

## Supplemental Tables

Supplemental Table 1. Water intake during 3 and 7 days of food restriction

Water consumption (g)		3 days		7 days					
		Day 2	Day 3	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
<b>Male</b>									
Control	Mean	35	36	33	34	32	35	42	33
	S.D.	5	4	3	3	2	7	17	3
80% group	Mean	29*	27*	28	29	31	31	32	30
	S.D.	3	4	3	3	4	2	2	3
60% group	Mean	30*	30	28	32	33	31	30	26*
	S.D.	3	5	10	8	6	7	6	7
40% group	Mean	21**	23**	21	21*	21*	19**	16**	16**
	S.D.	2	5	8	9	5	3	3	2
<b>Female</b>									
Control	Mean	28	30	24	23	23	26	26	25
	S.D.	8	7	5	3	5	2	6	1
80% group	Mean	22	24	19	19	23	21*	22	19**
	S.D.	6	5	3	3	3	3	3	2
60% group	Mean	20	20*	18	21	19	20**	19*	18**
	S.D.	1	2	3	7	2	2	3	3
40% group	Mean	17*	21	16*	20	16**	15**	15**	13**
	S.D.	4	7	5	6	3	3	3	2

S.D.: Standard deviation.  $p < 0.05$ , \*\*  $p < 0.01$  compared with control (Dunnett's test, N=5 per group).

Supplemental Table 2. Urinalysis parameters after 3 and 7 days of food restriction

			UV	Na/K	Na	K	Cl	Cre	ALP	LDH	NAG	Alb	
			(mL)		( $\mu\text{mol/day}$ )	( $\mu\text{mol/day}$ )	( $\mu\text{mol/day}$ )	(mg/day)	(U/day)	(U/day)	(U/day)	( $\mu\text{g/day}$ )	
3 days	Male	Control	Mean	16.3	0.25	351.2	1416.4	559.9	6.4	4.69	0.43	0.28	123
			S.D.	2.5	0.04	52.1	172.0	102.9	0.4	1.27	0.05	0.08	40
		80% group	Mean	10.8*	0.38	471.6	1272.6	685.1	5.6	4.14	0.41	0.25	108
			S.D.	2.4	0.08	84.6	186.6	176.5	0.4	1.44	0.07	0.05	33
		60% group	Mean	11.9	0.46**	499.6	1064.7**	729.6	5.6	4.50	0.33*	0.18	110
			S.D.	3.4	0.15	205.5	146.0	168.5	0.7	1.41	0.06	0.05	43
	40% group	Mean	7.9**	0.50**	392.1	777.6**	580.7	5.0**	2.65	0.25**	0.13**	73	
		S.D.	2.7	0.08	70.9	45.1	113.5	0.7	1.90	0.07	0.06	24	
	Female	Control	Mean	12.6	0.31	276.8	916.4	469.4	4.4	6.43	0.27	0.19	242
			S.D.	5.8	0.10	75.3	160.3	129.3	0.3	1.74	0.04	0.03	188
		80% group	Mean	6.0	0.39	268.8	711.3	412.6	3.8	3.37**	0.18**	0.14	73*
			S.D.	2.2	0.16	80.1	157.2	108.1	0.4	1.03	0.03	0.03	30
60% group		Mean	6.7	0.54*	419.4	807.2	691.8*	3.9	3.77**	0.16**	0.14	107	
		S.D.	4.4	0.12	112.5	250.5	162.9	0.4	0.82	0.03	0.03	36	
40% group	Mean	9.5	0.52	275.5	523.8**	491.8	4.1	5.28	0.18**	0.17	99		
	S.D.	6.0	0.12	82.9	71.9	58.1	0.6	0.95	0.05	0.05	37		
7 days	Male	Control	Mean	13.9	0.20	269.8	1360.1	484.1	6.3	7.83	0.44	0.21	340
			S.D.	8.9	0.04	97.3	265.1	148.2	1.0	4.25	0.10	0.05	122
		80% group	Mean	11.3	0.49**	840.3**	1662.5	1235.1**	6.2	2.00**	0.37	0.13**	233
			S.D.	1.3	0.15	373.9	410.8	442.7	0.5	0.68	0.02	0.05	34
		60% group	Mean	12.7	0.70**	934.5**	1434.1	1294.2**	5.5	1.64**	0.25**	0.06**	200*
			S.D.	4.4	0.14	189.8	178.2	140.0	0.4	0.40	0.05	0.02	36
	40% group	Mean	4.8*	0.59**	500.2	848.3*	808.9	4.5**	2.51**	0.18**	0.07**	126**	
		S.D.	2.3	0.06	102.9	122.1	119.6	0.4	0.87	0.03	0.03	71	
	Female	Control	Mean	10.2	0.28	222.9	802.2	304.7	3.4	5.31	0.20	0.14	147
			S.D.	6.0	0.07	66.3	94.7	86.2	0.5	3.02	0.06	0.04	24
		80% group	Mean	7.7	0.49**	448.6**	923.8	714.3**	3.4	3.01	0.15	0.08*	117
			S.D.	2.2	0.05	36.9	81.7	50.8	0.1	0.73	0.01	0.03	21
60% group		Mean	7.6	0.56**	452.4**	818.9	638.9**	3.2	3.01	0.12**	0.07**	109	
		S.D.	2.0	0.07	63.8	97.4	120.3	0.3	0.71	0.01	0.03	16	
40% group	Mean	2.9**	0.62**	310.2	501.1**	419.4	1.8**	2.08*	0.08**	0.06**	99*		
	S.D.	0.9	0.12	92.3	113.8	142.1	0.2	0.70	0.03	0.02	33		

