**Supplemental Table 1.** Of the 284 references included in the search, these were further screened out due to meeting one or more of the exclusion criteria.

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| --- | --- | --- |
| **Title** | **Reason for exclusion** | **Reference** |
| Effect of feed restriction on the environmental variability of birth weight in divergently selected lines of mice | Does not include a primary comparison of M to F (no male data reported); No HS outcome reported | (111) |
| Food anticipatory activity on a calorie-restricted diet is independent of Sirt1. | No DR intervention | (112) |
| Reduced expression of C/EBPβ-LIP extends health and lifespan in mice | No DR intervention | (113) |
| [Long term rapamycin treatment improves mitochondrial DNA quality in aging mice.](https://www.ncbi.nlm.nih.gov/pubmed/29486228) | DR is not the primary outcome, only included as a control; main study is about rapamycin | (114) |
| Metabolic effects of short-term caloric restriction in mice with reduced insulin gene dosage | No wildtype control group (to the InsR KO mice) despite having AL and CR | (115) |
| System-wide Benefits of Intermeal Fasting by Autophagy | Include both males and females but say no sex differences so sexes are combined; no CR group | (116) |
| Enzyme replacement prevents neonatal death, liver damage, and osteoporosis in murine homocystinuria | No DR intervention | (117) |
| Uncoupling of Metabolic Health from Longevity through Genetic Alteration of Adipose Tissue Lipid-Binding Proteins | No DR intervention | (118) |
| SIRT1 is a positive regulator of *in vivo* bone mass and a therapeutic target for osteoporosis | Uses males and females, and CR, but no direct comparison between M&F on CR | (119) |
| Caloric restriction delays age-related methylation drift | Do not use female mice (also includes monkeys) | (120) |
| Sterol regulatory element-binding protein-1c orchestrates metabolic remodeling of white adipose tissue by caloric restriction | Doesn’t include females except as to use them to make MEFS | (121) |
| Epigenetic aging signatures in mice livers are slowed by dwarfism, calorie restriction and rapamycin treatment | Does not have a sex-matched male group to compare to the female CR group | (122) |
| Diverse interventions that extend mouse lifespan suppress shared age-associated epigenetic changes at critical gene regulatory regions | Does not have a sex-matched male group to compare to the female CR group | (123) |
| Metabolic effects of fasting on human and mouse blood in vivo. | Does not have a sex-matched male group to compare to the female CR group | (124) |
| Multiple Metazoan Life-span Interventions Exhibit a Sex-specific Strehler–Mildvan Inverse Relationship Between Initial Mortality Rate and Age-dependent Mortality Rate Acceleration | Not a mouse study | (125) |
| Role of Hypothalamic Creb-Binding Protein in Obesity and Molecular Reprogramming of Metabolic Substrates | Data not shown for females | (126) |
| **β**1-Adrenergic receptor deficiency in ghrelin-expressing cells causes hypoglycemia in susceptible individuals | Does not have a female group for the CR comparison | (127) |
| Live fast die young | Not an original research article | (128) |
| Chronic Protein Restriction in Mice Impacts Placental Function and Maternal Body Weight before Fetal Growth. | Prenatal intervention; not looking at outcome on mice  Protein restriction | (129) |
| Measuring aging rates of mice subjected to caloric restriction and genetic disruption of growth hormone signaling. | data derived from previous published studies | (130) |
| Circulating microRNA signature of genotype‐by‐age interactions in the long‐lived Ames dwarf mouse | Do not have the appropriate control group (df/df females vs. calorie‐restricted B6C3F1 males) | (131) |
| Use of Nerve Conduction Velocity to Assess Peripheral Nerve Health in Aging Mice. | M&F used in initial nerve conduction characterization, but only females used in the DR study | (132) |
| The effects of graded levels of calorie restriction: II. Impact of short term calorie and protein restriction on circulating hormone levels, glucose homeostasis and oxidative stress Nin male C57BL/6 mice. | No females | (133) |
| Probucol-Induced α-Tocopherol Deficiency Protects Mice against Malaria Infection | NO DR intervention | (134) |
| The life-extending effect of dietary restriction requires Foxo3 in mice. | Does not include females | (135) |
| On the complex relationship between energy expenditure and longevity: Reconciling the contradictory empirical results with a simple theoretical model. | Modeling study, does not present unpublished data | (136) |
