

DAFTAR PUSTAKA

1. McKeown SR. Defining normoxia, physoxia and hypoxia in tumours—implications for treatment response. *The British Journal of Radiology*. 2014;87(1035):20130676.
2. Araneda OF, Tuesta M. Lung Oxidative Damage by Hypoxia. *Oxidative Medicine and Cellular Longevity*. 2012;2012:1–18.
3. Chandel NS, Maltepe E, Goldwasser E, Mathieu CE, Simon MC, Schumacker PT. Mitochondrial reactive oxygen species trigger hypoxia-induced transcription. *Proceedings of the National Academy of Sciences*. 1998;95(20):11715–20.
4. Birben E, Sahiner UM, Sackesen C, Erzurum S, Kalayci O. Oxidative Stress and Antioxidant Defense. *World Allergy Organization Journal*. 2012; 5(1):9–19.
5. Li Y. *Antioxidants in Biology and Medicine: Essentials, Advances, and Clinical Applications*. New York: Nova Science Publishers, Inc; 2011.
6. Bouayed J, Bohn T. Exogenous antioxidants—Double-edged swords in cellular redox state. *Oxidative Medicine and Cellular Longevity*. 2010; 3(4):228–237.
7. Baby B, Antony P, Vijayan R. Antioxidant and anticancer properties of berries. *Critical Reviews in Food Science and Nutrition*. 2017;58(15):2491–507.
8. Skrovankova S, Sumczynski D, Mlcek J, Jurikova T, Sochor J. Bioactive Compounds and Antioxidant Activity in Different Types of Berries. *International Journal of Molecular Sciences*. 2015;16(10):24673–706.
9. Zhao Y. Berry fruit value-added products for health promotion. 1st ed. Boca Raton: CRC Press. 2007:3–51.
10. Kalt W, Forney CF, Martin A, Prior RL. Antioxidant Capacity, Vitamin C, Phenolics, and Anthocyanins after Fresh Storage of Small Fruits. *Journal of Agricultural and Food Chemistry*. 1999;47(11):4638–44.
11. Kaume L, Howard LR, Devareddy L. The Blackberry Fruit: A Review on Its Composition and Chemistry, Metabolism and Bioavailability, and Health Benefits. *Journal of Agricultural and Food Chemistry*. 2011;60(23):5716–27.
12. Acosta-Montoya Ó, Vaillant F, Cozzano S, Mertz C, Pérez AM, Castro MV. Phenolic content and antioxidant capacity of tropical highland blackberry during three edible maturity stages. *Food Chemistry*. 2010;119(4):1497–501.
13. Benvenuti S, Pellati F, Melegari M, Bertelli D. Polyphenols, Anthocyanins, Ascorbic Acid, and Radical Scavenging Activity of Rubus, Ribes, and Aronia. *Journal of Food Science*. 2006;69(3).
14. Mukhriani. Ekstraksi, Pemisahan Senyawa, dan Identifikasi Senyawa Aktif. *Jurnal Kesehatan*. 2014;(7):361-363.

