



Hamid Zand

Professor of Biochemistry

Department of Cellular and Molecular Nutrition, School of Nutrition
Sciences & Food Technology

Shahid Beheshti University of Medical Sciences

https://isid.research.ac.ir/Hamid_Zand

Email: hamid_zand@sbmu.ac.ir

Scientific Website

- [Scopus](#)
- [Google Scholar](#)
- [ResearcherID](#)
- [ORCID](#)
- [ResearchGate](#)
- [Semantic Scholar](#)

Publications

1: Monji H, Zand H, Ghorbani A, Pourvali K. The Effects of Ovalbumin on Proliferation, Migration, and Stemness Properties of Chemoresistant SW480 Colon Cancer Cells. *Nutr Cancer*. 2022;74(10):3714-3722. doi: 10.1080/01635581.2022.2085754. Epub 2022 Jun 8. PMID: 35675283.

2: Pourvali K, Shimi G, Ghorbani A, Shakery A, Shirazi FH, Zand H. Selective thyroid hormone receptor beta agonist, GC-1, is capable to reduce growth of colorectal tumor in syngeneic mouse models. *J Recept Signal Transduct Res*. 2022 Apr 27:1-8. doi: 10.1080/10799893.2022.2032748. Epub ahead of print. PMID: 35473566.

3: Rahmani J, Montesanto A, Giovannucci E, Zand H, Barati M, Kopchick JJ, Mirisola MG, Lagani V, Bawadi H, Vardavas R, Laviano A, Christensen K, Passarino G, Longo VD. Association between IGF-1 levels ranges and all-cause mortality: A meta-analysis. *Aging Cell*. 2022 Feb;21(2):e13540. doi: 10.1111/accel.13540. Epub 2022 Jan 20. PMID: 35048526; PMCID: PMC8844108.

- 4: Poursoleiman F, Zand H, Pourbadie HG, Monji H, Pourvali K. Anti-mullerian hormone attenuates insulin resistance and systemic inflammation in old obese C57BL/6 male mice. *J Diabetes Metab Disord.* 2021 Nov 3;20(2):1697-1704. doi: 10.1007/s40200-021-00925-w. PMID: 34900820; PMCID: PMC8630344.
- 5: Salimi J, Behzadi M, Ramandi A, Jafarinia M, Zand H, Pirouzian M. Chronic gastrointestinal bleeding caused by a Dieulafoy's lesion in the small intestine: a case report. *J Med Case Rep.* 2021 Nov 2;15(1):545. doi: 10.1186/s13256-021-03121-9. PMID: 34724972; PMCID: PMC8561922.
- 6: Shimi G, Zand H, Pourvali K, Ghorbani A. Colorectal cancer causes alteration of thyroid hormone profile in newly diagnosed patients. *Expert Rev Endocrinol Metab.* 2021 Sep;16(5):259-262. doi: 10.1080/17446651.2021.1967744. Epub 2021 Aug 18. PMID: 34404289.
- 7: Shimi G, Sohrab G, Pourvali K, Ghorbani A, Balam FH, Rostami K, Zand H. Correlation of Low Levels of α -1 Antitrypsin and Elevation of Neutrophil to Lymphocyte Ratio with Higher Mortality in Severe COVID-19 Patients. *Mediators Inflamm.* 2021 Apr 28;2021:5555619. doi: 10.1155/2021/5555619. PMID: 34007243; PMCID: PMC8080869.
- 8: Shimi G, Zand H. Association of alpha-1-antitrypsin deficiency with vitamin D status: who is most at risk of getting severe COVID-19? *Inflamm Res.* 2021 Apr;70(4):375-377. doi: 10.1007/s00011-021-01456-z. Epub 2021 Mar 19. PMID: 33740066; PMCID: PMC7976726.
- 9: Varkaneh Kord H, M Tinsley G, O Santos H, Zand H, Nazary A, Fatahi S, Mokhtari Z, Salehi-Sahlabadi A, Tan SC, Rahmani J, Gaman MA, Sathian B, Sadeghi A, Hatami B, Soltanieh S, Aghamiri S, Bawadi H, Hekmatdoost A. The influence of fasting and energy-restricted diets on leptin and adiponectin levels in humans: A systematic review and meta-analysis. *Clin Nutr.* 2021 Apr;40(4):1811-1821. doi: 10.1016/j.clnu.2020.10.034. Epub 2020 Oct 24. PMID: 33158587.
- 10: Kaviani M, Nikooyeh B, Zand H, Yaghmaei P, Neyestani TR. Effects of vitamin D supplementation on depression and some involved neurotransmitters. *J Affect Disord.* 2020 May 15;269:28-35. doi: 10.1016/j.jad.2020.03.029. Epub 2020 Mar 13. PMID: 32217340.
- 11: Ghanavati M, Rahmani J, Rinaldi G, Zand H. Fasting Insulin and Risk of Cancer Related Mortality in Non-diabetic Adults: A Dose-response Meta-analysis of Cohort Studies. *Curr Diabetes Rev.* 2020;16(4):357-363. doi: 10.2174/1573399815666190906130544. PMID: 31490761.
- 12: Yari Z, Behrouz V, Zand H, Pourvali K. New Insight into Diabetes Management: From Glycemic Index to Dietary Insulin Index. *Curr Diabetes Rev.* 2020;16(4):293-300. doi: 10.2174/1573399815666190614122626. PMID: 31203801.

