

Medical Physiology Department

Mansoura University, Egypt

Research papers published in 2021- March 2024

2021

1. Bashar SM, Elhadidy MG, Mostafa AF, Hamed B, Helmy S, Abd-Elmoniem HA. Hepatoprotective effect of gallic acid against type 2-induced diabetic liver injury in male rats through modulation of fetuin-A and GLP-1 with involvement of ERK 1/2/NF- κ B and Wnt1/ β -catenin signaling pathways. *General Physiology & Biophysics*. 2021 May 1;40.(3)
2. Samir SM, Elalfy M, El Nashar EM, Alghamdi MA, Hamza E, Serria MS, Elhadidy MG. Cardamonin exerts a protective effect against autophagy and apoptosis in the testicles of diabetic male rats through the expression of Nrf2 via p62-mediated Keap-1 degradation. *The Korean Journal of Physiology & Pharmacology: Official Journal of the Korean Physiological Society and the Korean Society of Pharmacology*. 2021 Jul 7;25(4):341.
3. Elhadidy MG, El Nashar EM, Alghamdi MA, Samir SM. A novel gastroprotective effect of zeaxanthin against stress-induced gastritis in male rats targeting the expression of HIF-1 α , TFF-1 and MMP-9 through PI3K/Akt/JNK signaling pathway. *Life Sciences*. 2021 May 15;273:119297.
4. Abdel-Halim NH, El-Hamed A, Aya E, Helmy SA. The protective role of hydrogen sulfide on skeletal muscle in cast immobilization model of hindlimbs in rats. *Bulletin of Egyptian Society for Physiological Sciences*. 2021 Jul 1;41(3):358-72.
5. Obydah WO, Shaker GA, Samir SM, El Bassiony SF, Abd El Moneim HA. Effect of vanillic acid and exercise training on fatty liver and insulin resistance in rats: Possible role of fibroblast growth factor 21 and autophagy. *Physiology International*. 2021 Dec 3;108(4):412-26.
6. Shabanah M, Mohamed M, Gad GE, G Elserougy H. Exercise alleviates osteoporotic changes in glucocorticoids-induced osteoporosis in a rat model: a possible role of endogenous irisin. *Bulletin of Egyptian Society for Physiological Sciences*. 2021 Jan 1;41(1):121-39.
7. Mohamed M. Role of Kidney Injury Molecule-1 Expression, Wnt Proteins (Beta-catenin) and Endogenous Irisin in a Rat Model of Renal fibrosis: Renoprotective Effect of Metformin. *Bulletin of Egyptian Society for Physiological Sciences*. 2021 Apr 1;41(2):168-83.
8. Alrowaili MG, Hussein AM, Eid EA, Serria MS, Abdellatif H, Sakr HF. Effect of intermittent fasting on glucose homeostasis and bone remodeling in glucocorticoid-induced osteoporosis rat model. *Journal of Bone Metabolism*. 2021 Nov;28(4):307.
9. Awadalla A, Hussein AM, Yousra M, Barakat N, Hamam ET, El-Sherbiny M, El-Shafey M, Shokeir AA. Effect of zinc oxide nanoparticles and ferulic acid on renal ischemia/reperfusion injury: possible underlying mechanisms. *Biomedicine & Pharmacotherapy*. 2021 Aug 1;140:111686.
10. Hussein AM, Awadalla A, Abbas KM, Sakr HF, Elghaba R, Othman G, Mokhtar N, Helal GM. Chronic valproic acid administration enhances oxidative stress, upregulates IL6 and downregulates Nrf2, Glut1 and Glut4 in rat's liver and brain. *NeuroReport*. 2021 Jul 7;32(10):840-50.
11. Eid EA, Hussein AM, Ghazy HA. Safety and tolerability of sodium glucose co-transporter-2 inhibitors (SGLT2i) during Ramadan fasting. *Clinical Diabetology*. 2021;10(5):389-93.
12. Awadalla A, Hussein AM, Ali M, Barakat N, Hamam ET, Magar RW, Shokeir AA. Possible mechanisms for the renoprotective action of adipose-derived mesenchymal stem cells with CD44-targeted hyaluronic acid against renal ischemia. *Life Sciences*. 2021 May 1;272:119221.
13. Alshahawy R, El Habachi N, Allam E, Jernerén F, Refsum H, Elshorbagy A. Changes in plasma fatty acids and related biomarkers during transition to an exclusively plant-and fish-based diet in healthy adults. *Nutrition*. 2021 Oct 1;90:111306.

