

**Supplemental Table 3. Laboratory experiments that have evaluated the effects of dietary restriction protocols on the survival of CB7BL/6 mice.** The table lists 26 experiments involving a group of DR-fed B6 mice paired with a reference group of B6 mice maintained on a control diet (e.g., *ad lib* feeding). Experiments have been ordered chronologically according to the date of publication. Median and maximum lifespan estimates were reported in original research papers, or were otherwise estimated from published survival curves. In most cases, the median lifespan estimate is listed in the table (see “Median LS” columns and footnotes). Estimates listed under the “Max LS” columns correspond to one of several metrics, depending upon data reported in the published study (e.g., maximum survival time, average of longest-lived 10%; see footnotes).

Study	Sex	% DR	Sample Size (n)		Median LS (Months)		Max LS (Months)	
			DR	Control	DR	Control	DR	Control
Silberberg et al. 1961 <sup>1</sup>	M	33%	47	47	16.5	23.7	32.5 <sup>a</sup>	31.6 <sup>a</sup>
Silberberg et al. 1962 <sup>2</sup>	F	40%	30	29	22.0 <sup>†</sup>	22.4 <sup>†</sup>	30.6 <sup>a</sup>	32.9 <sup>a</sup>
Gerbase-DeLima et al. 1975 <sup>3</sup>	F	50%	100	100	33.7	31.2	> 40.0 <sup>a</sup>	38.0 <sup>a</sup>
Leto et al. 1976 <sup>4</sup>	F	?	70	70	28.0	23.5	38.9 <sup>a</sup>	28.0 <sup>a</sup>
Goodrick 1978 <sup>5</sup>	M	?	50	50	24.3 <sup>†</sup>	21.2 <sup>†</sup>	30.0 <sup>a</sup>	36.0 <sup>a</sup>
Cheney et al. 1980 <sup>6</sup>	M	43%	14	15	24.0	25.8	44.6 <sup>a</sup>	40.7 <sup>a</sup>
Cheney et al. 1980 <sup>6</sup>	F	43%	21	20	31.4	34.3	45.3 <sup>a</sup>	31.5 <sup>a</sup>
Cheney et al. 1980 <sup>6</sup>	F	43%	100	100	30.3 <sup>†</sup>	30.1 <sup>†</sup>	46.8 <sup>a</sup>	42.5 <sup>a</sup>
Cheney et al. 1980 <sup>6</sup>	F	43%	75	75	28.3	32.0	45.5 <sup>a</sup>	43.7 <sup>a</sup>
Cheney et al. 1980 <sup>6</sup>	F	43%	76	66	33.3	31.9	51.0 <sup>a</sup>	45.7 <sup>a</sup>
Weindruch and Walford 1982 <sup>7</sup>	M	44%	29	24	29.9 <sup>†</sup>	24.9 <sup>†</sup>	38.2 <sup>b</sup>	31.5 <sup>b</sup>
Harrison et al. 1984 <sup>8</sup>	F	33%	38	32	28.3	26.6	39.6 <sup>b</sup>	32.2 <sup>b</sup>
Harrison and Archer 1987 <sup>9</sup>	M	33%	48	45	19.7	29.3	35.2 <sup>b</sup>	36.1 <sup>b</sup>
Goodrick et al. 1990 <sup>10</sup>	M	50%	40	40	31.7 <sup>†</sup>	25.0 <sup>†</sup>	38.3 <sup>c</sup>	31.1 <sup>c</sup>
Goodrick et al. 1990 <sup>11</sup>	M	50%	30	30	29.2 <sup>†</sup>	26.4 <sup>†</sup>	38.8 <sup>c</sup>	34.6 <sup>c</sup>
Goodrick et al. 1990 <sup>12</sup>	M	50%	30	30	27.0 <sup>†</sup>	26.9 <sup>†</sup>	37.6 <sup>c</sup>	35.2 <sup>c</sup>
Blackwell et al. 1995 <sup>13</sup>	M	40%	55	50	31.7	27.5	41.0 <sup>b</sup>	34.8 <sup>b</sup>
Blackwell et al. 1995 <sup>13</sup>	F	40%	56	37	33.5	26.9	40.2 <sup>b</sup>	34.1 <sup>b</sup>
Turturro et al. 1999 <sup>14</sup>	M	40%	≈ 2700	≈ 3150	32.4	27.0	38.4 <sup>d</sup>	32.9 <sup>d</sup>
Turturro et al. 1999 <sup>14</sup>	F	40%	≈ 1410	≈ 1430	32.0	25.3	38.4 <sup>d</sup>	30.9 <sup>d</sup>
Turturro et al. 1999 <sup>15</sup>	M	40%	≈ 2260	≈ 2150	32.8	24.7	39.8 <sup>d</sup>	29.4 <sup>d</sup>
Turturro et al. 1999 <sup>15</sup>	F	40%	≈ 2260	≈ 2140	32.8	20.0	38.9 <sup>d</sup>	26.0 <sup>d</sup>
Pugh et al. 1999 <sup>16</sup>	M	26%	75	75	34.6	29.8	41.8 <sup>b</sup>	37.8 <sup>b</sup>