- 13: Rahmani J, Kord Varkaneh H, Clark C, Zand H, Bawadi H, Ryan PM, Fatahi S, Zhang Y. The influence of fasting and energy restricting diets on IGF-1 levels in humans: A systematic review and meta-analysis. *Ageing Res Rev.* 2019 Aug;53:100910. doi: 10.1016/j.arr.2019.100910. Epub 2019 May 19. PMID: 31116995.
- 14: Hosseini SA, Zand H, Cheraghpour M. The Influence of Curcumin on the Downregulation of MYC, Insulin and IGF-1 Receptors: A possible Mechanism Underlying the Anti-Growth and Anti-Migration in Chemoresistant Colorectal Cancer Cells. *Medicina (Kaunas).* 2019 Apr 3;55(4):90. doi: 10.3390/medicina55040090. PMID: 30987250; PMCID: PMC6524349.
- 15: Farhadnejad H, Emamat H, Zand H. The Effect of Resveratrol on Cellular Senescence in Normal and Cancer Cells: Focusing on Cancer and Age-Related Diseases. *Nutr Cancer.* 2019;71(7):1175-1180. doi: 10.1080/01635581.2019.1597907. Epub 2019 Apr 7. PMID: 30955382.
- 16: Sedaghat F, Cheraghpour M, Hosseini SA, Pourvali K, Teimoori Toolabi L, Mehtash A, Talaei R, Zand H. Hypomethylation of *NANOG* promoter in colonic mucosal cells of obese patients: a possible role of NF- κ B - CORRIGENDUM. *Br J Nutr.* 2019 Feb 14;121(3):360. doi: 10.1017/S0007114518003525. Epub 2018 Dec 14. PMID: 30630544.
- 17: Shakery A, Pourvali K, Ghorbani A, Fereidani SS, Zand H. Beta-Hydroxybutyrate Promotes Proliferation, Migration and Stemness in a Subpopulation of 5FU Treated SW480 Cells: Evidence for Metabolic Plasticity in Colon Cancer. *Asian Pac J Cancer Prev.* 2018 Nov 29;19(11):3287-3294. doi: 10.31557/APJCP.2018.19.11.3287. PMID: 30486639; PMCID: PMC6318419.
- 18: Sedaghat F, Cheraghpour M, Hosseini SA, Pourvali K, Teimoori-Toolabi L, Mehtash A, Talaei R, Zand H. Hypomethylation of *NANOG* promoter in colonic mucosal cells of obese patients: a possible role of NF- κ B. *Br J Nutr.* 2019 Sep 14;122(5):499-508. doi: 10.1017/S000711451800212X. Epub 2018 Aug 30. PMID: 30157990.
- 19: Sohrab G, Nasrollahzadeh J, Tohidi M, Zand H, Nikpayam O. Pomegranate Juice Increases Sirtuin1 Protein in Peripheral Blood Mononuclear Cell from Patients with Type 2 Diabetes: A Randomized Placebo Controlled Clinical Trial. *Metab Syndr Relat Disord.* 2018 Oct;16(8):446-451. doi: 10.1089/met.2017.0146. Epub 2018 Jun 29. PMID: 29957104.
- 20: Esfandiari Z, Hosseini-Esfahani F, Daneshpour MS, Zand H, Mirmiran P, Azizi F. Cholesteryl ester transfer protein gene variations and macronutrient intakes interaction in relation to metabolic syndrome: Tehran lipid and glucose study. *Iran J Basic Med Sci.* 2018 Jun;21(6):586-592. doi: 10.22038/IJBMS.2018.26768.6555. PMID: 29942448; PMCID: PMC6015254.

