

Table S1. Body Weight Gain in the 28-Day Study

Group (mg/kg bw/day)		Body weight gain (g) between days								
		0-3	3-7	7-10	10-14	14-17	17-21	21-24	24-27	0-27
Male										
0 (Control) (n = 10)	Mean	18.5	22.7	19.9	16.0	13.9	15.9	9.5	10.5	126.9
	SD	2.0	3.2	3.2	3.7	2.4	3.2	1.8	3.1	11.8
400 (n = 10)	Mean	20.4	25.3	20.8	17.3	14.7	15.9	9.7	11.4	135.5
	SD	2.3	4.0	3.4	3.5	3.1	2.5	3.1	3.3	10.9
	SS									
800 (n = 10)	Mean	21.5	24.2	20.1	16.1	14.5	14.7	10.5	12.7	134.3
	SD	3.4	3.6	3.8	3.4	2.3	2.8	2.5	3.4	14.5
	SS	*								
1200 (n = 10)	Mean	22.4	25.1	19.2	17.8	16.1	16.6	11.2	11.7	140.1
	SD	2.3	3.1	3.2	3.4	3.9	4.0	3.6	2.5	15.6
	SS	**								
Test for Significance		DN	NS	NS	NS	NS	NS	NS	NS	NS
Female										
0 (Control) (n = 10)	Mean	10.8	12.2	8.1	11.4	6.2	11.7	0.2	7.8	68.4
	SD	3.2	2.3	4.2	3.0	4.3	3.7	3.6	4.8	9.9
400 (n = 10)	Mean	9.8	12.3	9.5	11.5	7.3	10.5	1.8	4.8	67.5
	SD	2.3	2.3	4.2	3.4	4.0	2.5	3.3	4.1	6.5
	SS									
800 (n = 10)	Mean	9.8	13.0	8.8	10.7	7.4	9.1	3.2	4.3	66.3
	SD	2.1	2.9	4.9	3.9	5.1	3.0	3.4	3.7	10.6
	SS									
1200 (n = 10)	Mean	10.5	13.1	12.1	9.8	6.8	8.1	2.8	5.2	68.4
	SD	2.6	3.7	4.7	4.3	3.0	3.5	2.7	4.8	14.5
	SS						*			
Test for Significance		NS	NS	NS	NS	NS	DN	NS	NS	NS

Abbreviations: DN, Duncan's multiple range test; NS, Not Significant; SD, standard deviation; SS, statistically significant compared to control.

*p < 0.05; **p < 0.01

Table S2. Food Consumption and Feed Efficiency in the 28-Day Study

Group (mg/kg bw/day)		Days Weeks	Food consumption (g/animal/day)				Feed efficiency (g food/ g bwg)				
			0-7 1	7-14 2	14-21 3	21-27 4	0-7 1	7-14 2	14-21 3	21-27 4	0-27 1-4
Male											
0 (Control) (n = 10)	Mean		22.3	23.7	24.1	23.8	3.81	4.68	5.72	7.30	5.01
	SD		1.6	1.9	1.9	1.9	0.28	0.58	0.55	1.21	0.26
400 (n = 10)	Mean		23.3	24.4	25.6	24.0	3.59	4.51	5.92	7.01	4.86
	SD		1.5	2.0	1.8	2.0	0.28	0.46	0.77	1.22	0.34
800 (n = 10)	Mean		22.5	23.1	23.9	23.1	3.47	4.53	5.76	6.07	4.67
	SD		2.0	1.6	1.7	1.5	0.30	0.47	0.62	0.79	0.26
	SS						*			*	
1200 (n = 10)	Mean		22.8	24.0	25.5	24.4	3.37	4.58	5.58	6.55	4.68
	SD		2.4	2.4	2.9	2.7	0.39	0.54	0.96	1.09	0.49
	SS						**				
Test for Significance			NS	NS	NS	NS	DN	NS	NS	DN	NS
Female											
0 (Control) (n = 10†)	Mean		16.0	17.3	18.3	17.7	5.03	6.69	7.63	16.88	6.93
	SD		0.8	0.9	1.2	1.6	0.83	2.17	2.15	12.89	0.73
400 (n = 10†)	Mean		16.4	17.1	18.5	17.6	5.24	5.86	7.86	17.92	7.01
	SD		1.7	1.5	1.5	1.3	0.62	0.99	2.50	13.67	0.88
800 (n = 10†)	Mean		16.4	16.6	17.6	17.0	5.16	6.20	8.07	14.49	7.00
	SD		1.4	1.6	1.8	1.7	0.69	1.32	2.28	5.63	0.86
1200 (n = 10)	Mean		15.9	16.9	17.6	17.3	4.93	5.75	9.10	16.91	6.86
	SD		1.5	1.8	1.9	2.5	1.02	1.52	2.78	10.03	1.07
Test for Significance			NS	NS	NS	NS	NS	NS	NS	NS	NS

Abbreviations: DN, Duncan's multiple range test; NS, Not Significant; SD, standard deviation; SS, statistically significant compared to control.

