

Table 3. Hematological findings of F344 male rats fed diet containing *Gurcinia* extract for 52 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		8	8	8	8
RBC	$10^4/\mu\text{l}$	990 $\pm$ 36	984 $\pm$ 30	991 $\pm$ 42	960 $\pm$ 19
Hb	g/dl	15.8 $\pm$ 0.4	16.0 $\pm$ 0.3	15.9 $\pm$ 0.6	15.7 $\pm$ 0.3
Ht	%	45.9 $\pm$ 1.5	46.3 $\pm$ 1.5	45.9 $\pm$ 1.9	45.6 $\pm$ 0.7
MCV	fl	46.3 $\pm$ 0.6	47.1 $\pm$ 0.6	* 46.3 $\pm$ 0.4	47.5 $\pm$ 0.5 **
MCH	pg	16.0 $\pm$ 0.4	16.2 $\pm$ 0.3	16.0 $\pm$ 0.2	16.4 $\pm$ 0.2 **
MCHC	g/dl	34.6 $\pm$ 0.4	34.4 $\pm$ 0.6	34.7 $\pm$ 0.2	34.5 $\pm$ 0.2
RDW		18.6 $\pm$ 0.1	18.7 $\pm$ 0.2	18.6 $\pm$ 0.1	18.6 $\pm$ 0.2
Plt	$10^4/\mu\text{l}$	38.7 $\pm$ 8.2	44.3 $\pm$ 4.8	46.1 $\pm$ 8.2	44.8 $\pm$ 6.3
WBC	$10^2/\mu\text{l}$	78.9 $\pm$ 15.5	75.7 $\pm$ 13.9	74.4 $\pm$ 7.9	70.3 $\pm$ 9.2
Neut-B	%	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0
Neut-S	%	30.0 $\pm$ 3.8	29.1 $\pm$ 8.6	28.5 $\pm$ 6.7	27.0 $\pm$ 6.2
Eosino	%	2.3 $\pm$ 0.7	1.8 $\pm$ 1.0	1.6 $\pm$ 1.3	1.5 $\pm$ 0.8
Baso	%	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0
Lympha	%	64.6 $\pm$ 3.9	66.4 $\pm$ 8.6	66.5 $\pm$ 6.5	67.9 $\pm$ 5.1
Mono	%	3.1 $\pm$ 0.9	2.7 $\pm$ 0.8	3.5 $\pm$ 0.9	3.6 $\pm$ 0.9
Ebl	/200WBC	3 $\pm$ 2	3 $\pm$ 2	2 $\pm$ 2	3 $\pm$ 2

Values represent mean $\pm$ S.D..

* and ** show significant difference from 0.0% groups at $p < 0.05$ and $p < 0.01$, respectively.

Table 4. Hematological findings of F344 female rats fed diet containing *Gurcinia* extract for 52 weeks

Group		0.0%		0.2%		1.0%		5.0%	
No. of animals		8		8		8		8	
RBC	$10^4/\mu\text{l}$	887 $\pm$ 16		871 $\pm$ 21		873 $\pm$ 27		877 $\pm$ 23	
Hb	g/dl	15.9 $\pm$ 0.2		15.7 $\pm$ 0.3		15.7 $\pm$ 0.6		15.7 $\pm$ 0.4	
Ht	%	45.0 $\pm$ 0.9		44.5 $\pm$ 1.1		44.1 $\pm$ 1.4		44.7 $\pm$ 1.1	
MCV	fl	50.8 $\pm$ 0.4		51.1 $\pm$ 0.5		50.6 $\pm$ 0.5		50.9 $\pm$ 0.4	
MCH	pg	17.9 $\pm$ 0.1		18.0 $\pm$ 0.2		18.0 $\pm$ 0.4		17.9 $\pm$ 0.3	
MCHC	g/dl	35.2 $\pm$ 0.3		35.3 $\pm$ 0.4		35.6 $\pm$ 0.8		35.2 $\pm$ 0.6	
RDW		18.5 $\pm$ 0.2		18.7 $\pm$ 0.2		18.4 $\pm$ 0.4		18.5 $\pm$ 0.1	
Plt	$10^4/\mu\text{l}$	41.8 $\pm$ 4.4		44.2 $\pm$ 9.2		44.8 $\pm$ 9.8		45.1 $\pm$ 11.5	
WBC	$10^2/\mu\text{l}$	38.3 $\pm$ 6.5		41.3 $\pm$ 7.2		37.6 $\pm$ 8.6		38.6 $\pm$ 4.4	
Neut-B	%	0.0 $\pm$ 0.0		0.0 $\pm$ 0.0		0.0 $\pm$ 0.0		0.0 $\pm$ 0.0	
Neut-S	%	20.5 $\pm$ 6.5		22.8 $\pm$ 4.8		21.3 $\pm$ 10.6		18.9 $\pm$ 8.9	
Eosino	%	1.6 $\pm$ 0.7		1.5 $\pm$ 0.6		1.7 $\pm$ 1.0		1.8 $\pm$ 1.0	
Baso	%	0.0 $\pm$ 0.0		0.0 $\pm$ 0.0		0.0 $\pm$ 0.0		0.0 $\pm$ 0.0	
Lympho	%	75.1 $\pm$ 6.2		72.4 $\pm$ 5.5		74.1 $\pm$ 11.4		76.2 $\pm$ 8.5	
Mono	%	2.7 $\pm$ 1.2		3.3 $\pm$ 0.9		3.0 $\pm$ 1.0		3.1 $\pm$ 0.8	
Ebl	/200WBC	5 $\pm$ 2		6 $\pm$ 3		5 $\pm$ 3		4 $\pm$ 3	

Values represent mean $\pm$ S.D..

