

DAFTAR PUSTAKA

- Achmadi, (2008). *Substitusi Konsentrasi Protein Kecambah Kedelai Pada Pembuatan Bubur Tepung Beras Instan Dengan Berbagai Waktu Pemanasan*. Skripsi. Fakultas Teknologi Hasil Pertanian. FTP. Universitas Wangsa Manggala Yogyakarta.
- Almatsier, (2002). *Prinsip Ilmu Gizi Dasar*, Jakarta : PT .Gramedia
- Astuti dan Marsono, (2016). *Pengembangan Formula Pangan Fungsional Sereal Beras Hitam Dan Evaluasi Komponen Bioaktifnya Secara In Vivo*. Laporan Akhir PUPT . Direktorat Jenderal Pendidikan Kemenristek. Yogyakarta
- ADA, (2004). *Diagnosis and Classification of Diabetes Mellitus*. Diabetes Care . Jan; 27(suppl1): s5S10. https://doi.org/10.2337/diacare.27.2007.S5http://care.diabetesjournals.org/content/27/suppl_1/s5#F1
- Anonim¹. (2012). *Penyakit Tidak Menular*. Buletin Jendela Data dan Informasi. Jakarta : Kementerian Kesehatan RI.
- Anonim². (2010). *Mari Lestarkan Beras Hitam Lokal*. <http://www.yogya.litbang.deptan.go.id>.
- Anonim³. (2016). Sereal Sarapan. Wikipedia. https://id.wikipedia.org/wiki/Sereal_sarapan. Di akses [22 Februari 2016]
- Anonim⁴. (2014) .Sukralosa, Pemanis Buatan Serba-Guna Yang Relatif Aman. <https://wawasanilmukimia.wordpress.com/2014/06/>, Di akses [22 Februari 2016]
- Anonim⁵. (2014). *Batas Maksimum Penggunaan Bahan Pemanis*. BPOM. Kemenkes RI. Jakarta
- Anonim⁶. (2013). *Laporan Riset Kesehatan Dasar Nasional*. Kementerian Kesehatan RI. Balitbangkes. Jakarta
- Ataie-Jafari, A., Hosseini, S., Karimi, F., Pajouhi, M. (2008). Effects of sour cherry juice on blood glucose and some cardiovascular risk factors improvements in diabetic women. *A pilot study. Nutrition & Food Science*, 38, 355-360.
- Aura, A. M., Lopez, P. M., O'Leary, K. A., Williamson, G., Marja, Caldentey, K. M. O., Poutanen, K., Buelga, C. S. (2005). In vitro metabolism of anthocyanins by human gut microflora. *European Journal of Nutrition*, 44, 133-142.

