

# Molecular effects of advanced glycation end products on and pathophysiology

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Natural compounds with anti-ageing activity. <i>Natural Product Reports</i> , 2013, 30, 1412.	5.2	105
2	Diet-derived advanced glycation end products or lipofuscin disrupts proteostasis and reduces life span in <i>Drosophila melanogaster</i> . <i>Free Radical Biology and Medicine</i> , 2013, 65, 1155-1163.	1.3	49
3	Special issue on "AGEs and ALEs: chemistry, physiopathology and molecular strategies for their inhibition". <i>Free Radical Research</i> , 2013, 47, 1-2.	1.5	1
4	Grand challenges in cellular biochemistry: the "next-gen" biochemistry. <i>Frontiers in Chemistry</i> , 2014, 2, 22.	1.8	1
5	Alagebrium (ALT-711) improves the anti-hypertensive efficacy of nifedipine in diabetic-hypertensive rats. <i>Hypertension Research</i> , 2014, 37, 901-907.	1.5	9
6	Chronic Spontaneous Urticaria Is Characterized by Lower Serum Advanced Glycation End-Products. <i>BioMed Research International</i> , 2014, 2014, 1-5.	0.9	7
7	Cellular Regulation of Glucose Uptake by Glucose Transporter GLUT4. <i>Advances in Clinical Chemistry</i> , 2014, 66, 173-240.	1.8	58
8	The proteasome and the degradation of oxidized proteins: Part II " protein oxidation and proteasomal degradation. <i>Redox Biology</i> , 2014, 2, 99-104.	3.9	153
9	Molecular chaperones and proteostasis regulation during redox imbalance. <i>Redox Biology</i> , 2014, 2, 323-332.	3.9	192
10	Glycation: The angiogenic paradox in aging and age-related disorders and diseases. <i>Ageing Research Reviews</i> , 2014, 15, 146-160.	5.0	25
11	Soft-tissue Wound Healing by Anti-advanced Glycation End-products Agents. <i>Journal of Dental Research</i> , 2014, 93, 388-393.	2.5	27
12	Lipid peroxidation-derived 4-hydroxynonenal-modified proteins accumulate in human facial skin fibroblasts during ageing in vitro. <i>Biogerontology</i> , 2014, 15, 105-110.	2.0	30
13	Oxidation scrutiny in persuaded aging and chronological aging at systemic redox homeostasis level. <i>Experimental Gerontology</i> , 2014, 57, 132-140.	1.2	44
14	Effect of therapeutic plasma exchange on plasma levels of oxidative biomarkers in a patient with thrombotic thrombocytopenic purpura. <i>European Journal of Haematology</i> , 2015, 94, 368-373.	1.1	6
15	Advanced Glycation End Products (Ages) in Food: Focusing on Mediterranean Pasta. <i>Journal of Nutrition &amp; Food Sciences</i> , 2015, 05, .	1.0	2
16	AGEs-Induced IL-6 Synthesis Precedes RAGE Up-Regulation in HEK 293 Cells: An Alternative Inflammatory Mechanism?. <i>International Journal of Molecular Sciences</i> , 2015, 16, 20100-20117.	1.8	18
17	Standardization and quality control in quantifying non-enzymatic oxidative protein modifications in relation to ageing and disease: Why is it important and why is it hard?. <i>Redox Biology</i> , 2015, 5, 91-100.	3.9	13
18	Loganin attenuates diabetic nephropathy in C57BL/6J mice with diabetes induced by streptozotocin and fed with diets containing high level of advanced glycation end products. <i>Life Sciences</i> , 2015, 123, 78-85.	2.0	58

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19	AGE/RAGE signalling regulation by miRNAs: Associations with diabetic complications and therapeutic potential. <i>International Journal of Biochemistry and Cell Biology</i> , 2015, 60, 197-201.	1.2	61
20	Effects of insulin combined with idebenone on blood-brain barrier permeability in diabetic rats. <i>Journal of Neuroscience Research</i> , 2015, 93, 666-677.	1.3	29
