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16. Siddique YH, Naz F, Jyoti S. Effect of curcumin on lifespan, activity pattern, oxidative stress, and apoptosis in the brains of transgenic *Drosophila* model of Parkinson's disease. *Biomedical Research International*. 2014;606928. DOI: <https://doi.org/10.1155/2014/606928>.
  17. Datla KP, Zbarsky V, Rai D, Parkar S, Osakabe N, Aruoma OI et al. Short-term supplementation with plant extracts rich in flavonoids protect nigrostriatal dopaminergic neurons in a rat model of parkinson's disease. *Journal of the American College of Nutrition*. 2007;26(4):341-349. DOI: <https://doi.org/10.1080/07315724.2007.10719621>.
  18. Choi BM, Lim DW, Lee JA, Gao SS, Kwon DY, Kim BR. Luteolin suppresses cisplatin-induced apoptosis in auditory cells: possible mediation through induction of heme oxygenase-1 expression. *Journal of Medicinal Food*. 2008;11(2):230-6. DOI: <https://doi.org/10.1089/jmf.2007.591>.
  19. Ryu EY, Park SY, Kim SG, Park DJ, Kang JS, Kim YH, Seetharaman R, Choi YW, Lee SJ. Anti-inflammatory effect of heme oxygenase-1 toward *Porphyromonas gingivalis* lipopolysaccharide in macrophages exposed to gomisin A, G, and J. *Journal of Medicinal Food*. 2011;14(12):1519-26. DOI: <https://doi.org/10.1089/jmf.2011.1656>.
  20. Liu CB, Wang R, Pan HB, Ding QF, Lu FB. Effect of lycopene on oxidative stress and behavioral deficits in rotenone induced model of Parkinson's disease. *Chinese Journal of Applied Physiology*. 2013;29(4):380-384.
  21. Feany, M., Bender, W. A *Drosophila* model of Parkinson's disease. *Nature*. 2000;404:394-398 DOI: <https://doi.org/10.1038/35006074>.
  22. Abolaji AO, Kamdem JP, Lugokenski TH, Nascimento TK, Waczuk EP, Farombi EO, da Silva Loreto ÉL, Rocha JB. Corrigendum to "Involvement of oxidative stress in 4-vinylcyclohexene-induced toxicity in *Drosophila melanogaster*". *Free Radical Biology and Medicine*. 2015;1;82:204-5.
  23. Adedara IA, Owwoye O, Ajayi BO, Awogbindin IO, Rocha JBT, Farombi EO. Diphenyl diselenide abrogates chlorpyrifos-induced hypothalamic-pituitary-testicular axis impairment in rats. *Biochemical and Biophysical Research Communication*. 2018;503(1):171-176. DOI: <https://doi.org/10.1016/j.bbrc.2018.05.205>.
  24. LOWRY OH, ROSEBROUGH NJ, FARR AL, RANDALL RJ. Protein measurement with the Folin phenol reagent. *Journal of Biological Chemistry*. 1951;193(1):265-75. PMID: 14907713. DOI: [https://doi.org/10.1016/S0021-9258\(19\)52451-6](https://doi.org/10.1016/S0021-9258(19)52451-6).
  25. ELLMAN GL. Tissue sulfhydryl groups. *Archives of Biochemistry and Biophysics*. 1959;82(1):70-7. DOI: [https://doi.org/10.1016/0003-9861\(59\)90090-6](https://doi.org/10.1016/0003-9861(59)90090-6).
  26. Ohkawa H, Ohishi N, Yagi K. Assay for lipid peroxides in animal tissues by thiobarbituric acid reaction. *Analytical Biochemistry*. 1979;95(2):351-8. DOI: [https://doi.org/10.1016/0003-2697\(79\)90738-3](https://doi.org/10.1016/0003-2697(79)90738-3).
  27. Aebi H. Catalase in vitro. *Methods in enzymology*, 105, 1984;121-126. DOI: [https://doi.org/10.1016/s0076-6879\(84\)05016-3](https://doi.org/10.1016/s0076-6879(84)05016-3)
  28. ELLMAN GL, COURTNEY KD, ANDRES V Jr, FEATHER-STONE RM. A new and rapid colorimetric determination of acetylcholinesterase activity. *Biochemical Pharmacology*. 1961; 7:88-95. DOI: [https://doi.org/10.1016/0006-2952\(61\)90145-9](https://doi.org/10.1016/0006-2952(61)90145-9).