| Neuropeptide Y stimulates autophagy in hypothalamic neurons | Used female rats and male mice; no appropriate comparison group | (137) |
| The ketone metabolite β-hydroxybutyrate blocks NLRP3 inflammasome-mediated inflammatory disease. | No female mice included | (138) |
| Endogenous hydrogen sulfide production is essential for dietary restriction benefits. | NO FEMALES | (139) |
| ATF4 activity: a common feature shared by many kinds of slow-aging mice | No females for either the control group or the MetR group | (140) |
| The influence of Shc proteins on life span in mice. | No DR group | (141) |
| Preservation of blood glucose homeostasis in slow-senescing somatotrophism-deficient mice subjected to intermittent fasting begun at middle or old age | No appropriate sex matched control group | (142) |
| Long-lived crowded-litter mice exhibit lasting effects on insulin sensitivity and energy homeostasis. | Does not include a DR regimen that we are including in the review | (143) |
| ERGO: a pilot study of ketogenic diet in recurrent glioblastoma. | Humans | (144) |
| Early protein malnutrition negatively impacts physical growth and neurological reflexes and evokes anxiety and depressive-like behaviors | Looks at the effect of low/normal protein in the offspring (offspring have no intervention) | (145) |
| D-Glucosamine supplementation extends life span of nematodes and of ageing mice. | No DR intervention | (146) |
| Caloric restriction reduces age-related and all-cause mortality in rhesus monkeys. | Not mice | (147) |
| Oral glycotoxins are a modifiable cause of dementia and the metabolic syndrome in mice and humans. | Doesn’t specify sex of mice; no DR intervention | (148) |
| Low Protein Intake Is Associated with a Major Reduction in IGF-1, Cancer, and Overall Mortality in the 65 and Younger but Not Older Population | Doesn’t have sex matched comparison group for DR intervention (high/low protein) | (149) |
| Metabolic alterations due to caloric restriction and every other day feeding in normal and growth hormone receptor knockout mice. | Doesn’t specify sex of mice | (150) |
| Metabolic adaptations to short-term every-other-day feeding in long-living Ames dwarf mice | No female DR group | (151) |
| Specific lipidome signatures in central nervous system from methionine-restricted mice. | Include both sexes but do not stratify results by sex | (152) |
| Signalling pathways regulating muscle mass in ageing skeletal muscle. The role of the IGF1-Akt-mTOR-FoxO pathway | No DR group | (153) |
| A dietary regimen of caloric restriction or pharmacological activation of SIRT1 to delay the onset of neurodegeneration | Includes both, but does not specify which sex for which outcome, nor stratify by sex | (154) |
| Abdominal Obesity, Independent from Caloric Intake, Accounts for the Development of Intestinal Tumors in Apc1638N/+ Female Mice | Does CR after a surgical procedure | (155) |
| Get the fat out! | Commentary | (156) |
| Rapamycin extends life span of Rb1+/- mice by inhibiting neuroendocrine tumors. | No DR intervention in this paper | (157) |
| The TFEB orthologue HLH-30 regulates autophagy and modulates longevity in Caenorhabditis elegans. | Not mice | (158) |
| Changes in behaviors of male C57BL/6J mice across adult life span and effects of dietary restriction. | No female group | (159) |
| Could a hormone point the way to life extension? | Commentary | (160) |
| The starvation hormone, fibroblast growth factor-21, extends lifespan in mice. | NO DR group | (161) |
| New nanoformulation of rapamycin Rapatar extends lifespan in homozygous p53-/- mice by delaying carcinogenesis. | NO DR group | (162) |
| Activation of genes involved in xenobiotic metabolism is a shared signature of mouse models with extended lifespan | Only includes males | (163) |
| mTORC1 in the Paneth cell niche couples intestinal stem-cell function to calorie intake. | Doesn’t specify sex used in the study | (164) |
| Deletion of growth hormone receptor gene but not visceral fat removal decreases expression of apoptosis-related genes in the kidney-potential mechanism of lifespan extension. | Doesn’t specify sex used in the study | (165) |
| Potentiation of dietary restriction-induced lifespan extension by polyphenols | Male mice only | (166) |
| Rapamycin-induced insulin resistance is mediated by mTORC2 loss and uncoupled from longevity. | No DR intervention | (167) |
| Differential effects of energy balance on experimentally-induced colitis. | Doesn’t specify sex used in the study | (168) |
