

P - クロロニトロベンゼンのラット及びマウスを用いた  
経口(混餌)によるがん原性試験結果報告書

## TABLES

中央労働災害防止協会  
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TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE FEED (OR GAVAGE) STUDIES OF p-CHLORONITROBENZENE

Acute Studies	Two-Week Studies	Thirteen-Week Studies	Two-Year Studies
<Method of Administration>			
Gavage	Feed	Feed	Feed
<Number of Groups>			
Male 6, Female 6	Male 6, Female 6	Male 6, Female 6	Male 4, Female 4
<Size of Study Groups>			
10 males and 10 females of each groups	10 males and 10 females of each groups	10 males and 10 females of each groups	50 males and 50 females of each groups
<Animals>			
Strain and Species			
F344/DuCrj (Fischer) rat	F344/DuCrj (Fischer) rat	F344/DuCrj (Fischer) rat	F344/DuCrj (Fischer) rat
Crj:BDF <sub>1</sub> mouse	Crj:BDF <sub>1</sub> mouse	Crj:BDF <sub>1</sub> mouse	Crj:BDF <sub>1</sub> mouse
Animal Source			
Charles River Japan, Inc.	Charles River Japan, Inc.	Charles River Japan, Inc.	Charles River Japan, Inc.
During of Time Held Before Study			
1 wk	2 wk	2 wk	2 wk
Age When Placed on Study			
6 wk	6 wk	6 wk	6 wk
Age When Killed			
8 wk	8 wk	20 wk	111 wk
<Doses>			
Rat--0, 400, 600, 900, 1350, or 2030 mg/kg; Mouse--610, 977, 1560, 2500, or 4000mg/kg	Rat--0, 60, 180, 540, 1620, or 4860ppm ; Mouse--111, 333, 1000, 3000, or 9000ppm	Rat--0, 24, 7, 74, 1, 222, 667, or 2000ppm; Mouse--74, 1, 222, 667, 2000, or 6000ppm	Rat--0, 40, 200, or 1000ppm; Mouse--0, 125, 500, 2000ppm
<Duration of Dosing>			
Single	7d/wk for 2wk	7d/wk for 13wk	7d/wk for 104wk
<Animal Maintenance>			
Feed			
CRF-1 (pellet) (Oriental Yeast Co., Ltd.)	CRF-1 (mash) (Oriental Yeast Co., Ltd.)	Same as two-week studies	Same as two-week studies
Sterilized by $\gamma$ -ray	Sterilized by $\gamma$ -ray		
Available ad libitum	Available ad libitum		
Water			
Sterilized by ultraviolet rays	Same as acute studies	Same as acute studies	Same as acute studies
Automatic watering system			
Available ad libitum			
Animals per Cage			
Single (stainless steel wire)	Single (stainless steel wire)	Single (stainless steel wire)	Single (stainless steel wire)
Animal Room Environment			
Barrier system	Same as acute studies	Same as acute studies	Same as acute studies
Temperature:24±1°C			
Humidity :50±5%			
Fluorescent light 12h/d			
15-17 room air changes /h			
<Type and Frequency of Observation>			
Clinical Sign			
Observed 2h after 0~1, 1~2, 2~4, 4~6h administration/ observed 1×d thereafter	Observed 2×d	Observed 2×d	Observed 2×d
Body Weight			
Weighed 0-0, 1-1, 1-2, 1-4, 1-7, 2-3, and 2-7 (wk-d)	Weighed 0-0, 1-1, 1-2, 1-4, 1-7, 2-3, and 2-7 (wk-d)	Weighed 1×wk for 13wk	Weighed 1×wk for 14wk Weighed 1×2wk thereafter
<Food Consumption>			
None	Weighed 1×wk for 2wk	Weighed 1×wk for 13wk	Weighed 1×wk for 14wk Weighed 1×2wk thereafter

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE FEED (OR GAVAGE) STUDIES OF p-CHLORONITROBENZENE  
(Continued)