Table 5. Serum biochemical findings of F344 male rats fed diet containing *Gurcinia* extract for 26 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		7	7	7	7
TP	g/dl	6.95 ± 0.17	6.99 ± 0.13	7.06 ± 0.19	7.02 ± 0.14
Alb	g/dl	4.30 ± 0.15	4.38 ± 0.06	4.38 ± 0.14	4.31 ± 0.05
A/G		1.63 ± 0.08	1.68 ± 0.06	1.64 ± 0.08	1.60 ± 0.04
BUN	mg/dl	16.00 ± 1.67	15.63 ± 0.53	15.23 ± 0.49	15.33 ± 0.85
CRN	mg/dl	0.32 ± 0.02	0.31 ± 0.02	0.32 ± 0.02	0.30 ± 0.02
UA	mg/dl	0.89 ± 0.14	0.85 ± 0.12	0.82 ± 0.11	0.89 ± 0.19
Glc	mg/dl	121 ± 9	121 ± 10	119 ± 7	123 ± 8
NEFA	mEq/l	1.48 ± 0.84	1.62 ± 1.02	1.57 ± 0.75	1.72 ± 0.86
PL	mg/dl	132 ± 7	128 ± 4	133 ± 12	122 ± 9
TG	mg/dl	86 ± 15	81 ± 14	83 ± 17	71 ± 19
TCho	mg/dl	98 ± 13	98 ± 14	107 ± 22	97 ± 20
AlP	mU/ml	231 ± 22	226 ± 17	221 ± 11	228 ± 14
AIT	mU/ml	65 ± 14	71 ± 7	69 ± 7	58 ± 5
AsT	mU/ml	91 ± 15	96 ± 13	90 ± 10	92 ± 16
ChE	mU/ml	492 ± 63	460 ± 50	479 ± 67	488 ± 56
γ-GT	mU/ml	1.20 ± 0.53	1.17 ± 0.53	1.19 ± 0.57	1.05 ± 0.53
LAP	mU/ml	57 ± 3	57 ± 3	57 ± 2	58 ± 2
LDH	mU/ml	903 ± 738	731 ± 738	654 ± 438	1064 ± 1474
Ca	mg/dl	10.3 ± 0.2	10.3 ± 0.2	10.4 ± 0.2	10.2 ± 0.2
Mg	mg/dl	1.82 ± 0.20	1.80 ± 0.07	1.80 ± 0.08	1.80 ± 0.15
P	mg/dl	5.6 ± 0.4	5.5 ± 0.3	5.4 ± 0.4	5.6 ± 0.5
Na	mEq/l	140 ± 1	140 ± 1	140 ± 2	140 ± 1
K	mEq/l	5.0 ± 0.5	4.9 ± 0.3	4.8 ± 0.2	4.9 ± 0.4
Cl	mEq/l	96 ± 3	97 ± 2	96 ± 2	96 ± 3

Values represent mean ± S.D..

Table 6. Serum biochemical findings of F344 female rats fed diet containing *Gurcinia* extract for 26 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		7	7	7	7
TP	g/dl	7.17 ± 0.19	7.05 ± 0.36	7.06 ± 0.18	7.04 ± 0.39
Alb	g/dl	4.73 ± 0.16	4.63 ± 0.28	4.60 ± 0.14	4.55 ± 0.27
A/G		1.94 ± 0.08	1.91 ± 0.16	1.87 ± 0.07	1.83 ± 0.11
BUN	mg/dl	16.53 ± 1.73	18.25 ± 1.08	18.04 ± 1.54	18.01 ± 1.67
CRN	mg/dl	0.33 ± 0.03	0.32 ± 0.01	0.32 ± 0.02	0.32 ± 0.02
UA	mg/dl	0.91 ± 0.09	0.97 ± 0.12	0.83 ± 0.13	1.02 ± 0.21
Glc	mg/dl	105 ± 21	101 ± 5	100 ± 9	104 ± 8
NEFA	mEq/l	0.69 ± 0.06	0.72 ± 0.08	0.77 ± 0.14	0.74 ± 0.13
PL	mg/dl	198 ± 9	202 ± 23	197 ± 19	189 ± 20
TG	mg/dl	29 ± 8	29 ± 10	36 ± 21	39 ± 15
TCho	mg/dl	109 ± 19	107 ± 12	115 ± 34	93 ± 18
AIP	mU/ml	136 ± 11	144 ± 13	140 ± 13	140 ± 21
AIT	mU/ml	42 ± 3	43 ± 3	42 ± 5	43 ± 6
AsT	mU/ml	91 ± 8	100 ± 16	87 ± 9	102 ± 14
ChE	mU/ml	3159 ± 144	3051 ± 131	3056 ± 153	2929 ± 158 *
γ-GT	mU/ml	0.60 ± 0.42	0.53 ± 0.28	0.52 ± 0.36	0.58 ± 0.36
LAP	mU/ml	57 ± 3	56 ± 4	56 ± 2	57 ± 4
LDH	mU/ml	995 ± 586	1462 ± 756	902 ± 630	1618 ± 724
Ca	mg/dl	10.2 ± 0.3	10.2 ± 0.4	10.2 ± 0.3	10.1 ± 0.2
Mg	mg/dl	2.24 ± 0.11	2.34 ± 0.15	2.25 ± 0.06	2.25 ± 0.24
P	mg/dl	4.3 ± 0.8	4.6 ± 0.6	4.5 ± 0.6	4.4 ± 0.5
Na	mEq/l	141 ± 1	141 ± 1	140 ± 1	141 ± 1
K	mEq/l	4.3 ± 0.4	4.5 ± 0.3	4.3 ± 0.2	4.5 ± 0.4
Cl.	mEq/l	95 ± 3	96 ± 1	96 ± 2	95 ± 1

Values represent mean ± S.D.

