DAFTAR PUSTAKA

Abdoellah, S. (2021). Analisis Kinerja dan Prospek Komoditas Kakao. *Radar Opini Dan Analisis Perkebunan*, *2*(1), 1–7.

Afoakwa, E. O. (2010a). Chocolate Science and Technology. In *Chocolate Science and Technology*. https://doi.org/10.1002/9781444319880

Afoakwa, E. O. (2010b). Chocolate Science and Technology. In *Chocolate Science and Technology*. https://doi.org/10.1002/9781444319880

Afoakwa, E. O., Paterson, A., & Fowler, M. (2007). Factors influencing rheological and textural qualities in chocolate - a review. *Trends in Food Science and Technology*, *18*(6), 290–298. https://doi.org/10.1016/j.tifs.2007.02.002

Afoakwa, E. O., Paterson, A., Fowler, M., & Ryan, A. (2009). Matrix effects on flavour volatiles release in dark chocolates varying in particle size distribution and fat content using GC-mass spectrometry and GC-olfactometry. *Food Chemistry*, *113*(1), 208–215. https://doi.org/10.1016/j.foodchem.2008.07.088

Afoakwa, E. O., Paterson, A., Fowler, M., & Vieira, J. (2008a). Effects of tempering and fat crystallisation behaviour on microstructure, mechanical properties and appearance in dark chocolate systems. *Journal of Food Engineering*, *89*(2), 128–136. https://doi.org/10.1016/j.jfoodeng.2008.04.021

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 and 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., & Vieira, J. (2009). Influence of tempering and fat crystallization behaviours on microstructural and melting properties in dark chocolate systems. *Food Research International*, *42*(1), 200–209. https://doi.org/10.1016/j.foodres.2008.10.007

Albandary, A., Albandary, F., & K. Jaiswal, A. (2022). Chocolate: Health, Processing, and Food Safety. In *A Glance at Food Processing Applications* (Issue June). IntechOpen. https://doi.org/10.5772/intechopen.104819

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

Azhar, L. O. M. F. (2017). *Pengaruh Asal Bahan Baku Biji Kakao (Theobroma cacao L.) dan Lama Koncing Terhadap Karakteristik Tekstur dan Sifat Sensori Dark Chocolate*. Universitas Brawijaya.

Barišić, V., Petrović, J., Lončarević, I., Flanjak, I., Šubarić, D., Babić, J.,

Miličević, B., Doko, K., Blažić, M., & Ačkar, Đ. (2021). Physical properties of chocolates enriched with untreated cocoa bean shells and cocoa bean shells treated with high-voltage electrical discharge. *Sustainability (Switzerland)*, *13*(5), 1–14. https://doi.org/10.3390/su13052620

Becerra, L. D., Quintanilla-Carvajal, M. X., Escobar, S., & Ruiz, R. Y. (2023). Correlation between color parameters and bioactive compound content during cocoa seed transformation under controlled process conditions. *Food Bioscience*, *53*(March). https://doi.org/10.1016/j.fbio.2023.102526

Beckett, S. T. (2009). *Industrial Chocolate Manufacture and Use Fourth Edition* (Stephen T. Beckett (ed.)). Blackwell Publishing Ltd.

Beckett, S. T. (2018). The Science of Chocolate. In *Choice Reviews Online* (Vol. 38, Issue 06). The Royal Society of Chemistry. https://doi.org/10.1039/9781839168437

Böhme, B., Bickhardt, A., & Rohm, H. (2021). Pre-crystallization of nougat by seeding with cocoa butter crystals enhances the bloom stability of nougat pralines. *Foods*, *10*(5). https://doi.org/10.3390/foods10051056

Briones, V., & Aguilera, J. M. (2005). Image analysis of changes in surface color of chocolate. *Food Research International*, *38*(1), 87–94. https://doi.org/10.1016/j.foodres.2004.09.002

Bui, L. T. T., & Coad, R. (2014). Military ration chocolate: The effect of simulated tropical storage on sensory quality, structure and bloom formation. *Food Chemistry*, *160*, 365–370. https://doi.org/10.1016/j.foodchem.2014.03.084