- AOAC. 1995. *Officials Method of Analysis of the Association of Officials Chemists*. AOAC, Inc. Alington. Virginia.
- Azrimaidaliza, (2011). Asupan Zat Gizi Dan Diabetes Mellitus. *Jurnal Kesehatan Masyarakat Andalas*. Vol 6 No.1. Padang : FKM
- Benzie, I. F. F. & Strain, J. J. (1996). The ferric reducing ability of plasma (FRAP) as a measure of “Antioxidant Power”: The FRAP assay. *Analytical Biochemistry*, 239, 70-76.
- Bintanah, S. & Kusuma, H.S. (2010). Pengaruh Pemberian Bekatul dan Tepung Tempe Terhadap Profil Gula Darah Pada Tikus Yang Diberi Alloxan. *Jurnal Pangan dan Gizi*. 10(02):1–9.
- Buckle dkk, (1987). *Ilmu Pangan*. Diterjemahkan oleh Hari dan Adiono. Jakarta : Universitas Indonesia-Press.
- Cai *et al*, (2016). *Conventional, Ultrasound-assisted, And Accelerated-Solvent Extractions Of Anthocyanins From Purple Sweet Potatoes*. *Food Chemistry* 197 (2016) 266–272
- Dai, L. P., Dong, X. J., Ma, H. H. (2012). Antioxidative and chelating properties of anthocyanins in *Azolla imbricate* induced by cadmium. *Polish Journal of Environmental Studies*, 21 (4), 837-844.
- Devi, P. S., Kumar, M. S., Das, S. M. (2012). DNA damage protecting activity and free radical scavenging activity of anthocyanins from red sorghum (*Sorghum bicolor*) bran. *Biotechnology Research International*, 2012, 1-9.
- Departemen Kesehatan RI. (2006). *Pedoman Tatalaksana Gizi Usia Lanjut untuk Tenaga Kesehatan*. Jakarta: Direktorat Bina Gizi Masyarakat Ditjen Binkesmas Depkes RI
- Desrosier, (1988). *Teknologi Pengawetan Pangan*. Jakarta : Universitas Indonesia-Press.
- Dupont *et al*, (2017). The Food Matrix Affects The Anthocyanin Profile Of Fortified Egg And Dairy Matrices During Processing And In Vitro Digestion. *Food Chemistry* 214 (2017) 486–496
- En. Li *et al*, (2015). *Total Flavonoids Content, Antioxidant And Antimicrobial Activities Of Extracts From Mosla Chinensis Maxim. cv. Jiangxiangru*. *LWT - Food Science and Technology* 64 (2015) 1022-1027
- E. Fox, R.W Bowers and M.L. Foss, . (1998). *The Pysiological Basis of Physical Education and Athletics* (4th Ed.). Philadelphia: Saunders College

- Fatimah, (2015). *Diabetes Mellitus Type 2*. Artikel Review. Volume 4 No 5. 93-101. Medical Faculty, Lampung University.
- Fernandes, I., Faria, A., Calhaub, C., de Freitas, V., Mateusa, N. (2013). Bioavailability of anthocyanins and derivatives. *Journal of Functional Foods*, 7, 54-66.
- Efendi, (2009). *Keperawatan Kesehatan Komunitas: Teori Dan Praktek Dalam Keperawatan*. Jilid 1. Jakarta : Salemba Medika
- Flood, A., Subar, A. F., Hull, S. G., Zimmerman, T. P., Jenkins, A. A. J., Schatzkin, A. (2006). Methodology for adding glycemic load values to the national cancer institute diet history questionnaire database. *Journal of the American Dietetic Association*, 106, 393-402.
- Giusti, M. & Wroslad, R.E. (2001). *Characterization and Measurement of Anthocyanins by UV-Visible Spectroscopy*. <http://www.wiley.com>.
- Hall, *et al* ,(2016) Drinks containing anthocyanin-rich blackcurrant extract decrease postprandial blood glucose, insulin and incretin concentrations,. *Journal of nutritional Biochemistry* 38(2016)154-161
- Harini, S., Roekistiningsih, Rahmi, Y. (2012). *Perbedaan Nilai Indeks Glikemik Beras Hitam (*Oryza sativa L. indica*), Beras Merah (*Oryza nivara*), dan Beras Putih. (*Oryza sativa*)* . fk.ub.ac.id/artike/1/id/filedownload/gizi/SETYO%20HARINI.pdf. Di akses pada tanggal 29 desember 2016
- Hau *et al*, (2015). Identification of Anthocyanins In Black Rice (*Oryza sativa L.*) by UPLC/QTOF- MS And Their In Vitro And In Vivo Antioxidant Activities. *Journal of Cereal Science* 64 (2015) 92e99
- Hayashi *et al*, (2016). A Study On The Color Deepening In Red Rice During Storage. *Food Chemistry* 199 (2016) 457-462
- Hendromartono, Tjokroprawiro A, Sutjahjo A, Pranoto A, Murtiwi S, Adi S, *et al*. *Dislipidemia*. Dalam: Tjokroprawiro A, Setiawan Boedi S, Pranoto A, Nasronudin, Santoso D, Soegiarto G, editors. *Buku Ajar Ilmu Penyakit Dalam*. Surabaya : Airlangga University Press; 2007; 93-106.
- Herawati (2013). Pengaruh konsumsi ekstrak antosianin ubi jalar ungu (*Ipomoea batatas L.*) terhadap glukosa darah, status antioksidan darah, dan gambaran histopatologi pancreas tikus hiperglikemia induksi aloksan. *Tesis*. Yogyakarta : Fakultas Teknologi Pertanian.
- Hou, D. X. (2003). Potential mechanisms of cancer chemoprevention by anthocyanins. *Current Molecular Medicine*, 3, 149-159.