2022

1. El-Hefnawy MA, Yehia A, El Nashar EM, Saad S, Obydah W, Alghamdi MA, Alasmari WA, Hussein AM. Effect of vanillic acid on pentylenetetrazole-kindled rats: Nrf2/HO-1, IGF-1 signaling pathways cross talk. *Journal of Integrative Neuroscience*. 2022 Jan 28;21(1):15.
2. El Nashar EM, Obydah W, Alghamdi MA, Saad S, Yehia A, Maryoud A, Kiwan NA, Alasmari WA, Hussein AM. Effects of Stevia rebaudiana Bertoni extracts in the rat model of epilepsy induced by pentylenetetrazol: Sirt-1, at the crossroads between inflammation and apoptosis. *Journal of Integrative Neuroscience*. 2022 Jan 28;21(1):21.
3. Oaf SS, Elwakeel GA, Mostafa AF, Gad SA, Mansour AA. Mesenchymal stem cells versus intermittent fasting on statin induced myopathy in rats: The possible involvement of autophagy. *Egyptian Journal of Chemistry*. 2022 Oct 1;65(10):367-81.
4. Abdel-Moneim AM, Lutfi MF, Alsharidah AS, Shaker G, Faisal W, Abdellatif AA, Rugaie OA, Mohany KM, Eid SY, El-Readi MZ, Alsharidah M. Short-term treatment of metformin and glipizide on oxidative stress, lipid profile and renal function in a rat model with diabetes mellitus. *Applied Sciences*. 2022 Feb 15;12(4):2019.
5. El-Sherbiny M, El-Shafey M, Said E, Shaker GA, El-Dosoky M, Ebrahim HA, Abed SY, Ibraheem KM, Mohsen Faheem A, AlMutawa M, Alatawi B. Dapagliflozin, Liraglutide, and Their Combination Attenuate Diabetes Mellitus-Associated Hepato-Renal Injury—Insight into Oxidative Injury/Inflammation/Apoptosis Modulation. *Life*. 2022 May 21;12(5):764.
6. El-Mancy EM, Elsherbini DM, Al-Serwi RH, El-Sherbiny M, Ahmed Shaker G, Abdel-Moneim AM, Enan ET, Elsherbiny NM. α -Lipoic acid protects against cyclosporine a-induced hepatic toxicity in rats: effect on oxidative stress, inflammation, and apoptosis. *Toxics*. 2022 Aug 2;10(8):442.
7. Ebrahim N, Abd El-Halim HE, Helal OK, El-Azab NE, Badr OA, Hassouna A, Al Saihati HA, Aborayah NH, Emam HT, El-Wakeel HS, Aljasir M. Effect of bone marrow mesenchymal stem cells-derived exosomes on diabetes-induced retinal injury: Implication of Wnt/b-catenin signaling pathway. *Biomedicine & Pharmacotherapy*. 2022 Oct 1;154:113554.
8. El-Sherbiny M, Atef H, Helal GM, Al-Serwi RH, Elkattawy HA, Shaker GA, Said E, Abulfaraj M, Albalawi MA, Elsherbiny NM. Vitamin K2 (MK-7) Intercepts Keap-1/Nrf-2/HO-1 pathway and hinders inflammatory/apoptotic signaling and liver aging in naturally aging rat. *Antioxidants*. 2022 Oct 30;11(11):2150.
9. Awadalla A, Hamam ET, El-Senduny FF, Omar NM, Mahdi MR, Barakat N, Ammar OA, Hussein AM, Shokeir AA, Khirallah SM. Zinc oxide nanoparticles and spironolactone-enhanced Nrf2/HO-1 pathway and inhibited Wnt/ β -catenin pathway in adenine-induced nephrotoxicity in rats. *Redox Report*. 2022 Dec 31;27(1):249-58.
10. Azzam MM, Hussein AM, Marghani BH, Barakat NM, Khedr MM, Heakel NA. Retinoic acid potentiates the therapeutic efficiency of bone marrow-derived mesenchymal stem cells (BM-MSCs) against cisplatin-induced hepatotoxicity in rats. *Scientia pharmaceutica*. 2022 Sep 29;90(4):58.
11. Barakat M, Hussein AM, Salama MF, Awadalla A, Barakat N, Serria M, El-Shafey M, El-Sherbiny M, El Adl MA. Possible underlying mechanisms for the renoprotective effect of retinoic acid-pretreated wharton's jelly mesenchymal stem cells against renal ischemia/reperfusion Injury. *Cells*. 2022 Jun 22;11(13):1997.
12. Abulseoud OA, Alasmari F, Hussein AM, Sari Y. Ceftriaxone as a novel therapeutic agent for hyperglutamatergic states: Bridging the gap between preclinical results and clinical translation. *Frontiers in Neuroscience*. 2022 Jul 5;16:841036.
13. Awadalla A, Hussein AM, El-Far YM, El-Senduny FF, Barakat N, Hamam ET, Abdeen HM, El-Sherbiny M, Serria MS, Sarhan AA, Sena AM. Rapamycin improves adipose-derived mesenchymal stem cells (ADMSCs) Renoprotective effect against cisplatin-induced acute nephrotoxicity in rats by inhibiting the mTOR/AKT signaling pathway. *Biomedicines*. 2022 May 31;10(6):1295.