| Long-term calorie restriction, but not endurance exercise, lowers core body temperature in humans. | Humans, not mice | (169) |
| The effects of physiological adaptations to calorie restriction on global cell proliferation rates | Uses both sexes in the study, but not within each experiment. Ie only compared F-AL to F-CR in expt 1; M-CR to M-AL in expt 2 etc | (170) |
| The spatial association of gene expression evolves from synchrony to asynchrony and stochasticity with age. | Reanalysis of previously published data | (171) |
| Accumulation of long-chain glycosphingolipids during aging is prevented by caloric restriction. | Male mice only | (172) |
| Gender differences in metformin effect on aging, life span and spontaneous tumorigenesis in 129/Sv mice. | No DR | (173) |
| Glutamine targeting inhibits systemic metastasis in the VM-M3 murine tumor model. | No DR | (174) |
| Genetic Dissection of Dietary Restriction in Mice Supports the Metabolic Efficiency Model of Life Extension | Only includes females | (175) |
| Agrp neurons mediate Sirt1's action on the melanocortin system and energy balance: roles for Sirt1 in neuronal firing and synaptic plasticity. | No DR | (176) |
| SIRT1 promotes the central adaptive response to diet restriction through activation of the dorsomedial and lateral nuclei of the hypothalamus | Includes both sexes but doesn’t stratify outcomes by this | (177) |
| Recent advances in vertebrate aging research 2009. | Commentary/review | (178) |
| Genes and behavior interact to determine mortality in mice when food is scarce and competition fierce. | Commentary | (179) |
| Fetal malnutrition affects hypothalamic leptin receptor expression after birth in male mice. | Maternal restriction, no DR in offspring | (180) |
| Loss of the actin remodeler Eps8 causes intestinal defects and improved metabolic status in mice. | No DR intervention | (181) |
| Early-life nutrition influences thymic growth in male mice that may be related to the regulation of longevity. | No DR intervention in the offspring | (182) |
| Identifying advanced glycation end products as a major source of oxidants in aging: implications for the management and/or prevention of reduced renal function in elderly persons. | Humans | (183) |
| Ribosomal protein S6 kinase 1 signaling regulates mammalian life span | No DR group | (184) |
| Cell signaling. Aging is RSKy business. | Commentary | (185) |
| Early life undernutrition alters the level of reduced glutathione but not the activity levels of reactive oxygen species enzymes or lipid peroxidation in the mouse forebrain. | Pre-weaning food restriction | (186) |
| The prolongevity effect of resveratrol depends on dietary composition and calorie intake in a tephritid fruit fly. | Not in mice | (187) |
| Calpain 10 is required for cell viability and is decreased in the aging kidney. | No females | (188) |
| Identification and characterization of an insulin receptor substrate 4-interacting protein in rat brain: implications for longevity. | Rats | (189) |
| The effect of gonadectomy and estradiol on sensitivity to oxidative stress. | No DR intervention | (190) |
| Short-term calorie restriction in male mice feminizes gene expression and alters key regulators of conserved aging regulatory pathways. | No females | (191) |
| Maternal protein restriction affects postnatal growth and the expression of key proteins involved in lifespan regulation in mice. | Only looks at maternal effects | (192) |
| Endurance exercise as a countermeasure for aging. | Humans | (193) |
| Moderate caloric restriction initiated in rodents during adulthood sustains function of the female reproductive axis into advanced chronological age. | Only females | (194) |
| Oral glycotoxins determine the effects of calorie restriction on oxidant stress, age-related diseases, and lifespan. | Only males | (195) |
| Effects of aging and calorie restriction on the global gene expression profiles of mouse testis and ovary | Can’t compare gene expression in testes to ovaries (has both sexes and CR) | (196) |
| Comparative analysis of microarray data identifies common responses to caloric restriction among mouse tissues. | Compares previously published gene expression data | (197) |
| Effects of dietary restriction on hematopoietic stem-cell aging are genetically regulated | Don’t have the correct sex matched strain controls ie BalbC Female AL&DR, F1 male AL&DR | (198) |
| Gene expression profiling of long-lived dwarf mice: longevity-associated genes and relationships with diet, gender and aging. | Analysis of previously published data sets | (199) |