Ikeno et al. 2005 <sup>17</sup>	M	40%	28	28	36.0	30.8	41.7 <sup>d</sup>	34.5 <sup>d</sup>
Ikeno et al. 2005 <sup>18</sup>	M	40%	32	30	37.8	31.2	45.6 <sup>d</sup>	35.4 <sup>d</sup>
Pearson et al. 2008 <sup>19</sup>	M	50%	55	60	30.6 <sup>†</sup>	29.4 <sup>†</sup>	35.0 <sup>d</sup>	34.0 <sup>d</sup>

<sup>†</sup>The value listed is a mean lifespan rather than median lifespan.

<sup>a</sup>Maximum survival time in the cohort.

<sup>b</sup>Average of the longest 10% of survival times in the cohort.

<sup>c</sup>Average of the longest 20% of survival times in the cohort.

<sup>d</sup>Age at 10% survival

<sup>1</sup>C57BLJax6 mice. Food was restricted to approximately 2/3 that of mice provided an *ad lib* diet starting at 1 month of age. In this study, the DR protocol was only implemented for 3 months (until 4 months of age). A fraction of the DR-fed mice were individually housed (18 of 47) while others were housed with multiple mice per cage (29 of 47). Safeguards against pathogen exposure are not described in the research report (Am J Physiol 200: 332-334).

<sup>2</sup>C57BLJax6 mice. Food was restricted to 3/5 that of mice provided the *ad lib* diet starting at 4 months of age (Purina laboratory chow). A fraction of mice were individually housed while others were housed with multiple mice per cage. Safeguards against pathogen exposure are not described in the research report (J Gerontol 17: 239-44).

<sup>3</sup>C57BL/6J mice. Every-other-day feeding was started at 4 weeks with a 21.6% protein diet. It is unclear whether mice were housed individually or with multiple mice per cage. Safeguards against pathogen exposure are not described in the research report (Gerontologia 21:184-202).

<sup>4</sup>C57BL/6J mice. Restricted animals were provided a low-protein diet with only 4% protein while control-fed animals were provided a standard diet with 26% protein (both diets had 4% fat). Mice were housed individually and dietary treatments were initiated at 4 weeks of age. Safeguards against pathogen exposure are not described in the research report (J Gerontol 31:144-8).

<sup>5</sup>C57BL/6J mice. Restricted animals were provided a low-protein diet with only 4% protein while control-fed animals were provided a standard diet with 26% protein (Tekland Test Diet). Mice were housed individually and dietary treatments were initiated at 6 weeks of age. Cages were cleaned monthly and each mouse brushed lightly with pyrethins insecticide every other month (J Gerontol 33:184-90).

<sup>6</sup>C57BL/6J mice. DR diet was started at 3 weeks of age (22% protein and 13.5% fat). All mice were housed individually. Safeguards against pathogen exposure are not described in the research report (Exp. Gerontol. 15:237-58).

<sup>7</sup>C57BL/6J mice. DR diet was started at 12 months of age (Purina lab chow diet). All mice were housed individually. Safeguards against pathogen exposure are not described in the research report (Science 215:1415-1418).