UV: Urine volume, Na/K: sodium/potassium ratio, Na: sodium, K: potassium, Cl: chloride, Cre: creatinine, ALP: alkaline phosphatase, LDH: lactate dehydrogenase, NAG: N-acetyl- $\beta$ -D-glucosaminidase, Alb: albumin, S.D.: standard deviation. \*  $p < 0.05$ , \*\*  $p < 0.01$  compared with control (Dunnett's test, N=5 per group).

Supplemental Table 3. Hematologic parameters after 3 and 7 days of food restriction

		3 days																	
		RBC	Hb	Ht	MCV	MCH	MCHC	Ret	WBC	Neut	Mono	Eos	Baso	Lymp	PLT	PT	APTT	Fbg	
		(10 <sup>6</sup> /μL)	(g/dL)	(%)	(fL)	(pg)	(g/dL)	(10 <sup>4</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(sec)	(sec)	(mg/dL)	
Male	Control	Mean	6.57	13.2	38.9	59.3	20.2	34.0	49.86	5.01	0.85	0.18	0.04	0.00	3.95	1038	12.4	16.0	215
		S.D.	0.36	0.5	1.5	3.0	1.0	0.4	5.93	1.05	0.28	0.07	0.01	0.00	0.73	57	1.6	1.4	10
	80% group	Mean	6.63	13.4	39.7	59.9	20.3	33.9	43.14	4.75	0.62	0.14	0.03	0.00	3.95	1026	12.7	15.3	219
		S.D.	0.37	0.5	1.4	1.7	0.4	0.3	4.04	0.68	0.07	0.05	0.01	0.00	0.64	119	1.3	1.8	9
	60% group	Mean	6.86	13.9*	40.7	59.3	20.3	34.3	42.06	5.37	0.56	0.16	0.04	0.00	4.60	1059	12.6	16.4	216
		S.D.	0.30	0.4	1.2	1.9	0.6	0.1	3.55	1.00	0.27	0.05	0.01	0.00	0.81	145	1.3	0.8	9
	40% group	Mean	7.05	14.2**	41.7**	59.2	20.1	34.0	38.8**	5.87	0.54	0.16	0.05	0.00	5.12	1101	12.1	16.2	214
		S.D.	0.28	0.3	0.8	2.0	0.6	0.4	5.86	3.45	0.13	0.05	0.02	0.00	3.34	81	0.9	0.9	15
Female	Control	Mean	7.10	13.9	39.5	55.7	19.5	35.0	31.30	4.03	0.54	0.11	0.05	0.00	3.33	978	9.7	13.3	204
		S.D.	0.24	0.7	2.1	2.1	0.7	0.4	3.00	0.66	0.13	0.06	0.01	0.00	0.69	139	0.1	0.9	3
	80% group	Mean	7.10	14.3	41.0	57.8	20.2*	35.0	28.65	4.28	0.57	0.13	0.06	0.00	3.52	1010	9.6	12.8	201
		S.D.	0.25	0.5	1.0	0.8	0.1	0.5	5.99	1.23	0.48	0.09	0.02	0.00	0.92	105	0.2	0.5	17
	60% group	Mean	7.18	14.2	40.6	56.6	19.8	35.0	30.87	4.78	0.73	0.09	0.05	0.00	3.92	1047	9.7	13.1	180*
		S.D.	0.25	0.5	1.3	1.0	0.2	0.5	3.47	1.40	0.13	0.02	0.02	0.00	1.38	117	0.3	1.4	7