| Implications of hemopoietic progenitor cell kinetics and experimental leukemogenesis: Relevance to Gompertzean mortality as possible hematotoxicological endpoint. | No DR | (200) |
| The functional costs and benefits of dietary restriction in Drosophila. | Not in mice | (201) |
| Effects of caloric restriction and growth hormone resistance on insulin-related intermediates in the skeletal muscle. | No females | (202) |
| Transgenic Mice with a Reduced Core Body Temperature Have an Increased Life Span | No DR intervention | (203) |
| A thin phenotype is protective for impaired glucose tolerance and related to low birth weight in mice. 100 | Only males; maternal intervention | (204) |
| Stress resistance and aging: influence of genes and nutrition. | Don’t include the proper control groups and/or sexes | (205) |
| Accelerated aging pathology in ad libitum fed *XpdTTD* mice is accompanied by features suggestive of caloric restriction | Doesn’t report the male data despite apparently having done males | (206) |
| The influence of dominant lethal mutations on litter size and body weight and the consequent impact on transgenerational carcinogenesis | Data reported previously | (207) |
| Caloric restriction transiently improves motor performance but hastens clinical onset of disease in the Cu/Zn‐superoxide dismutase mutant G93A mouse | Combine and present both sexes as one | (208) |
| Altered cholesterologenic and lipogenic transcriptional profile in livers of aging Snell dwarf (Pit1dw/dwJ) mice. | No DR intervention | (209) |
| An accelerated assay for the identification of lifespan-extending interventions in Drosophila melanogaster. | Not in mice | (210) |
| Divergent effects of caloric restriction on gene expression in normal and long-lived mice. | Don’t specify which sex | (211) |
| Additive regulation of hepatic gene expression by dwarfism and caloric restriction. | Only use females | (212) |
| Increased rat brain cytochrome c correlates with degree of perinatal copper deficiency rather than apoptosis. | Rat | (213) |
| Delayed occurrence of fatal neoplastic diseases in ames dwarf mice: correlation to extended longevity. | Don’t specify which sex | (214) |
| Genotype and age influence the effect of caloric intake on mortality in mice | Only males | (215) |
| Sexual differentiation, pregnancy, calorie restriction, and aging affect the adipocyte-specific secretory protein adiponectin. | Don’t have appropriate controls; rats | (216) |
| Extended Longevity in Mice Lacking the Insulin Receptor in Adipose Tissue | Don’t specify sex of the mice | (217) |
| Big mice die young: early life body weight predicts longevity in genetically heterogeneous mice | No DR intervention | (218) |
| Antioxidant enzymes, free-radical damage, and response to paraquat in liver and kidney of long-living growth hormone receptor/binding protein gene-disrupted mice. | No DR intervention | (219) |
| Growth negatively impacts the life span of mammals | Reanalysis of previously published data | (220) |
| Caloric restriction inhibits seizure susceptibility in epileptic EL mice by reducing blood glucose. | Include both but pool male and female data together b/c there isn’t a sex difference (according to them) | (221) |
| Does oxidative damage to DNA increase with age? | No DR intervention | (222) |
| Age distribution of cancer in mice: the incidence turnover at old age | Reanalysis of previously published data | (223) |
| Dietary restriction and aging in rhesus monkeys: the University of Wisconsin study. | Not in mice | (224) |
| IRS-2 pathways integrate female reproduction and energy homeostasis | No DR intervention | (225) |
| Calorie restriction, stress and the ubiquitin-dependent pathway in mouse livers. | Include M & F but don’t stratify data by results | (226) |
| Aging, calorie restriction and ubiquitin-dependent proteolysis in the livers of Emory mice | Include M & F but don’t stratify data by results | (227) |
| Antioxidant enzyme activities in lens, liver and kidney of calorie restricted Emory mice | Include M & F but don’t stratify data by results | (228) |
| Age-related association of tail tendon break time with tissue pentosidine in DBA/2 vs C57BL/6 mice: the effect of dietary restriction. | Do not have sex-matched DR group | (229) |
| Effect of Dietary Restriction on Toxicology and Carcinogenesis Studies in F344/N Rats and B6C3F1 Mice. | Not a research article, technical report | (230) |
| Chronic treatment of Syrian hamsters with low dose selegiline increases life span in females but not males. | Not mice | (231) |