* show significant difference from 0.0% groups at p<0.05.

Table 7. Serum biochemical findings of F344 male rats fed diet containing *Gurcinia* extract for 52 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		8	7	8	8
TP	g/dl	7.04 ± 0.19	7.00 ± 0.15	6.99 ± 0.28	6.81 ± 0.13
Alb	g/dl	4.03 ± 0.08	3.98 ± 0.12	4 ± 0.17	3.59 ± 0.87
A/G		1.34 ± 0.04	1.32 ± 0.06	1.34 ± 0.09	1.20 ± 0.38
BUN	mg/dl	16.99 ± 0.69	17.26 ± 0.74	17.47 ± 0.59	17.55 ± 1.37
CRN	mg/dl	0.32 ± 0.01	0.31 ± 0.02	0.32 ± 0.02	0.32 ± 0.02
UA	mg/dl	0.68 ± 0.12	0.63 ± 0.13	0.71 ± 0.18	0.86 ± 0.25
Glc	mg/dl	128 ± 4	124 ± 4	134 ± 15	138 ± 19
NEFA	mEq/l	0.59 ± 0.09	0.62 ± 0.07	0.57 ± 0.09	0.58 ± 0.14
PL	mg/dl	177 ± 11	178 ± 16	174 ± 34	156 ± 19
TG	mg/dl	128 ± 10	142 ± 24	117 ± 32	107 ± 40
TCho	mg/dl	125 ± 10	129 ± 16	127 ± 24	111 ± 16
AIP	mU/ml	358 ± 42	377 ± 34	376 ± 69	341 ± 55
AIT	mU/ml	113 ± 28	119 ± 28	115 ± 36	75 ± 14 *
AsT	mU/ml	118 ± 25	123 ± 20	127 ± 22	110 ± 30
ChE	mU/ml	729 ± 46	840 ± 89	789 ± 88	790 ± 71
γ-GT	mU/ml	3.39 ± 1.71	4.57 ± 1.63	4.88 ± 4.59	3.41 ± 2.19
LAP	mU/ml	55 ± 2	57 ± 2	57 ± 4	56 ± 2
LDH	mU/ml	858 ± 510	963 ± 673	989 ± 843	1289 ± 827
Ca	mg/dl	10.6 ± 0.1	10.5 ± 0.1	10.5 ± 0.3	10.3 ± 0.3 *
Mg	mg/dl	1.93 ± 0.10	1.97 ± 0.06	2.00 ± 0.12	2.02 ± 0.13
P	mg/dl	4.9 ± 0.3	4.9 ± 0.3	4.9 ± 0.4	5.2 ± 0.5
Na	mEq/l	141 ± 1	141 ± 1	141 ± 1	141 ± 1
K	mEq/l	4.3 ± 0.3	4.3 ± 0.4	4.4 ± 0.3	4.6 ± 0.5
Cl	mEq/l	95 ± 4	95 ± 5	93 ± 3	97 ± 5

Values represent mean ± S.D.

* show significant difference from 0.0% groups at p<0.05.

Table 8. Serum biochemical findings of F344 female rats fed diet containing *Gurcinia* extract for 52 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		8	8	8	8
TP	g/dl	7.36 ± 0.32	7.34 ± 0.38	7.38 ± 0.31	7.23 ± 0.27
Alb	g/dl	4.62 ± 0.20	4.65 ± 0.39	4.74 ± 0.28	4.49 ± 0.29
A/G		1.70 ± 0.09	1.69 ± 0.23	1.79 ± 0.12	1.64 ± 0.15
BUN	mg/dl	17.40 ± 1.69	18.14 ± 1.01	18.58 ± 1.70	16.17 ± 1.34
CRN	mg/dl	0.33 ± 0.02	0.32 ± 0.02	0.32 ± 0.04	0.30 ± 0.01
UA	mg/dl	0.60 ± 0.14	0.72 ± 0.16	0.76 ± 0.57	0.50 ± 0.12
Glc	mg/dl	104 ± 6	108 ± 7	115 ± 8	103 ± 7
NEFA	mEq/l	0.76 ± 0.12	0.83 ± 0.18	0.80 ± 0.21	0.72 ± 0.09
PL	mg/dl	243 ± 14	272 ± 51	248 ± 24	241 ± 20
TG	mg/dl	99 ± 33	147 ± 77	106 ± 36	94 ± 39
TCho	mg/dl	141 ± 11	157 ± 31	141 ± 14	139 ± 13
AlP	mU/ml	137 ± 21	163 ± 94	139 ± 32	122 ± 18
AlT	mU/ml	42 ± 4	56 ± 39	46 ± 12	37 ± 6
AsT	mU/ml	74 ± 12	110 ± 82	93 ± 30	73 ± 7
ChE	mU/ml	3564 ± 264	3325 ± 221	3254 ± 192	3419 ± 175
γ-GT	mU/ml	0.45 ± 0.47	2.93 ± 5.63	0.64 ± 0.48	0.69 ± 0.95
LAP	mU/ml	49 ± 3	50 ± 3	49 ± 3	50 ± 3
LDH	mU/ml	574 ± 257	901 ± 437	537 ± 358	595 ± 363
Ca	mg/dl	10.7 ± 0.5	10.7 ± 0.6	10.8 ± 0.5	10.7 ± 0.5
Mg	mg/dl	2.21 ± 0.28	2.13 ± 0.12	2.09 ± 0.30	1.98 ± 0.13
P	mg/dl	3.3 ± 0.6	3.3 ± 0.8	3.6 ± 0.4	3.5 ± 0.5
Na	mEq/l	141 ± 1	140 ± 1	140 ± 1	141 ± 1
K	mEq/l	4.1 ± 0.3	4.2 ± 0.2	4.1 ± 0.4	4.0 ± 0.3
Cl	mEq/l	99 ± 2	98 ± 2	99 ± 2	98 ± 2