Castro-Alayo, E. M., Balcázar-Zumaeta, C. R., Torrejón-Valqui, L., Medina-Mendoza, M., Cayo-Colca, I. S., & Cárdenas-Toro, F. P. (2023). Effect of tempering and cocoa butter equivalents on crystallization kinetics, polymorphism, melting, and physical properties of dark chocolates. *Lwt*, *173*(June 2022). https://doi.org/10.1016/j.lwt.2022.114402

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), 1–18. https://doi.org/10.3390/foods11121769

Chen, J., Ghazani, S. M., Stobbs, J. A., & Marangoni, A. G. (2021). Tempering of cocoa butter and chocolate using minor lipidic components. *Nature Communications*, *12*(1), 5018. https://doi.org/10.1038/s41467-021-25206-1

Chicco, D., Warrens, M. J., & Jurman, G. (2021). The coefficient of determination R-squared is more informative than SMAPE, MAE, MAPE, MSE and RMSE in regression analysis evaluation. *PeerJ Computer Science*, *7*, 1–24. https://doi.org/10.7717/PEERJ-CS.623

Cikrikci, S., & Oztop, M. H. (2018). Oil migration in hazelnut paste/chocolate systems using magnetic resonance imaging. *Journal of Food Measurement and Characterization*, *12*(3), 1460–1472. https://doi.org/10.1007/s11694-018-9761-0

Dahlenborg, H., Millqvist-Fureby, A., & Bergenståhl, 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

De Clercq, N., Kadivar, S., Van de Walle, D., De Pelsmaeker, S., Ghellynck, X., & Dewettinck, K. (2017). Functionality of cocoa butter equivalents in chocolate products. *European Food Research and Technology*, *243*(2), 309–321. https://doi.org/10.1007/s00217-016-2745-6

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

Delbaere, C., Van de Walle, D., Depypere, F., Gellynck, X., & Dewettinck, K. (2016). Relationship between chocolate microstructure, oil migration, and fat bloom in filled chocolates. In *European Journal of Lipid Science and Technology* (Vol. 118, Issue 12, pp. 1800–1826). https://doi.org/10.1002/ejlt.201600164

El-kalyoubi, M., Khallaf, M. F., Abdelrashid, A., & Mostafa, E. M. (2011). Quality characteristics of chocolate – Containing some fat replacer. *Annals of Agricultural Sciences*, *56*(2), 89–96. https://doi.org/10.1016/j.aoas.2011.05.009

Fajardo, G. C. C., Arrunategui, R. A. V., Rivera, C. A. O., & Peralta, M. O. U. (2017). Assessment of physical and physicochemical quality of main chocolates traded in Peru. *Acta Agronomica*, *66*(2), 164–171.

Farhanandi, B. W., Indah, N. K., Biologi, J., Matematika, F., Pengetahuan, I., Universitas, A., & Surabaya, N. (2022). Morphological and Anatomical Characteristics of Cocoa Plants That Grow at Different Heights. *LenteraBio : Berkala Ilmiah Biologi*, *11*(2), 310–325. https://doi.org/https://journal.unesa.ac.id/index.php/lenterabio/index

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*(September 2021), 110805. https://doi.org/10.1016/j.jfoodeng.2021.110805

Galdámez, J. R., Szlachetka, K., Duda, J. L., & Ziegler, G. R. (2009). Oil migration in chocolate: A case of non-Fickian diffusion. *Journal of Food Engineering*, *92*(3), 261–268. https://doi.org/10.1016/j.jfoodeng.2008.11.003

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

González-Miret, M. L., Terrab, A., Hernanz, D., Fernández-Recamales, M. Á., & Heredia, F. J. (2005). Multivariate correlation between color and mineral composition of honeys and by their botanical origin. *Journal of Agricultural and Food Chemistry*, *53*(7), 2574–2580. https://doi.org/10.1021/jf048207p

Gregersen, S. B., Miller, R. L., Hammershøj, M., Andersen, M. D., & Wiking, L. (2015). Texture and microstructure of cocoa butter replacers: Influence of

composition and cooling rate. *Food Structure*, *4*, 2–15. https://doi.org/10.1016/j.foostr.2015.03.001