	40% group	Mean	7.07	14.0	40.2	56.9	19.9	34.9	28.19	3.83	0.42	0.07	0.04	0.00	3.31	1093	9.7	13.3	179*
		S.D.	0.43	0.9	2.2	0.9	0.2	0.3	2.88	1.28	0.30	0.04	0.00	0.00	1.02	127	0.3	0.4	18
		7 days																	
		RBC	Hb	Ht	MCV	MCH	MCHC	Ret	WBC	Neut	Mono	Eos	Baso	Lymp	PLT	PT	APTT	Fbg	
		(10 <sup>6</sup> /μL)	(g/dL)	(%)	(fL)	(pg)	(g/dL)	(10 <sup>4</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(sec)	(sec)	(mg/dL)	
Male	Control	Mean	6.99	14.0	40.8	58.5	20.1	34.3	42.65	6.05	0.85	0.25	0.04	0.00	4.91	1088	14.4	18.8	221
		S.D.	0.22	0.5	1.5	1.5	0.7	0.5	6.48	1.22	0.40	0.06	0.01	0.00	0.83	159	1.3	1.7	8
	80% group	Mean	6.79	13.8	40.2	59.3	20.4	34.3	34.38	4.48	0.68	0.11**	0.05	0.00	3.65	1093	13.2	19.3	235
		S.D.	0.32	0.5	1.8	2.7	0.8	0.4	8.03	1.73	0.20	0.06	0.02	0.00	1.65	66	1.4	1.0	19
	60% group	Mean	7.17	14.5	42.0	58.7	20.2	34.4	25.11*	4.91	0.50	0.10**	0.04	0.00	4.27	1229	13.5	18.7	218
		S.D.	0.39	0.5	1.4	1.8	0.7	0.2	4.73	1.18	0.15	0.04	0.02	0.00	1.03	92	1.0	2.1	17
	40% group	Mean	7.74**	15.9**	44.8**	58.0	20.6	35.5**	14.44*	2.71**	0.27**	0.05**	0.04	0.00	2.35**	1163	14.8	21.0	202
		S.D.	0.43	0.5	1.1	2.6	0.9	0.4	3.4	0.88	0.16	0.03	0.04	0.00	0.69	167	3.2	4.3	26
Female	Control	Mean	6.96	14.2	39.4	56.6	20.3	36.0	25.51	4.67	0.79	0.14	0.05	0.00	3.70	1083	9.7	13.7	204
		S.D.	0.19	0.3	1.3	1.0	0.4	0.5	4.71	0.43	0.21	0.04	0.01	0.00	0.30	163	0.3	1.0	9
	80% group	Mean	7.38	14.5	40.8	55.3	19.7	35.7	20.71	5.22	0.69	0.15	0.09*	0.00	4.28	1117	9.9	13.5	188
		S.D.	0.15	0.5	1.3	1.3	0.5	0.2	5.26	1.50	0.29	0.07	0.04	0.00	1.14	182	0.3	0.6	13
	60% group	Mean	7.63*	14.9	41.5	54.5	19.5	35.8	13.9**	3.92	0.27**	0.08	0.07	0.00	3.50	1159	10.2	13.7	173*
		S.D.	0.46	0.5	1.0	2.7	0.8	0.6	3.88	1.10	0.13	0.05	0.03	0.00	1.13	60	0.4	0.7	11
	40% group	Mean	8.42**	16.8**	45.8**	54.4	19.9	36.6	7.21**	2.52*	0.25**	0.04*	0.02	0.00	2.20	1232	11.0**	15.6**	149**
		S.D.	0.54	0.8	1.7	1.7	0.3	0.7	2.72	0.99	0.06	0.02	0.02	0.00	0.94	79	0.8	1.0	23