Values represent mean ± S.D..

* show significant difference from 0.0% groups at p<0.05.

Table 9. Organ weights of F344 male rats fed diet containing *Gurcinia* extract for 26 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		7	7	7	7
Absolute					
Body weight	g	367.9 ± 14.36	358.1 ± 12.93	364.3 ± 12.69	353.3 ± 5.88
Brain	g	1.99 ± 0.06	1.97 ± 0.02	1.95 ± 0.04	1.94 ± 0.03
Heart	g	1.05 ± 0.07	0.97 ± 0.03 *	1.03 ± 0.06	1.01 ± 0.04
Lung	g	1.10 ± 0.07	1.11 ± 0.04	1.06 ± 0.07	1.07 ± 0.09
Liver	g	8.26 ± 0.61	8.05 ± 0.66	7.98 ± 0.40	7.89 ± 0.20
Kidney	g	2.080 ± 0.11	2.10 ± 0.11	2.08 ± 0.11	2.08 ± 0.07
Spleen	g	0.65 ± 0.03	0.64 ± 0.02	0.67 ± 0.03	0.64 ± 0.02
Testes	g	3.17 ± 0.19	3.08 ± 0.10	3.15 ± 0.10	1.49 ± 0.86 **
Adrenal	mg	35 ± 3	35 ± 4	37 ± 4	33 ± 5
Relative					
Brain	g%	0.54 ± 0.02	0.55 ± 0.02	0.54 ± 0.02	0.55 ± 0.01
Heart	g%	0.29 ± 0.01	0.27 ± 0.01	0.28 ± 0.01	0.28 ± 0.01
Lung	g%	0.30 ± 0.02	0.31 ± 0.02	0.29 ± 0.02	0.30 ± 0.03
Liver	g%	2.24 ± 0.10	2.24 ± 0.11	2.19 ± 0.10	2.23 ± 0.05
Kidney	g%	0.57 ± 0.02	0.59 ± 0.02	0.57 ± 0.03	0.590 ± 0.02
Spleen	g%	0.18 ± 0.01	0.18 ± 0.00	0.18 ± 0.01	0.18 ± 0.01
Testes	g%	0.86 ± 0.04	0.86 ± 0.03	0.86 ± 0.04	0.43 ± 0.25 *
Adrenal	mg%	9.6 ± 0.8	9.9 ± 1.0	10.0 ± 0.7	9.3 ± 1.4

Values represent mean ± S.D.

* and ** show significant difference from 0.0% groups at p<0.05 and p<0.01, respectively.

Table 10. Organ weights of F344 female rats fed diet containing *Gurcinia* extract for 26 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		7	7	7	7
Absolute					
Body weight	g	184.1 ± 10.48	180.6 ± 7.91	182.8 ± 7.83	184.1 ± 10.20
Brain	g	1.83 ± 0.02	1.78 ± 0.05	1.82 ± 0.06	1.78 ± 0.04
Heart	g	0.63 ± 0.04	0.60 ± 0.04	0.63 ± 0.05	0.60 ± 0.04
Lung	g	0.75 ± 0.05	0.74 ± 0.04	0.77 ± 0.07	0.73 ± 0.05
Liver	g	4.09 ± 0.26	3.98 ± 0.41	4.05 ± 0.24	4.01 ± 0.28
Kidney	g	1.17 ± 0.09	1.16 ± 0.04	1.23 ± 0.06	1.21 ± 0.07
Spleen	g	0.41 ± 0.03	0.38 ± 0.02	0.40 ± 0.03	0.38 ± 0.02
Ovary	g	57 ± 4.0	52 ± 5.0	58 ± 9.0	54 ± 5.0
Adrenal	mg	42 ± 3.0	38 ± 3.0	42 ± 4.0	42 ± 4.0
Relative					
Brain	g%	0.99 ± 0.06	0.99 ± 0.05	1.02 ± 0.04	0.99 ± 0.07
Heart	g%	0.34 ± 0.02	0.34 ± 0.03	0.32 ± 0.01	0.33 ± 0.02
Lung	g%	0.41 ± 0.02	0.41 ± 0.02	0.43 ± 0.04	0.40 ± 0.03
Liver	g%	2.22 ± 0.06	2.20 ± 0.16	2.26 ± 0.12	2.22 ± 0.09
Kidney	g%	0.64 ± 0.05	0.64 ± 0.02	0.69 ± 0.02	* 0.67 ± 0.02
Spleen	g%	0.22 ± 0.01	0.21 ± 0.01	0.22 ± 0.01	0.21 ± 0.02
Ovary	g%	31 ± 2.0	29 ± 2.0	33 ± 4.0	30 ± 3.0
Adrenal	mg%	23.1 ± 1.6	21.2 ± 1.9	23.3 ± 2.0	23.1 ± 2.3

Values represent mean ± S.D.

