



## DAFTAR PUSTAKA

- Afoakwa, E. O., Paterson, A., & Fowler, M. (2007). Factors influencing rheological and textural qualities in chocolate – a review. *Trends in Food Science & Technology*, 18(6), 290–298.  
<https://doi.org/10.1016/J.TIFS.2007.02.002>
- Bangun, S. K., Saputro, A. D., Fadilah, M. A. N., Rahayoe, S., Prasetyatama, Y. D., & Setiowati, A. D. (2022). A Preliminary study: the addition of konjac glucomannan-based hydrogel into chocolate increases the melting point of chocolate. *IOP Conference Series: Earth and Environmental Science*, 1038(1), 012073. <https://doi.org/10.1088/1755-1315/1038/1/012073>
- Beckett, S. T. (2008). The Science of Chocolate. *The Science of Chocolate*.  
<https://doi.org/10.1039/9781847558053>
- Beckett, S. T. (2009). Industrial Chocolate Manufacture and Use: Fourth Edition. *Industrial Chocolate Manufacture and Use: Fourth Edition*, 1–688.  
<https://doi.org/10.1002/9781444301588>
- 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>
- 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>
- Dian, H., & Dedy, R. (2015). *The Quality of Milk Chocolate Bars by Substitution of Cocoa Butter, Milk Powder and Lecithin Soya-A Preliminary Study*. 5(4).
- Erizal, E., S, S. G., Juniarti, Z., & Hariyanti, H. (2017). SINTESIS DAN KARAKTERISASI BIODEGRADABLE HIDROGEL SUPERABSORBEN POLI(KALIUM AKRILAT)-G-GLUKOMANAN DENGAN TEKNIK IRADIASI GAMMA. *Jurnal Sains Materi Indonesia*, 19(1), 32–38.  
<https://doi.org/10.17146/JSMI.2017.19.1.4110>
- Franke, K., & Heinzelmann, K. (2008). Structure improvement of milk powder for chocolate processing. *International Dairy Journal*, 18(9), 928–931.  
<https://doi.org/10.1016/J.IDAIRYJ.2008.03.013>
- Gray, M. P. (2017). Moulding, enrobing and cooling chocolate products. *Beckett's Industrial Chocolate Manufacture and Use*, 356–399.  
<https://doi.org/10.1002/9781118923597.CH14>

- Ilmi, A., Praseptiangga, D., & Muhammad, R. A. (n.d.). *Sensory Attributes and Preliminary Characterization of Milk Chocolate Bar Enriched with Cinnamon Essential Oil You may also like Sensory Attributes and Preliminary Characterization of Milk Chocolate Bar Enriched with Cinnamon Essential Oil.* <https://doi.org/10.1088/1757-899X/193/1/012031>
- Kartika, R., Gadri, A., & Darma, G. C. E. (2015). Formulasi basis sediaan pembalut luka hidrogel dengan teknik beku leleh menggunakan polimer kappa karagenan. *Prosiding Farmasi*, 0(0), 643–648.  
<https://doi.org/10.29313/V0I0.2241>
- Keogh, K., Twomey, M., O'kennedy, B., & Mulvihill, D. (n.d.). *Effect of milk composition on spray-dried high-fat milk powders and their use in chocolate.* <https://doi.org/10.1051/lait:2002030>
- Kinta, Y., & Hatta, T. (2012). Morphology of Chocolate Fat Bloom. *Cocoa Butter and Related Compounds*, 195–212. <https://doi.org/10.1016/B978-0-9830791-2-5.50011-6>
- Korley Kortei, N., Tawia Odamten, G., Obodai, M., Appiah, V., & Toah Akonor, P. (n.d.). *Determination of color parameters of gamma irradiated fresh and dried mushrooms during storage.*
- Larasati, W., Rahayu, W. M., & Nurrohmah, B. A. (2022). Evaluation and Improvement of Chocolate Bar Production at CV. XYZ Factory. *Journal of Agri-Food Science and Technology*, 3(2), 52–60.  
<https://doi.org/10.12928/JAFOST.V3I2.5897>
- Liang, B., & Hartel, R. W. (2004). Effects of Milk Powders in Milk Chocolate. *Journal of Dairy Science*, 87(1), 20–31. [https://doi.org/10.3168/JDS.S0022-0302\(04\)73137-9](https://doi.org/10.3168/JDS.S0022-0302(04)73137-9)
- Malpure, P. S., Patil, S. S., More, Y. M., & Nikam, P. P. (2018). A Review On-Hydrogel. *A Review On-Hydrogel. American Journal of PharmTech Research*, 8(3). <http://www.ajptr.com/www.ajptr.com>
- Mellor, D. D., Amund, D., Georgousopoulou, E., & Naumovski, N. (2018). Sugar and cocoa: sweet synergy or bitter antagonisms. Formulating cocoa and chocolate products for health: a narrative review. *International Journal of Food Science & Technology*, 53(1), 33–42.  
<https://doi.org/10.1111/IJFS.13651>
- Naik, B., & Kumar, V. (2014). Cocoa butter and its alternatives: A review Cocoa Butter and Its Alternatives: A Reveiw. *Journal of Bioresource Engineering and Technology* | Year-2014 |, 1, 7–17. [www.jakraya.com/journal/jbet](http://www.jakraya.com/journal/jbet)