- Hou, Z., Qin, P., Zhang, Y., Cui, S., Ren, G. (2013). Identification of anthocyanins isolated from black rice (*Oryza sativa L.*) and their degradation kinetics. *Food Research International*, 50, 691-697.
- Inaguma *et al.*, (2011). Improvement of insulin resistance by Cyanidin 3-glucoside, anthocyanin from black beans through the up-regulation of GLUT4 gene expression. *BioMed Central Proceedings*, 5 (8), 21-22.
- Jayarama N, Reddy M, Lakshmaiah V. *Prevalence and Pattern of Dyslipidemia in Type 2 Diabetes Mellitus Patients in a Rural Tertiary Care Centre, Southern India*. Global Journal of Medicine and Public Health [internet]. 2012 .<http://www.gjmedph.org/uploads/O2-Vo1No3.pdf>
- Jisieike-Onuigbo NN, Unuigbo EI, Oguejiofor CO. (.2011) *Dyslipidemias in Type 2 Diabetes Melitus Patients in Nnewi South-East Nigeria*. Annals of African Medicines. <http://www.ajol.info/index.php/aamarticle.../64474.pdf>
- Maryam, R. Siti, *et al.* (2008). *Mengenal Usia Lanjut dan Perawatannya* . Jakarta : Salemba Medika
- Marsono, (2007). *Prospek Pengembangan Makanan Fungsional*. Jurnal Pangan Dan Gizi. Vol 7 No.1.19-27. Program Studi Teknologi Pangan Fakultas Teknologi Pertanian Unika Widya Mandala Surabaya
- Nabavi *et al.*,(2015) . Role of quercetin as an alternative for obesity treatment: you are what you eat. *Food Chemistry* 179 (2015) 305–310
- Oki *et al.*, (2016). Antihyperglycemic Effect and Antioxidants Properties of Black Rice (*Oryza sativa L. indica*) Cereal and Anthocyanin Extract on Health and Histopathology of Hyperglycemic Rats. *Pakistan Journal of Nutrition* 15 (7): 702-707, 2016 ISSN 1680-5194. Asian Network for Scientific Information
- Oktafiani, L. D. A., Permatasari, N., Rahmi, Y. (2012). *Perbedaan Proses Pengolahan terhadap Penurunan Kandungan Antosianin pada Beras Hitam (*Oryza sativa L.*)*. <http://www.old.fk.ub.ac.id>.
- Patras, A., Brunton, N. P., O'Donnell, C., Tiwari, B.K. (2010). Effect of thermal Processing on Anthocyanin Stability in Foods; Mechanisms And Kinetics of Degradation. *Review. Trends in Food Science & Technology*, 21, 3-11.
- Paramita *et al.*, (2009). *Pengembangan Minuman Isotonik Antosianin Beras Hitam (*oryza sativa.l.indica*) Dan Efeknya Terhadap Kebugaran Dan Aktivitas Antioksidan Pada Manusia Pasca Stres Fisik : A Case Control Study*. Tesis. Program Pascasarjana Fakultas Teknologi Pertanian. Universitas Gadjah Mada

