Richard Weindruch

List of Publications by Year
in descending order

134 papers	17,738 citations	22099 59 h-index	15683 125 g-index
138 all docs	138 docs citations	138 times ranked	14487 citing authors

#	Article	IF	Citations
1	Caloric Restriction and Healthy Life Span: Frail Phenotype of Nonhuman Primates in the Wisconsin National Primate Research Center Caloric Restriction Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2018, 73, 273-278.	1.7	50
2	Caloric restriction improves health and survival of rhesus monkeys. Nature Communications, 2017, 8, 14063.	5.8	626
3	Identification of tissueâ€specific transcriptional markers of caloric restriction in the mouse and their use to evaluate caloric restriction mimetics. Aging Cell, 2017, 16, 750-760.	3.0	41
4	Effects of calorie restriction on the lifespan and healthspan of POLG mitochondrial mutator mice. PLoS ONE, 2017, 12, e0171159.	1.1	17
5	A Conserved Transcriptional Signature of Delayed Aging and Reduced Disease Vulnerability Is Partially Mediated by SIRT3. PLoS ONE, 2015, 10, e0120738.	1.1	29
6	Caloric restriction reduces age-related and all-cause mortality in rhesus monkeys. Nature Communications, 2014, 5, 3557.	5.8	579
7	Long-term calorie restriction decreases metabolic cost of movement and prevents decrease of physical activity during aging in rhesus monkeys. Experimental Gerontology, 2013, 48, 1226-1235.	1.2	55
8	Circulating Factors Induced by Caloric Restriction in the Nonhuman Primate Macaca Mulatta Activate Angiogenic Processes in Endothelial Cells. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2013, 68, 235-249.	1.7	51
9	A shift in energy metabolism anticipates the onset of sarcopenia in rhesus monkeys. Aging Cell, 2013, 12, 672-681.	3.0	66
10	Transcriptomics and Metabonomics Identify Essential Metabolic Signatures in Calorie Restriction (CR) Regulation across Multiple Mouse Strains. Metabolites, 2013, 3, 881-911.	1.3	13
11	Skeletal effects of long-term caloric restriction in rhesus monkeys. Age, 2012, 34, 1133-1143.	3.0	18
12	The caloric restriction paradigm: Implications for healthy human aging. American Journal of Human Biology, 2012, 24, 101-106.	0.8	130
13	Gene expression profiling reveals differential effects of sodium selenite, selenomethionine, and yeast-derived selenium in the mouse. Genes and Nutrition, 2012, 7, 155-165.	1.2	42
14	Cellular adaptation contributes to calorie restriction-induced preservation of skeletal muscle in aged rhesus monkeys. Experimental Gerontology, 2012, 47, 229-236.	1.2	48
15	Calorie Restriction in Nonhuman and Human Primates. , 2011, , 447-461.		1
16	Caloric restriction delays aging-induced cellular phenotypes in rhesus monkey skeletal muscle. Experimental Gerontology, 2011, 46, 23-29.	1.2	85
17	Effects of Caloric Restriction on Age-Related Hearing Loss in Rodents and Rhesus Monkeys. Current Aging Science, 2010, 3, 20-25.	0.4	39
18	Auditory function in rhesus monkeys: Effects of aging and caloric restriction in the Wisconsin monkeys five years later. Hearing Research, 2010, 261, 75-81.	0.9	30