14. Safwat SM, Hussein AM, Eid EA, Serria MS, Elesawy BH, Sakr HF. Dehydroepiandrosterone (DHEA) Improves the Metabolic and Haemostatic Disturbances in Rats with Male Hypogonadism. *Scientia Pharmaceutica*. 2022 Jan 20;90(1):6.
15. Eldesoqui M, Eldken ZH, Mostafa SA, Al-Serwi RH, El-Sherbiny M, Elsherbiny N, Mohammedsaleh ZM, Sakr NH. Exercise augments the effect of SGLT2 inhibitor dapagliflozin on experimentally induced diabetic cardiomyopathy, possible underlying mechanisms. *Metabolites*. 2022 Jul 11;12(7):635.

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1. Maryoud AM, Elghaba R, Gad GE, El_desouky S, Adel M. Studying the effect of vitamin B12 and folic acid on the levels of brain-derived neurotrophic factor in the blood and the brain of obese male rats. *Bulletin of Egyptian Society for Physiological Sciences*. 2023 Apr 1;43(2):142-54.
2. El Tohamy M, Adel M, El-Menabawy FR, Gad GE, El-Gamal R, El Serougy H. Role of Cannabinoid Type 2 Receptor Activation in Renal Fibrosis Induced by Unilateral Ureteric Obstruction in Rats. *Reports of Biochemistry & Molecular Biology*. 2023 Apr;12(1):59.
3. El Agamy DF, Elseadawy R, El Tohamy M, Abdelaziz S, Abo-Elsoud R. Serum uric acid as a biological marker for assessment of progression of glycemic status and polyneuropathy in experimentally induced type 2 diabetic rats. *Bulletin of Egyptian Society for Physiological Sciences*. 2023 Oct 1;43(4):230-44.
4. Safwat SM, Aboonq MS, El Tohamy M, Mojaddidi M, Al-Qahtani SA, Zakari MO, ElGendy AA, Hussein AM. New Insight into the Possible Roles of L-Carnitine in a Rat Model of Multiple Sclerosis. *Brain Sciences*. 2023 Dec 25;14(1):23.
5. Safwat SM, El Tohamy M, Aboonq MS, Alrehaili A, Assinnari AA, Bahashwan AS, ElGendy AA, Hussein AM. Vanillic Acid Ameliorates Demyelination in a Cuprizone-Induced Multiple Sclerosis Rat Model: Possible Underlying Mechanisms. *Brain Sciences*. 2023 Dec 22;14(1):12.
6. Elmorshdy Elsaed Mohammed Elmorshdy S, Ahmed Shaker G, Helmy Eldken Z, Abdelbadie Salem M, Awadalla A, Mahmoud Abdel Shakour H, Elmahdy El Hosiny Sarhan M, Mohamed Hussein A. Impact of Cerium Oxide Nanoparticles on Metabolic, Apoptotic, Autophagic and Antioxidant Changes in Doxorubicin-Induced Cardiomyopathy: Possible Underlying Mechanisms. *Reports of Biochemistry and Molecular Biology*. 2023 Nov 10:495-511.
7. yehya YM, El-Said ZH, Adel M, Othman BH, Mansour AA, Gad SM. Intermittent fasting and probiotics in non-alcoholic fatty liver in rats: interplay between FGF19 and FGF21. *Egyptian Journal of Basic and Applied Sciences*. 2023 Dec 31;10(1):447-59.
