

## DAFTAR PUSTAKA

- Adjakly M., Ngollo M, Boiteux J.P., Bignon Y.J., Guy L., and Gallon D.B., 2013, Genistein and Daidzein: Different Molecular Effects on Prostate Cancer, *Anticancer Res*, **33**, 39-44.
- Aka, J.A., dan Lin., S.X., 2012, Comparison of Functional Proteomic Analyses of Human Breast Cancer Cell Lines T47D and MCF7, *PLoS ONE*, **7** (2), e31532.
- Anonim, 2009, *Fact Sheet No.297 : Cancer*, diperoleh dari <http://www.who.int/mediacentre/factsheets/fs297/en/indez.html>, diakses pada 8 Maret 2017.
- Anonim, 2010, *Pedoman Tatalaksana Kanker*, Badan Penerbit FKUI.pp.17-18, Jakarta.
- Anonim, 2012, *What You Need To Know About Breast Cancer*, U.S. Departement Of Health And Human Services, USA.
- Anonim, 2015, *Stop Kanker*, Pusat Data dan Informasi Kementerian Kesehatan RI, Jakarta.
- Anonim, 2016, *What is Breast Cancer ?*, [https://ww5.komen.org/uploadedFiles/Komen/Content/About Breast Cancer /Tools and Resources/Fact Sheets and Breast Self Awareness Cards/What %20is%20Breast%20Cancer.pdf](https://ww5.komen.org/uploadedFiles/Komen/Content/About%20Breast%20Cancer/Tools%20and%20Resources/Fact%20Sheets%20and%20Breast%20Self%20Awareness%20Cards/What%20is%20Breast%20Cancer.pdf) , diakses pada 8 Maret 2017.
- Atkinson, C., Frankenfeld, C.L, Lampe, J.W., 2005, Gut bacterial metabolism of the soy isoflavone daidzein: exploring the relevance to human health, *Exp Biol Med*, **230** (3), 155-70.
- Barlow, J., Johnson J., dan Scofield L., 2007, *Early Life Exposure to the Phytoestrogen Daidzein and Breast Cancer Risk in Later Years*, Breast Cancer & The Environment Research Center, San Francisco.
- Beck, B., Chen, Y.F., Walthere, D., Devanarayan, W., Eastwood, B.J., Farmen M.W., Itturia, S.J., Iversen, P.W., Kahl, S.D., Moore, R.A., Sawyer, B.D., dan Weidner, J., 2012, *Assay Guidline Manual*, 1-2, Eli Lilly & Company, Indianapolis.
- CCRC (Cancer Chemoprevention Research Center), 2012, *Prosedur Tetap Uji Sitotoksik Metode MTT*, <http://ccrc.farmasi.ugm.ac.id/wp->

[content/uploads/10\\_sop-uji-sitotoksik-metode-mtt.pdf](#) , diakses pada 26 Mei 2016.

- Choi E.J., dan Kim G.H., 2013, Antiproliferative activity of daidzein and genistein may be related to ER $\alpha$ /c-erbB-2 expression in human breast cancer cells, *Mol Med Rep*, **7**, 781-784.
- Choi, E.J., Kim, G.H., 2008, Daidzein Causes Cell Cycle Arrest at The G1 and G2/M Phases in Human Breast Cancer MCF-7 and MDA-MB-453 cells, *Phytomedicine*, **15**, 683–690.
- Dal-Ho,H., Michael, S.D., Hirofumi, T., Koji, Y., 2002, Relationship between Estrogen Receptor-Binding and Estrogenic Activities of Environmental Estrogens and Suppression by Flavonoids, *Biosci. Biotechnol. Biochem.*, **66** (7),1479–1487.
- Dalimartha, S, 2004, *Deteksi Dini Kanker & Simplisia Antikanker*, Penebar Swadaya.pp.19-26, Jakarta.
- Dhananjaya, K., G., Sibi, Mallesha, H., Ravikumar, K.R., Awashi, S., 2012, Insilico studies of daidzein and genistein with human estrogen receptor, *Asian Pacific J Trop Biomed*, *S1747-S1753*.
- Dixon, R.A, 2004, Phytoestrogens, *Annu. Rev. Plant Biol.*, **55**, 225–61.
- Djajanegara, I., Wahyudi, P., 2009, Pemakaian Sel HeLa Dalam Uji Sitotoksitas Fraksi Kloroform dan Etanol Ekstrak Daun *Annona squamosa*, *Jurnal Ilmu Kefarmasian Indonesia*, **7**(1), 7-11.
- Doyle, A., & Griffith, S.J.B., 2000, Cell and Tissue Culture for Medical Research, 49, John Willey and Sons, Ltd., New York.
- Farjadian, S., Khajoei, N.L., Fazeli, M., Askari, F.H., Zaeri, S., 2015, Doxorubicin Cytotoxicity in Combination with Soy Isoflavone Daidzein on MCF-7 Breast Cancer Cells, *Mal J Nutr*, **21**(1), 63-73.
- Fazwishni, S., & Hadijono, B.S., 2000., Uji Sitotoksitas dengan esei MTT, *Jurnal Kedokteran Gigi, Universitas Indonesia*, **7**, 28-32.
- Gruber, C.J, Tschugguei, W., Schneebeger, C., Huber, J.C., 2002. Production and action of estrogens. *N Engl J Med*, **346**, 340-50.
- Guo, J.M., Xiao, B.X., Liu, D.H., Grant, M., Zhang, S., Lai, Y.F., Guo, Y.B, Liu, Q., 2004, Biphasic Effect of Daidzein on Cell Growth of Human Colon Cancer Cells, *Food and Chem Toxicology*, **42**, 1641–1646.