- Pedro *et al.*, (2016). *Extraction Of Anthocyanins And Polyphenols From Black Rice (*Oryza sativa l.*) By Modeling And Assessing Their Reversibility And Stability*. Food Chemistry 191 (2016) 12–20
- Pramitasari *et al.*, (2014). *Potensi Antioksidatif Minuman Fungsional Berbasis Beras Hitam (*oryza sativa l. Indica*) Dan Kedelai Hitam (*glycine max l. Merr.*) Untuk Lansia Penyandang Diabetes Mellitus Tipe 2*. Tesis. Program Pascasarjana Fakultas Teknologi Pertanian. Universitas Gadjah Mada
- Proverawati dan Wati. (2010). *Ilmu Gizi Untuk Keperawatan dan Gizi Kesehatan*. Nuha Medika, Yogyakarta.
- Qu, H. Q., Li, Q., Rentfro, A. R., Fisher-Hoch, S. P., McCormick, J. B. (2011). The definition of insulin resistance using HOMA-IR for Americans of Mexican descent using machine learning. *PLoS ONE*, 6, 1-4.
- Kamal, (2014). Pengaruh Bahan Aditif CMC (Carboxyl Methyl Cellulose) Terhadap Beberapa Parameter Pada Larutan Sukrosa. *Jurnal Teknologi Vol. I, Edisi 17, Periode Juli-Desember 2010 (78-84)*. Bandung. ITENAS
- Kay, C.D. (2006). Aspects of anthocyanin absorption, metabolism and pharmacokinetics in humans. *Review. Nutrition Research Reviews*, 19, 137-146.
- Kristiana, H.D., S. Ariviani and L.U. Khasanah, 2012. Ekstraksi Antosianin Buah Senggangi (*Melastoma malabathricum* Auct. non Linn) dengan Variasi Jenis Pelarut. *J. Teknosains Pangan*, 1: 105-109.
- Lionetto, M. G., Giordano, M. E., Calisi, A., Erroi, E., De Nuccio, F., Schettino, T. (2011). Effect of the daily ingestion of a purified anthocyanin extract from grape skin on rat serum antioxidant capacity. *Physiological Research*, 60, 637-645.
- Rader DJ, Hobbs HH. *Disorders of Lipoprotein Metabolism*. Dalam : Jameson JL, editor. *Harrison's Endocrinology* Ed. 16. United States of America: Library of Congress Cataloging; 2006; 333-354
- Rahayu, (2013). *Ekstrak Sarang Semut (*Hydnophytum Formicarum*) Dan Potensinya Sebagai Antihiperlikemik*. Skripsi. Departemen Teknologi Hasil Perairan. Fakultas Perikanan Dan Hasil Kelautan. Institut Pertanian Bogor. Bogor
- Renata A. Soriano Sancho, Glaucia Maria Pastore , (2012). Review Evaluation of the effects of anthocyanins in type 2 diabetes. *Food Research International* 46 (2012) 378–386