| The Physiologic, Neurologic, and Behavioral Effects of Caloric Restriction Related to Aging, Disease, and Environmental Factors | Do measurements on both M & F on CR but don’t report female data because they are “similar” | (232) |
| Diet and calorie restriction | Reprint of previously published results | (233) |
| Candidate biomarkers of aging: age-sensitive indices of immune and muscle function covary in genetically heterogeneous mice. | Do measurements on both M & F but don’t specify if data is M or F or both combined | (234) |
| A tumor preventive effect of dietary restriction is (antagonized by a high housing temperature through deprivation of torpor | Do not specify sex of the mice | (235) |
| Genetics of age-related hearing loss in mice. II. Strain differences and effects of caloric restriction on cochlear pathology and evoked response thresholds | Measure both but do not stratify results because M&F are not different | (236) |
| Caloric restriction: conservation of cellular replicative capacity in vitro accompanies life-span extension in mice. | Only include males | (42) |
| The effect of L-amino acid oxidase on activity of melphalan against an intracranial xenograft. | State male or females are used in the experiment in the methods but don’t specify which sex is for which experiment | (237) |
| Aging and restriction of dietary calories increases insulin receptor mRNA, and aging increases glucocorticoid receptor mRNA in the liver of female C3B10RF1 mice | Only uses females | (238) |
| Longevity‐Assurance Mechanisms and Caloric Restriction | Assume that they use both as they mention females in the discussion, but it seems that the data is combined for M&F | (239) |
| Decrease by chronic energy intake restriction of cellular proliferation in the intestinal epithelium and lymphoid organs in autoimmunity-prone mice | Include both sexes but do not have the appropriate control group; No DR intervention | (240) |
| The therapeutic effects of dietary fatty acid supplementation in the autoimmune disease of the MRL-mp-1pr/1pr mouse | Doesn’t include a DR which is included in this review | (241) |
| Calorie restriction: effect on growth of human tumors heterotransplanted in nude mice. | Include both sexes but say there is no sex difference, so they combine M&F | (242) |
| Effects of reduced food intake on reproduction in mice. | Can’t really compare because they look at the effect of DR on reproduction | (243) |
| Influence of dietary restriction on immunologic function and renal disease in (NZB X NZW)F1 mice | Include both, but don’t stratify results by sex | (244) |
| Immune Function and Survival in a Long-Lived Mouse Strain Subjected to Undernutrition | Only used females in the study | (245) |
| Genetic analysis of a murine QTL for diet restriction on chromosome 15 | No ad libitum control group for the DR group (compare between strains DR not across AL vs DR) | (246) |
| Using DNA Methylation Profiling to Evaluate Biological Age and Longevity Interventions | Includes both sexes and multiple strains but does not stratify by sex | (247) |
| Influence on longevity of blueberry, cinnamon, green and black tea, pomegranate, sesame, curcumin, morin, pycnogenol, quercetin, and taxifolin fed iso-calorically to long-lived, F1 hybrid mice | Doesn’t specify the sex used | (248) |
| Interventions: Live long and prosper | Commentary | (249) |
| Age-related gliosis in the white matter of mice | Don’t have the appropriate male comparison group | (250) |
| Hepatic gene body hypermethylation is a shared epigenetic signature of murine longevity | Don’t have the appropriate male comparison group | (251) |
| Transient caloric restriction in early adulthood hastens disease endpoint in male, but not female, Cu/Zn-SOD mutant G93A mice | Doesn’t have a WT comparison group, only compares AL and WT mutant mice | (252) |
| Reduced Levels of Thyroid Hormones, Insulin, and Glucose, and Lower Body Core Temperature in the Growth Hormone Receptor/Binding Protein Knockout Mouse | No DR intervention | (253) |
| Modulating the therapeutic response of tumours to dietary serine and glycine starvation | Doesn’t specify which sex is used in which expeirment, serine-glycine restricted diet | (157) |
| Caloric restriction: conservation of cellular replicative capacity in vitro accompanies life-span extension in mice | Different strains were used to compare male (B6D2F1) and female (B6C3F1) responses to DR | (254) |
| Ageing research: Blood to blood | Commentary | (255) |
| Effects of Chronic and Intermittent Calorie Restriction on Adropin Levels in Breast Cancer | Only females | (256) |
