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Daftar Pustaka

Abidin, Z. (2018). Peran Jalur *Phosphatidyl-Inositol-3-Kinase* (PI3K) dalam Resistensi Kemoterapi pada Kanker. *Qanun Medika Vol. II No. 1*.

Banjara, S., Suraweera, C. D., Hinds, M. G., & Kvansakul, M. (2020). The BCL-2 Family: Ancient Origins, Conserved Structures, and Divergent Mechanisms. *Biomolecules 2020, Vol. 10, Page 128*, *10*(1), 128. https://doi.org/10.3390/BIOM10010128

Bassoli, B. K., Cassolla, P., Borba-Murad, G. R., Constantin, J., Salgueiro-Pagadigorria, C. L., Bazotte, R. B., da Silva, R. S. D. S. F., & de Souza, H. M. (2008). Chlorogenic acid reduces the plasma glucose peak in the oral glucose tolerance test: effects on hepatic glucose release and glycaemia. *Cell Biochemistry and Function*, *26*(3), 320–328. https://doi.org/10.1002/CBF.1444

Chiang, J. L., Kirkman, M. S., Laffel, L. M. B., & Peters, A. L. (2014). Type 1 Diabetes Through the Life Span: A Position Statement of the American Diabetes Association. *Diabetes Care*, *37*(7), 2034–2054. https://doi.org/10.2337/DC14-1140

DiMeglio, L. A., Evans-Molina, C., & Oram, R. A. (2018). Type 1 diabetes. *Lancet (London, England)*, *391*(10138), 2449–2462. https://doi.org/10.1016/S0140-6736(18)31320-5

Dou, Z., Zhao, D., Chen, X., Xu, C., Jin, X., Zhang, X., Wang, Y., Xie, X., Li, Q., Di, C., & Zhang, H. (2021). Aberrant Bcl-x splicing in cancer: from molecular mechanism to therapeutic modulation. *Journal of Experimental & Clinical Cancer Research 2021 40:1*, *40*(1), 1–18. https://doi.org/10.1186/S13046-021-02001-W

Febrianti, K. D., & Setyaningtyas, S. W. (2021). ASAM KLOROGENAT PADA KOPI DAN OBESITAS: A SYSTEMATIC REVIEW Chlorogenic Acid in Coffee and Obesity: A Systematic Review. *Media Gizi Indonesia*, *16*(3), 256–266. https://doi.org/10.20473/MGI.V16I3.256-266

Fristiohady, A. dan Agustina, I. (2020). Review Artikel: Apoptosis pada Kanker Payudara. *Media Farmasi p.issn 0216-2083 e.issn 2622-0962 Vol. XVI No. 2*.

Gil, M., & Wianowska, D. (2017). Chlorogenic acids – their properties, occurrence and analysis. *Annales Universitatis Mariae Curie-Sklodowska, Sectio AA – Chemia*, *72*(1), 61. https://doi.org/10.17951/AA.2017.72.1.61

Hardwick, J. M., & Soane, L. (2013). Multiple functions of BCL-2 family proteins. *Cold Spring Harbor perspectives in biology*, *5*(2), a008722. https://doi.org/10.1101/cshperspect.a008722

Hawa, M. I., Kolb, H., Schloot, N., Beyan, H., Paschou, S. A., Buzzetti, R., Mauricio, D., de Leiva, A., Yderstraede, K., Beck-Neilsen, H., Tuomilehto, J., Sarti, C., Thivolet, C., Hadden, D., Hunter, S., Schernthaner, G.,

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Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/

Scherbaum, W. A., Williams, R., Brophy, S., Leslie, R. D. (2013). Adult-onset autoimmune diabetes in Europe is prevalent with a broad clinical phenotype: Action LADA 7. *Diabetes Care*, *36*(4), 908–913. https://doi.org/10.2337/dc12-0931

Hernandes, L. C., Machado, A., Tuttis, K., Ribeiro, D. L., Aissa, A. F., Dévoz, P. P., & Antunes, L. (2020). Caffeic acid and chlorogenic acid cytotoxicity, genotoxicity and impact on global DNA methylation in human leukemic cell lines. *Genetics and molecular biology*, *43*(3), e20190347. https://doi.org/10.1590/1678-4685-GMB-2019-0347

Hikmah, Nuzulul & Dewi, Amandia & Shita, Amandia & Maulana, Hafiedz. (2015). Rat Diabetic Blood Glucose Level Profile with Stratified Dose Streptozotocin (SD-STZ) and Multi Low Dose Streptozotocin (MLD-STZ) Induction Methods. *Journal of Tropical Life Science*. 5. 30-34.