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19	Metabolic reprogramming, caloric restriction and aging. Trends in Endocrinology and Metabolism, 2010, 21, 134-141.	3.1	233
20	Exploring Mechanisms of Aging Retardation by Caloric Restriction: Studies in Model Organisms and Mammals. , 2010, , 69-96.		0
21	Age-related hearing loss in C57BL/6J mice is mediated by Bak-dependent mitochondrial apoptosis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19432-19437.	3.3	287
22	Longitudinal analysis of early stage sarcopenia in aging rhesus monkeys. Experimental Gerontology, 2009, 44, 170-176.	1.2	34
23	Metabolic shifts due to long-term caloric restriction revealed in nonhuman primates. Experimental Gerontology, 2009, 44, 356-362.	1.2	70
24	Caloric restriction counteracts age-related changes in the activities of sorbitol metabolizing enzymes from mouse liver. Biogerontology, 2009, 10, 471-479.	2.0	10
25	Gene expression profiling of aging in multiple mouse strains: identification of aging biomarkers and impact of dietary antioxidants. Aging Cell, 2009, 8, 484-495.	3.0	114
26	Egr-1 and Hipk2 are required for the TrkA to p75NTR switch that occurs downstream of IGF1-R. Neurobiology of Aging, 2009, 30, 2010-2020.	1.5	9
27	Caloric Restriction Delays Disease Onset and Mortality in Rhesus Monkeys. Science, 2009, 325, 201-204.	6.0	2,016
28	Caloric Restriction and Aging: Studies in Mice and Monkeys. Toxicologic Pathology, 2009, 37, 47-51.	0.9	224
29	Dynamic regulation of PGCâ€1Î± localization and turnover implicates mitochondrial adaptation in calorie restriction and the stress response. Aging Cell, 2008, 7, 101-111.	3.0	250
30	The role of mtDNA mutations in the pathogenesis of age-related hearing loss in mice carrying a mutator DNA polymerase Î³. Neurobiology of Aging, 2008, 29, 1080-1092.	1.5	83
31	Tympanometry in rhesus monkeys: Effects of aging and caloric restriction. International Journal of Audiology, 2008, 47, 209-214.	0.9	4
32	Attenuation of Sarcopenia by Dietary Restriction in Rhesus Monkeys. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2008, 63, 556-559.	1.7	121
33	Enzymes of glycerol and glyceraldehyde metabolism in mouse liver: effects of caloric restriction and age on activities. Bioscience Reports, 2008, 28, 107-115.	1.1	34
34	A Low Dose of Dietary Resveratrol Partially Mimics Caloric Restriction and Retards Aging Parameters in Mice. PLoS ONE, 2008, 3, e2264.	1.1	504
35	Î±- and Î³-Tocopherol Prevent Age-Related Transcriptional Alterations in the Heart and Brain of Mice3. Journal of Nutrition, 2008, 138, 1010-1018.	1.3	45
36	Caloric restriction suppresses apoptotic cell death in the mammalian cochlea and leads to prevention of presbycusis. Neurobiology of Aging, 2007, 28, 1613-1622.	1.5	122

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37	Role of mitochondrial dysfunction and mitochondrial DNA mutations in age-related hearing loss. Hearing Research, 2007, 226, 185-193.	0.9	118
38	Influences of calorie restriction and age on energy expenditure in the rhesus monkey. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E101-E106.	1.8	23
39	Gene expression profiling of aging reveals activation of a p53-mediated transcriptional program. BMC Genomics, 2007, 8, 80.	1.2	161
40	Metabolizable energy intake during long-term calorie restriction in rhesus monkeys. Experimental Gerontology, 2007, 42, 988-994.	1.2	9
41	Metabolic Shifts Induced by Caloric Restriction. FASEB Journal, 2007, 21, A153.	0.2	0
42	SIRT4 Inhibits Glutamate Dehydrogenase and Opposes the Effects of Calorie Restriction in Pancreatic Î2 Cells. Cell, 2006, 126, 941-954.	13.5	1,053
43	Energy Restriction Lowers the Expression of Genes Linked to Inflammation, the Cytoskeleton, the Extracellular Matrix, and Angiogenesis in Mouse Adipose Tissue. Journal of Nutrition, 2006, 136, 343-352.	1.3	115
44	Will dietary restriction work in primates?. Biogerontology, 2006, 7, 169-171.	2.0	19
45	Calorie restriction: Progress during mid-2005â€“mid-2006. Experimental Gerontology, 2006, 41, 1247-1249.	1.2	16
46	Metabolic Reprogramming in Dietary Restriction. , 2006, 35, 18-38.		54
47	Intentional Weight Loss Reduces Mortality Rate in a Rodent Model of Dietary Obesity. Obesity, 2005, 13, 693-702.	4.0	45
48	Assessment of nutritional status in rhesus monkeys: comparison of dual-energy X-ray absorptiometry and stable isotope dilution. Journal of Medical Primatology, 2005, 34, 130-138.	0.3	17
49	Muscle mass loss in Rhesus monkeys: Age of onset. Experimental Gerontology, 2005, 40, 573-581.	1.2	50
50	Empirical Bayes estimation of gene-specific effects in micro-array research. Functional and Integrative Genomics, 2005, 5, 32-39.	1.4	9
51	The effects of intentional weight loss as a latent variable problem. Statistics in Medicine, 2005, 24, 941-954.	0.8	25
52	Long-term calorie restriction reduces proton leak and hydrogen peroxide production in liver mitochondria. American Journal of Physiology - Endocrinology and Metabolism, 2005, 288, E674-E684.	1.8	85
53	Long-term caloric restriction increases UCP3 content but decreases proton leak and reactive oxygen species production in rat skeletal muscle mitochondria. American Journal of Physiology - Endocrinology and Metabolism, 2005, 289, E429-E438.	1.8	142
54	Reference Body Composition in Adult Rhesus Monkeys: Glucoregulatory and Anthropometric Indices. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2005, 60, 1518-1524.	1.7	24