| Effects of rikkunshito supplementation on resistance to oxidative stress and lifespan in mice | Out no CR or DR diet | (257) |
| Murine maternal dietary restriction affects neural Humanin expression and cellular profile | No HS outcome | (258) |
| Effect of dietary fat and sucrose consumption on cardiac fibrosis in mice and rhesus monkeys | Only males | (259) |
| Identification and Application of Gene Expression Signatures Associated with Lifespan Extension | Reanalysis of published data | (260) |
| Cross-species functional modules link proteostasis to human normal aging | Reanalysis of published data | (261) |
| Anti-aging interventions affect lifespan variability in sex, strain, diet and drug dependent fashion | Reanalysis of published data | (262) |
| Changes in the gut microbiome and fermentation products concurrent with enhanced longevity in acarbose-treated mice | No diet intervention, only acarbose | (263) |
| Transcription Factor EB Activation Rescues Advanced αB-Crystallin Mutation-Induced Cardiomyopathy by Normalizing Desmin Localization | No LS or HS outcome | (264) |
| Therapeutic benefit of combining calorie-restricted ketogenic diet and glutamine targeting in late-stage experimental glioblastoma | Not one of the DR regimens included in this review | (265) |
| Calorie restriction protects neural stem cells from age-related deficits in the subventricular zone | No HS or LS outcome; no sex differences observed according to them, both sexes combined | (266) |
| Methods to Study the Role of Methionine-Restricted Diet and Methioninase in Cancer Growth Control | In vitro work only/methods paper | (267) |
| Long-term Dietary Macronutrients and Hepatic Gene Expression in Aging Mice | Both sexes included but they pool males and females | (268) |
| Weight Cycling Increases Longevity Compared with Sustained Obesity in Mice | Not one of the DR regimens included in this review | (269) |
| A multi-tissue full lifespan epigenetic clock for mice | No LS or HS outcome | (270) |
| Sarcosine Is Uniquely Modulated by Aging and Dietary Restriction in Rodents and Humans | Not mice | (271) |
| Deletion of Nrip1 Extends Female Mice Longevity, Increases Autophagy, and Delays Cell Senescence | No diet intervention | (272) |
| The lifelong impact of fetal growth restriction on cardiac development | No HS or LS outcome | (273) |
| Kidney dysfunction in the low-birth weight murine adult: implications of oxidative stress | No diet intervention | (274) |
| Caloric restriction in humans reveals immunometabolic regulators of health span | Sex of the animal is not specified | (275) |
| Muscle-directed AAV gene therapy rescues the maple syrup urine disease phenotype in a mouse model | No dietary intervention | (276) |
| Combined intermittent fasting and ERK inhibition enhance the anti-tumor effects of chemotherapy via the GSK3β-SIRT7 axis | Only female mice used | (277) |
| Effects of acyl-coenzyme A binding protein (ACBP)/diazepam-binding inhibitor (DBI) on body mass index | Male and female mice combined for analyses | (278) |
| Modulation of Endocannabinoids by Caloric Restriction Is Conserved in Mice but Is Not Required for Protection from Acute Kidney Injury | Only use male mice | (279) |
| Skeletal muscle RBM3 expression is associated with extended lifespan in Ames Dwarf and calorie restricted mice | No healthspan measure | (280) |
| Selenium supplementation inhibits IGF-1 signaling and confers methionine restriction-like healthspan benefits to mice | Diet induced obesity outcomes | (281) |
| Maternal protein restriction impairs nutrition and ovarian histomorphometry without changing p38MAPK and PI3K-AKT-mTOR signaling in adult rat ovaries | Rats, only use females; no LS/HS outcomes | (282) |
| Calorie restriction during gestation affects ovarian reserve in offspring in the mouse | Only use females, no LS/HS outcomes | (283) |
| Calorie Restriction Increases the Number of Competing Stem Cells and Decreases Mutation Retention in the Intestine | No LS/HS outcomes, males and females combined for analyses | (284) |
| Untangling Determinants of Enhanced Health and Lifespan through a Multi-omics Approach in Mice | Males only, no LS/HS outcomes | (285) |
| The Role of Ames Dwarfism and Calorie Restriction on Gut Microbiota | No LS/HS outcomes | (286) |
| Etiology of atherosclerosis informs choice of animal models and tissues for initial functional genomic studies of resveratrol | Review, no LS/HS outcomes, no DR intervention | (287) |
| Quantification of the pace of biological aging in humans through a blood test, the DunedinPoAm DNA methylation algorithm | Humans, no DR intervention | (288) |