<sup>8</sup>C57BL/6J mice. DR diet was started at 4 weeks of aging (Emory Morse 96WA; 22% protein and 7% fat). Mice were housed 4 per cage. Mice were not exposed to pathogens known to affect longevity and were free of extoparasites, nematodes, cestodes and trematodes. Serological tests indicated that the mice were free of ectromelia, sendai, K, mouseadeno, polyoma, lymphocytic choriomeningitis, reovirus III and GD VII viruses (Proc. Natl. Acad. Sci. USA 81:1835-1838).

<sup>9</sup>C57BL/6J mice. DR diet was started at 4 weeks of aging (Emory Morse 96WA; 22% protein and 7% fat). Mice were housed 3-4 per cage. Mice were not exposed to known pathogens, and the colony was clean when tested for 10 standard mouse viruses (J. Nutr. 117:376-382).

<sup>10</sup>C57BL/6J mice. Every-other-day feeding was started at 6 weeks of age (NIH-07; 24% protein). Mice were housed 2 per cage. No safeguards against exposure to pathogens are described in the research report (Mech. Ageing Dev. 55:69-87).

<sup>11</sup>C57BL/6J mice. Every-other-day feeding was started at 6 months of age (NIH-07; 24% protein). Mice were housed 2 per cage. No safeguards against exposure to pathogens are described in the research report (Mech. Ageing Dev. 55:69-87).

<sup>12</sup>C57BL/6J mice. Every-other-day feeding was started at 10 months of age (NIH-07; 24% protein). Mice were housed 2 per cage. No safeguards against exposure to pathogens are described in the research report (Mech. Ageing Dev. 55:69-87).

<sup>13</sup>C57BL/6J mice. DR diet was started at 14 weeks of age and implemented gradually (10% DR at 14 weeks of age, 25% DR at 15 weeks, 40% DR at 16 weeks; NIH-31; 20.1% protein and 3.6% fat). Mice were housed individually and maintained under specific pathogen free conditions (Toxicol Pathol 23:570-582).

<sup>14</sup>C57Bi/6NNia mice. DR diet was started at 14 weeks and implemented gradually (10% DR at 14 weeks of age, 25% DR at 15 weeks, 40% DR at 16 weeks; NIH-31 with 20.1% protein and 3.6% fat). Mice were housed two per cage in a specific pathogen free facility with strong safeguards against pathogen exposure. Multiple longevity cohorts were maintained and lifespan estimates listed in the table are based upon an aggregation of survival data from all cohorts (J. Gerontol. Biol. Sci. 54A:B492-B501).

<sup>15</sup>C57Bi/6NNia mice. DR diet was started at 14 weeks and implemented gradually (10% DR at 14 weeks of age, 25% DR at 15 weeks, 40% DR at 16 weeks; EM-911a high protein and high fat diet). Mice were housed two per cage in a specific pathogen free facility with strong safeguards against pathogen exposure. Multiple longevity cohorts were maintained and lifespan estimates listed in the table are based upon an aggregation of survival data from all cohorts (J. Gerontol. Biol. Sci. 54A:B492-B501).

<sup>16</sup>C57Bi/6 mice. DR diet was started at 12 months of age (Purina PLI 5001). Mice were individually housed. Safeguards against pathogen exposure are not described in the research report (Cancer Res. 59: 1642-1648).

<sup>17</sup>C57BL/6J mice. DR diet was started at 6 weeks of age (Tekland Diet LM485). Mice were individually housed. Sentinel mice housed in the same room and exposed weekly to bedding collected from the cages of experimental mice were evaluated upon receipt from the Jackson laboratory and at 6-month intervals during the experiment. All tests were negative (J Gerontol A Biol Sci Med Sci 60:1510-7).

<sup>18</sup>C57BL/6J mice. DR diet was started at 6 weeks of age (Tekland Diet LM485). Mice were housed four per cage. Sentinel mice housed in the same room and exposed weekly to bedding collected from the cages of experimental mice were evaluated upon receipt from the Jackson laboratory and at 6-month intervals during the experiment. All tests were negative (J Gerontol A Biol Sci Med Sci 60:1510-7).

<sup>19</sup>C57BL/6NIA mice. Every-other-day feeding was started at 12 months (AIN-93G diet). Mice were housed with multiple animals per cage. Safeguards against pathogen exposure are not described in the research report (Cell Metab. 8: 157-168).