Hapsari, T. T., & Yuniasih, A. F. (2020). The determinant factors of Indonesian competitiveness of cocoa exports to Germany. *Jurnal Ekonomi Pembangunan*, *18*(1), 75–84. https://doi.org/10.29259/jep.v18i1.9978

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

Hřivna, 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 and Nutrition*, *9*(9), 4863–4873. https://doi.org/10.1002/fsn3.2434

Hussain, N., Agus, B. A. P., Rahim, S. N. F. A., & Halim, H. S. A. (2018). Comparison of quality characteristics between compound and pure milk chocolate. *MOJ Food Processing & Technology*, *6*(3). https://doi.org/10.15406/mojfpt.2018.06.00178

Junaidi, L., Lestari, N., & Meutia, Y. R. (2020). Optimization of the hydrogenation and rafination process for cocoa butter substitute production using palm kernel oil in a small and medium scale industry. *IOP Conference Series: Materials Science and Engineering*, *980*(1). https://doi.org/10.1088/1757-899X/980/1/012062

Karmila, Ridwan, M., Parlina, I., & Satria, H. (2017). Sistem Pendukung Keputusan dalam Merekomendasikan Smartphone untuk Kalangan Pemula dengan Metode TOPSIS. *Osf*, 2–7.

Kinta, Y., & Hatta, T. (2012). Morphology of Chocolate Fat Bloom. In *Cocoa Butter and Related Compounds* (pp. 195–212). Elsevier. https://doi.org/10.1016/B978-0-9830791-2-5.50011-6

Kiyat, W. El, Monica, A., Qomariyah, N., & Manurung, B. S. (2018). Enzymes Involving in Chocolate Processing. *Enzymes Involving in Chocolate Processing*, *6*(1), 1–6. https://doi.org/10.14499/jfps

Klappa, P. (2009). *Kinetics for Bioscientist*.

Kurniasari, J., Cahyani, A., Nafingah, R., Rahayoe, S., Harmayani, E., & Saputro, A. D. (2019). The use of oven as a device to temper molten Dark Chocolate. *IOP Conference Series: Earth and Environmental Science*, *355*(1). https://doi.org/10.1088/1755-1315/355/1/012042

Lillah, Asghar, A., Pasha, I., Murtaza, G., & Ali, M. (2017). Improving heat stability along with quality of compound dark chocolate by adding optimized cocoa butter substitute (hydrogenated palm kernel stearin) emulsion. *Lwt*, *80*, 531–536. https://doi.org/10.1016/j.lwt.2017.02.042

Liu, W., Yao, Y., & Li, C. (2022). *Effect of tempered procedures on the crystallization behavior of different positions of cocoa butter products*. *370*(August 2021).

Lonchampt, P., & Hartel, R. W. (2004). Fat bloom in chocolate and compound coatings. *European Journal of Lipid Science and Technology*, *106*(4), 241–274. https://doi.org/10.1002/ejlt.200400938

Machálková, L., Hřivna, L., Nedomová, Š., & Jůzl, M. (2015). The effect of

storage temperature on the quality and formation of blooming defects in chocolate confectionery. *Potravinarstvo*, *9*(1), 39–47. https://doi.org/10.5219/425

Mokbul, M., Cheow, Y. L., & Siow, L. F. (2023). Physical properties, sensory profile and storage stability of compound chocolates made with cocoa butter replacer consisting of mango kernel fat and rice bran oil. *Food Chemistry Advances*, *3*(June). https://doi.org/10.1016/j.focha.2023.100515

Muhammad, D. R. A. (2021). *Mengendalikan Fat Bloom dan Cracking*. *XVI*(7).

Neilson, J., Dwiartama, A., Fold, N., & Permadi, D. (2020). Resource-based industrial policy in an era of global production networks: Strategic coupling in the Indonesian cocoa sector. *World Development*, *135*, 105045. https://doi.org/10.1016/j.worlddev.2020.105045

Nightingale, L. M., Lee, S. Y., & Engeseth, N. J. (2011). Impact of Storage on Dark Chocolate: Texture and Polymorphic Changes. *Journal of Food Science*, *76*(1). https://doi.org/10.1111/j.1750-3841.2010.01970.x

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), 012018. https://doi.org/10.1088/1755-1315/1200/1/012018