15. Altemimi A, Lakhssassi N, Baharlouei A, Watson D, Lightfoot D. Phytochemicals: Extraction, Isolation, and Identification of Bioactive Compounds from Plant Extracts. *Plants*. 2017;6(4):42.
16. Murkowski FH, Jackson KK, Mandsager R. Chapter 4: Hypoxia and Oxygenation. In Alaska Air Medical Escort. Juneau: Department of Health and Social Services; 2006: 71-82.
17. Valko M, Leibfritz D, Moncol J, Cronin MT, Mazur M, Telser J. Free radicals and antioxidants in normal physiological functions and human disease. *The International Journal of Biochemistry & Cell Biology*. 2007;39(1):44–84.
18. Boyer F, Vidot JB, Dubourg AG, Rondeau P, Essop MF, Bourdon E. Oxidative Stress and Adipocyte Biology: Focus on the Role of AGEs. *Oxidative Medicine and Cellular Longevity*. 2015;2015:1–9.
19. Jiang Y, Wang X, Hu D. Mitochondrial alterations during oxidative stress in chronic obstructive pulmonary disease. *International Journal of Chronic Obstructive Pulmonary Disease*. 2017;(12):1153-1162.
20. Bhattacharya S. Reactive Oxygen Species and Cellular Defense System. *Free Radicals in Human Health and Disease*. 2014:17–29.
21. Schieber M, Chandel NS. ROS Function in Redox Signaling and Oxidative Stress. *Current Biology*. 2014; 25(10).
22. E Ridwan. Etika Pemanfaatan Hewan Percobaan dalam Penelitian Kesehatan. *Journal Indonesia Medical Association*. 2013;63:112-6.
23. Smith JB, Mangkoewidjojo S. Pemeliharaan, pembiakan, dan penggunaan hewan percobaan di daerah tropis. Jakarta: Penerbit Universitas Indonesia. 1988; 37:381-384.
24. Herlinda Y. Hewan percobaan tikus albino strain wistar di unit penelitian gizi Diponegoro. *Majalah Kedokteran Indonesia*. 1986; 36(11):491-495.
25. Brower M, Grace M, Kotz CM, Koya V. Comparative analysis of growth characteristics of Sprague Dawley rats obtained from different sources. *Laboratory Animal Research*. 2015;31(4):166.
26. Sherwood L. Introduction to human physiology. Vol. 8. Pacific Grove, CA: Brooks/Cole; 2013:488-492.
27. Białas AJ, Sitarek P, Miłkowska-Dymanowska J, Piotrowski WJ, Górska P. The Role of Mitochondria and Oxidative/Antioxidative Imbalance in Pathobiology of Chronic Obstructive Pulmonary Disease. *Oxidative Medicine and Cellular Longevity*. 2016;2016:1–15.
28. Valavanidis A, Vlachogianni T, Fiotakis K, Loridas S. Pulmonary Oxidative Stress, Inflammation and Cancer : Respirable Particulate Matter, Fibrous Dust, and Ozone as Major Causes of Lung Carcinogenesis through Reactive Oxygen Species Mechanism. *International Journal of Environmental Research and Public Health*. 2013; 10(9):3886-3907.

29. Glorieux C, Calderon PB. Catalase, a remarkable enzyme: targeting the oldest antioxidant enzyme to find a new cancer treatment approach. *Biological Chemistry*. 2017;398(10):1-29.
30. Chelikani P, Fita I, Loewen PC. Diversity of structures and properties among catalases. *Cellular and Molecular Life Sciences (CMLS)*. 2004;61(2):192–208.
31. Ryu J, Kwon S-J, Jo YD, Jin CH, Nam BM, Lee SY, et al. Comparison of Phytochemicals and Antioxidant Activity in Blackberry (*Rubus fruticosus L.*) Fruits of Mutant Lines at the Different Harvest Time. *Plant Breeding and Biotechnology*. 2016;4(2):242–51.
32. Ahmad M, Masood S, Sultana S, Hadda TB, Bader A, & Zafar M. Antioxidant and nutraceutical value of wild medicinal *Rubus* berries. *Pakistan Journal of Pharmaceutical Sciences*. 2015;28(1):241–247.
33. Hassimotto NMA, Mota RVD, Cordenunsi BR, Lajolo FM. Physico-chemical characterization and bioactive compounds of blackberry fruits (*Rubus* sp.) grown in Brazil. *Ciência e Tecnologia de Alimentos*. 2008;28(3):702–8.
34. Sariburun E, Şahin S, Demir C, Türkben C, Uylaşer V. Phenolic Content and Antioxidant Activity of Raspberry and Blackberry Cultivars. *Journal of Food Science*. 2010;75(4):328-335.
35. Hamidi MR, Jovanova B, Panovska TK. Toxicological evaluation of the plant products using Brine Shrimp (*Artemia salina* L.) model. *Maced Pharm Bull*. 2014; 60(1):9-18.
36. Song J, Yoon D, Christensen RD, Horvathova M, Thiagarajan P, Prchal JT. HIF-mediated increased ROS from reduced mitophagy and decreased catalase causes neocytolysis. *Journal of Molecular Medicine*. 2015;93(8):857–66.
37. Cao C, Leng Y, Liu X, Yi Y, Li P, Kufe D. Catalase Is Regulated by Ubiquitination and Proteasomal Degradation. Role of the c-Abl and Arg Tyrosine Kinases. *Biochemistry*. 2003;42(35):10348–53.
38. Rahal A, Kumar A, Singh V, Yadav B, Tiwari R, Chakraborty S, et al. Oxidative Stress, Prooxidants, and Antioxidants: The Interplay. *BioMed Research International*. 2014;2014:1–19.
39. Domej W, Foldes-Papp Z, Floegl E, Haditsch B. Chronic Obstructive Pulmonary Disease and Oxidative Stress. *Current Pharmaceutical Biotechnology*. 2006;7(2):117–23.