†Week 4 Feed efficiency (n = 9)

*p < 0.05; **p < 0.01

Table S3. Organ Weights in the 28-Day Study

Group (mg/kg bw/day)	Body weight (g)	Organ weight (g)										
		Brain	Liver	Kidneys	Heart	Thymus	Spleen	Testes	Epididymides	Prostate†	Adrenals	
Male												
Control (n = 10)	Mean	318.9	2.05	10.10	2.12	0.94	0.54	0.60	3.26	1.07	1.62	0.073
	SD	19.38	0.10	1.11	0.24	0.07	0.06	0.13	0.25	0.11	0.17	0.011
400 (n = 10)	Mean	325.1	2.01	9.91	2.05	0.94	0.54	0.62	3.18	1.07	1.69	0.076
	SD	16.72	0.05	1.07	0.16	0.08	0.10	0.07	0.28	0.14	0.32	0.013
800 (n = 10)	Mean	321.2	2.00	9.59	2.14	0.92	0.47	0.63	3.33	1.00	1.50	0.072
	SD	14.02	0.06	0.76	0.16	0.07	0.06	0.09	0.17	0.14	0.29	0.010
	SS						*					
1200 (n = 10)	Mean	324.9	2.01	9.95	2.16	0.93	0.48	0.63	3.36	1.09	1.61	0.078
	SD	20.65	0.08	1.16	0.18	0.10	0.07	0.06	0.20	0.13	0.25	0.007
Test for Significance		NS	NS	NS	NS	NS	DN	NS	NS	NS	NS	NS
Historical Control Range		249.0–316.0	1.90–2.21	7.09–9.92	1.69–2.55	0.70–0.98	0.49–0.93	0.49–0.77	2.84–3.54	0.66–1.07	0.86–1.39	0.050–0.087
Female												
0 (Control) (n = 10)	Mean	202.8	1.91	6.03	1.51	0.70	0.42	0.47	Ovaries 0.100	–	Uterus 0.61	0.087
	SD	12.24	0.09	0.52	0.14	0.06	0.07	0.05	0.016	–	0.16	0.008
400 (n = 10)	Mean	201.0	1.90	5.62	1.45	0.65	0.40	0.48	0.094	–	0.56	0.081
	SD	9.98	0.09	0.39	0.10	0.04	0.06	0.05	0.012	–	0.13	0.013
800 (n = 10)	Mean	201.3	1.90	5.85	1.43	0.66	0.44	0.43	0.090	–	0.56	0.081
	SD	15.87	0.08	0.76	0.12	0.05	0.10	0.05	0.020	–	0.16	0.010
1200 (n = 10)	Mean	203.8	1.87	6.02	1.41	0.63	0.41	0.49	0.095	–	0.52	0.082
	SD	20.35	0.09	0.86	0.13	0.06	0.09	0.10	0.016	–	0.15	0.012
	SS					*						
Test for Significance		NS	NS	NS	NS	DN	NS	NS	NS	–	NS	NS
Historical Control Range		160–195	1.75–1.98	4.74–6.61	1.20–1.61	0.54–0.66	0.28–0.59	0.32–0.54	0.081–0.113	–	0.35–0.56	0.055–0.099

Abbreviations: DN, Duncan's multiple range test; NS, Not Significant; SD, standard deviation; SS, statistically significant compared to control.

†Prostate with seminal vesicles and coagulating gland as a whole.

*p < 0.05

Remarks: Paired organs were weighed together.

