

Supplemental Table 1. Comparison of normal diet (2018SX), ketogenic diet (D07091701), and AIN-93G standards (Reeves et al., 1993).

Diet	Norm (2018SX)	Keto (D07091701)	AIN-93G
		kcal%	
Protein	23	7	—
Carbohydrate	60	0	—
Fat	17	93	—
kcal/g	3.3	6.1	—
Vitamins		amount (gm)/kg	
Biotin	0.0008	0.00034	0.00020
Folic Acid	0.0084	0.0034	0.0020
Vitamin K	0.102	0.0009	0.0008
Niacin	0.0873	0.0508	0.0300
Pantothenic Acid	0.1416	0.0271	0.0160
Pyridoxine HCl	0.0268	0.0119	0.0070
Riboflavin	0.0272	0.0102	0.0060
Thiamine HCl	0.118	0.0102	0.0060
Vitamin A Acetate, IU	30700	6800.0	4000.0
Vitamin B12	0.00015	0.0000169	0.0000250
Vitamin D3, IU	2100	1690.0	1000.0
Vitamin E Acetate, IU	128	84.8	75.0
Minerals			
Ca	10	10.2	5.0
P	6.5	5.1	3.2
Cr	0.0005	0.0034	0.0010
Cu	0.015	0.010	0.006
Fe	0.225	0.076	0.045
Mg	2	0.85	0.50
Mn	0.118	0.1	0.0105
K	6.8	10.2	3.6
I	0.012	0.000339	0.000200
Na	2.3	1.7	1.0
Se	0.0002	0.0003	0.0002
Zn	0.077	0.049	0.030

Supplemental Table 2. Data for 6 Hz test

Current (mA)	Diet	All mice		Weight-matched mice	
		No. of mice with seizures	No. of mice tested	No. of mice with seizures	No. of mice tested
6	Normal	0	6	0	6
8	Normal	2	12	2	12
9	Normal	3	6	3	6
10	Normal	8	12	8	12
13	Normal	7	7	7	7
6	CR-D	0	7	0	7
7	CR-D	0	6	0	6
8	CR-D	4	9	4	9
9	CR-D	8	8	7	7
10	CR-D	6	7	6	6
12	CR-D	7	7	7	7
6	CR-IF	1	15	0	11
7	CR-IF	3	6	2	5
8	CR-IF	9	19	8	18
9	CR-IF	6	6	5	5
10	CR-IF	17	18	15	16
12	CR-IF	7	7	6	6
13	CR-IF	1	1	0	0
8	Keto	0	7	0	4
10	Keto	2	9	1	6
11	Keto	8	15	5	9
12	Keto	4	6	4	6
13	Keto	8	10	5	6
16	Keto	5	6	2	2
20	Keto	5	5	4	4

Supplemental Table 3. Data for MES threshold test

Current (mA)	Diet	All mice		Weight-matched mice	
		No. of mice with seizures	No. of mice tested	No. of mice with seizures	No. of mice tested
4	Normal	0	8	0	8
5	Normal	0	9	0	9
6	Normal	6	9	6	9
8	Normal	9	9	9	9
3	CR-IF	2	6	0	2
4	CR-IF	2	6	1	5
5	CR-IF	4	6	3	4
6	CR-IF	6	6	3	3
3	Keto	0	6	0	6
4	Keto	0	6	0	5
5	Keto	1	6	1	3
6	Keto	4	6	3	4
8	Keto	5	5	2	2

Supplemental Table 4. Complete blood count results for unrestricted normal diet (Norm) and intermittent fasting (CR-IF) groups.

	units	Norm			CR-IF			Significance
		Mean	SEM	N	Mean	SEM	N	level
WBC	10 ³ /uL	2.6	0.17	9	1.8	0.31	6	t-test 0.06
Hgb	g/dl	12.5	0.28	9	13.2	0.68	6	0.38
Hct	%	44.3	1.4	9	43.6	2.7	6	0.84
MCV	fL	56.1	0.79	9	54.2	0.87	6	0.13
Platelet	10 ³ /uL	1000	199	8	892	237.4	5	0.74

Supplemental Table 5. Comprehensive metabolic panel results for unrestricted normal diet (Norm) and intermittent fasting (CR-IF) groups.

			Norm			CR-IF			Significance level
	units	Mean	SEM	N	Mean	SEM	N	<i>t</i> -test	
Na	mEq/L	146	0.62	10	148	0.3	9	0.02	
K	mEq/L	8.7	0.87	10	9.8	0.5	9	0.25	
Cl	mEq/L	106	1.9	10	108	0.71	9	0.27	
CO2	mEq/L	18.5	0.87	11	17.4	1.4	13	0.48	
BUN	mg/dL	21.5	1.4	11	30	1.5	13	0.0004	
Cr	mg/dL	1.9	1.7	7	2.4	1.5	7	0.82	
total									
protein	g/dL	5.2	0.16	10	5.4	0.13	11	0.32	
Albumin	g/dL	2.8	0.04	11	3.3	0.08	13	0.00003	
ALT	U/L	51	6.6	11	75	8.9	12	0.04	
AST	U/L	283	49	11	331	69	13	0.57	
alk phos	U/L	151	7.7	11	149	7.5	13	0.82	
bili T	mg/dL	0.15	0.05	11	0.22	0.06	13	0.36	
bili D	mg/dL	0.15	0.05	11	0.15	0.05	13	0.9	
Amylase	U/L	1417	141	11	1512	100	13	0.56	
Lipase	U/L	93	10	11	85	8.6	11	0.5	
Chol	mg/dL	136	13	11	150	5.8	13	0.78	
Trig	mg/dL	125	11	11	124	11	11	0.93	
Ca	mg/dL	8.8	0.69	11	9.8	0.14	11	0.13	
Phos	mg/dL	11	1.1	11	11.4	0.4	13	0.69	
Mg	mg/dL	2.5	0.41	11	3.3	0.19	8	0.41	
Osm (calc)	mOsm/kg	328	2.6	11	335	1.6	9	0.02	
CK	U/L	9543	2516	8	10012	3403	13	0.91	