* show significant difference from 0.0% groups at p<0.05.

Table 11. Organ weights of F344 male rats fed diet containing *Gurcinia* extract for 52 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		8	8	8	8
Absolute					
Body weight	g	425.6 ± 26.30	409.4 ± 19.86	416.8 ± 21.70	399.5 ± 18.64
Brain	g	2.01 ± 0.06	2.00 ± 0.10	2.03 ± 0.03	2.02 ± 0.05
Heart	g	1.09 ± 0.03	1.04 ± 0.05	1.07 ± 0.05	1.03 ± 0.07
Lung	g	1.14 ± 0.06	1.13 ± 0.03	1.15 ± 0.09	1.14 ± 0.15
Liver	g	10.43 ± 0.87	9.70 ± 0.67	10.17 ± 0.91	9.33 ± 0.81 *
Kidney	g	2.33 ± 0.13	2.29 ± 0.12	2.40 ± 0.16	2.32 ± 0.09
Spleen	g	0.72 ± 0.05	0.71 ± 0.04	0.72 ± 0.07	0.68 ± 0.05
Testes	g	3.30 ± 0.17	3.04 ± 0.73	3.06 ± 0.32	1.48 ± 0.65 **
Prostate	g	0.63 ± 0.29	0.54 ± 0.27	0.65 ± 0.29	0.55 ± 0.18
Seminal vesicle	g	1.61 ± 0.19	1.47 ± 0.25	1.37 ± 0.3	1.40 ± 0.35
Epididymis	g	1.05 ± 0.12	1.00 ± 0.14	1.06 ± 0.13	0.58 ± 0.15 **
Adrenal	mg	39 ± 4	40 ± 4	39 ± 3	38 ± 4
Relative					
Brain	g%	0.47 ± 0.06	0.49 ± 0.03	0.49 ± 0.02	0.51 ± 0.05
Heart	g%	0.26 ± 0.02	0.25 ± 0.01	0.26 ± 0.01	0.26 ± 0.02
Lung	g%	0.27 ± 0.01	0.28 ± 0.01	0.28 ± 0.02	0.29 ± 0.04
Liver	g%	2.45 ± 0.14	2.37 ± 0.09	2.44 ± 0.19	2.34 ± 0.22
Kidney	g%	0.55 ± 0.02	0.56 ± 0.03	0.57 ± 0.02	0.58 ± 0.03 *
Spleen	g%	0.17 ± 0.01	0.17 ± 0.01	0.17 ± 0.01	0.17 ± 0.01
Testes	g%	0.78 ± 0.04	0.74 ± 0.18	0.74 ± 0.08	0.37 ± 0.16 **
Prostate	g%	0.15 ± 0.07	0.13 ± 0.06	0.15 ± 0.07	0.14 ± 0.04
Seminal vesicle	g%	0.38 ± 0.06	0.36 ± 0.06	0.33 ± 0.08	0.35 ± 0.08
Epididymis	g%	0.25 ± 0.04	0.24 ± 0.04	0.26 ± 0.03	0.15 ± 0.04 **
Adrenal	mg%	9.1 ± 1.1	9.7 ± 0.9	9.3 ± 1.0	9.5 ± 1.0

Values represent mean ± S.D.

* and ** show significant difference from 0.0% groups at p<0.05 and p<0.01, respectively.

Table 12. Organ weights of F344 female rats fed diet containing *Gurcinia* extract for 52 weeks

Group		0.0%	0.2%	1.0%	5.0%
No. of animals		8	8	8	8
Absolute					
Body weight	g	214.3 ± 12.56	206.1 ± 14.33	202.6 ± 6.89	199.5 ± 7.13 *
Brain	g	1.87 ± 0.06	1.83 ± 0.03	1.84 ± 0.06	1.88 ± 0.05
Heart	g	0.69 ± 0.05	0.69 ± 0.03	0.67 ± 0.03	0.68 ± 0.03
Lung	g	0.85 ± 0.03	0.78 ± 0.03	0.79 ± 0.05	0.80 ± 0.04 *
Liver	g	5.17 ± 0.47	5.02 ± 0.28	4.89 ± 0.29	4.61 ± 0.20 **
Kidney	g	1.42 ± 0.08	1.35 ± 0.06	1.36 ± 0.08	1.36 ± 0.06
Spleen	g	0.45 ± 0.03	0.42 ± 0.02	0.41 ± 0.04 *	0.41 ± 0.02 *
Ovary	g	60 ± 8	50 ± 13	50 ± 9	51 ± 8
Adrenal	mg	47 ± 6	45 ± 6	43 ± 5	41 ± 3
Relative					
Brain	g%	0.88 ± 0.04	0.89 ± 0.07	0.91 ± 0.04	0.94 ± 0.04 *
Heart	g%	0.32 ± 0.01	0.34 ± 0.02	0.33 ± 0.02	0.34 ± 0.02
Lung	g%	0.40 ± 0.02	0.38 ± 0.03	0.39 ± 0.02	0.40 ± 0.02
Liver	g%	2.41 ± 0.20	2.44 ± 0.16	2.41 ± 0.14	2.31 ± 0.07
Kidney	g%	0.66 ± 0.04	0.66 ± 0.05	0.67 ± 0.04	0.68 ± 0.02
Spleen	g%	0.21 ± 0.02	0.20 ± 0.01	0.20 ± 0.02	0.21 ± 0.01
Ovary	g%	28 ± 4	24 ± 6	25 ± 5	25 ± 4
Adrenal	mg%	22.0 ± 3.6	21.8 ± 3.0	21.3 ± 2.6	20.8 ± 1.4