21	Antithrombotic therapy in the elderly: expert position paper of the European Society of Cardiology Working Group on Thrombosis. <i>European Heart Journal</i> , 2015, 36, ehv304.	1.0	175
22	Rifampicin reduces advanced glycation end products and activates <i>DAF-16</i> to increase lifespan in <i>Caenorhabditis elegans</i> . <i>Aging Cell</i> , 2015, 14, 463-473.	3.0	41
23	Cardiomyocyte mitochondrial respiration is reduced by receptor for advanced glycation end-product signaling in a ceramide-dependent manner. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 309, H63-H69.	1.5	41
24	Effect of diet-derived advanced glycation end products on inflammation. <i>Nutrition Reviews</i> , 2015, 73, 737-759.	2.6	113
25	Preferential sites for intramolecular glucosepane cross-link formation in type I collagen: A thermodynamic study. <i>Matrix Biology</i> , 2015, 48, 78-88.	1.5	22
26	The Amazing Ubiquitin-Proteasome System: Structural Components and Implication in Aging. <i>International Review of Cell and Molecular Biology</i> , 2015, 314, 171-237.	1.6	59
27	AGE-modified basement membrane cooperates with Endo180 to promote epithelial cell invasiveness and decrease prostate cancer survival. <i>Journal of Pathology</i> , 2015, 235, 581-592.	2.1	43
28	Advanced glycation end products increase expression of S100A8 and A9 via RAGE-MAPK in rat dental pulp cells. <i>Oral Diseases</i> , 2015, 21, 328-334.	1.5	23
29	Cross Talk of Proteostasis and Mitostasis in Cellular Homeodynamics, Ageing, and Disease. <i>Oxidative Medicine and Cellular Longevity</i> , 2016, 2016, 1-24.	1.9	33
30	GIT2 Acts as a Systems-Level Coordinator of Neurometabolic Activity and Pathophysiological Aging. <i>Frontiers in Endocrinology</i> , 2015, 6, 191.	1.5	25
31	Effects of Glycosylation on the Enzymatic Activity and Mechanisms of Proteases. <i>International Journal of Molecular Sciences</i> , 2016, 17, 1969.	1.8	88
32	Corneal Biomechanical Properties in Aspirin Users. <i>Ophthalmic Research</i> , 2016, 55, 199-204.	1.0	1
33	Non-enzymatic glycation mediated structure-function changes in proteins: case of serum albumin. <i>RSC Advances</i> , 2016, 6, 90739-90753.	1.7	20
34	Increased AGE-RAGE ratio in idiopathic pulmonary fibrosis. <i>Respiratory Research</i> , 2016, 17, 144.	1.4	40
35	Clinical significance of AGE-RAGE axis in colorectal cancer: associations with glyoxalase-I, adiponectin receptor expression and prognosis. <i>BMC Cancer</i> , 2016, 16, 174.	1.1	55
36	RAGE and glyoxalase in kidney disease. <i>Glycoconjugate Journal</i> , 2016, 33, 619-626.	1.4	26

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37	Glycative stress from advanced glycation end products (AGEs) and dicarbonyls: An emerging biological factor in cancer onset and progression. <i>Molecular Nutrition and Food Research</i> , 2016, 60, 1850-1864.	1.5	79
38	Effect of Aging on Periodontal Inflammation, Microbial Colonization, and Disease Susceptibility. <i>Journal of Dental Research</i> , 2016, 95, 460-466.	2.5	66
39	Aspartic acid functions as carbonyl trapper to inhibit the formation of advanced glycation end products by chemical chaperone activity. <i>Journal of Biomolecular Structure and Dynamics</i> , 2016, 34, 943-951.	2.0	15
40	Uremic Toxicity of Advanced Glycation End Products in CKD. <i>Journal of the American Society of Nephrology: JASN</i> , 2016, 27, 354-370.	3.0	175
