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## Dietary Restriction Library

Phelan, J.P. & S.N. Austad. 1989. Natural selection, dietary restriction and extended longevity. *Growth, Development, & Aging* 53:4-6.

Austad, S.N. 1989. [Life extension by dietary restriction in the bowl and doily spider, *Frontinella pyramitela*](http://www.sciencedirect.com/science/article/pii/0531556589900375). *Experimental Gerontology* 24: 83-92.

Austad, S.N. 1995. [Aging and caloric restriction: human effects and mode of action](http://www.sciencedirect.com/science/article/pii/019745809500070U). *Neurobiology of Aging* 16:851-852.

Masoro, E.J. & Austad, S.N. 1996. [The evolution of the antiaging action of dietary restriction: a hypothesis.](http://biomedgerontology.oxfordjournals.org/content/51A/6/B387.short) *Journals of Gerontology* 51A:B387-B391.

Wanagat J, Allison DB, Weindruch R. 1999. [Caloric intake and aging: mechanisms in rodents and a study in nonhuman primates](http://toxsci.oxfordjournals.org/content/52/suppl_1/35.abstract). *Toxicological Sciences*, 52(2 Suppl):35-40.

Zainal, T. A., Oberley, T. D., Allison, D. B., Szweda, L. I., & Weindruch, R. (2000). [Caloric Restriction of Rhesus Monkeys Lowers Oxidative Damage in Skeletal Muscle](http://www.fasebj.org/content/14/12/1825.short). FASEB Journal, 14, 1825-1836.

Allison, D.B., Miller, R.A., Austad, S.N., Bouchard, C., Leibel, R., Klebanov, S., Johnson, T., and Harrison, D.E. 2001. [Genetic variability in responses to caloric restriction in animals and in regulation of metabolism and obesity in humans](http://biomedgerontology.oxfordjournals.org/content/56/suppl_1/55.short). *Journal of Gerontology: Biological Sciences* 56A:55-65.

Austad, S.N. (2001). [Does caloric restriction in the laboratory simply prevent overfeeding and return house mice to their natural level of food intake?](http://sageke.sciencemag.org/cgi/content/full/sageke%3B2001/6/pe3) *Science of Aging Knowledge Environment*. AAAS.

Black, A, Allison, DB, Shapses, SA, Tilmont, EM, Handy, AM, Ingram, DK, Roth GS, Lane MA. 2001. [Calorie Restriction and Skeletal Mass in Rhesus Monkeys (Macaca mulatta): Evidence for an Effect Mediated Through Changes in Body Size](http://biomedgerontology.oxfordjournals.org/content/56/3/B98.short). *Journal of Gerontology, Biological Sciences*, 56A, B98-B107.

Lee I-M, Blair SN, Allison DB, Folsom AR, Harris TB, Manson JE, Wing RR. 2001. [Epidemiologic data on the relationships of caloric intake, energy balance, and weight gain over the life span with longevity and morbidity](http://biomedgerontology.oxfordjournals.org/content/56/suppl_1/7.short). *Journal of Gerontology, Series A*, 56 (special issue 1); 7-19.

Kayo, T., Allison, D. B., Weindruch, R. & Prolla, T. A. 2001. [Influences of Aging and Caloric Restriction on the Transcriptional Profile of Skeletal Muscle from Rhesus Monkeys](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC33169/). *Proceedings of The National Academy of Sciences*, 98, 5093-5098.

Gresl, T. A., Colman, R. J., Roecker, E. B., Havighurst, T. C. Huang, Z., Allison, D. B., Bergman, R. N., & Kemnitz, J. W. 2001. [Dietary Restriction and Glucose Regulation in Aging Rhesus Monkeys: A Follow-up Report at 8.5 Years](http://ajpendo.physiology.org/content/281/4/E757.short). *American Journal Of Physiology-Endocrinology and Metabolism*, 281 (4): E757-E765.

Lee, CK, Allison, D. B., Brand, J., Weindruch, R., & Prolla, T. A. 2002. [Transcriptional Profiles Associated with Aging and Adult-Onset Caloric Restriction in Mouse Hearts](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC137532/). *Proceedings of the National Academy of Sciences*, 99, 14988-14993.