Values represent mean ± S.D.

* and ** show significant difference from 0.0% groups at $p < 0.05$ and $p < 0.01$, respectively.

Table 13. Gross Findings in Rats Fed Diet Containing Gurcinia Extract for 52 weeks

Male		26 Week				52 Week			
	Group	0 %	0.2 %	1.0 %	5.0 %	0 %	0.2 %	1.0 %	5.0 %
Number of animals examined		7	7	7	7	8	8	8	8
Organ / Finding									
Lung									
	White mottled	0 ^{a)}	0	0	0	0	0	0	1
	Nodule	0	0	0	0	0	0	0	1
Testis									
	Edema	0	0	0	1	0	0	0	1
	Atrophy with Edema	0	0	0	6	0	1 ^{b)}	1 ^{b)}	7
Female		26 Week				52 Week			
	Group	0 %	0.2 %	1.0 %	5.0 %	0 %	0.2 %	1.0 %	5.0 %
Number of animals examined		7	7	7	7	8	8	8	8
Organ / Finding									
Lung									
	White mottled	0	0	0	0	0	0	0	3
	Nodule	0	0	0	0	0	0	0	2
Pituitary gland									
	Hematoma	0	0	0	0	1	0	1	0
Uterus									
	Hydrometra					0	1	1	0

a) Number of animals with lesion

b) Unilateral lesion

Table 14. Histopathological findings in male rats fed diet containing *Gurcinia* extract for 52 weeks

Organ / Finding	Group	No. of animals examined	26 Week				52 Week			
			0 %	0.2 %	1.0 %	5.0 %	0 %	0.2 %	1.0 %	5.0 %
			7	7	7	7	8	8	8	8
Testis										
Atrophy of seminiferous tubulus	—	3 ^{a)}	6	1	0		1	3	7	0
	±	2	1	6	1		7	4	0	0
	+	2	0	0	0		0	0	0	1
	++	0	0	0	1		0	0	0	0
	+++	0	0	0	5		0	1 ^{b)}	1 ^{b)}	7
Edema of intertubular space	—	2	3	0	0		1	1	1	0
	±	2	3	5	1		6	6	5	0
	+	3	1	2	0		1	0	1	2
	++	0	0	0	6		0	0	0	0
	+++	0	0	0	0		0	1 ^{b)}	1 ^{b)}	6
Degeneration of germ cell ^{c)} Spermatid	—	0	1	0	5		2	4	3	6
	±	7	6	6	1		6	4	5	1
	+	0	0	1	0		0	0	0	0
	+++	0	0	0	0		0	0	0	1
Spermatocyte	—	0	2	1	5		2	5	3	6
	±	7	5	6	1		6	3	5	1
	+	0	0	0	1		0	0	0	0
	+++	0	0	0	0		0	0	0	1
Disappearance of germ cell	—	2	3	1	0		2	3	0	0
	±	5	4	6	1		5	4	7	1
	+	0	0	0	0		1	0	0	0
	++	0	0	0	1		0	0	0	0
	+++	0	0	0	5		0	1 ^{b)}	1 ^{b)}	7
Vacuolar degeneration of Sertoli cells	—	3	0	0	0		4	4	3	1
	±	4	7	5	1		4	3	4	2 ^{d)}
	+	0	0	2	5		0	1 ^{b)}	1 ^{b)}	4 ^{d)}
	++	0	0	0	1		0	0	0	1 ^{d)}
Proliferation of Leydig cell	—	5	7	6	1		6	7	7	4
	±	2	0	1	1		2	1	1	2
	+	0	0	0	3		0	0	0	2
	++	0	0	0	2		0	0	0	0
Calcification of seminiferous tubulu	—	7	7	7	6		8	8	8	7
	±	0	0	0	1		0	0	0	1
Interstitial cell tumor			0	0	0		0	0	1	0
Epididymis										
Sperm contents	++	7	7	7	1		6	6	7	1
	+	0	0	0	1		2	1	1	0
	—	0	0	0	5		0	1 ^{b)}	0	7
Cell debris	—	1	1	0	3		0	3	0	7
	±	6	6	7	0		8	5	8	1
	+	0	0	0	3		0	0	0	0
	++	0	0	0	1		0	0	0	0
Others	—	5	3	3	1		7	7	4	5
	±	2	3	3	0		1	1	4	2
	+	0	1	1	3		0	0	0	1
	++	0	0	0	3		0	0	0	0

±: slight, +: mild, ++: moderate, +++: severe.

a) Number of animals with lesion.