- Rimbawan, (2004). Indeks Glikemik Pangan. Jakarta: Penebar Swadaya
- Roden *et al*, (2014). Review. Vascular Effects Of Advanced Glycation Endproducts: Clinical Effects And Molecular. Mechanisms Molecular Metabolism 3 (2014) 94–108
- Santoso, (2006). *Antioksidan*. Sekolah Pascasarjana Universitas Gadjah Mada. Yogyakarta
- Scanlon, (2007). Buku Ajar Anatomi dan Fisiologi Edisi 3. Jakarta: Penerbit Buku Kedokteran EGC.
- Shao *et al*, (2017). Effect Of Parboiling On Phytochemical Content, Antioxidant Activity And Physicochemical Properties Of Germinated Red Rice. Food Chemistry 214 (2017) 285–292
- Surianti *et al*, (2011). *Pengaruh Konsentrasi Asam Sitrat Terhadap Karakteristik Ekstrak Pigmen Limbah Selaput Lendir Biji Terung Belanda (*Cyphomandra batatacea s.*) Dan Aktivitas Antioksidannya*. Skripsi. Fakultas Teknologi Pertanian, Universitas Udayana
- Sudarmadji, (1997). *Prosedur Untuk Analisa Bahan Makanan Dan Pertanian. Edisi Keempat*. Liberty. Yogyakarta
- Suhartono T.(2007). *Dislipidemia pada Diabetes Melitus*. Dalam: Darmono, Suhartono T, Pemayun TGD, Padmomartono FS, editors. Diabetes Melitus Ditinjau dari Berbagai Aspek Penyakit Dalam. Semarang: Badan Penerbit Universitas Diponegoro; 2007; 31-34
- Sukardji, (2002). Penatalaksanaan Gizi Pada Diabetes Melitus. Dalam Penatalaksanaan Diabetes Melitus Terpadu. PUSAT Diabetes dan Lipid RSUPN Dr. Cipto Mangunkusuma. Jakarta: FKIK
- Stanley, (2006). Buku Ajar Keperawatan Gerontik, Edisi 2., Jakarta: EGC.
- Takikawa, M., Inoue, S., Horio, F., Tsuda, S. (2010). Dietary Anthocyanin-Rich Bilberry Extract Ameliorates Hyperglycemia And Insulin Sensitivity Via Activation Of Amp-Activated Protein Kinase In Diabetic Mice. *The Journal of Nutrition and Disease*, 140, 527-533.
- Troung, V. D., Nigel, D., Roger, T., Roger, F., Lisa, O. D., Kenneth, V., dan Craigh, Y. (2010). Charaterization of Antochyanins and Antocyanidins in Purple Fleshed Sweet Potato by HPLC-DAD/ESI-MS/MS. *Journal Agricultural Food Chemistry*, 504, 404-410.

- Veridiana Vera de Rosso, Débora Estadella, Luciana Pellegrini Pisani. (2016). Anthocyanins as inflammatory modulators and the role of the gut microbiota Carina Almeida Morais, *Journal of nutritional Biochemistry* 33(2016)1-7
- Veberic, (2015). Anthocyanin Composition Of Different Wild And Cultivated Berry Species. *LWT - Food Science and Technology* 60 (2015) 509e517
- Vujic dkk, (2015). *Impact Of Dietetic Tea biscuit Formulation On Starch Digestibility And Selected Nutritional And Sensory Characteristics*. *LWT-Food Science Technology*. 62-(2015) 647-653
- Wallace, T. M., Levy, J. C., Matthews, D. R. (2004). Use and abuse of HOMA modeling. *Review. Diabetes Care*, 27, 1487-1495.
- Winarsi, (2011). *Antioksidan Alami & Radikal Bebas Potensi dan Aplikasinya dalam Kesehatan*. Yogyakarta : Kanisius.
- Winarno, (2004). *Kimia Pangan dan Gizi*. Jakarta : Gramedia. Universitas Gadjah Mada. Yogyakarta.
- Wild, (2004). Global Prevalence of Diabetes Estimates For The Year 2000 And Projections For 2030. *Diabetes Care*, 27, 1047–1053.
- Wilcox, G. (2005). Insulin and Insulin Resistance. *Review. Clinical Biochemistry*, 26, 19-39.
- Yamamoto, *et al.*(2013). Research Report. Neurite Regeneration In Adult Rat Retinas Exposed To Advanced Glycation End-Products And Regenerative Effects Of Neurotrophin-4. *Brain research* 1534 (2013) 33 – 45
- Yanishlieva, N,V. (2001). *Inhibiting Oxidation. Antioxidants in Food*. Woodhead Publishing. Cambridge
- Yang, Y. X., Wang, H.W., Cui, H. M. , Wang, Y., Yu, L. D., Xiang, S. X. (2006). Glycemic index of cereals and tubers produced in China. *World Journal of Gastroenterology*, 12 (21), 3430-3433.



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**PENGARUH PEMBERIAN EKSTRAK ANTOSIANIN PADA BUBUK MINUMAN FORMULA BERAS
HITAM (*Oryza Sativa L. Indica*)
TERHADAP KAPASITAS ANTIOKSIDAN DAN PROFIL GLIKEMIK LANSIA PENYANDANG DIABETES
MELLITUS TIPE 2**

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