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55	A TrkA-to-p75NTR molecular switch activates amyloid Î²-peptide generation during aging. Biochemical Journal, 2005, 391, 59-67.	1.7	134
56	Fructose metabolizing enzymes from mouse liver: influence of age and caloric restriction. Biochimica Et Biophysica Acta - General Subjects, 2005, 1721, 37-43.	1.1	15
57	Serine utilization in mouse liver: Influence of caloric restriction and aging. FEBS Letters, 2005, 579, 2009-2013.	1.3	13
58	Adipose tissue energy metabolism: altered gene expression profile of mice subjected to longâ€term caloric restriction. FASEB Journal, 2004, 18, 1-26.	0.2	146
59	Metabolic adaptations to fasting and chronic caloric restriction in heart, muscle, and liver do not include changes in AMPK activity. American Journal of Physiology - Endocrinology and Metabolism, 2004, 287, E1032-E1037.	1.8	107
60	Altered lipid metabolism in rodents subjected to calorie restriction. Geriatrics and Gerontology International, 2004, 4, S155-S157.	0.7	1
61	Molecular analyses of mtDNA deletion mutations in microdissected skeletal muscle fibers from aged rhesus monkeys. Aging Cell, 2004, 3, 319-326.	3.0	85
62	Fond memories of my years at UCLA with Roy Walford. Experimental Gerontology, 2004, 39, 943-945.	1.2	0
63	Krebs cycle enzymes from livers of old mice are differentially regulated by caloric restriction. Experimental Gerontology, 2004, 39, 1145-1154.	1.2	34
64	The impact of Î±-lipoic acid, coenzyme Q10 and caloric restriction on life span and gene expression patterns in mice. Free Radical Biology and Medicine, 2004, 36, 1043-1057.	1.3	122
65	Power and sample size estimation in high dimensional biology. Statistical Methods in Medical Research, 2004, 13, 325-338.	0.7	64
66	Impairment of the Transcriptional Responses to Oxidative Stress in the Heart of Aged C57BL/6 Mice. Annals of the New York Academy of Sciences, 2004, 1019, 85-95.	1.8	24
67	Aging: The Reality: Biomarkers of Aging: From Primitive Organisms to Humans. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2004, 59, B560-B567.	1.7	164
68	Caloric restriction, gene expression and aging. International Congress Series, 2004, 1260, 13-20.	0.2	3
69	Effects of short- and medium-term calorie restriction on muscle mitochondrial proton leak and reactive oxygen species production. American Journal of Physiology - Endocrinology and Metabolism, 2004, 286, E852-E861.	1.8	138
70	Proton leak and hydrogen peroxide production in liver mitochondria from energy-restricted rats. American Journal of Physiology - Endocrinology and Metabolism, 2004, 286, E31-E40.	1.8	59
71	Caloric restriction: life span extension and retardation of brain aging. Clinical Neuroscience Research, 2003, 2, 279-284.	0.8	23
72	Caloric restriction increases gluconeogenic and transaminase enzyme activities in mouse liver. Experimental Gerontology, 2003, 38, 267-278.	1.2	123