Nizori, A., Simamora, L. D., Rahmi, S. L., Tafzi, F., Mapegau, & Ichwan, B. (2022). Halal Dark Chocolate Quality: Influence of Tempering Time and Temperature. *Proceedings of the 6th International Conference of Food, Agriculture, and Natural Resource (IC-FANRES 2021)*, *16*, 399–408. https://doi.org/10.2991/absr.k.220101.055

Nöbel, S., Böhme, B., Schneider, Y., & Rohm, H. (2009). Technofunctional barrier layers for preventing fat bloom in triple-shot pralines. *Food Research International*, *42*(1), 69–75. https://doi.org/10.1016/j.foodres.2008.08.011

Oba, S., Toker, O. S., Palabiyik, İ., Konar, N., Goktas, H., Cukur, Y., Artik, N., & Sagdic, O. (2017). Rheological and melting properties of sucrose-free dark chocolate. *International Journal of Food Properties*, *20*, 2096–2106. https://doi.org/10.1080/10942912.2017.1362652

Ornla-ied, P., Rungsang, S., Tan, C. P., Lan, D., Wang, Y., & Sonwai, S. (2022). Production of Cocoa Butter Substitute via Enzymatic Interesterification of Fully Hydrogenated Palm Kernel Oil, Coconut Oil and Fully Hydrogenated Palm Stearin Blends. *Journal of Oleo Science*, *71*(3), ess21277. https://doi.org/10.5650/jos.ess21277

Ostrowska-Ligeza, E., Zebrowska, K. D.-, Brzezi, R., Wirkowska-wojdyła, M., Bry, J., Piasecka, I., & Agata, G. (2023). Characterization of Thermal Properties of Ruby Chocolate Using DSC, PDSC and TGA Methods. *Applied Science*, *13*(5221), 13. https://doi.org/10.3390/app13095221

Papadakis, S. E., Abdul-Malek, S., Kamdem, R. E., & Yam, K. L. (2000). A Versatile and Inexpensive Technique for Measuring Color of Foods. *Food Technology*, *54*(12), 48–51.

Pastor, C., Santamaría, J., Chiralt, A., & Aguilera, J. M. (2007). Gloss and Colour of Dark Chocolate During Storage. *Food Science and Technology*

International, *13*(1), 27–34. https://doi.org/10.1177/1082013207075664

Peyronel, F., & Pink, D. A. (2021). Using USAXS to predict the under-tempered chocolate microstructure. *Food Research International*, *143*(February). https://doi.org/10.1016/j.foodres.2021.110224

Pirouzian, H. R., Konar, N., Palabiyik, I., Oba, S., & Toker, O. S. (2020). Pre-crystallization process in chocolate: Mechanism, importance and novel aspects. In *Food Chemistry* (Vol. 321). https://doi.org/10.1016/j.foodchem.2020.126718

Popov-Raljić, J. V., Laličić-Petronijević, J. G., Georgijev, A. S., Popov, V. S., & Mladenović, M. A. (2010). Sensory Evaluation of Pralines Containing Different Honey Products. *Sensors*, *10*(9), 7913–7933. https://doi.org/10.3390/s100907913

Priya Varshini, A. G., Anitha Kumari, K., Janani, D., & Soundariya, S. (2021). Comparative analysis of Machine learning and Deep learning algorithms for Software Effort Estimation. *Journal of Physics: Conference Series*, *1767*(1). https://doi.org/10.1088/1742-6596/1767/1/012019

Rahim, R., Supiyandi, S., Siahaan, A. P. U., Listyorini, T., Utomo, A. P., Triyanto, W. A., Irawan, Y., Aisyah, S., Khairani, M., Sundari, S., & Khairunnisa, K. (2018). TOPSIS Method Application for Decision Support System in Internal Control for Selecting Best Employees. *Journal of Physics: Conference Series*, *1028*, 012052. https://doi.org/10.1088/1742-6596/1028/1/012052

Ramadhan, F., Muchtadi, T., & Subroto, E. (2023). Kajian Karakteristik Produk Chocolate Compound dengan Penambahan Inulin (Fat Replacer) dan Stevia (Sweetener). *Syntax Literate ; Jurnal Ilmiah Indonesia*, *8*(5), 3198–3216. https://doi.org/10.36418/syntax-literate.v8i5.11805