- Han, B.J., Li, W., Jiang, G.B., Lai, S.H., Zhang, C., 2015, Effects of Daidzein in Regards to Cytotoxicity *In Vitro*, Apoptosis, Reactive Oxygen Species Level, Cell Cycle Arrest and The Expression of Caspase and Bcl-2 Family Proteins, *Oncol rep*, **34**, 1115-1120.
- Harrison, R.M, Phillippi, P.P, Swan, K.F, dan Henson, M.C.,1999, Effect of genistein on steroid hormon production in the pregnant rhesus monkey, *Society for Exp Bio and Med*, vol. 222.
- Haryoto, Muhtadi, Indrayudha, P., Azizah, T., Suhendi, A., Aktivitas Sitotoksik Ekstrak Etanol Tumbuhan Sala (*Cynometra ramiflora* Linn) Terhadap Sel HeLa, T47D, dan WiDR, *Jurnal Penelitian Saintek*, **18** (2).
- Hayashi, S-I., Eguchi, H., Tanimoto, K., Yoshida, T., Omoto, Y., Inoue, A., Yosida, N., dan Yamaguchi, Y., 2003, The expression and function of estrogen receptor  $\alpha$  and  $\beta$  in human breast cancer and its clinical application, *Endocrine-Related Cancer*, **10**, 193–202.
- Hejmadi, M., 2010, Introduction to Cancer Biology, <http://bookboon.com/en/introduction-to-cancer-biology-ebook>, diakses pada 8 Maret 2017.
- Hopert, A.C., Beyer, A., Frank, K., Strunck, E., Wiinsche, W., dan Volimer, G., 1998, Characterization of Estrogenicity of Phytoestrogens in an Endometrial-derived Experimental Model, *Environ Health Perspect*, **106**, 581-586.
- Hsieh C.Y., Santoli, R.C., Haslam, S.Z., dan Helferich, W.G., 1998, Estrogenic Effects of Genistein on the Growth of Estrogen Receptor-positive Human Breast Cancer (MCF-7) Cells in Vitro and in Vivo, *Cancer Res*, **58**, 3833-3838.
- Hughes, C.L, 1998, Phytochemical Mimicry of Reproductive Hormones and Modulation of Herbivore Fertility by Phytoestrogens, *Environ Health Perspect.*, **78**, 171-174.
- Husoy, T., Syyersen, T., & Jenssen, J., 1993, Comparisons of four in vitro cytotoxixity tests : The MTT assay, NR assay, uridine incorporation, and protein measurements, *Toxicology In Vitro*, **7** (2), 149-154.
- Ikawati, Z., 2008, *Pengantar Farmakologi Molekuler*, UGM Press, Yogyakarta.
- Isodai, H., Talorete, T.P.N., Kimura, M., Maekawa, T., Inamori, Y., Nakajimai, N., dan Seki, H., 2002, Phytoestrogens Genistein and Daidzin Enhance The Acetylcholinesterase Activity of The Rat Pheochromocytoma Cell Line PC12 by Binding to The Estrogen Receptor, *Cytotechnology*, **40**, 117–123.