| Developmental programming: intrauterine caloric restriction promotes upregulation of mitochondrial sirtuin with mild effects on oxidative parameters in the ovaries and testes of offspring | No LS/HS outcomes | (289) |
| Branched chain amino acids impact health and lifespan indirectly via amino acid balance and appetite control | Males and females combined together | (290) |
| Maternal feed restriction during pregnancy in Wistar rats: Evaluation of offspring using classical and immunoteratology protocols | No LS/HS outcomes | (291) |
| The use of telomere length as a predictive biomarker for injury prognosis in juvenile rats following a concussion/mild traumatic brain injury | No LS/HS outcomes | (292) |
| Effects of Metabolic Programming on Juvenile Play Behavior and Gene Expression in the Prefrontal Cortex of Rats | No LS/HS outcomes | (293) |
| Short-term low-protein diet during pregnancy alters islet area and protein content of phosphatidylinositol 3-kinase pathway in rats | No LS/HS outcomes; Rats | (294) |
| Maternal caloric restriction prior to pregnancy increases the body weight of the second-generation male offspring and shortens their longevity in rats | Rats; maternal food restriction prior to pregnancy | (295) |
| Positive effects of prolonged caloric restriction on the population of very small embryonic-like stem cells - hematopoietic and ovarian implications | No LS/HS outcomes | (296) |
| Short‑term calorie restriction activates SIRT1‑4 and ‑7 in cardiomyocytes in vivo and in vitro | No LS/HS outcomes; rats | (297) |
| QTLs influencing IGF-1 levels in a LOU/CxFischer 344F2 rat population. Tracks towards the metabolic theory of Ageing | No LS/HS outcomes; rats | (298) |
| Food and water intake, growth, and adiposity of Sprague-Dawley rats with diet board for 24 months | Rats; no LS outcome | (299) |
| Calorie restriction in humans inhibits the PI3K/AKT pathway and induces a younger transcription profile | Humans | (300) |
| Autophagy promotes oligodendrocyte survival and function following dysmyelination in a long-lived myelin mutant | No LS/HS outcomes; rats | (301) |
| Long-lasting effect of perinatal exposure to L-tryptophan on circadian clock of primary cell lines established from male offspring born from mothers fed on dietary protein restriction | No DR intervention in offspring | (302) |
| Reproductive resilience to food shortage in a small heterothermic primate | Primates | (303) |
| Prenatal alcohol exposure reduces the proportion of newly produced neurons and glia in the dentate gyrus of the hippocampus in female rats | Females only; rats | (304) |
| FoxO1 is involved in the antineoplastic effect of calorie restriction | Only males included | (305) |
| SirT1--a sensor for monitoring self-renewal and aging process in retinal stem cells | In vitro experiments in rat cells | (306) |
| Cross-sectional analysis of intermittent versus chronic caloric restriction in the TRAMP mouse | Does not specify sex of mice used in experiments, only for breeding | (307) |
| Combined effect of gender and caloric restriction on liver proteomic expression profile | No LS/HS outcomes | (308) |
| Maternal protein restriction leads to early life alterations in the expression of key molecules involved in the aging process in rat offspring | Rats, no LS/HS outcomes | (309) |
| Behavioral impairments of the aging rat | Rats | (310) |
| Chronic calorie restriction increases susceptibility of laboratory mice (Mus musculus) to a primary intestinal parasite infection | No LS/HS outcomes | (94) |
| Rapid neonatal weight gain in rats results in a renal ubiquinone (CoQ) deficiency associated with premature death | Rats | (311) |
| Sex-dependent metabolic, neuroendocrine, and cognitive responses to dietary energy restriction and excess | Rats | (312) |
| Protein restriction in lactation confers nephroprotective effects in the male rat and is associated with increased antioxidant expression | No LS/HS outcomes; rats | (313) |
| Sexual dimorphism in liver mitochondrial oxidative capacity is conserved under caloric restriction conditions | No LS/HS outcomes; rats | (314) |
| Early renal structure alteration in rat offspring from dams fed low protein diet | No LS/HS outcomes ; rats | (315) |
| Suckling a protein-restricted rat dam leads to diminished albuminuria in her male offspring in adult life: a longitudinal study | Rats | (316) |
| The association between birthweight and longevity in the rat is complex and modulated by maternal protein intake during fetal life | Rats | (317) |