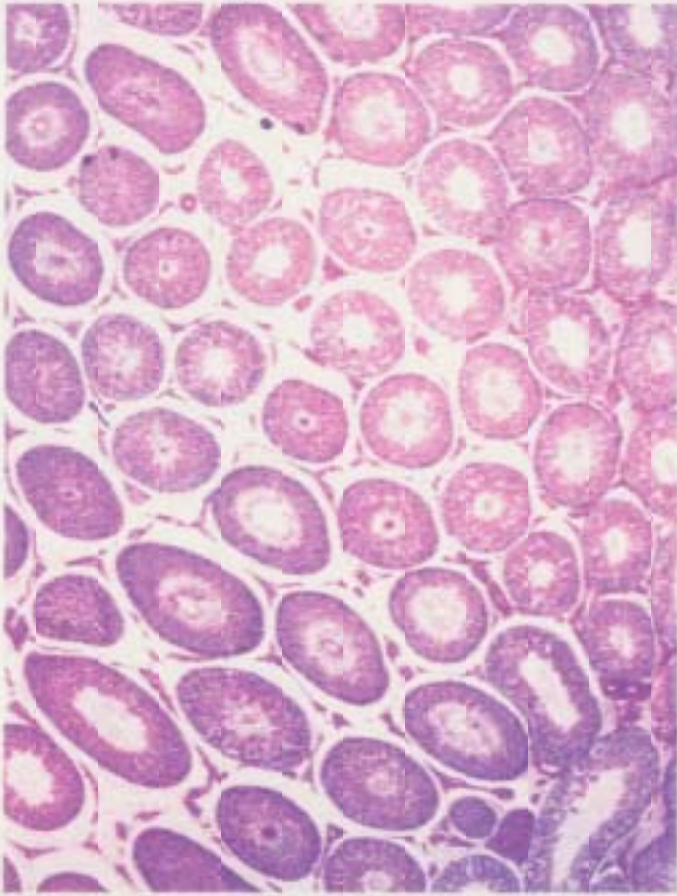
b) Unilateral lesion.

c) Degenerative debris in tubulus.

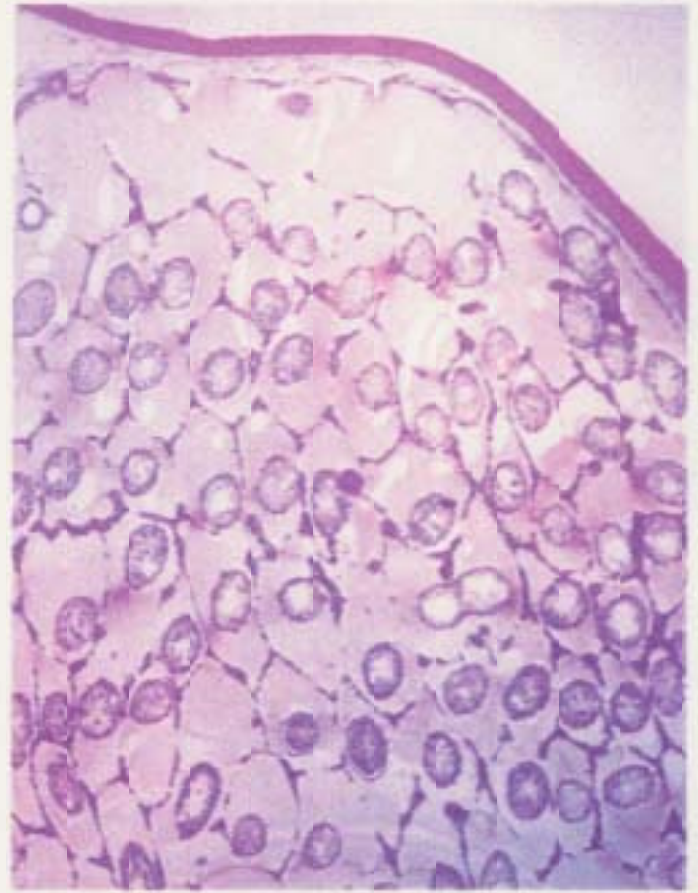
d) Sertoli only tubulus.