Jha, S., & Kitsis, R. N. (2011). Myocardial Basis for Heart Failure: Role of Cell Death. *Heart Failure*, 85–102. https://doi.org/10.1016/B978-1-4160-5895-3.10006-3

Kahanovitz, L., Sluss, P. M., & Russell, S. J. (2017). Type 1 Diabetes – A Clinical Perspective. *Point of Care*, *16*(1), 37. https://doi.org/10.1097/POC.0000000000000125

Kemenkes RI, (2020). Diabetes Mellitus. *Pusat Data dan Informasi Kementerian Kesehatan Republik Indonesia.*

Lu, H., Tian, Z., Cui, Y., Liu, Z., & Ma, X. (2020). Chlorogenic acid: A comprehensive review of the dietary sources, processing effects, bioavailability, beneficial properties, mechanisms of action, and future directions. *Comprehensive Reviews in Food Science and Food Safety*, *19*(6), 3130–3158. https://doi.org/10.1111/1541-4337.12620

Lu, Y., Ma, W., Li, Z., Lu, J., & Wang, X. (2017). The interplay between p16 serine phosphorylation and arginine methylation determines its function in modulating cellular apoptosis and senescence. *Scientific Reports 2017 7:1*, *7*(1), 1–10. https://doi.org/10.1038/srep41390

Meng, S., Cao, J., Feng, Q., Peng, J., & Hu, Y. (2013). Roles of chlorogenic Acid on regulating glucose and lipids metabolism: a review. Evidence-based complementary and alternative medicine : eCAM, 2013, 801457. https://doi.org/10.1155/2013/801457

Miller, R. G., Secrest, A. M., Sharma, R. K., Songer, T. J., & Orchard, T. J. (2012). Improvements in the life expectancy of type 1 diabetes: the Pittsburgh Epidemiology of Diabetes Complications study cohort. *Diabetes*, *61*(11), 2987–2992. https://doi.org/10.2337/db11-1625

Muliani. (2016). Siklus Sel. *Fakultas Kedokteran Universitas Udayana*

Naveed, M., Hejazi, V., Abbas, M., Kamboh, A. A., Khan, G. J., Shumzaid, M., Ahmad, F., Babazadeh, D., FangFang, X., Modarresi-Ghazani, F., WenHua,

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Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/

L., & XiaoHui, Z. (2018). Chlorogenic acid (CGA): A pharmacological review and call for further research. *Biomedicine & Pharmacotherapy*, *97*, 67–74. https://doi.org/10.1016/J.BIOPHA.2017.10.064

Peters, A., Laffel, L., Albright, A., Anderson, B., Bloomgarden, Z. T., Childs, B., Ehlinger, E., Hanna, K. M., Hirsch, I. B., Hitchcock, M., Lawrence, J. M., Lyles, S. P., McLaughlin, S., Prakasam, G., Riddell, M., Rodriguez, H., Shubrook, J., Silverstein, J., Kirkman, S., & Puryear, J. (2011). Diabetes care for emerging adults: recommendations for transition from pediatric to adult diabetes care systems: a position statement of the American Diabetes Association, with representation by the American College of Osteopathic Family Physicians, the American Academy of Pediatrics, the American Association of Clinical Endocrinologists, the American Osteopathic Association, the Centers for Disease Control and Prevention, Children with Diabetes, The Endocrine Society, the International Society. *Diabetes Care*, *34*(11), 2477–2485. https://doi.org/10.2337/dc11-1723