Raoufi, N., Tehrani, M. M., Farhoosh, R., & Golmohammadzadeh, S. (2012). The effects of adding water and polyglycerol polyricinoleate on the texture, appearance, and sensory qualities of compound milk chocolate. *European Journal of Lipid Science and Technology*, *114*(12), 1390–1399. https://doi.org/10.1002/ejlt.201100408

Ruban, A., Hrivna, L., Machalkova, L., Nedomova, S., & Sottnikova, V. (2016). Effect of Storage Regime on Texture and Other Sensory Properties of Chocolate. *Proceedings of International Phd Students Conference, (Mendelnet 2016)*, *114*, 645–650. https://mendelnet.cz/pdfs/mnt/2016/01/114.pdf

Samanta, S., Sarkar, T., Chakraborty, R., Rebezov, M., Ali, M., Thiruvengadam, M., & Rengasamy, K. R. R. (2022). *Current Research in Food Science Dark chocolate : An overview of its biological activity , processing , and fortification approaches*. *5*(October), 1916–1943.

Saputro, A. D., Hati, F. I. P., Yuda, W. A., Yanti, R., Marwati, T., Djaafar, T. F., Utami, T., & Rahayu, E. S. (2020). Quality attributes of probiotic-enriched chocolate: A preliminary study. *IOP Conference Series: Materials Science and Engineering*, *980*(1), 012035. https://doi.org/10.1088/1757-899X/980/1/012035

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 Glucomannan 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-l.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

Saputro, A. D., Van de Walle, D., Kadivar, S., Bin Sintang, M. D., Van der Meeren, P., & Dewettinck, K. (2017). Investigating the rheological, microstructural and textural properties of chocolates sweetened with palm sap-based sugar by partial replacement. *European Food Research and Technology*, *243*(10), 1729–1738. https://doi.org/10.1007/s00217-017-2877-3

Septiano, A. F., Susilo, S., & Setyaningsih, N. E. (2021). Analisis Citra Hasil Scanning Electron Microscopy Energy Dispersive X-Ray (SEM EDX) Komposit Resin Timbal dengan Metode Contrast to Noise Ratio (CNR). *Indonesian Journal of Mathematics and Natural Sciences*, *44*(2), 81–85. https://doi.org/10.15294/ijmns.v44i2.33143

Shadwell, N., Villalobos, F., Kern, M., & Hong, M. Y. (2013). Blooming reduces the antioxidant capacity of dark chocolate in rats without lowering its capacity to improve lipid profiles. *Nutrition Research*, *33*(5), 414–421. https://doi.org/10.1016/j.nutres.2013.03.004

Shafi, F., Reshi, M., & Bashir Assistant Professor, I. (2018). Chocolate Processing. *Ijabr*, *8*(3), 408–419.

Shen, L., Jin, J., Ye, X., Li, Y., Zhang, C., Jiang, L., & Zhao, L. (2023). Effects of sucrose particle size on the microstructure and bloom behavior of chocolate model systems. *Food Structure*, *36*(December 2022). https://doi.org/10.1016/j.foostr.2023.100323

Silveira, P. T. de S., Pedroso, A. C. A., Muniz, C. P., Cristianini, M., & Efraim, P. (2022). Influence of Refining and Conching Systems on Rheological and Sensory Properties of Chocolate. *Journal of Food Research*, *11*(2), 69. https://doi.org/10.5539/jfr.v11n2p69

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*. http://publications.lib.chalmers.se/records/fulltext/131122.pdf

SNI, 7934:2014. (2014). Standar Nasional Indonesia (SNI) Cokelat dan Produk-produk Cokelat. In *Sni 7934:2014*.

Son, Y. J., Choi, S. Y., Yoo, K. M., Lee, K. W., Lee, S. M., Hwang, I. K., & Kim, S. (2018). Anti-blooming effect of maltitol and tagatose as sugar substitutes for chocolate making. *Lwt*, *88*, 87–94. https://doi.org/10.1016/j.lwt.2017.09.018

Sonwai, S., & Rousseau, D. (2010). Controlling fat bloom formation in chocolate - Impact of milk fat on microstructure and fat phase crystallisation. *Food Chemistry*, *119*(1), 286–297. https://doi.org/10.1016/j.foodchem.2009.06.031

Stauffer, M. (2007). Conquering Shelf-life Issues of chocolate. *The Manufacturing Confectioner*, *February*, 47–51.