8. Obydah W, Abouelnaga AF, Abass M, Saad S, Yehia A, Ammar OA, Badawy AM, Ibrahim MM, Hussein AM. Possible Role of Oxidative Stress and Nrf2/HO-1 Pathway in Pentylentetrazole-induced Epilepsy in Aged Rats. *Reports of Biochemistry & Molecular Biology*. 2023 Apr;12(1):147.
9. Eltobshy SA, Messiha R, Metias E, Sarhan M, El-Gamal R, El-Shaieb A, Ghalwash M. Effect of SGLT2 inhibitor on cardiomyopathy in a rat model of T2DM: possible involvement of cardiac aquaporins. *Tissue and Cell*. 2023 Dec 1;85:102200.
10. Ibrahim HA, Hussein AM, Gabr M, Abdel-Aziz AF, El-Saeed RA. Effect of melatonin on oxidative stress of differentiated Dopaminergic cells. *Egyptian Pharmaceutical Journal*. 2023 Jul 1;22(3):481-9.
11. Ibrahim HA, Hussein AM, Gabr M, El-Saeed RA, Ammar OA, Mosa AA, Abdel-Aziz AA. Effect of melatonin on alpha synuclein and autophagy in dopaminergic neuronal differentiation of adipose mesenchymal stem cells. *Reports of Biochemistry & Molecular Biology*. 2023 Apr;12(1):13.
12. Hussein AM, Mahmoud SA, Elazab KM, Abouelnaga AF, Abass M, Mosa AA, Hussein MA, Elsayed ME. Possible Mechanisms of the Neuroprotective Actions of Date Palm Fruits

Aqueous Extracts against Valproic Acid-Induced Autism in Rats. *Current Issues in Molecular Biology*. 2023 Feb 14;45(2):1627-43.

13. Eldken ZH, Safwat SM, Sakr NH, El Nashar EM, Eissa H, Gouda SI, Hassan AH, Alshehri MH, Al-Zahrani NS, Ghaffar DM. The possible effects of the aqueous extract of *Stevia Rebaudiana* on autophagic clearance and sympathetic nerve density in pancreatic β cells of type 2 diabetic rats. *Journal of Functional Foods*. 2023 Nov 1;110:105822.

2024

1. Elsamman I, Abdallah Z, Elserougy HG, Messiha RK. Role of melatonin and garlic treatment in cisplatin induced acute kidney injury in adult male rats. *Bulletin of Egyptian Society for Physiological Sciences*. 2024 Jan 1;44(1):39-53.
2. Samir SM, Hassan HM, Elmowafy R, ElNashar EM, Alghamdi MA, AlSheikh MH. Neuroprotective effect of ranolazine improves behavioral discrepancies in a rat model of scopolamine-induced dementia. *Frontiers in Neuroscience*. 2024 Jan 12;17:1267675.
3. Elsaid FH, Hussein AM, Eid EA, Ammar O, Khalil AA. Effect of Intermittent Fasting on Adriamycin-induced Nephropathy: Possible Underlying Mechanisms. *Tissue and Cell*. 2024 Mar 13:102360.
4. Ghaffar DM, Eldken ZH, Sultan MS, Khalil RM, Sakr NH, Eissa H, Safwa SM. Insights on Protective Effect of Platelet Rich Plasma and Tadalafil on Testicular Ischemia/Reperfusion Injury in Rats Exposed to Testicular Torsion/Detorsion. *Cellular physiology and biochemistry: international journal of experimental cellular physiology, biochemistry, and pharmacology*. 2024 Jan 16;58(1):14-32.