- 21: Mohammadi E, Tamaddoni A, Qujeq D, Nasser E, Zayeri F, Zand H, Gholami M, Mir SM. An investigation of the effects of curcumin on iron overload, hepcidin level, and liver function in β -thalassemia major patients: A double-blind randomized controlled clinical trial. *Phytother Res.* 2018 Sep;32(9):1828-1835. doi: 10.1002/ptr.6118. Epub 2018 May 28. PMID: 29806132.
- 22: Zand H, Pourvali K, Christides T. Reconsidering Values in Biomedical Research. *Bioessays.* 2018 Jun;40(6):e1800019. doi: 10.1002/bies.201800019. Epub 2018 Mar 30. PMID: 29603300.
- 23: Nasser E, Mohammadi E, Tamaddoni A, Qujeq D, Zayeri F, Zand H. Benefits of Curcumin Supplementation on Antioxidant Status in β -Thalassemia Major Patients: A Double-Blind Randomized Controlled Clinical Trial. *Ann Nutr Metab.* 2017;71(3-4):136-144. doi: 10.1159/000479634. Epub 2017 Sep 8. PMID: 28881347.
- 24: Zand H, Morshedzadeh N, Naghashian F. Signaling pathways linking inflammation to insulin resistance. *Diabetes Metab Syndr.* 2017 Nov;11 Suppl 1:S307-S309. doi: 10.1016/j.dsx.2017.03.006. Epub 2017 Mar 10. PMID: 28365222.
- 25: Ehrampoush E, Homayounfar R, Davoodi SH, Zand H, Askari A, Kouhpayeh SA. Ability of dairy fat in inducing metabolic syndrome in rats. *Springerplus.* 2016 Nov 28;5(1):2020. doi: 10.1186/s40064-016-3716-x. PMID: 27994997; PMCID: PMC5125350.
- 26: Zand H, Homayounfar R, Cheraghpour M, Jeddi-Tehrani M, Ghorbani A, Pourvali K, Soltani SR. Obesity-induced p53 activation in insulin-dependent and independent tissues is inhibited by beta-adrenergic agonist in diet-induced obese rats. *Life Sci.* 2016 Feb 15;147:103-9. doi: 10.1016/j.lfs.2016.01.040. Epub 2016 Jan 29. PMID: 26827989.
- 27: Ghorbani A, Zand H, Jeddi-Tehrani M, Koohdani F, Shidfar F, Keshavarz SA. PTEN over-expression by resveratrol in acute lymphoblastic leukemia cells along with suppression of AKT/PKB and ERK1/2 in genotoxic stress. *J Nat Med.* 2015 Oct;69(4):507-12. doi: 10.1007/s11418-015-0915-7. Epub 2015 May 1. PMID: 25929783.
- 28: Ghorbani A, Jeddi-Tehrani M, Saidpour A, Safa M, Bayat AA, Zand H. PI3K/AKT and Mdm2 activation are associated with inhibitory effect of cAMP increasing agents on DNA damage-induced cell death in human pre-B NALM-6 cells. *Arch Biochem Biophys.* 2015 Jan 15;566:58-66. doi: 10.1016/j.abb.2014.11.010. Epub 2014 Dec 16. PMID: 25524737.
- 29: Homayounfar R, Jeddi-Tehrani M, Cheraghpour M, Ghorbani A, Zand H. Relationship of p53 accumulation in peripheral tissues of high-fat diet-induced obese rats with decrease in metabolic and oncogenic signaling of insulin. *Gen*

Comp Endocrinol. 2015 Apr 1;214:134-9. doi: 10.1016/j.ygcn.2014.06.029. Epub 2014 Jul 10. PMID: 25016051.

30: Sohrab G, Nasrollahzadeh J, Zand H, Amiri Z, Tohidi M, Kimiagar M. Effects of pomegranate juice consumption on inflammatory markers in patients with type 2 diabetes: A randomized, placebo-controlled trial. *J Res Med Sci.* 2014 Mar;19(3):215-20. PMID: 24949028; PMCID: PMC4061642.

31: Safa M, Mousavizadeh K, Noori S, Pourfathollah A, Zand H. cAMP protects acute promyelocytic leukemia cells from arsenic trioxide-induced caspase-3 activation and apoptosis. *Eur J Pharmacol.* 2014 Aug 5;736:115-23. doi: 10.1016/j.ejphar.2014.04.040. Epub 2014 May 8. PMID: 24815320.