RBC: Red blood cell count, Hb: hemoglobin concentration, Ht: hematocrit, MCV: mean corpuscular volume, MCH: mean corpuscular hemoglobin, MCHC: mean corpuscular hemoglobin concentration, Ret: reticulocyte count, WBC: white blood cell count, Neut: neutrophils, Mono: monocytes, Eos: eosinophils, Baso: basophils, Lymp: lymphocytes, PLT: platelet count, PT: prothrombin time, APTT: activated partial thromboplastin time, Fbg: fibrinogen, S.D.: standard deviation. \*  $p < 0.05$ , \*\*  $p < 0.01$  compared with control (Dunnett's test, N=5 per group).

Supplemental Table 4. Blood chemistry parameters after 3 and 7 days of food restriction

			AST	ALT	ALP	CK	BUN	Glu	T-Cho	TG	PL	P	Ca	Na	Cl	GLDH		
			(U/L)	(U/L)	(U/L)	(U/L)	(mg/dL)	(mg/dL)	(mg/dL)	(mg/dL)	(mg/dL)	(mg/dL)	(mg/dL)	(mEq/L)	(mEq/L)	(U/L)		
3 days	Male	Control	Mean	74	27	649	227	11	113	57	47	96	9.7	9.5	146	107	8	
			S.D.	7	4	66	23	3	4	8	21	9	1.1	0.2	4	4	2	
		80% group	Mean	68	25	829	224	11	124	59	56	99	8.7	9.6	142*	104	5	
			S.D.	7	5	162	22	1	7	7	22	9	0.6	0.2	1	1	2	
		60% group	Mean	72	26	823	240	10	125	61	36	96	8.2*	9.7	142*	104	6	
			S.D.	9	2	115	54	1	14	15	13	16	0.5	0.2	1	2	1	
		40% group	Mean	65	23	714	225	9	143**	67	20	96	7.9**	9.6	142*	106	6	
			S.D.	2	1	283	65	2	17	12	2	10	0.4	0.1	1	1	1	
		Control	Mean	63	19	461	110	14	124	60	18	110	8.0	9.9	142	106	6	
			S.D.	7	2	86	9	3	9	15	9	24	0.4	0.2	1	1	2	
		Female	80% group	Mean	62	18	539	158*	13	128	62	21	109	7.7	10.0	142	106	6
			S.D.	13	2	126	44	2	8	16	15	23	0.3	0.3	1	1	2	
		60% group	Mean	64	19	474	114	10*	132	62	13	102	7.4	9.9	142	107	6	
		S.D.	3	2	66	17	1	6	12	2	18	0.8	0.3	1	2	3		
		40% group	Mean	72	20	422	133	12	117	42	7	70*	7.3	9.7	143	108	9	
		S.D.	4	3	64	23	2	4	7	2	9	0.5	0.1	1	2	2		
7 days	Male	Control	Mean	76	28	916	196	11	116	53	38	99	9.1	10	143	105	8	
			S.D.	4	2	158	34	1	6	4	13	10	0.5	0.1	1	1	2	
		80% group	Mean	65	27	773	192	12	113	63	21**	102	9.3	9.7	143	105	7	
			S.D.	3	3	195	45	1	5	14	4	18	0.3	0.2	1	1	2	
		60% group	Mean	67	29	895	164	10	120	64	18**	99	8.4*	9.6	143	107*	7	
			S.D.	6	5	380	37	2	1	7	5	9	0.3	0.3	1	1	1	
		40% group	Mean	77	33	784	133*	16*	119	60	9**	88	7.3**	9.3**	143	108**	10	
			S.D.	12	8	171	11	5	9	15	2	13	0.4	0.3	1	1	3	
		Control	Mean	72	22	571	198	15	129	60	20	113	7.0	9.6	141	105	7	
			S.D.	9	3	111	118	3	17	4	9	10	0.9	0.2	1	3	3	
		Female	80% group	Mean	75	24	514	157	15	123	70*	18	123	6.7	9.5	142	106	6
			S.D.	11	4	93	42	2	14	6	7	12	0.4	0.2	1	2	2	
		60% group	Mean	71	23	541	140	18	126	54	15	102	6.5	9.3	142	107	10	
		S.D.	7	3	66	15	4	10	6	4	7	0.2	0.3	1	1	8		
		40% group	Mean	173*	50*	362**	171	30**	129	36**	12	69**	6.5	8.8**	144*	108	27	
		S.D.	110	31	31	49	8	14	7	2	11	0.6	0.3	1	1	17		