Pettitt, D. J., Talton, J., Dabelea, D., Divers, J., Imperatore, G., Lawrence, J. M., Liese, A. D., Linder, B., Mayer-Davis, E. J., Pihoker, C., Saydah, S. H., Standiford, D. A., & Hamman, R. F. (2014). Prevalence of diabetes in U.S. youth in 2009: the SEARCH for Diabetes in Youth study. *Diabetes Care*, *37*(2), 402–408. https://doi.org/10.2337/dc13-1838

Prawitasari, D. S. (2019). Diabetes Melitus dan Antioksidan. *KELUWIH: Jurnal Kesehatan Dan Kedokteran*, *1*(1), 47–51. https://doi.org/10.24123/KESDOK.V1I1.2496

Rayess, H., Wang, M. B., & Srivatsan, E. S. (2012). Cellular senescence and tumor suppressor gene p16. *International Journal of Cancer*, *130*(8), 1715–1725. https://doi.org/10.1002/IJC.27316

Santana-Gálvez, J., Cisneros-Zevallos, L., & Jacobo-Velázquez, D. A. (2017). Chlorogenic Acid: Recent Advances on Its Dual Role as a Food Additive and a Nutraceutical against Metabolic Syndrome. *Molecules 2017, Vol. 22, Page 358*, *22*(3), 358. https://doi.org/10.3390/MOLECULES22030358

Saputra, Nengah & Suartha, Nyoman & Dharmayudha, Anak. (2018). Agen Diabetagonik Streptozotocin untuk Membuat Tikus Putih Jantan Diabetes Mellitus. *Buletin Veteriner Udayana*. 116. 10.24843/bulvet.2018.v10.i02.p02.

Sari, Liza Meutia. (2018). APOPTOSIS: MEKANISME MOLEKULER KEMATIAN SEL. *Cakradonya Dental Journal; 10(2): 65-70*

Serra, S., & Chetty, R. (2018). p16. *Journal of Clinical Pathology*, *71*(10), 853–858. https://doi.org/10.1136/JCLINPATH-2018-205216

Skyler, J. S., Bakris, G. L., Bonifacio, E., Darsow, T., Eckel, R. H., Groop, L., Groop, P. H., Handelsman, Y., Insel, R. A., Mathieu, C., McElvaine, A. T., Palmer, J. P., Pugliese, A., Schatz, D. A., Sosenko, J. M., Wilding, J. P. H., & Ratner, R. E. (2017). Differentiation of Diabetes by Pathophysiology,

PENGARUH PEMBERIAN ASAM KLOROGENAT TERHADAP EKSPRESI mRNA p16 DAN BAX PADA JANTUNG TIKUS MODEL DIABETES MELLITUS
ANANTA BRYAN T W, dr. Nur Arfian, Ph.D; Wiwit Ananda Wahyu Setyaningsih, S.Keb, M.Sc
Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/

Natural History, and Prognosis. *Diabetes*, *66*(2), 241–255. https://doi.org/10.2337/DB16-0806

Speight, J., & Pouwer, F. (2021). Diabetes Mellitus Type 1. *Cambridge Handbook of Psychology, Health and Medicine: Third Edition*, 477–480. https://doi.org/10.29309/tpmj/2017.24.12.614

Song, J.-Q., Xu, A. E., Ae, T., Cai, Y., Chao-Shu, A. E., Ae, T., & Qi, Y.-F. (2009). *Activation of Akt/GSK-3b signaling pathway is involved in intermedin 1-53 protection against myocardial apoptosis induced by ischemia/reperfusion*. https://doi.org/10.1007/s10495-009-0398-7

Sowers, J. R., Epstein, M., & Frohlich, E. D. (2001). Diabetes, hypertension, and cardiovascular disease: an update. *Hypertension (Dallas, Tex. : 1979)*, *37*(4), 1053–1059. https://doi.org/10.1161/01.HYP.37.4.1053