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, S. (2018). Aplikasi Proses Tempering Untuk Optimasi Titik Leleh Cokelat Hitam Produk Pengolahan Pintas. *Jurnal Teknologi Industri Pertanian*, *28*(3), 262–268. https://doi.org/10.24961/j.tek.ind.pert.2018.28.3.262

Subramaniam, P. (2011). The stability and shelf life of confectionery products. In *Food and Beverage Stability and Shelf Life* (pp. 716–742). Elsevier. https://doi.org/10.1533/9780857092540.3.716

Sudibyo, A. (2017). Effect of Processing Techniques on Flavour and Characteristics of Cocoa Processed and Chocolate Products. *Jurnal Industri Hasil Perkebunan*, *12*, 1–13.

Suriano, S., Balconi, C., Valoti, P., & Redaelli, R. (2021). Comparison of total polyphenols, profile anthocyanins, color analysis, carotenoids and tocols in pigmented maize. *Lwt*, *144*(September 2020). https://doi.org/10.1016/j.lwt.2021.111257

Suryana, M. R., & Djuanda, U. (2022). PENGARUH PROSES CONCHING TERHADAP SIFAT FUNGSIONAL COKELAT (Cacao theobroma cacao L.). *EDUFORTECH*, *March*. https://doi.org/10.17509/edufortech.v6i1.33288

Svanberg, L., Lorén, N., & Ahrné, L. (2012). Chocolate Swelling during Storage Caused by Fat or Moisture Migration. *Journal of Food Science*, *77*(11), 328–334. https://doi.org/10.1111/j.1750-3841.2012.02945.x

Talbot, G. (2009). Chocolate Temper. *Industrial Chocolate Manufacture and Use: Fourth Edition*, 261–275. https://doi.org/10.1002/9781444301588.ch12

Todorovic, V., Redovnikovic, I. R., Todorovic, Z., Jankovic, G., Dodevska, M., & Sobajic, S. (2015). Polyphenols, methylxanthines, and antioxidant capacity of chocolates produced in Serbia. *Journal of Food Composition and Analysis*, *41*, 137–143. https://doi.org/10.1016/j.jfca.2015.01.018

Vercet, A. (2003). Browning of white chocolate during storage. *Food Chemistry*, *81*(3), 371–377. https://doi.org/10.1016/S0308-8146(02)00452-1

Vivek, V., Bermúdez, S., & Larrea, C. (2019). Global Market Report: Cocoa. *Exchange Organizational Behavior Teaching Journal*, 1–12. https://www.iisd.org/publications/report/global-market-report-cocoa

Wijayati, H., & Haqqi, H. (2022). The Indonesian Global Cocoa Chain's Position in the Pandemic Era. *International Journal on Social Science, Economics and Art*, *12*(1), 10–21. https://doi.org/10.35335/ijosea.v12i1.75

Yuan, S., Li, X., Jin, Y., & Lu, J. (2017). Chocolate consumption and risk of coronary heart disease, stroke, and diabetes: A meta-analysis of prospective studies. *Nutrients*, *9*(7). https://doi.org/10.3390/nu9070688

Zhao, H., & James, B. J. (2019). Fat bloom formation on model chocolate stored under steady and cycling temperatures. *Journal of Food Engineering*, *249*(December 2018), 9–14. https://doi.org/10.1016/j.jfoodeng.2018.12.008

Zhongyou, X. (2012). Study on the Application of TOPSIS Method to the Introduction of Foreign Players in CBA Games. *Physics Procedia*, *33*, 2034–2039. https://doi.org/10.1016/j.phpro.2012.05.320

Zulqarnain, R. M., Saeed, M., Ahmad, N., Dayan, F., & Ahmad, B. (2020). Application of TOPSIS Method for Decision Making. *International Journal of Scientific Research in Mathematical and Statistical Sciences Mathematical and Statistical Sciences*, *7*, 76–81. www.isroset.org