AST: Aspartate aminotransferase, ALT: alanine aminotransferase, ALP: alkaline phosphatase, CK: creatine kinase, BUN: blood urea nitrogen, Glu: glucose, T-Cho: total cholesterol, TG: triglycerides, PL: phospholipids, P: inorganic phosphorus, Ca: calcium, Na: sodium, Cl: chloride, GLDH: glutamate dehydrogenase, S.D.: standard deviation. \*  $p < 0.05$ , \*\*  $p < 0.01$  compared with control (Dunnett's test, N=5 per group).

Supplemental Table 5. Bone marrow cell and differential cell counts after 7 days of food restriction

		BMC	E	M	Mono	Lymp	MK	M/E	E	M	Mono	Lymp	MK	
		(10 <sup>3</sup> /μL)	(%)	(%)	(%)	(%)	(%)		(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	(10 <sup>3</sup> /μL)	
<b>Male</b>	Control	Mean	2656	33.9	43.4	1.6	21.0	0.2	1.3	904	1142	42	564	4
		S.D.	364	2.1	4.1	0.6	3.5	0.2	0.2	157	101	13	158	4
	80% group	Mean	2474	34.8	41.7	1.5	22.0	0.0	1.2	858	1035	37	543	1
		S.D.	384	5.2	3.1	0.4	2.2	0.1	0.3	168	197	12	81	2
	60% group	Mean	2859	28.5	44.4	1.5	25.5	0.1	1.6	815	1265	42	734	2
		S.D.	204	2.1	4.4	0.3	3.6	0.1	0.2	84	92	6	156	3
	40% group	Mean	2547	17.8**	51.8*	1.8	28.4*	0.2	3.3**	456**	1301	46	740	5
		S.D.	641	6.6	7.2	0.1	5.7	0.1	1.6	179	281	11	289	4
<b>Female</b>	Control	Mean	2732	27.4	44.0	1.4	27.1	0.1	1.7	746	1202	38	742	3
		S.D.	122	5.3	5.9	0.1	1.5	0.2	0.6	146	171	5	67	5
	80% group	Mean	2588	23.1	46.5	1.8	28.4	0.1	2.1	605	1188	47	745	3
		S.D.	396	4.3	5.7	0.2	3.5	0.2	0.6	184	87	10	204	4
	60% group	Mean	2412	17.7*	47.2	1.9	33.2*	0.1	2.9	435*	1137	44	794	2
		S.D.	279	5.3	2.4	0.8	3.1	0.1	1.0	164	133	17	43	3
	40% group	Mean	1581**	5.4**	62.7**	1.9	29.9	0.1	15**	94**	971	29	485*	2
		S.D.	567	2.7	5.0	0.3	3.0	0.1	9.0	70	299	8	205	2

BMC: Bone marrow cell count, E: erythroblasts, M: myelocytes, Mono: monocytes, Lymp: lymphocytes, MK: megakaryocytes, M/E: myelocyte/erythroblast ratio, S.D.: standard deviation. \*  $p < 0.05$ , \*\*  $p < 0.01$  compared with control (Dunnett's test, N=5 per group).