41	Protective effects of physiological testosterone on advanced glycation end product-induced injury in human endothelial cells. <i>Molecular Medicine Reports</i> , 2017, 15, 1165-1171.	1.1	8
42	The receptor for advanced glycation end products RAGE is involved in corneal healing. <i>Annals of Anatomy</i> , 2017, 211, 13-20.	1.0	11
43	Ethnic differences regarding arterial stiffness of 6â€8â€year-old black and white boys. <i>Journal of Hypertension</i> , 2017, 35, 960-967.	0.3	54
44	Glycation, antiglycation, and deglycation: Their role in aging mechanisms and geroprotective effects (literature review). <i>Advances in Gerontology</i> , 2017, 7, 1-9.	0.1	6
45	Insulin signaling: An opportunistic target to minify the risk of Alzheimerâ€™s disease. <i>Psychoneuroendocrinology</i> , 2017, 83, 159-171.	1.3	51
46	<i>In vivo</i> ROS production and use of oxidative stress-derived biomarkers to detect the onset of diseases such as Alzheimerâ€™s disease, Parkinsonâ€™s disease, and diabetes. <i>Free Radical Research</i> , 2017, 51, 413-427.	1.5	197
47	Generation of Advanced Glycation End-Products (AGEs) by glycooxidation mediated by copper and ROS in a human serum albumin (HSA) model peptide: reaction mechanism and damage in motor neuron cells. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2017, 824, 42-51.	0.9	22
48	Endothelial cells, endoplasmic reticulum stress and oxysterols. <i>Redox Biology</i> , 2017, 13, 581-587.	3.9	100
49	Alzheimer's Diseaseâ€™ Current Status and Future Directions. <i>Journal of Medicinal Food</i> , 2017, 20, 1141-1151.	0.8	21
50	Proteome Stability as a Key Factor of Genome Integrity. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2036.	1.8	30
51	Mesenchymal Stem Cells from Adipose Tissue in Clinical Applications for Dermatological Indications and Skin Aging. <i>International Journal of Molecular Sciences</i> , 2017, 18, 208.	1.8	131
52	Autophagy Protects Advanced Glycation End Product-Induced Apoptosis and Expression of MMP-3 and MMP-13 in Rat Chondrocytes. <i>BioMed Research International</i> , 2017, 2017, 1-9.	0.9	22
53	Nutrition and AGE-ing: Focusing on Alzheimerâ€™s Disease. <i>Oxidative Medicine and Cellular Longevity</i> , 2017, 2017, 1-10.	1.9	71
54	Probing Protein Glycation by Chromatography and Mass Spectrometry: Analysis of Glycation Adducts. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2557.	1.8	52

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55	Sevelamer reduces endothelial inflammatory response to advanced glycation end products. CKJ: Clinical Kidney Journal, 2018, 11, 89-98.	1.4	21
56	Pterostilbene inhibited advanced glycation end products (AGEs)-induced oxidative stress and inflammation by regulation of RAGE/MAPK/NF- $\kappa$ B in RAW264.7 cells. Journal of Functional Foods, 2018, 40, 272-279.	1.6	39
57	Targeting oxidative stress through antioxidants in diabetes mellitus. Journal of Drug Targeting, 2018, 26, 766-776.	2.1	47
58	Oxidation, glycation and glycooxidationâ€”The vicious cycle and lung cancer. Seminars in Cancer Biology, 2018, 49, 29-36.	4.3	59
59	Fingolimod anti-inflammatory and neuroprotective effects modulation of RAGE axis in multiple sclerosis patients. Neuropharmacology, 2018, 130, 71-76.	2.0	12
60	Cancer chemoprevention via activation of proteostatic modules. Cancer Letters, 2018, 413, 110-121.	3.2	29
61	Oxidative stress effects in the uterus, placenta and fetus of pregnant rats submitted to acute and chronic stress. Acta Cirurgica Brasileira, 2018, 33, 806-815.	0.3	8