Sujatmiko, T., Hadiati, D. R., dan Nurdiati, D. S. (2015). Perbandingan Rerata Ekspresi Protein Bax dan Bak Pada Preeklampsia Berat dan Kehamilan Normotensi. *Jurnal Kesehatan Reproduksi: 146-152 Vol. 2, No. 3.*

Sulistiyowati, I., Yunus, J., Sari, D. C. R., & Arfian, N. (2020). Upregulation of p16, bax and bcl-2 mrna expression associated with epithelial apoptosis and myofibroblast proliferation in kidney fibrosis model in mice. *Malaysian Journal of Medical Sciences*, *27*(2), 37–44. https://doi.org/10.21315/MJMS2020.27.2.4

Sukohar, A., Setiawan, Wirakusumah, F. F., Sastramihardja, H. S. (2011). Isolasi dan Karakterisasi Senyawa Sitotoksik Kafein dan Asam Klorogenat dari Biji Kopi Robusta Lampung. Jurnal Medika Planta – Vol. 1 No. 4.

Toyama, Daniela & Ferreira, Marcelo & Romoff, Paulete & Fávero, Oriana & Gaeta, Henrique & Toyama, Marcos. (2014). Effect of Chlorogenic Acid (5-Caffeoylquinic Acid) Isolated from Baccharis oxyodonta on the Structure and Pharmacological Activities of Secretory Phospholipase A2 from Crotalus durissus terrificus. BioMed research international. 2014. 726585. 10.1155/2014/726585.

Tuomilehto, J. (2013). The emerging global epidemic of type 1 diabetes. *Curr Diab Rep*, *13*(6), 795–804. https://doi.org/10.1007/s11892-013-0433-5

Uchime, O., Dai, Z., Biris, N., Lee, D., Sidhu, S. S., Li, S., Lai, J. R., & Gavathiotis, E. (2016). Synthetic antibodies inhibit Bcl-2-associated X protein (BAX) through blockade of the N-terminal activation site. *Journal of Biological Chemistry*, *291*(1), 89–102. https://doi.org/10.1074/JBC.M115.680918/ATTACHMENT/3D2752D6-6F70-413F-8626-46641A1BE9C8/MMC1.ZIP s

Vetere, A., Choudhary, A., Burns, S. M., & Wagner, B. K. (2014). Targeting the pancreatic β-cell to treat diabetes. *Nature Reviews Drug Discovery*, *13*(4), 278–289. https://doi.org/10.1038/NRD4231

UNIVERSITAS
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Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/

Vukelić, I., Detel, D., Pučar, L. B., Potočnjak, I., Buljević, S., & Domitrović, R. (2018). Chlorogenic acid ameliorates experimental colitis in mice by suppressing signaling pathways involved in inflammatory response and apoptosis. *Food and Chemical Toxicology*, *121*, 140–150. https://doi.org/10.1016/J.FCT.2018.08.061

Wisman, W., Siregar, C. D., & Deliana, M. (2016). Pemberian Insulin pada Diabetes Melitus Tipe-1. *Sari Pediatri*, *9*(1), 48. https://doi.org/10.14238/SP9.1.2007.48-53

Wu, W., Liu, X., & Han, L. (2019). Apoptosis of cardiomyocytes in diabetic cardiomyopathy involves overexpression of glycogen synthase kinase-3β. *Bioscience Reports*, *39*(1), 20171307. https://doi.org/10.1042/BSR20171307

Yan, Y., Zhou, X., Guo, K., Zhou, F., & Yang, H. (2020). Use of Chlorogenic Acid against Diabetes Mellitus and Its Complications. *Journal of Immunology Research*, *2020*. https://doi.org/10.1155/2020/9680508

Yu, Bang-Wei, Li, Jin-Long, Guo, Bin-Bin, Fan, Hui-Min, Zhao, Wei-Min, & Wang, He-Yao (2016). Chlorogenic acid analogues from Gynura nepalensis protect H9c2 cardiomyoblasts against H2O2-induced apoptosis.. Acta pharmacologica Sinica, 37(11), 1413-1422, ISSN 1745-7254, https://doi.org/10.1038/aps.2016.79