Photograph

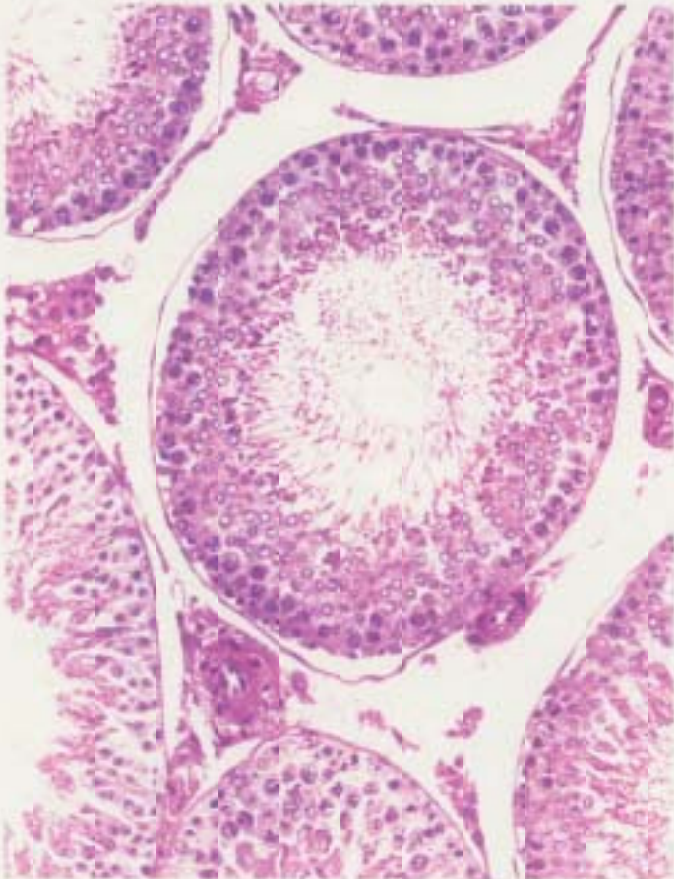
1. 0%群 No. 9 精巢 ×40
正常



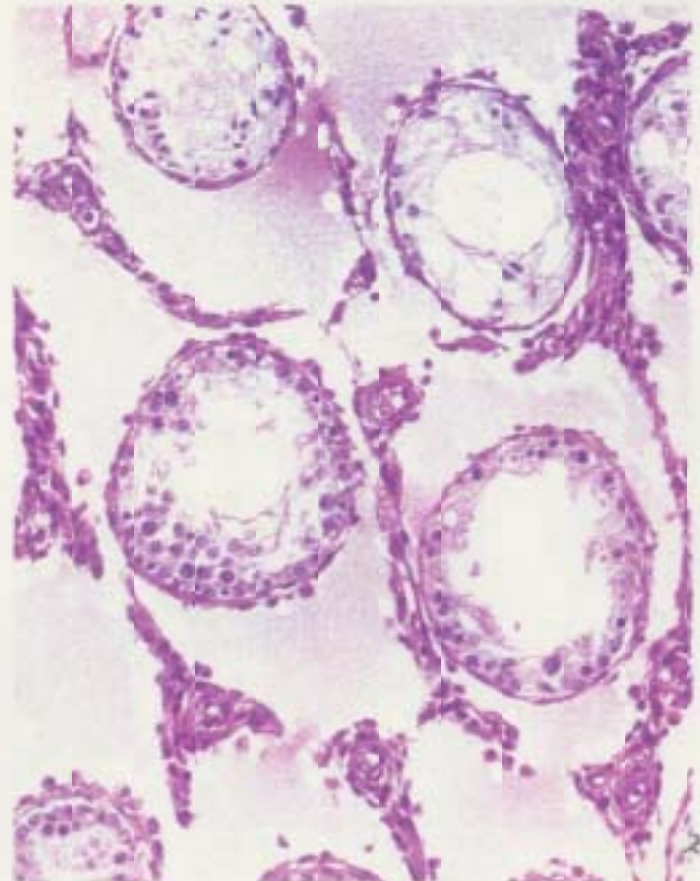
2. 5%群 No. 51 精巢 ×40
精細管の萎縮、生殖細胞の消失



3. 0%群 No. 9 精巢 ×200
正常



4. 5%群 No. 51 精巢 ×200
精細管の萎縮、生殖細胞の消失
ライディッヒ細胞の増殖



写真説明：精巣で観察された精細管の光学顕微鏡所見。

(ブアン固定、パラフィン包埋切片。ヘマトキシリン・エオジン二重染色。)

1. 実験 52 週目の非投与対照群 (Fischer 344 Crj/SPF) の精巣所見。原倍率 ($\times 40$)。

精細管の横断断面では、種々の高さの生殖細胞層を示し、精細管内腔には成熟精子もしくは凝集性の細胞塊を貯える。精細管相互の間隙にはライディッヒ細胞巣と血管の介在、ならびに水腫を認める。

2. 実験 52 週目のガルシニア 5%混餌投与群 (Fischer 344 Crj/SPF) の精巣所見。

原倍率 ($\times 40$)。

精細管の横断断面 (1. と同率の拡大写真) では、1. に比べて 53.6% の径の萎縮が認められ、管腔に生殖細胞は殆ど認められず、消失している。また、間質腔は、精細管の萎縮に伴って拡大し、これを水腫様物が充たしている他、対照群と同程度もしくはやや増量傾向のライディッヒ細胞巣と思われる細胞塊の分布が認められる。

3. 実験 52 週目の非投与対照群 (Fischer 344 Crj/SPF) の精巣所見、1. の拡大図。

原倍率 ($\times 200$)。

精細管には基底膜上に沿って、精祖細胞から精子細胞に至る各分化段階の生殖細胞の比較的整然とした配列が認められ、中心管腔には成熟精子が観察される。また、間質腔には、血管とライディッヒ細胞巣の小集塊が認められる。

4. 実験 52 週目のガルシニア 5%混餌投与群 (Fischer 344 Crj/SPF) の精巣所見、

2. の拡大図。原倍率 ($\times 200$)。

各々の精細管の横断断面は、顕著な萎縮を示し、基底膜の肥厚傾向を認める。精細管内に生殖細胞は殆ど認められないか、もしくは薄層の精祖細胞層の遺残を見るのみで、主たる構成要素は、セルトリ細胞に置換された状態になっている。分化型の生殖細胞は全く認められない。

また、精細管と精細管の間腔は、無定型の水様物を貯え、水腫様所見を示し、また間質のライディッヒ細胞の小増殖巣を認める。