62	The effect of advanced glycation end products on cellular signaling molecules in skeletal muscle. The Journal of Physical Fitness and Sports Medicine, 2018, 7, 229-238.	0.2	8
63	Carnosine and advanced glycation end products: a systematic review. Amino Acids, 2018, 50, 1177-1186.	1.2	58
64	Integrating the DNA damage and protein stress responses during cancer development and treatment. Journal of Pathology, 2018, 246, 12-40.	2.1	79
65	4â€²-Methoxyresveratrol Alleviated AGE-Induced Inflammation via RAGE-Mediated NF- $\kappa$ B and NLRP3 Inflammasome Pathway. Molecules, 2018, 23, 1447.	1.7	51
66	RAGE and Its Ligands: Molecular Interplay Between Glycation, Inflammation, and Hallmarks of Cancerâ€”a Review. Hormones and Cancer, 2018, 9, 295-325.	4.9	124
67	Impact of obesity and overweight on DNA stability: Few facts and many hypotheses. Mutation Research - Reviews in Mutation Research, 2018, 777, 64-91.	2.4	61
68	Targeting Protein Quality Control Mechanisms by Natural Products to Promote Healthy Ageing. Molecules, 2018, 23, 1219.	1.7	29
69	Glucoseâ€”mediated protein glycation: Contribution of methanolic extract of <i>Ceratonia siliqua</i> L. in protection and in vitro potential inhibition of acetylcholinesterase. Journal of Food Biochemistry, 2019, 43, e13009.	1.2	8
70	Advanced Glycation End Products of Bovine Serum Albumin Suppressed Th1/Th2 Cytokine but Enhanced Monocyte IL-6 Gene Expression via MAPK-ERK and MyD88 Transduced NF- $\kappa$ B p50 Signaling Pathways. Molecules, 2019, 24, 2461.	1.7	11
71	Dietary Advanced Glycation End Products: Digestion, Metabolism and Modulation of Gut Microbial Ecology. Nutrients, 2019, 11, 215.	1.7	146
72	Dietary Genistein Inhibits Methylglyoxal-Induced Advanced Glycation End Product Formation in Mice Fed a High-Fat Diet. Journal of Nutrition, 2019, 149, 776-787.	1.3	30

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73	Associations of Serum S100B and S100P With the Presence and Classification of Diabetic Peripheral Neuropathy in Adults With Type 2 Diabetes: A Case-Cohort Study. <i>Canadian Journal of Diabetes</i> , 2019, 43, 336-344.e2.	0.4	14
74	Glucagon-like peptide-1 attenuates endothelial barrier injury in diabetes via cAMP/PKA mediated down-regulation of MLC phosphorylation. <i>Biomedicine and Pharmacotherapy</i> , 2019, 113, 108667.	2.5	29
75	Diversity of advanced glycation end products in the bovine milk proteome. <i>Amino Acids</i> , 2019, 51, 891-901.	1.2	23
76	Hydrophobicity and aggregation, but not glycation, are key determinants for uptake of thermally processed $\beta$ -lactoglobulin by THP-1 macrophages. <i>Food Research International</i> , 2019, 120, 102-113.	2.9	19
77	Upregulation of Cytoprotective Chaperones Mediate Better Tolerance to High Altitude. <i>Heat Shock Proteins</i> , 2019, , 123-145.	0.2	1
78	The Autophagy-Lysosomal Pathways and Their Emerging Roles in Modulating Proteostasis in Tumors. <i>Cells</i> , 2019, 8, 4.	1.8	32
79	The neurotoxicity of N $\beta$ -(carboxymethyl)lysine in food processing by a study based on animal and organotypic cell culture. <i>Ecotoxicology and Environmental Safety</i> , 2020, 190, 110077.	2.9	8
80	Antioxidant and Biological Properties of Mesenchymal Cells Used for Therapy in Retinitis Pigmentosa. <i>Antioxidants</i> , 2020, 9, 983.	2.2	9
81	Protein carbonylation: molecular mechanisms, biological implications, and analytical approaches. <i>Free Radical Research</i> , 2021, 55, 307-320.	1.5	51