- Kato, K., Takahashi, S., Cui, L., Suzuki S., Futakuchi, M., Sugiura, S., dan Shirai, T., 2000, Suppressive Effects of Dietary Genistin and Daidzin on Rat Prostate Carcinogenesis, *Jpn J Cancer Res*, **91** (8), 786-91.
- Kelly, G.E., Nelson, C., Waring, M.A., Joannou, G.E., dan Reeder, A.Y., 1993, Metabolites of dietary (soya) isoflavones in human urine, *Clin Chim Acta.*, **223**, 9-22.
- Keung, W.M., Vallee, B.L., 1993, Daidzin and daidzein suppress free-choice ethanol intake by Syrian Golden hamsters, *Proc Natl Acad Sci USA.*, **90**, 10008-10012.
- Kim, D.H., Jung, H.A, Park, S.J., Kim, J.M., Lee, S.J, Choi, J.S., Cheong, J.H., Ko, K.H., dan Ryu, J. H., 2010, The Effects of Daidzin and Its Aglycon, Daidzein, on the Scopolamineinduced Memory Impairment in Male Mice, *Arch Pharm Res*, **33** (10), 1685-1690.
- Kim, S.H dan Park, M.J., 2012, Effects of Phytoestrogen on Sexual Development. *Korean J. Pediatr.* **55** (8), 265-271
- Koni, E dan Eka B, 2009, *Kupas Tuntas Kanker Payudara. Paradigma Indonesia*.pp.12-25, Yogyakarta.
- Korach, K., 1994., Insights from the study of animals lacking functional estrogen receptor. *Science*, **266**, 1524–1527.
- Leavitt, W. W., dan Meisner, D. M., 1968, Sexual development altered by non-steroidal oestrogens. *Nature*, **218**, 181–194.
- Leclerq, G., dan Heuson, J.C., 1979, Physiological and pharmacological effects of estrogens in breast cancer, *Biochim Biophys Acta*, **560**, 427–55.
- Limer, J.L., dan Speirs, V., 2004, Phyto-oestrogens and Breast Cancer Chemoprevention, *Breast Cancer Res*, **6**, 119-127.
- Lo, F.H., Mak, N.K., Leung, K.N., 2007, Studies on The Anti-tumor Activities of The Soy Isoflavone Daidzein on Murine Neuroblastoma Cells, *Biomed. Pharmacother.*, **61**, 591-595.
- Lowe, E.D., Gao, G., Johnson, L.N., *et al.*, 2008, Structure of daidzin, a naturally occurring anti-alcohol-addiction agent, in complex with human mitochondrial aldehyde dehydrogenase. *J Med Chem*, **51**, 4482-4487.
- Martin, P.M., Horwitz, K.B., Ryan, D.S., McGuire, W.L., 1978, Phytoestrogen Interaction with Estrogen Receptors in Human Breast Cancer Cells, *Endocrinology*, **103**, 1860-1867.

- Messina, M., 2003, A Close look at Soybeans, *4th Edition Nutritional Prospectives*, 176-17.
- Morito, K., Hirose, T., Kinjo, J., Hirakawa, T., Okawa, M., Nohara, T., Ogawa, S., Inoue, S., Muramatsu, M., dan Masamune, Y., 2001, Interaction of Phytoestrogens with Estrogen Receptors  $\alpha$  dan  $\beta$ , *Biol. Pharm. Bull.* **24** (4) 351—356.
- Mosmann, T., 1983, Rapid Colorimetric Assay for Cellular Growth and Survival : Application to Proliferation & Cytotoxicity Assays, *Journal of Immunological Method*, **65**, 65-69.
- Mysinger, M.M., Carchia, M., Irwin, J.J., Shoichet, B.K., 2012. Directory of Useful Decoys, Enhanced (DUD-E): Better Ligands and Decoys for Better Benchmarking. *J. Med. Chem.*, **55**, 6582–6594.
- Naim, M.B., Gestetner, S. Zilkah, Y. Bilk, dan A. Bondi, 1974, Soybean isoflavone, characteristic, determination and antifungal activity, *J. Agric. Food Chem.*, **22** (5), 806-809.
- Neubig, R.R., Spedding, M., Kenakin, T., dan Christopoulos, A., 2003, International Union of Pharmacology Committee on Receptor Nomenclature and Drug Classification. XXXVIII. Update on Terms and Symbols in Quantitative Pharmacology, *Pharmacol Rev.*, **55**, 597–606.
- Nielsen, I.L., dan Williamson, G., 2007, Review of the factors affecting bioavailability of soy isoflavones in humans., *Nutr Cancer* , **57** (1), 1-10.
- Ozaki, T., dan Nakagawara, A., 2011, Role of p53 in Cell Death and Human Cancers, *Cancers*, **3**, 994-1013.
- Ravindranath, M.H., Muthugounder, S., Presser, N., dan Viswanathan, S., 2004, Anticancer Therapeutic Potential of Soy Isoflavone, Genistein , <https://www.researchgate.net/publication/8144317> , diakses pada April 2016.
- Reece, J.B., Urry, L.A., Cain, M.L., Wasserman, S.A, Minorsky, V., dan Jackson, R.B., 2011, *Campbell Biology*, 9<sup>th</sup> Ed., Pearson, London.
- Rice, S., dan Whitehead S.A., 2008, Phytoestrogens Oestrogen Synthesis and Breast Cancer, *Journal of Steroid Biochemistry & Molecular Biology*, **108**, 186–195.
- Riss, T.L, Moravec, R.A., Niles, A.L., Duellman, S., Benink, H.A., Worzella, T.J., Minor, L., 2013, *Cell Viability Assays*, Eli Lilly & Company, Indianapolis.
- Rowland, I., Faughnan, M., Hoey, L., et al., 2003, Bioavailability of phyto-oestrogens, *Br J Nutr.*, **89** (1), 45-58.