Supplemental Table 6. Organ weights after 3 and 7 days of food restriction

		<b>3 days</b>															
		BW	Liver		Kidneys		Lung		Thyroid		Salivary glands		Prostate		Seminal vesicles		
			AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	
<b>Male</b>	Control	Mean	285	8.40	2.94	2.41	0.84	1.20	0.42	22	7.9	0.52	0.18	0.347	0.122	1.15	0.40
		S.D.	9	0.56	0.12	0.31	0.09	0.10	0.03	2	0.7	0.01	0.01	0.065	0.024	0.14	0.04
	80% group	Mean	282	8.51	3.02	2.33	0.83	1.13	0.40	20	7.2	0.53	0.19	0.268	0.095	0.99	0.35
		S.D.	12	0.58	0.12	0.20	0.07	0.06	0.03	2	0.7	0.04	0.02	0.049	0.019	0.19	0.07
	60% group	Mean	278	8.22	2.96	2.26	0.81	1.15	0.41	21	7.5	0.56	0.20*	0.249	0.089	0.93	0.33
		S.D.	7	0.35	0.17	0.09	0.03	0.05	0.01	2	0.8	0.03	0.01	0.062	0.021	0.14	0.05
	40% group	Mean	267*	7.61*	2.85	2.15	0.80	1.07*	0.40	18*	6.7	0.54	0.20**	0.276	0.104	1.01	0.38
		S.D.	10	0.33	0.07	0.13	0.04	0.08	0.02	3	1.0	0.02	0.01	0.070	0.024	0.16	0.06
<b>Female</b>	Control	Mean	204	6.12	3.00	1.72	0.84	0.99	0.49	21	10.3	0.38	0.19	NE	NE	NE	NE
		S.D.	8	0.20	0.18	0.13	0.06	0.07	0.02	5	2.5	0.02	0.01	NE	NE	NE	NE
	80% group	Mean	204	6.16	3.02	1.73	0.85	1.02	0.50	19	9.2	0.43*	0.21	NE	NE	NE	NE
		S.D.	10	0.41	0.19	0.08	0.03	0.06	0.03	2	1.1	0.03	0.02	NE	NE	NE	NE
	60% group	Mean	203	5.92	2.91	1.66	0.82	0.99	0.49	21	10.2	0.37	0.19	NE	NE	NE	NE
		S.D.	8	0.39	0.11	0.05	0.04	0.03	0.02	4	1.8	0.02	0.02	NE	NE	NE	NE
	40% group	Mean	197	5.74	2.91	1.60	0.81	0.98	0.50	22	11.1	0.39	0.20	NE	NE	NE	NE
		S.D.	11	0.44	0.16	0.10	0.03	0.05	0.03	3	1.2	0.02	0.02	NE	NE	NE	NE

(continued)