82	Peanut skin polyphenols inhibit toxicity induced by advanced glycation end-products in RAW264.7 macrophages. <i>Food and Chemical Toxicology</i> , 2020, 145, 111619.	1.8	18
83	Discovery of GLO1 New Related Genes and Pathways by RNA-Seq on A2E-Stressed Retinal Epithelial Cells Could Improve Knowledge on Retinitis Pigmentosa. <i>Antioxidants</i> , 2020, 9, 416.	2.2	28
84	Redox Signaling and Advanced Glycation Endproducts (AGEs) in Diet-Related Diseases. <i>Antioxidants</i> , 2020, 9, 142.	2.2	98
85	The anti-aging effect of <i>Scutellaria baicalensis</i> Georgi flowers extract by regulating the glutamine-glutamate metabolic pathway in d-galactose induced aging rats. <i>Experimental Gerontology</i> , 2020, 134, 110843.	1.2	30
86	Association of advanced glycation end-product accumulation with overactive bladder in community-dwelling elderly: A cross-sectional Sukagawa study. <i>Asian Journal of Urology</i> , 2021, 8, 189-196.	0.5	0
87	The Taming of Nuclear Factor Erythroid-2-Related Factor-2 (Nrf2) Deglycation by Fructosamine-3-Kinase (FN3K)-Inhibitors-A Novel Strategy to Combat Cancers. <i>Cancers</i> , 2021, 13, 281.	1.7	14
88	Antithrombotic therapy in the elderly and senile age: the consensus opinion of experts of the Russian Association of Gerontologists and Geriatricians and the National Society of Preventive Cardiology. <i>Cardiovascular Therapy and Prevention (Russian Federation)</i> , 2021, 20, 2847.	0.4	3
89	Hemoglobin catalyzes ATP-synthesis in human erythrocytes: a murburn model. <i>Journal of Biomolecular Structure and Dynamics</i> , 2022, 40, 8783-8795.	2.0	17
90	Molecular Mechanisms Related to Oxidative Stress in Retinitis Pigmentosa. <i>Antioxidants</i> , 2021, 10, 848.	2.2	40

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91	Protein oxidation - Formation mechanisms, detection and relevance as biomarkers in human diseases. Redox Biology, 2021, 42, 101901.	3.9	102
92	Linking Oxidative Stress and Proteinopathy in Alzheimer's Disease. Antioxidants, 2021, 10, 1231.	2.2	57
93	Natural Products as a Source of Inspiration for Novel Inhibitors of Advanced Glycation Endproducts (AGEs) Formation. Planta Medica, 2021, 87, 780-801.	0.7	16
94	AGE/RAGE in diabetic kidney disease and ageing kidney. Free Radical Biology and Medicine, 2021, 171, 260-271.	1.3	90
95	Advanced glycation end productions and tendon stem/progenitor cells in pathogenesis of diabetic tendinopathy. World Journal of Stem Cells, 2021, 13, 1338-1348.	1.3	5
96	Role of Advanced Glycation End-Products and Other Ligands for AGE Receptors in Thyroid Cancer Progression. Journal of Clinical Medicine, 2021, 10, 4084.	1.0	7
97	Comparison of bovine serum albumin glycation by ribose and fructose in vitro and in vivo. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2022, 1868, 166283.	1.8	18
99	Lysine-arginine advanced glycation end-product cross-links and the effect on collagen structure: A molecular dynamics study. Proteins: Structure, Function and Bioinformatics, 2021, 89, 521-530.	1.5	9
100	Pulmonary Oxidative Stress and Antioxidant Defence System in the Lung Ageing and Fibrotic and Diabetic Lungs. , 2019, , 325-353.		3
101	The protective effects of dehydrocostus lactone against TNF- $\alpha$ -induced degeneration of extracellular matrix (ECM) in SW1353 cells. Aging, 2020, 12, 17137-17149.	1.4	5
102	The pathological role of advanced glycation end products-downregulated heat shock protein 60 in islet $\beta$ -cell hypertrophy and dysfunction. Oncotarget, 2016, 7, 23072-23087.	0.8	23
