

**Table 2** Organ weights in female B6C3F1/N mice exposed to gum guggul extract via oral gavage daily for 28 days

Parameter	Vehicle	Gum Guggul Extract (mg/kg/day)					Positive Control <sup>a</sup> 50 mg/kg	Trend Analysis p-value
		31.25	62.5	125	250	500		
<i>Histopathology Study</i>								
Body weight (g)	22.85 ± 1.01	22.92 ± 0.68	23.73 ± 0.86	24.74 ± 0.60	25.09 ± 0.9/1	23.42 ± 0.86	25.42 ± 0.94	0.102
Liver Weight (mg)	792 ± 50	770 ± 47	780 ± 26	830 ± 32	894 ± 27	892 ± 32	867 ± 27	<b>0.001</b>
% Body weight	3.47 ± 0.16	3.37 ± 0.21	3.30 ± 0.08	3.35 ± 0.08	3.58 ± 0.09	3.82 ± 0.10	3.43 ± 0.16	<b>0.009</b>
Spleen Weight (mg)	55 ± 4	56 ± 3	56 ± 3	63 ± 2	64 ± 3	58 ± 2	40 ± 3**	0.164
% Body weight	0.24 ± 0.01	0.24 ± 0.02	0.24 ± 0.01	0.26 ± 0.01	0.26 ± 0.02	0.25 ± 0.01	0.16 ± 0.01**	0.543
Lung Weight (mg)	189 ± 13	210 ± 26	186 ± 6	185 ± 5	192 ± 8	195 ± 9	202 ± 8	0.807
% Body weight	0.83 ± 0.04	0.92 ± 0.12	0.79 ± 0.04	0.75 ± 0.03	0.77 ± 0.03	0.84 ± 0.02	0.79 ± 0.02	0.793
Thymus Weight (mg)	44 ± 4	44 ± 2	45 ± 3	47 ± 2	48 ± 2	41 ± 2	27 ± 2**	0.899
% Body weight	0.19 ± 0.02	0.19 ± 0.01	0.19 ± 0.02	0.19 ± 0.01	0.20 ± 0.01	0.17 ± 0.01	0.10 ± 0.01**	0.314
Kidney Weight (mg)	280 ± 11	284 ± 12	293 ± 7	<b>318 ± 9*</b>	308 ± 8	290 ± 7	318 ± 10*	0.151
% Body weight	1.23 ± 0.03	1.24 ± 0.05	1.24 ± 0.03	1.29 ± 0.02	1.23 ± 0.04	1.24 ± 0.03	1.25 ± 0.02	0.779
<i>MPS Study 1</i>								
Body weight (g)	23.82 ± 0.61	23.54 ± 1.00	23.28 ± 0.95	24.00 ± 1.15	24.13 ± 0.61	23.72 ± 0.67	25.25 ± 0.96	0.793
Liver Weight (mg)	759 ± 20	750 ± 35	735 ± 24	755 ± 40	789 ± 22	806 ± 40	1055 ± 42**	0.279
Spleen Weight (mg)	66 ± 2	63 ± 4	62 ± 2	62 ± 3	69 ± 3	65 ± 5	77 ± 4*	0.285
Lung Weight (mg)	185 ± 12	208 ± 15	177 ± 6	180 ± 11	192 ± 12	182 ± 14	214 ± 11	0.779
Thymus Weight (mg)	62 ± 2	50 ± 3	54 ± 3	56 ± 4	52 ± 4	60 ± 4	44 ± 3**	0.793
Kidney Weight (mg)	282 ± 7	283 ± 13	276 ± 9	281 ± 11	272 ± 7	284 ± 11	330 ± 9**	0.857
<i>MPS Study 2</i>								
Body weight (g)	23.74 ± 0.82	22.83 ± 0.55	22.60 ± 0.80	23.54 ± 0.80	23.58 ± 0.77	23.25 ± 0.59	23.60 ± 0.67	0.985
Liver Weight (mg)	760 ± 23	688 ± 31	709 ± 15	784 ± 30	780 ± 32	807 ± 30	1011 ± 22**	<b>0.014</b>
Spleen Weight (mg)	61 ± 3	63 ± 5	62 ± 3	71 ± 5	72 ± 4	65 ± 3	77 ± 4*	0.113
Lung Weight (mg)	199 ± 12	211 ± 18	210 ± 19	207 ± 16	211 ± 13	198 ± 16	164 ± 6*	0.823
Thymus Weight (mg)	52 ± 4	63 ± 3	53 ± 5	62 ± 4	72 ± 5	64 ± 4	44 ± 4	<b>0.018</b>
Kidney Weight (mg)	282 ± 9	261 ± 11	260 ± 9	283 ± 14	275 ± 11	282 ± 6	311 ± 11	0.675

<sup>a</sup> Positive controls – Histopathology Study: Cyclophosphamide (CPS, 50 mg/kg); MPS Study: Maleic Vinyl Ether, (50 mg/kg);

Values represent the mean (± SE) from 8 animals per group; \*p < 0.05; \*\*p < 0.01; Bolded entries indicate GGE-exposed groups that differ significantly from the vehicle controls or significant trends across GGE-exposed groups and vehicle controls.

GGE, Gugulipid® Lot # G51177/H, ~2.45% total guggulsterone content. MPS, mononuclear phagocyte system