W. H., & Wijayanti, N. (2016). *KARAKTERISTIK FISIK KIMIA MINYAK KACANG TANAH (Arachis hypogaea) HASIL PEMUCATAN (KAJIAN KOMBINASI ASDORBEN DAN WAKTU PROSES)* Physical and Chemical Characteristic of Peanut Oil (*Arachis hypogaea*) After Bleaching (Study Adsorbent Combination and Process Time) (Vol. 4, Issue 1).
- Svanberg, L., Ahrné, L., Lorén, N., & Windhab, E. (2013). Impact of pre-crystallization process on structure and product properties in dark chocolate. *Journal of Food Engineering*, 114(1), 90–98. <https://doi.org/10.1016/j.jfoodeng.2012.06.016>
- Svanberg, L., Lorén, N., & Ahrné, L. (2012). Chocolate swelling during storage caused by fat or moisture migration. *Journal of Food Science*, 77(11), E328–E334. <https://doi.org/10.1111/j.1750-3841.2012.02945.x>
- Talbot, G. (2015). Specialty oils and fats in confectionery. In *Specialty Oils and Fats in Food and Nutrition: Properties, Processing and Applications*. Elsevier Ltd. <https://doi.org/10.1016/B978-1-78242-376-8.00009-0>
- Tan, R. (2013). The history and science of chocolate. *Malaysian Journal of Pathology*, 35(2), 111-121.
- Toker, O. S., Palabiyik, I., & Konar, N. (2019). Chocolate quality and conching. *Trends in Food Science & Technology*, 91, 446–453. <https://doi.org/10.1016/j.tifs.2019.07.047>
- Toro-Vazquez, J. F., Pérez-Martínez, D., Dibildox-Alvarado, E., Charó-Alonso, M., & Reyes-Hernández, J. (2004). Rheometry and polymorphism of cocoa butter during crystallization under static and stirring conditions. *Journal of the American Oil Chemists' Society*, 81(2), 195–202. <https://doi.org/10.1007/s11746-004-0881-z>
- Tran P.D., Van de Walle D, Hinneh, M., Delbaere, C., De Clercq N., Tran, D.N., Dewettinc K. (2015). Controlling the stability of chocolates through the incorporation of soft and hard StOSt-rich fats. *European Journal of Lipid Science Technology*, 117(11), 1700 - 1713 24.
- White, J. R. (2018). Sugar. *Clinical Diabetes*, 36(1), 74–76. <https://doi.org/10.2337/cd17-0084>
- World Cocoa Foundation. (2010). *Cocoa market update*. World Cocoa Foundation Published Reports and Resources.
- Yuda, R. C., Irdiansyah, I., & Prihatiningtyas, I. (2018). Studi Kinetika Pengaruh Suhu Terhadap Ekstraksi Minyak Atsiri dari Kulit Jeruk Nipis dengan Pelarut Etanol. *Jurnal Chemurgy*, 1(1), 22. <https://doi.org/10.30872/cmg.v1i1.1135>
- Zambrano, M. V., Dutta, B., Mercer, D. G., MacLean, H. L., & Touchie, M. F. (2019). Assessment of moisture content measurement methods of dried food products in small-scale operations in developing countries: A review. *Trends in Food Science and Technology*, 88(December 2018), 484 – 496. <https://doi.org/10.1016/j.tifs.2019.04.006>
- Ziegleder, G., & Biehl, B. (1996a). The migration of hazelnut oil in chocolate and chocolate products. Part 1: The influence of the type of fat and the temperature of storage. *Fett/Lipid*, 98(11), 423-427.
- Ziegleder, G., & Biehl, B. (1996b). The migration of hazelnut oil in chocolate and chocolate products. Part 2: The influence of the type of emulsifier and the storage time. *Fett/Lipid*, 98(12), 469-473.



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Ziegleder, G., & Schwingshandl, I. (1998). Kinetics of fat migration within chocolate products. Part III: fat bloom. *Fett/Lipid*, 100(9), 411-416.

Ziegler, G. R., Mongia, G., & Hollender, R. (2001). The role of particle size distribution of suspended dolids in defining the sensory properties of milk chocolate. *International Journal of Food Properties*, 4(2), 353–370.
<https://doi.org/10.1081/JFP-100105199>