- Pajin, B., Radujko, I., Šereš, Z., Simović, D. Š., Gyura, J., & Sakač, M. (2012). Influence of low-melting milk fat fraction on crystallization and physical properties of chocolate. *British Food Journal*, 114(6), 868–879. <https://doi.org/10.1108/00070701211234381/FULL/PDF>
- Ranken, M. D., Kill, R. C., & Baker, C. (1997). Sugar and Chocolate Confectionery. *Food Industries Manual*, 406–443. [https://doi.org/10.1007/978-1-4613-1129-4\\_11](https://doi.org/10.1007/978-1-4613-1129-4_11)
- Rifqi, M. (2021). PENGARUH PROSES CONCHING TERHADAP SIFAT FUNGSIONAL COKELAT (Cacao theobroma cacao L.). *EDUFORTECH*, 6(1), 26–31. <https://doi.org/10.17509/EDUFORTECH.V6I1.33288>
- Saputro, A. D., Muhammad, D. R. A., Sunarharum, W. B., Kusumadevi, Z., & Irmandharu, F. (2021). Physical characteristics of chocolate made from cocoa bean fermented at different duration: a preliminary study. *IOP Conference Series: Earth and Environmental Science*, 653(1), 012039. <https://doi.org/10.1088/1755-1315/653/1/012039>
- Saputro, A. D., Nur Fadilah, M. A., Keegen Bangun, S., Rahayoe, S., Wahyu Karyadi, J. N., & 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>
- Stortz, T. A., & Marangoni, A. G. (2011a). Heat resistant chocolate. *Trends in Food Science & Technology*, 22(5), 201–214. <https://doi.org/10.1016/J.TIFS.2011.02.001>
- Stortz, T. A., & Marangoni, A. G. (2011b). Heat resistant chocolate. *Trends in Food Science & Technology*, 22(5), 201–214. <https://doi.org/10.1016/J.TIFS.2011.02.001>
- Verde, A. B., Alvim, I. D., Luccas, V., & Vercelino Alves, R. M. (2021). Stability of milk chocolate with hygroscopic fibers during storage. *LWT*, 137, 110477. <https://doi.org/10.1016/J.LWT.2020.110477>
- Warburton, S., & Pixton, S. W. (1978). The moisture relations of spray dried skimmed milk. *Journal of Stored Products Research*, 14(2–3), 143–158. [https://doi.org/10.1016/0022-474X\(78\)90009-7](https://doi.org/10.1016/0022-474X(78)90009-7)
- Wibisono, W., Tunggal, I., & Hendrawati, T. Y. (2015). PENGARUH KONSENTRASI KOH PADA EKSTRAKSI RUMPUT LAUT (*Eucheuma cottonii*) DALAM PEMBUATAN KARAGENAN. *Jurnal Konversi*, 4(1). <https://jurnal.umj.ac.id/index.php/konversi/article/view/901>



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Hidrogel Berbasis Karagenan dan Pemanis Gula Sukrosa

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Zhao, H. (2018). *Fat bloom in chocolate: Bloom identification and its corresponding effects on chocolate properties.*

<https://researchspace.auckland.ac.nz/handle/2292/37330>