Rikke, B. A., Yerg, J. E., Battaglia, M. E., Nagy, T. R., Allison, D. B., & Johnson, T. E. 2003. [Significant Strain Variation in the Response of Body Temperature to Dietary Restriction](http://www.sciencedirect.com/science/article/pii/S0047637403000034). *Mechanisms of Ageing and Development*, 124(5):663-78.

Gresl, T. A., Colman, R. J., Havighurst, T. C., Allison, D. B., Schoeller, D. A., & Kemnitz, J. W. 2003. [Dietary restriction and B-cell sensitivity to glucose in adult male rhesus monkeys](http://biomedgerontology.oxfordjournals.org/content/58/7/B598.short). *Journal of Gerontology A: Biological Sciences & Medical Sciences*, 58(7):B598-B610.

Higami, Y., Pugh, T. D., Page, G. P., Allison, D. B., Prolla, T. A., Weindruch, R. (2003). [Adipose tissue energy metabolism: altered gene expression profile of mice subjected to long-term caloric restriction](http://www.fasebj.org/content/18/2/415.short). *The FASEB Journal Express Article* 10.1096/fj.03-0678fje. Published online December 19, 2003. Published in print as FASEB Journal, 2004 Feb;18(2):415-7.

Wang, C., Weindruch, R., Fernandez, J. R., Coffey, C. S., Patel, P., & Allison, D. B. (2004). Caloric Restriction and Body Weight independently Affect Longevity in Wistar Rats. International Journal of Obesity, 28, 357-62. http://www.nature.com/ijo/journal/v28/n3/abs/0802518a.html

Rikke, B. A., Yerg, J. E., Battaglia, M. E., Nagy, T. R., Allison, D. B., Johnson, T. E. (2004). Quantitative Trait Loci Specifying the Response of Body Temperature to Dietary Restriction. Journal of Gerontology: Biological Sciences, 59A, 118–125 http://biomedgerontology.oxfordjournals.org/content/59/2/B118.short

Lee CK, Pugh TD, Klopp RG, Edwards J, Allison DB, Weindruch R, Prolla TA. (2004). The impact of alpha-lipoic acid, coenzyme Q(10) and caloric restriction on life span and gene expression patterns in mice. Free Radical Biology and Medicine, 15;36(8):1043-57. http://www.sciencedirect.com/science/article/pii/S0891584904000826

Harper, JM, Leathers, CW, Austad, SN. 2006. [Does caloric restriction extend life in wild mice?](http://www.ncbi.nlm.nih.gov/pubmed/17054664) *Aging Cell* 5, 441-449.

Rikke BA, Battaglia ME, Allison DB, Johnson TE. 2006. [Murine weight loss exhibits significant genetic variation during dietary restriction](http://physiolgenomics.physiology.org/content/27/2/122.short). *Physiological Genomics*, 27(2):122-30.

Rikke BA, Battaglia ME, Allison DB, Johnson TE. 2006. [Murine weight loss exhibits significant genetic variation during dietary restriction](http://physiolgenomics.physiology.org/content/27/2/122.short). *Physiological Genomics*, 27(2):122-30.

Colman, R. J., Beasley, T. M., Allison, D. B., & Weindruch, R. 2008. [Attenuation of Sarcopenia by Dietary Restriction in Rhesus monkeys](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2812805/). *Journal of Gerontology*. Jun; 63 (6), 556-559. PMCID: PMC2812805.

Colman, R. J., Anderson, R. M., Johnson, S. C., Kastman, E. K., Kosmatka, K. J., Beasley, T. M., Allison, D. B., Cruzen, C. Simmons, H. A., Kemnitz, J. W., Weindruch, R. 2009. [Caloric restriction delays disease onset and mortality in rhesus monkeys](http://www.sciencemag.org/content/325/5937/201.short). *Science*. Jul;325(5937), 201-204. PMCID: PMC2812811.

Smith, D. L., Nagy, T. R., Allison, D. B. 2010. [Calorie Restriction: What Recent Results Suggest for the Future of Ageing Research](http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2362.2010.02276.x/full). *European Journal of Clinical Investigation*. 40(5):440-450. Epub 2010 Apr 20. PMCID: PMC3073505.