  29. Nguyen TT, Vuu MD, Huynh MA, Yamaguchi M, Tran LT, Dang TPT. Curcumin Effectively Rescued Parkinson's Disease-Like Phenotypes in a Novel *Drosophila melanogaster* Model with dUCH Knockdown. *Oxidative Medicine and Cellular Longevity*. 2018; 2018:2038267. DOI: <https://doi.org/10.1155/2018/2038267>.
  30. Zhao M, Zhu P, Fujino M, Zhuang J, Guo H, Sheikh I, Zhao L, Li X-K. Oxidative Stress in Hypoxic-Ischemic Encephalopathy: Molecular Mechanisms and Therapeutic Strategies. *International Journal of Molecular Sciences*. 2016; 17(12):2078. DOI: <https://doi.org/10.3390/ijms17122078>
  31. Bellezza I. Oxidative Stress in Age-Related Macular Degeneration: Nrf2 as Therapeutic Target. *Frontiers in Pharmacology*. 2018; 9:1280. DOI: <https://doi.org/10.3389/fphar.2018.01280>.
  32. Ighodaro OM, Adeosun AM, Akinloye OA. Alloxan-induced diabetes, a common model for evaluating the glycemic-control potential of therapeutic compounds and plants extracts in experimental studies. *Medicina (Kaunas)*. 2017;53(6):365-374. DOI: <https://doi.org/10.1016/j.medic.2018.02.001>.
  33. Dias BG, Ressler KJ. Parental olfactory experience influences behavior and neural structure in subsequent generations. *Nature Neuroscience*. 2014;17(1):89-96. DOI: <https://doi.org/10.1038/nn.3594>.
  34. Lee KS, Lee BS, Semnani S, Avanesian A, Um CY, Jeon HJ, Seong KM, Yu K, Min KJ, Jafari M. Curcumin extends life span, improves health span, and modulates the expression of age-

- associated aging genes in *Drosophila melanogaster*. *Rejuvenation Res.earch* 2010;13(5):561-70. DOI: <https://doi.org/10.1089/rej.2010.1031>.
35. Soh JW, Marowsky N, Nichols TJ, Rahman AM, Miah T, Sarao P, Khasawneh R, Unnikrishnan A, Heydari AR, Silver RB, Arking R. Curcumin is an early-acting stage-specific inducer of extended functional longevity in *Drosophila*. *Experimental Gerontology*. 2013;48(2):229-39. DOI: <https://doi.org/10.1016/j.exger.2012.09.007>.
36. Adesanoye OA, Abolaji AO, Faloye TR, Olaoye HO, Adedara AO. Luteolin-Supplemented diets ameliorates Bisphenol A-Induced toxicity in *Drosophila melanogaster*. *Food and Chemical Toxicology*. 2020; 142:111478. DOI: <https://doi.org/10.1016/j.fct.2020.111478>.
37. Abolaji AO, Fasae KD, Iwezor CE, Aschner M, Farombi EO. Curcumin attenuates copper-induced oxidative stress and neurotoxicity in *Drosophila melanogaster*. *Toxicology Reports*. 2020; 7:261-268. DOI: <https://doi.org/10.1016/j.toxrep.2020.01.015>.
38. Long, J, Gao, H, Sun L., Liu J, Zhao-Wilson X. Grape Extract Protects Mitochondria from Oxidative Damage and Improves Locomotor Dysfunction and Extends Lifespan in a *Drosophila* Parkinson's Disease Model. *Rejuvenation Research*.2009;12, /321331. DOI: <http://dx.doi.org/10.1089/rej.2009.0877>
39. Lü JM, Nurko J, Weakley SM, Jiang J, Koungias P, Lin PH, Yao Q, Chen C. Molecular mechanisms, and clinical applications of nordihydroguaiaretic acid (NDGA) and its derivatives: an update. *Medical Science Monitor*. 2010;16(5):RA93-100.