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73	Influence of age and caloric restriction on liver glycolytic enzyme activities and metabolite concentrations in mice. Experimental Gerontology, 2003, 38, 253-266.	1.2	75
74	A design and statistical perspective on microarray gene expression studies in nutrition:. Nutrition, 2003, 19, 997-1000.	1.1	36
75	The retardation of aging by caloric restriction: its significance in the transgenic era. Experimental Gerontology, 2003, 38, 1343-1351.	1.2	144
76	Energy Expenditure of Rhesus Monkeys Subjected to 11 Years of Dietary Restriction. Journal of Clinical Endocrinology and Metabolism, 2003, 88, 16-23.	1.8	120
77	Caloric Restriction, Gene Expression, and Aging. Alzheimer Disease and Associated Disorders, 2003, 17, S58-S59.	0.6	24
78	Age-related impairment of the transcriptional responses to oxidative stress in the mouse heart. Physiological Genomics, 2003, 13, 119-127.	1.0	81
79	Authorsâ€™ Response: Dubious Assumptions Underlying the Adjustment of Metabolic Rates for Changes in Fat-Free Mass. Journal of Clinical Endocrinology and Metabolism, 2003, 88, 3454-3455.	1.8	1
80	Transcriptional profiles associated with aging and middle age-onset caloric restriction in mouse hearts. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14988-14993.	3.3	289
81	Gene Expression Profile of the Aging Brain. Archives of Neurology, 2002, 59, 1712.	4.9	33
82	Effects of Caloric Restriction on Gene Expression. , 2002, 6, 17-32.		6
83	Gene expression profiling of aging using DNA microarrays. Mechanisms of Ageing and Development, 2002, 123, 177-193.	2.2	155
84	A mixture model approach for the analysis of microarray gene expression data. Computational Statistics and Data Analysis, 2002, 39, 1-20.	0.7	287
85	Microglia and Aging in the Brain. , 2002, , 275-305.		23
86	Caloric Intake, Oxidative Stress and Aging. Scientific World Journal, The, 2001, 1, 85-85.	0.8	4
87	Microarray Profiling of Gene Expression in Aging and Its Alteration by Caloric Restriction in Mice. Journal of Nutrition, 2001, 131, 918S-923S.	1.3	240
88	Caloric restriction lowers plasma lipoprotein (a) in male but not female rhesus monkeys. Experimental Gerontology, 2001, 36, 1413-1418.	1.2	29
89	Androgen and taxol cause cell type-specific alterations of centrosome and DNA organization in androgen-responsive LNCaP and androgen-independent DU145 prostate cancer cells. Journal of Cellular Biochemistry, 2000, 76, 463-477.	1.2	18
90	Gene-expression profile of the ageing brain in mice. Nature Genetics, 2000, 25, 294-297.	9.4	1,016

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91	Restriction of energy intake, energy expenditure, and aging. Free Radical Biology and Medicine, 2000, 29, 946-968.	1.3	182
92	Cellular phenotypes of age-associated skeletal muscle mitochondrial abnormalities in rhesus monkeys. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2000, 452, 123-138.	0.4	59
93	Caloric restriction of rhesus monkeys lowers oxidative damage in skeletal muscle. FASEB Journal, 2000, 14, 1825-1836.	0.2	200
94	Androgen-Induced Oxidative Stress in Human LNCaP Prostate Cancer Cells Is Associated with Multiple Mitochondrial Modifications. Antioxidants and Redox Signaling, 1999, 1, 71-81.	2.5	33
95	Localization of 4-hydroxy-2-nonenal-modified proteins in kidney following iron overload. Free Radical Biology and Medicine, 1999, 26, 1181-1193.	1.3	47
96	Gene Expression Profile of Aging and Its Retardation by Caloric Restriction. Science, 1999, 285, 1390-1393.	6.0	1,405
97	Controlling caloric consumption: protocols for rodents and rhesus monkeysâ˜†. Neurobiology of Aging, 1999, 20, 157-165.	1.5	155
98	Influences of Caloric Restriction on Age-associated Skeletal Muscle Fiber Characteristics and Mitochondrial Changes in Rats and Micea. Annals of the New York Academy of Sciences, 1998, 854, 182-191.	1.8	51
99	Caloric restriction prevents age-associated accrual of oxidative damage to mouse skeletal muscle mitochondria. Free Radical Biology and Medicine, 1998, 25, 1089-1097.	1.3	237
100	Association of age-related mitochondrial abnormalities with skeletal muscle fiber atrophy. Free Radical Biology and Medicine, 1998, 25, 964-972.	1.3	112
101	Decreased mitochondrial RNA levels without accumulation of mitochondrial DNA deletions in aging Drosophila melanogaster. Mutation Research - Mutation Research Genomics, 1998, 382, 99-107.	1.2	15
102	Age-related increase in mitochondrial proton leak and decrease in ATP turnover reactions in mouse hepatocytes. American Journal of Physiology - Endocrinology and Metabolism, 1998, 275, E197-E206.	1.8	49
103	Caloric Intake and Aging. New England Journal of Medicine, 1997, 337, 986-994.	13.9	690
104	Adult-Onset Energy Restriction of Rhesus Monkeys Attenuates Oxidative Stressâ€“Induced Cytokine Expression by Peripheral Blood Mononuclear Cells. Journal of Nutrition, 1997, 127, 2293-2301.	1.3	44
105	Caloric restriction reduces fiber loss and mitochondrial abnormalities in aged rat muscle. FASEB Journal, 1997, 11, 573-581.	0.2	155
106	Age-Associated Alterations of the Mitochondrial Genome. Free Radical Biology and Medicine, 1997, 22, 1259-1269.	1.3	66
107	Increased effective activity of rat liver catalase by dietary restriction. Age, 1997, 20, 215-220.	3.0	9
108	A circadian study of liver antioxidant enzyme systems of female Fischer-344 rats subjected to dietary restriction for six weeks.. Age, 1997, 20, 221-228.	3.0	5