103	Treatment of Diabetic Cardiovascular Autonomic, Peripheral and Painful Neuropathy. Focus on the Treatment of Cardiovascular Autonomic Neuropathy with ACE Inhibitors. Current Vascular Pharmacology, 2020, 18, 158-171.	0.8	10
104	Immunohistochemical and Biochemical Expression Patterns of TTF-1, RAGE, GLUT-1 and SOX2 in HCV-Associated Hepatocellular Carcinomas. Asian Pacific Journal of Cancer Prevention, 2018, 19, 219-227.	0.5	8
105	Protein Quality Control in Neurodegeneration and Neuroprotection. Advances in Medical Diagnosis, Treatment, and Care, 2020, , 1-24.	0.1	3
106	Centenarian longevity had inverse relationships with nutritional status and abdominal obesity and positive relationships with sex hormones and bone turnover in the oldest females. Journal of Translational Medicine, 2021, 19, 436.	1.8	13
109	Neonatal Oral Curcumin: Effect on Telomere Lengths of Adolescent Rats Fed a High Fructose Diet Post-weaning. Journal of Biological Sciences, 2019, 19, 224-230.	0.1	1
110	Formulation of Drosophila Food for Various Feeding Studies. Springer Protocols, 2020, , 1-13.	0.1	2
111	Herbal Drugs Used In Treatment Of Alzheimer's Disease. American Journal of PharmTech Research, 2020, 10, 66-87.	0.2	0

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112	Identification of Impacted Pathways and Transcriptomic Markers as Potential Mediators of Pulmonary Fibrosis in Transgenic Mice Expressing Human IGFBP5. <i>International Journal of Molecular Sciences</i> , 2021, 22, 12609.	1.8	5
113	Methylglyoxal Levels in Human Colorectal Precancer and Cancer: Analysis of Tumor and Peritumor Tissue. <i>Life</i> , 2021, 11, 1319.	1.1	1
115	Impact of Advanced Glycation End products (AGEs) and its receptor (RAGE) on cancer metabolic signaling pathways and its progression. <i>Glycoconjugate Journal</i> , 2021, 38, 717-734.	1.4	27
116	Advanced Glycation End Products-Mediated Oxidative Stress and Regulated Cell Death Signaling in Cancer. , 2022, , 535-550.		0
118	Oxidation, Glycation, and Carbamylation of Salivary Biomolecules in Healthy Children, Adults, and the Elderly: Can Saliva Be Used in the Assessment of Aging?. <i>Journal of Inflammation Research</i> , 2022, Volume 15, 2051-2073.	1.6	12
119	Recent Developments in Biomarkers for Diagnosis and Screening of Type 2 Diabetes Mellitus. <i>Current Diabetes Reports</i> , 2022, 22, 95-115.	1.7	40
120	The Biological Role of Advanced Glycation End Products in the Development and Progression of Colorectal Cancer. <i>Open Access Macedonian Journal of Medical Sciences</i> , 2022, 10, 487-494.	0.1	0
121	Glycation-induced age-related illnesses, antiglycation and drug delivery strategies. <i>Journal of Pharmacy and Pharmacology</i> , 2022, 74, 1546-1567.	1.2	2
122	Long-Term Dietary Lycium ruthenicum Murr. Anthocyanins Intake Alleviated Oxidative Stress-Mediated Aging-Related Liver Injury and Abnormal Amino Acid Metabolism. <i>Foods</i> , 2022, 11, 3377.	1.9	3
123	The Protective Effect of Theaflavins on the Kidney of Mice with Type II Diabetes Mellitus. <i>Nutrients</i> , 2023, 15, 201.	1.7	2
124	Chemical Composition of Hazelnut Skin Food Waste and Protective Role against Advanced Glycation End-Products (AGEs) Damage in THP-1-Derived Macrophages. <i>Molecules</i> , 2023, 28, 2680.	1.7	2
130	1-Amino-1-deoxy-d-fructose (â€œfructosamineâ€) and its derivatives: An update. <i>Advances in Carbohydrate Chemistry and Biochemistry</i> , 2023, , 1-26.	0.4	0