		7 days																		
		BW		Brain		Liver		Kidneys		Spleen		Heart		Lung		Thymus				
			AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE		
Male	Control	Mean	307	1.97	0.64	9.37	3.06	2.71	0.88	0.67	0.22	1.19	0.39	1.25	0.41	0.60	0.19			
		S.D.	10	0.10	0.03	0.58	0.13	0.11	0.03	0.05	0.02	0.11	0.04	0.04	0.01	0.13	0.04			
	80% group	Mean	295	1.97	0.67	9.05	3.07	2.42**	0.82	0.70	0.23	1.08	0.37	1.25	0.42	0.56	0.19			
		S.D.	11	0.10	0.03	0.61	0.11	0.05	0.03	0.13	0.03	0.06	0.02	0.09	0.04	0.11	0.03			
Female	60% group	Mean	278**	1.96	0.71*	8.21*	2.95	2.24**	0.81*	0.52*	0.19	0.94**	0.34*	1.14	0.41	0.59	0.21			
		S.D.	8	0.05	0.03	0.37	0.06	0.09	0.04	0.07	0.02	0.05	0.02	0.08	0.03	0.12	0.04			
	40% group	Mean	243**	1.98	0.81**	6.53**	2.68**	2.08**	0.85	0.46**	0.19	0.87**	0.35	1.06**	0.44	0.36*	0.15			
		S.D.	8	0.06	0.04	0.65	0.23	0.15	0.06	0.03	0.01	0.05	0.02	0.10	0.03	0.08	0.03			
Male	Control	Mean	185	1.79	0.97	5.92	3.21	1.63	0.88	0.44	0.24	0.66	0.36	0.91	0.49	0.52	0.28			
		S.D.	6	0.07	0.05	0.36	0.28	0.06	0.02	0.03	0.01	0.02	0.01	0.05	0.03	0.11	0.05			
	80% group	Mean	174	1.80	1.03	5.36*	3.07	1.46*	0.84	0.40	0.23	0.64	0.37	0.90	0.52	0.52	0.30			
		S.D.	8	0.06	0.02	0.20	0.07	0.09	0.06	0.07	0.04	0.06	0.03	0.06	0.04	0.18	0.11			
Female	60% group	Mean	165**	1.76	1.07**	4.80**	2.92	1.37**	0.83	0.40	0.24	0.60	0.36	0.87	0.53	0.42	0.26			
		S.D.	3	0.03	0.03	0.24	0.14	0.08	0.06	0.07	0.04	0.04	0.03	0.04	0.02	0.12	0.08			
	40% group	Mean	136**	1.77	1.30**	3.95**	2.90*	1.25**	0.91	0.26**	0.19*	0.48**	0.36	0.76**	0.56**	0.22**	0.16			
		S.D.	8	0.05	0.04	0.36	0.17	0.10	0.06	0.06	0.04	0.05	0.03	0.03	0.02	0.12	0.09			
		Salivary glands		Adrenals		Pituitary		Thyroid		Testes		Prostate		Seminal vesicles		Ovaries		Uterus		
		AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE	
Male	Control	Mean	0.58	0.19	59	19.4	12	4.0	21	6.9	2.77	0.91	0.334	0.109	1.18	0.39	NE	NE	NE	NE
		S.D.	0.06	0.02	3	0.9	2	0.6	3	1.1	0.17	0.06	0.056	0.020	0.28	0.10	NE	NE	NE	NE
	80% group	Mean	0.58	0.20	55	18.7	12	4.1	21	7.3	2.93	1.00	0.298	0.101	1.02	0.35	NE	NE	NE	NE
		S.D.	0.06	0.03	10	3.7	2	0.6	3	1.0	0.20	0.09	0.033	0.013	0.05	0.03	NE	NE	NE	NE
Female	60% group	Mean	0.56	0.20	49	17.5	11	4.1	22	8.0	2.74	0.98	0.250*	0.090	0.95	0.34	NE	NE	NE	NE
		S.D.	0.05	0.03	8	3.0	1	0.4	3	1.0	0.13	0.03	0.037	0.012	0.04	0.02	NE	NE	NE	NE
	40% group	Mean	0.52	0.22	49	20.2	11	4.4	19	7.9	2.77	1.14*	0.262	0.108	0.84*	0.34	NE	NE	NE	NE
		S.D.	0.04	0.02	6	2.1	1	0.5	3	1.1	0.05	0.05	0.055	0.026	0.11	0.06	NE	NE	NE	NE
Male	Control	Mean	0.39	0.21	60	32.6	13	7.0	17	9.2	NE	NE	NE	NE	NE	83	45.0	0.39	0.21	
		S.D.	0.05	0.03	6	2.5	1	1.0	2	1.2	NE	NE	NE	NE	NE	12	7.5	0.07	0.04	
	80% group	Mean	0.38	0.22	55	31.7	12	6.6	15	8.5	NE	NE	NE	NE	NE	72	41.4	0.36	0.21	
		S.D.	0.03	0.02	5	1.8	2	0.8	1	0.8	NE	NE	NE	NE	NE	10	5.4	0.09	0.04	
Female	60% group	Mean	0.34	0.21	54	32.8	11	6.8	16	9.8	NE	NE	NE	NE	NE	67*	40.4	0.40	0.24	
		S.D.	0.02	0.01	8	5.3	2	1.0	1	0.5	NE	NE	NE	NE	NE	4	3.0	0.09	0.05	
	40% group	Mean	0.34	0.25*	56	41.1**	10*	7.2	13*	9.6	NE	NE	NE	NE	NE	55**	40.9	0.31	0.23	
		S.D.	0.02	0.02	7	4.8	2	1.2	3	2.0	NE	NE	NE	NE	NE	8	7.1	0.12	0.09	