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109	Caloric restriction diminishes the age-associated loss of immunoreactive catalase in rat prostate. , 1997, 33, 256-263.		6
110	Analysis of age-associated mitochondrial DNA deletion breakpoint regions from mice suggests a novel model of deletion formation. Age, 1996, 19, 117-128.	3.0	15
111	Age-associated mitochondrial DNA deletions in mouse skeletal muscle: Comparison of different regions of the mitochondrial genome. , 1996, 18, 107-113.		37
112	Caloric Restriction and Aging. Scientific American, 1996, 274, 46-52.	1.0	168
113	The Retardation of Aging by Caloric Restriction: Studies in Rodents and Primates. Toxicologic Pathology, 1996, 24, 742-745.	0.9	229
114	Age-associated mitochondrial DNA deletions in mouse skeletal muscle: Comparison of different regions of the mitochondrial genome. , 1996, 18, 107.		1
115	Measures of body size and growth in rhesus and squirrel monkeys subjected to long-term dietary restriction. American Journal of Primatology, 1995, 35, 207-228.	0.8	44
116	High levels of mitochondrial DNA deletions in skeletal muscle of old rhesus monkeys. Mechanisms of Ageing and Development, 1995, 83, 91-101.	2.2	109
117	Use of caloric restriction to investigate neuroendocrine involvement in aging. Neurobiology of Aging, 1995, 16, 845-847.	1.5	1
118	Immunogerontologic Outcomes of Dietary Restriction Started in Adulthood. Nutrition Reviews, 1995, 53, S66-S74.	2.6	13
119	Direct repeat sequences are not required at the breakpoints of age-associated mitochondrial DNA deletions in rhesus monkeys. Mechanisms of Ageing and Development, 1994, 75, 69-79.	2.2	31
120	Influences of aging and dietary restriction on red blood cell density profiles and antioxidant enzyme activities in rhesus monkeys. Experimental Gerontology, 1993, 28, 515-527.	1.2	2
121	Caloric restriction, aging, and antioxidant enzymes. Mutation Research - DNAging, 1993, 295, 191-200.	3.3	80
122	Mitotic Activity in Mice is Suppressed by Energy Restriction-Induced Torpor. Journal of Nutrition, 1992, 122, 1446-1453.	1.3	61
123	Effect of caloric restriction on age-associated cancers. Experimental Gerontology, 1992, 27, 575-581.	1.2	67
124	The Role of Calories and Caloric Restriction in Carcinogenesis. Hematology/Oncology Clinics of North America, 1991, 5, 79-89.	0.9	47
125	Effects of Energy Restriction on Mouse Mammary Tumor Virus mRNA Levels in Mammary Glands and Uterus and on Uterine Endometrial Hyperplasia and Pituitary Histology in C3H/SHN F1 Mice. Journal of Nutrition, 1990, 120, 1401-1411.	1.3	19
126	Dietary Restriction Alone and in Combination With Oral Ethoxyquin/2-Muercaptoethylamine in Mice. Journal of Gerontology, 1990, 45, B141-B147.	2.0	31

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127	Caloric Restriction and Longevity. , 1990, , 313-317.		2
128	Effect of dietary restriction upon the age-associated decline of lymphocyte DNA repair activity in mice. Age, 1988, 11, 48-52.	3.0	60
129	Influences of Dietary Restriction and Age on Liver Enzyme Activities and Lipid Peroxidation in Mice. Journal of Nutrition, 1987, 117, 361-367.	1.3	258
130	Dietary Restriction and Aging: Historical Phases, Mechanisms and Current Directions. Journal of Nutrition, 1987, 117, 1650-1654.	1.3	101
131	The Retardation of Aging in Mice by Dietary Restriction: Longevity, Cancer, Immunity and Lifetime Energy Intake. Journal of Nutrition, 1986, 116, 641-654.	1.3	855
132	Aging in Rodents Fed Restricted Diets*,â€. Journal of the American Geriatrics Society, 1985, 33, 125-132.	1.3	26
133	Food intake reduction and immunologic alterations in mice fed dehydroepiandrosterone. Experimental Gerontology, 1984, 19, 297-304.	1.2	40
134	Dietary restriction in mice beginning at 1 year of age: Effects on serum immune complex levels. Age, 1982, 5, 111-112.	3.0	7