Barger, J. L., Kayo, T., Vann, J. M., Arias, E. B., Wang, J., Hacker, T. A., Wang, Y., Raederstorff, D., Morrow, J. D., Leeuwenburgh, C., Allison, D. B., Saupe, K. W., Cartee, G. D., Weindruch, R., Prolla, T. A. 2008. [A low dose of dietary resveratrol partially mimics caloric restriction and retards aging parameters in mice](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2386967/). *PLoS ONE*, Jun 4;3(6):e2264. PMCID: PMC2386967.

Smith, D. L., Mattison, J. A., Desmond, R. A., Gardner, J. P., Kimura, M., Roth, G. S., Ingram, D. K., Allison, D. B., Aviv, A. 2011. [Telomere Dynamics in Rhesus Monkeys: No Apparent Effect of Caloric Restriction](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3193524/). *Journal of Gerontology: Biological Sciences*, Nov;66(11):1163-8. PMCID: PMC3193524.

Austad SN. 2012. [Ageing: mixed results for dieting monkeys](http://www.ncbi.nlm.nih.gov/pubmed/22932269). *Nature*, 489, 210-11. PMCID: N/A.

Willette, A. A., Coe, C. L., Colman, R. J., Bendlin, B. B., Kastman, E. K., Field, A. S., Alexander, A. L., Allison, D. B., Anderson, Weindruch, R. H., & Johnson, S. C. 2012. [Calorie restriction reduces psychological stress reactivity and its association with brain volume and microstructure in aged rhesus monkeys](http://www.sciencedirect.com/science/article/pii/S0306453011003106). *Psychoneuroendocrinology*, Jul;37(7):903-16. PMCID: PMC3243474.

Willette, AA, Bendlin, BB, Colman, RJ, Kastman, EK, Field, AS, Alexander, AL, Sridharan, A., Allison, DB, Anderson, R., Voytko, ML, Kemnitz, JW, Weindruch, RH, Johnson, SC. 2012. [Calorie restriction reduces the influence of glucoregulatory dysfunction on regional brain volume in aged rhesus monkeys](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3331743/). *Diabetes*, May;61(5):1036-42.

Kaiser, K. A., Smith, D. L., & Allison, D. B. 2012. [Conjectures on Some Curious Connections Among Social Status, Calorie Restriction, Hunger, Fatness, and Longevity](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3464393/). *Annals of the New York Academy of Sciences*, Aug;1264(1):1-12.

Mattison, J. A., Roth, G. S., Beasley, T. M., Tilmont, E. M., Handy, A. H., Herbert, R. L., Longo, D. L., Allison, D. B., Young, J. E., Bryant, M., Barnard, D., Ward, W. F., Qi, W., Ingram, D. K., de Cabo, R. 2012. [Impact of caloric restriction on health and survival in rhesus monkeys: the NIA study](https://www.ncbi.nlm.nih.gov/pubmed/22932268). *Nature*. Published online 29 August 2012. doi:10.1038/nature11432.

Colman, R.J. , Mark Beasley, T., Allison, D.B., Weindruch, R. 2012. [Skeletal effects of long-term caloric restriction in rhesus monkeys](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3448987/). *Age*. (34) 5, October 2012; 1133-1143.

Dhurandhar, E. J., Allison, D. B., van Groen, T., & Kadish, I. 2013. [Hunger in the Absence of Caloric Restriction Improves Cognition and Attenuates Alzheimer's Disease Pathology in a Mouse Model](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3614512/). *PLoS One*, 8(4):e60437. doi: 10.1371/journal.pone.0060437. Epub 2013 Apr 2.

Willette AA, Coe CL, Birdsill AC, Bendlin BB, Colman RJ, Alexander AL, Allison DB, Weindruch RH, Johnson SC. 2013. [Interleukin-8 and interleukin-10, brain volume and microstructure, and the influence of calorie restriction in old rhesus macaques](http://link.springer.com/article/10.1007/s11357-013-9518-y). Age (Dordr). 2013 Dec;35(6):2215-27. doi: 10.1007/s11357-013-9518-y. Epub 2013 Mar 6.