| Sex-related differences in energy balance in response to caloric restriction | Rats | (318) |
| Programming of hepatic antioxidant capacity and oxidative injury in the ageing rat | Rats; No HS/LS outcomes | (319) |
| Intentional weight loss reduces mortality rate in a rodent model of dietary obesity | Rats | (320) |
| Diabesity: a polygenic model of dietary-induced obesity from ad libitum overfeeding of Sprague-Dawley rats and its modulation by moderate and marked dietary restriction | Rats | (321) |
| Caloric restriction and body weight independently affect longevity in Wistar rats | Rats | (322) |
| The effect of dietary restriction on PhIP-induced mutation in the distal colon and B[a]P- and ENU-induced mutation in the liver of the rat | Rats | (323) |
| Does food restriction increase life span in lean rats? | Rats | (324) |
| Diet restriction in rat toxicity studies: automated gravimetric dispensing equipment for allocating daily rations of powdered rodent diet into pouches and 7-day feeders | Rats | (325) |
| Prenatal exposure to a maternal low protein diet shortens life span in rats | Rats | (326) |
| Chronic nephropathy in ad libitum overfed Sprague-Dawley rats and its early attenuation by increasing degrees of dietary (caloric) restriction to control growth | Rats | (327) |
| The effects of diet, ad Libitum feeding, and moderate and severe dietary restriction on body weight, survival, clinical pathology parameters, and cause of death in control Sprague-Dawley rats | Rats | (328) |
| Mice with early onset of death (EOD) due to lupus glomerulonephritis | No DR intervention | (329) |
| Effect of early body weight and moderate dietary restriction on the survival of the Sprague-Dawley rat | Rats | (330) |
| Spontaneous and induced alterations in the cardiac membranous ventricular septum of fetal, weanling, and adult rats | Rats | (331) |
| Diet, overfeeding, and moderate dietary restriction in control Sprague-Dawley rats: II. Effects on age-related proliferative and degenerative lesions | Rats | (332) |
| Diet, overfeeding, and moderate dietary restriction in control Sprague-Dawley rats: I. Effects on spontaneous neoplasms | Rats | (333) |
| The Biosure Study: influence of composition of diet and food consumption on longevity, degenerative diseases and neoplasia in Wistar rats studied for up to 30 months post weaning | Rats | (334) |
| Reduced tumour incidence in mice with inherited seborrhoeic dermatitis | No DR intervention | (335) |
| Calorie restriction prevents the occlusive coronary vascular disease of autoimmune (NZW x BXSB)F1 mice | Males only | (336) |
| The effects of overfeeding and dietary restriction on Sprague-Dawley rat survival and early pathology biomarkers of aging | Rats | (337) |
| The early effects of dietary restriction on the pathogenesis of chronic renal disease in Sprague-Dawley rats at 12 months | Rats | (338) |
| Influence of food intake and sexual segregation on longevity, organ weights and the incidence of non-neoplastic and neoplastic diseases in rats | Rats | (339) |
| Changes in hepatic androgen sensitivity and gene expression during aging | Rats | (340) |
| Nutrition, onset of disease, and longevity in the rat | Rats | (341) |
| The importance of the period of dietary restriction of the dam on behavior and growth in the rat | Rats | (342) |
| Mature body weight and life span of male and female progeny of primiparous rats fed a low protein or adequate diet throughout pregnancy | Rats | (343) |
| Energy/protein interrelation in experimental food restriction | Rats | (344) |
| Environmental and genetic factors that influence immunity and longevity in mice | No DR intervention | (345) |
| Effects of maternal dietary restriction in vitamin B-6 on neocortex development in rats: B-6 vitamer concentrations, volume and cell estimates | Rats | (346) |
| Developmental programming: intrauterine caloric restriction promotes upregulation of mitochondrial sirtuin with mild effects on oxidative parameters in the ovaries and testes of offspring | Rats | (289) |
| Effect of Caloric Restriction on the *in vivo* Functional Properties of Aging Microglia | No LS/HS outcomes | (347) |
| FGF21 is required for protein restriction to extend lifespan and improve metabolic health in male mice | Males only | (348) |
| Ovariectomy uncouples lifespan from metabolic health and reveals a sex-hormone-dependent role of hepatic mTORC2 in aging | No DR | (349) |
| Decreased Consumption of Branched-Chain Amino Acids Improves Metabolic Health | Males only | (350) |
| Depletion of Rictor, an essential protein component of mTORC2, decreases male lifespan | Males only | (351) |