BW: Body weight (g), AB, absolute weight (g for brain, liver, kidneys, spleen, heart, lung, thymus, salivary glands, testes, prostate, seminal vesicles, and uterus; mg for adrenals, pituitary, ovaries and thyroid), RE: relative weight, normalized to body weight (g/100 g for brain, liver, kidneys, spleen, heart, lung, thymus, salivary glands, testes, prostate, seminal vesicles, and uterus; mg/100 g for



adrenals, pituitary, ovaries and thyroid), S.D.: standard deviation, NE: not evaluated. \*  $p < 0.05$ , \*\*  $p < 0.01$  compared with control (Dunnett's test, N=5 per group). Organs that showed no differences from control after either 3 or 7 days of food restriction are not included.

Supplemental Table 7. Histopathological changes after 3 and 7 days of food restriction

		3 days							
		Male				Female			
Organ	Finding	Control	80% group	60% group	40% group	Control	80% group	60% group	40% group
Spleen	Extramedullary hematopoiesis	±(3), +(2)	±(4), +(1)	±(4), +(1)	-(3), ±(2)	-(4), ±(1)	-(4), ±(1)	-(5)	-(5)
		7 days							
		Male				Female			
Organ	Finding	Control	80% group	60% group	40% group	Control	80% group	60% group	40% group
Liver	Single cell necrosis, hepatocyte, centrilobular	-(5)	NA	NA	-(5)	-(5)	NA	-(5)	-(3), ±(1), +(1)
Bone marrow, femur	Cellularity, decreased, erythroblast	-(5)	NA	-(5)	-(2), ±(3)	-(5)	NA	-(5)	±(2), +(3)
	Cellularity, decreased, myelocyte	-(5)	NA	NA	-(5)	-(5)	NA	-(5)	-(2), ±(1), +(2)
Bone marrow, sternum	Cellularity, decreased, erythroblast	-(5)	NA	-(5)	-(3), ±(2)	-(5)	NA	-(5)	±(2), +(3)
	Cellularity, decreased, myelocyte	-(5)	NA	NA	-(5)	-(5)	NA	-(5)	-(2), +(3)
Spleen	Extramedullary hematopoiesis	±(5)	±(5)	-(5)	-(5)	-(5)	NA	-(5)	-(5)
	Atrophy	-(5)	-(5)	-(5)	-(5)	-(5)	NA	-(5)	-(3), ±(2)
Thymus	Atrophy	-(5)	NA	-(5)	-(4), ±(1)	-(5)	NA	-(5)	-(2), +(1), 2+(2)
Mammary gland	Atrophy, adipose tissue	-(5)	NA	-(5)	-(2), ±(2), +(1)	-(5)	-(5)	-(1), +(3), 2+(1)	2+(1), 4+(4)
	Atrophy, lobuloalveolar	-(5)	NA	-(5)	-(2), ±(1), +(2)	-(5)	-(5)	-(5)	-(5)

N=5 animals per group. () : Number of animals in which the finding was made; - : not remarkable, ± : minimal, + : mild, 2+ : moderate, 3+ : marked, 4+ : severe, NA, not applicable. If no abnormalities were identified in the group in which feeding was highly restricted, the groups with milder restriction were not evaluated. Tissues that showed no change compared with the control group are not included in the table. No change was observed in animals after 3 days of food restriction.