32: Salimi S, Moudi B, Farajian Mashhadi F, Tavilani H, Hashemi M, Zand H, Yaghmaei M. Association of functional polymorphisms in FAS and FAS Ligand genes promoter with pre-eclampsia. *J Obstet Gynaecol Res.* 2014 May;40(5):1167-73. doi: 10.1111/jog.12327. Epub 2014 Apr 2. PMID: 24690069.

33: Amiri F, Zarnani AH, Zand H, Koohdani F, Jeddi-Tehrani M, Vafa M. Synergistic anti-proliferative effect of resveratrol and etoposide on human hepatocellular and colon cancer cell lines. *Eur J Pharmacol.* 2013 Oct 15;718(1-3):34-40. doi: 10.1016/j.ejphar.2013.09.020. Epub 2013 Sep 17. PMID: 24055188.

34: Salimi S, Naghavi A, Firoozrai M, Zand H, Tavilani H, Nakhaee A, Mohebbi A. Association of plasma nitric oxide concentration and endothelial nitric oxide synthase T-786C gene polymorphism in coronary artery disease. *Pathophysiology.* 2012 Jun;19(3):157-62. doi: 10.1016/j.pathophys.2012.04.003. Epub 2012 Jun 8. PMID: 22682929.

35: Ghorbani A, Nazari M, Jeddi-Tehrani M, Zand H. The citrus flavonoid hesperidin induces p53 and inhibits NF- κ B activation in order to trigger apoptosis in NALM-6 cells: involvement of PPAR γ -dependent mechanism. *Eur J Nutr.* 2012 Feb;51(1):39-46. doi: 10.1007/s00394-011-0187-2. Epub 2011 Mar 29. PMID: 21445621.

36: Nazari M, Ghorbani A, Hekmat-Doost A, Jeddi-Tehrani M, Zand H. Inactivation of nuclear factor- κ B by citrus flavanone hesperidin contributes to apoptosis and chemo-sensitizing effect in Ramos cells. *Eur J Pharmacol.* 2011 Jan 15;650(2-3):526-33. doi: 10.1016/j.ejphar.2010.10.053. Epub 2010 Oct 31. PMID: 21044621.

37: Safa M, Zand H, Mousavizadeh K, Kazemi A, Bakhshayesh M, Hayat P. Elevation of cyclic AMP causes an imbalance between NF- κ B and p53 in NALM-6 cells treated by doxorubicin. *FEBS Lett.* 2010 Aug 4;584(15):3492-8. doi: 10.1016/j.febslet.2010.07.009. Epub 2010 Jul 15. PMID: 20624391.

38: Salimi S, Firoozrai M, Zand H, Nakhaee A, Shafiee SM, Tavailani H, Mohebbi A. Endothelial nitric oxide synthase gene Glu298Asp polymorphism in patients with coronary artery disease. *Ann Saudi Med.* 2010 Jan-Feb;30(1):33-7. doi: 10.4103/0256-4947.59370. PMID: 20103956; PMCID: PMC2850180.

39: Shafiee SM, Firoozrai M, Salimi S, Zand H, Hesabi B, Mohebbi A. Angiotensin converting enzyme DD genotype not associated with increased risk of coronary artery disease in the Iranian population. *Pathophysiology.* 2010 Jun;17(3):163-7. doi: 10.1016/j.pathophys.2009.10.001. Epub 2010 Jan 15. PMID: 20079615.

40: Safa M, Kazemi A, Zand H, Azarkeivan A, Zaker F, Hayat P. Inhibitory role of cAMP on doxorubicin-induced apoptosis in pre-B ALL cells through dephosphorylation of p53 serine residues. *Apoptosis.* 2010 Feb;15(2):196-203. doi: 10.1007/s10495-009-0417-8. PMID: 19882354.

41: Zand H, Rahimipour A, Salimi S, Shafiee SM. Docosahexaenoic acid sensitizes Ramos cells to Gamma-irradiation-induced apoptosis through involvement of PPAR-gamma activation and NF-kappaB suppression. *Mol Cell Biochem.* 2008 Oct;317(1-2):113-20. doi: 10.1007/s11010-008-9838-x. Epub 2008 Jun 20. PMID: 18566752.

42: Zand H, Rhimipour A, Bakhshayesh M, Shafiee M, Nour Mohammadi I, Salimi S. Involvement of PPAR-gamma and p53 in DHA-induced apoptosis in Reh cells. *Mol Cell Biochem.* 2007 Oct;304(1-2):71-7. doi: 10.1007/s11010-007-9487-5. Epub 2007 May 9. PMID: 17487454.