- Saji, S., Hirose, M., Toi, M., 2005, Clinical Significance of Estrogen Receptor Beta in Breast Cancer, *Cancer Chemother. Pharmacol.*, **56**, s21–s26.
- Schafer, J.M., Lee, E.S., O'regam, R.M., Yao, K., dan Jordan, V.C., 2000, Rapid Development of Tamoxifen-Stimulated Mutant p53 Breast Tumors (T47D) in Atyhmic Mice, *Clin. Cancer Res.*, **6**, 4373-4380, **cit.**, Da'I, M., 2007, Mekanisme Molekuler Aktivitas Analog Kurkumin Pentagamavunon terhadap Sel Kanker Payudara T47D, Disertasi, Fakultas Farmasi Universitas Gadjah Mada Yogyakarta.
- Setchell, K.D., 1998, Phytoestrogens the Biochemistry, Physiology, and Implications for Human Health of Soy Isoflavones, *Am. J. Clin. Nutr.*, **68** (6), 1333-1346.
- Setiawati, A., Riswanto, F.O.D., Yuliani, S.H., Istyastono, E.P., 2014, Anticancer activity of mangosteen pericarp dry extract against MCF-7 breast cancer cell line though estrogen receptor- $\alpha$ , *Indonesian J. Pharm.*, **25**, 119–124.
- Siegel R., Naishadham D., Jemal A., 2012, Cancer Statistics.. *CA Cancer J. Clin.* **62**, 10 – 29.
- Song, X., Pan Z., 2012, Estrogen receptor-beta agonist diarylpropionitrile counteracts the estrogenic activity of estrogen receptor-alpha agonist propylpyrazole-triol in the mammary gland of ovariectomized Sprague Dawley rats, *Journal of Steroid Biochemistry & Molecular Biology*, **130**, 26– 35.
- Spagnuolo C., Russo, G.L., Orhan, I.E., Hebtemariam, S., Daglia, M., Sureda, A., Nabavi, S.N., Devi., K.P., Loizzo, M.R., Tundis, R., Nabavi, S.M., 2015, Genistein and Cancer: Current Status, Challenges, and Future Directions, *American Society for Nutrition. Adv Nutr* , **6**, 408–19.
- Verheus, M., van Gils, C.H., Keinan, B.L, et al., 2007, Plasma phytoestrogens and subsequent breast cancer risk, *J Clin Oncol*, **25** (6), 648-655.
- Wang, T.T.Y., Sathyamoorthy, N., & Phang, J.M., 1996, Molecular Effects of Genistein on Estrogen Receptor Mediated Pathways, *Carcinogenesis (Lond.)*, **17**, 271-275.
- Zang, Y., Igarashi, K., dan Yu C., 2015, Anti-obese and anti-diabetic effects of a mixture of daidzin and glycitin on C57BL/6J mice fed with a high-fat diet, *Biosci. Biotech. Biochem.*, **79** (1), 117–123.