Table S4. Organ Weights Relative to Body Weight in the 28-Day Study

Group (mg/kg bw/day)		Organ weight relative to body weight (%)									
		Brain	Liver	Kidneys	Heart	Thymus	Spleen	Testes	Epididymides	Prostate†	Adrenals
Male											
Control (n = 10)	Mean	0.646	3.162	0.663	0.295	0.169	0.187	1.020	0.337	0.508	0.023
	SD	0.047	0.229	0.054	0.012	0.021	0.035	0.039	0.027	0.035	0.003
400 (n = 10)	Mean	0.618	3.044	0.630	0.290	0.167	0.192	0.978	0.327	0.520	0.023
	SD	0.023	0.231	0.041	0.012	0.030	0.020	0.087	0.038	0.103	0.003
800 (n = 10)	Mean	0.623	2.982	0.666	0.286	0.145	0.195	1.038	0.313	0.466	0.022
	SD	0.034	0.121	0.032	0.017	0.016	0.023	0.059	0.049	0.081	0.003
	SS					*					
1200 (n = 10)	Mean	0.621	3.057	0.667	0.286	0.148	0.193	1.039	0.337	0.495	0.024
	SD	0.053	0.212	0.057	0.026	0.023	0.017	0.104	0.050	0.067	0.002
Test for Significance		NS	NS	NS	NS	DN	NS	NS	NS	NS	NS
Historical Control Range		0.65–0.82	2.82–3.57	0.68–0.95	0.28–0.36	0.17–0.36	0.17–0.29	1.00–1.29	0.24–0.37	0.30–0.49	0.020–0.033
Female											
0 (Control) (n = 10)	Mean	0.943	2.974	0.745	0.343	0.208	0.234	Ovaries 0.050	–	Uterus 0.303	0.043
	SD	0.077	0.198	0.050	0.030	0.032	0.023	0.008	–	0.085	0.003
400 (n = 10)	Mean	0.945	2.800	0.723	0.326	0.198	0.239	0.047	–	0.279	0.040
	SD	0.050	0.174	0.032	0.022	0.028	0.026	0.006	–	0.060	0.006
800 (n = 10)	Mean	0.949	2.898	0.710	0.329	0.218	0.215	0.045	–	0.277	0.040
	SD	0.070	0.193	0.026	0.019	0.048	0.021	0.008	–	0.075	0.004
	SS			*							
1200 (n = 10)	Mean	0.924	2.947	0.695	0.310	0.203	0.241	0.046	–	0.258	0.040
	SD	0.090	0.224	0.036	0.016	0.040	0.028	0.006	–	0.086	0.007
	SS			**	**						
Test for Significance		NS	NS	DN	DN	NS	NS	NS	–	NS	NS
Historical Control Range		0.91–1.19	2.83–3.72	0.66–0.89	0.28–0.37	0.15–0.34	0.19–0.32	0.043–0.059	–	0.19–0.31	0–0

Abbreviations: DN, Duncan's multiple range test; NS, Not Significant; SD, standard deviation; SS, statistically significant compared to control.

†Prostate with seminal vesicles and coagulating gland as a whole.

*p < 0.05; **p < 0.01

Table S5. Organ Weights Relative to Brain Weight in the 28-Day Study

Group (mg/kg bw/day)		Body weight	Organ weight and body weight relative to brain weight (%)								Prostate†	Adrenals
			Liver	Kidneys	Heart	Thymus	Spleen	Testes	Epididymides			
Male												
Control (n = 10)	Mean	15550.8	492.17	103.14	45.90	26.21	29.16	158.63	52.28	79.03	3.55	
	SD	1089.95	54.54	10.94	3.75	3.06	6.46	12.30	4.96	8.68	0.51	
400 (n = 10)	Mean	16210.4	494.06	102.08	47.04	27.03	31.04	158.50	53.09	84.30	3.76	
	SD	615.09	48.91	7.17	3.06	5.00	3.20	14.50	6.73	16.39	0.56	
800 (n = 10)	Mean	16089.4	480.45	107.18	46.08	23.33	31.39	166.74	50.04	75.00	3.62	
	SD	866.33	42.19	7.61	3.73	2.81	3.89	8.87	6.05	14.39	0.56	
1200 (n = 10)	Mean	16203.5	496.50	107.70	46.25	23.81	31.27	167.22	54.04	80.23	3.89	
	SD	1427.38	68.75	8.32	4.72	3.32	3.18	9.38	4.97	13.82	0.35	
Test for Significance		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Historical Control Range		12184–15340	344–492	83–133	34.3–48.2	24.5–47.7	23.8–39.1	140.2–171.8	33.8–51.9	41.0–69.5	2.4–4.4	
Female												
0 (Control) (n = 10)	Mean	10669.3	317.17	79.51	36.53	22.16	24.92	<u>Ovaries</u> 5.26	–	<u>Uterus</u> 32.26	4.57	
	SD	855.60	30.31	8.17	3.22	3.80	2.62	0.80	–	8.98	0.51	
400 (n = 10)	Mean	10613.5	297.62	76.66	34.55	20.98	25.31	4.96	–	29.61	4.28	
	SD	559.36	30.08	4.54	3.14	2.82	2.72	0.78	–	6.48	0.72	
800 (n = 10)	Mean	10582.8	307.17	75.03	34.79	23.08	22.77	4.74	–	29.39	4.23	
	SD	762.97	34.81	5.05	2.33	5.37	2.62	1.02	–	8.03	0.48	
1200 (n = 10)	Mean	10916.0	321.96	75.57	33.73	22.04	26.45	5.08	–	27.85	4.36	
	SD	1089.27	42.85	5.53	2.97	4.41	5.49	0.94	–	8.44	0.55	
Test for Significance		NS	NS	NS	NS	NS	NS	NS	–	NS	NS	
Historical Control Range		8421–10971	249–378	65.9–92.0	27.3–37.7	15.1–33.0	17.3–30.5	4.24–6.46	–	18.3–29.5	2.88–5.38	

Abbreviations: NS, Not Significant; SD, standard deviation.

†Prostate with seminal vesicles and coagulating gland as a whole.

Remarks: Paired organs were weighed together.