40. Siddique YH, Ara G, Jyoti S, Afzal M. Protective effect of curcumin in transgenic *Drosophila melanogaster* model of Parkinson's disease. *Alternative Medicine Studies [Internet]*. 2012 Jan. 30 [cited 2023 Sep. 28];2(1): e3.
41. Khatri DK, Juvekar AR. Neuroprotective effect of curcumin as evinced by abrogation of rotenone-induced motor deficits, oxidative and mitochondrial dysfunctions in mouse model of Parkinson's disease. *Pharmacology Biochemistry and Behaviour*. 2016;150-151:39-47. DOI: <https://doi.org/10.1016/j.pbb.2016.09.002>.
42. Aggarwal A, Reichert H, VijayRaghavan K. A locomotor assay reveals deficits in heterozygous Parkinson's disease model and proprioceptive mutants in adult *Drosophila*. *Proceedings of the National Academy of Sciences*. 2019;116(49):24830-24839. DOI: <https://doi.org/10.1073/pnas.1807456116>.
43. Ali YO, Escala W, Ruan K, Zhai RG. Assaying locomotor, learning, and memory deficits in *Drosophila* models of neurodegeneration. *Journal of Visualized Experiment*. 2011;(49):2504. DOI: <https://doi.org/10.3791/2504>.
44. Klaunig JE, Kamendulis LM, Hocevar BA. Oxidative stress and oxidative damage in carcinogenesis. *Toxicologic Pathology*. 2010;38(1):96-109. DOI: <https://doi.org/10.1177/0192623309356453>.
45. Karuppagounder SS, Madathil SK, Pandey M, Haobam R, Rajamma U, Mohanakumar KP. Quercetin up-regulates mitochondrial complex-I activity to protect against programmed cell death in rotenone model of Parkinson's disease in rats. *Neuroscience*. 2013; 236:136-48. DOI: <https://doi.org/10.1016/j.neuroscience.2013.01.032>.
46. Shen LR, Xiao F, Yuan P, Chen Y, Gao QK, Parnell LD, Meydani M, Ordovas JM, Li D, Lai CQ. Curcumin-supplemented diets increase superoxide dismutase activity and mean lifespan in *Drosophila*. *Age (Dordrecht)*. 2013;35(4):1133-42. DOI: <https://doi.org/10.1007/s11357-012-9438-2>.
47. Cui Q, Li X, Zhu H. Curcumin ameliorates dopaminergic neuronal oxidative damage via activation of the Akt/Nrf2 pathway. *Molecular Medicine Reports*. 2016;13(2):1381-8. DOI: <https://doi.org/10.3892/mmr.2015.4657>.
48. Odimegwu CO, Akinyemi JO, Alabi OO. HIV-Stigma in Nigeria: Review of Research Studies, Policies, and Programmes. *AIDS Research and Treatment*. 2017:5812650. DOI: <https://doi.org/10.1155/2017/5812650>.
49. Zimlichman E, Henderson D, Tamir O, Franz C, Song P, Yamin CK, Keohane C, Denham CR, Bates DW. Health care-associated infections: a meta-analysis of costs and financial impact on the US health care system. *JAMA Internal Medicine*. 2013;923;173(22):203946. DOI: <https://doi.org/10.1001/jamainternmed.2013.9763>.
50. Matsumoto J, Stewart T, Sheng L, Li N, Bullock K, Song N, Shi M, Banks WA, Zhang J. Transmission of  $\alpha$ -synuclein-containing erythrocyte-derived extracellular vesicles across the blood-brain barrier via adsorptive mediated transcytosis: another mechanism for initiation and progression of Parkinson's disease? *Acta Neuropathological Communications*. 2017;5(1):71. DOI: <https://doi.org/10.1186/s40478-017-0470-4>.
51. Rivera-Mancía S, Trujillo S, Daniela, CJ. Utility of curcumin for the treatment of diabetes mellitus: Evidence from preclinical and clinical studies. *Journal of Nutrition & Intermediary Metabolism*. 2018;14. DOI: <https://doi.org/10.1016/j.jnim.2018.05.001>.