Acute Studies	Two-Week Studies	Thirteen-Week Studies	Two-Year Studies
<b>&lt;Hematology&gt;</b> None	None	Red blood cell (RBC), Hemoglobin, Hematocrit, Mean corpuscular volume (MCV), Platelet, White blood cell (WBC), Differential WBC.	Same as thirteen-week studies
<b>&lt;Blood Biochemistry&gt;</b> None	None	Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride<rat only>, Glutamic oxaloacetic transaminase (GOT), Glutamic pyruvic transaminase (GPT), Lactate dehydrogenase (LDH), Alkaline phosphatase (ALP), Leucine aminopeptidase (LAP), Creatine phosphokinase (CPK) <rat only>, Urea nitrogen, Creatinine<rat only>, Sodium, Potassium, Chloride, Calcium<rat only>, Inorganic phosphorus<rat only>.	Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride, Phospholipid, Glutamic oxaloacetic transaminase (GOT), Glutamic pyruvic transaminase (GPT), Lactate dehydrogenase (LDH), Alkaline phosphatase (ALP), Leucine aminopeptidase (LAP), $\gamma$ -Glutamyl transpeptidase (G-GTP)<rat only>, Creatine phosphokinase (CPK). Urea nitrogen, Creatinine<rat only>, Sodium, Potassium, Chloride, Calcium, Inorganic phosphorus.
<b>&lt;Urinalysis&gt;</b> None	None	pH, Protein, Glucose, Ketone body, Bilirubin<rat only>, Occult blood, Urobilinogen.	Same as thirteen-week studies
<b>&lt;Necropsy&gt;</b> Necropsy performed on all animals.	Same as acute studies	Same as acute studies	Same as acute studies
<b>&lt;Organ Weight&gt;</b> None	None	Organ weight measurement performed on schedule sacrificed animals. The following organs were weighed : brain, lung, liver, spleen, heart, kidney, adrenal, testis, ovary, thymus.	Same as thirteen-week studies The following organs were weighed : brain, lung, liver, spleen, heart, kidney, adrenal, testis, ovary.
<b>&lt;Histopathologic Examination&gt;</b> Histopathologic examination performed on at least two animals per sex per group.	Same as acute studies	Histopathologic examination performed on all animals.	Same as thirteen-week studies
The following organs were examined: lung, bone marrow, lymph node, thymus, spleen, heart, stomach, small intes, large intes, liver, pancreas, kidney, pituitary, adrenal, testis, ovary, brain.	Same as acute studies	The following organs were examined : skin, nasal cavit, trachea, lung, bone marrow, lymph node, thymus, spleen, heart, tongue, salivary gl, esophagus, stomach, small intes, large intes, liver, pancreas, kidney, urin bladd, pituitary, thyroid, adrenal, testis, epidymis, semin ves, prostate, ovary, uterus, vagina, mammary gl, brain, spinal cord, periph nerv, eye, Harder gl, muscle, bone.	Same as thirteen-week studies

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (ACUTE STUDIES)

Week-Day on Study	Control			400 mg/kg			600 mg/kg			900 mg/kg			1350 mg/kg			2030 mg/kg		
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt. <10>	% of cont. <10>	No.of Surviv. <10>													
0-0	109 (10)	10/10	109 (10)	100	10/10	109 (10)	100	10/10	109 (10)	100	10/10	109 (10)	100	10/10	109 (10)	100	10/10	
1-1	122 (10)	10/10	107 (10)	88	10/10	102 (10)	84	10/10	99 (10)	81	10/10	98 (10)	80	8/10	97 (10)	80	5/10	
1-2	129 (10)	10/10	112 (10)	87	10/10	100 (10)	78	10/10	90 (10)	70	9/10	92 (8)	71	5/10	94 (5)	73	0/10	
1-4	141 (10)	10/10	126 (10)	89	10/10	114 (10)	81	10/10	86 (3)	61	2/10	89 (2)	63	1/10	- (-)	-	0/10	
1-7	160 (10)	10/10	146 (10)	91	10/10	135 (10)	84	10/10	108 (2)	68	2/10	111 (1)	69	1/10	- (-)	-	0/10	
2-3	179 (10)	10/10	168 (10)	94	10/10	159 (10)	89	10/10	133 (2)	74	2/10	138 (1)	77	1/10	- (-)	-	0/10	
2-7	202 (10)	10/10	196 (10)	97	10/10	188 (10)	93	10/10	165 (2)	82	2/10	175 (1)	87	1/10	- (-)	-	0/10	

&lt; &gt;:No.of effective animals, ( ) : No.of measured animals

Au.Wt.: g

TABLE 3 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (ACUTE STUDIES)

Week-Day on Study	Control			400 mg/kg			600 mg/kg			900 mg/kg			1350 mg/kg			2030 mg/kg		
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt. <10>	% of cont. <10>	No.of Surviv. <10>													
0-0	84 (10)	10/10	84 (10)	100	10/10	84 (10)	100	10/10	84 (10)	100	10/10	84 (10)	100	10/10	84 (10)	100	10/10	
1-1	92 (10)	10/10	83 (10)	90	10/10	80 (10)	87	10/10	77 (10)	84	10/10	77 (10)	84	6/10	76 (10)	83	5/10	
1-2	95 (10)	10/10	86 (10)	91	10/10	80 (10)	84	10/10	73 (10)	77	9/10	73 (6)	77	0/10	74 (5)	78	1/10	
1-4	100 (10)	10/10	95 (10)	95	10/10	91 (10)	91	10/10	73 (4)	73	2/10	- (-)	-	0/10	- (-)	-	0/10	
1-7	111 (10)	10/10	106 (10)	95	10/10	104 (10)	94	10/10	92 (2)	83	2/10	- (-)	-	0/10	- (-)	-	0/10	
2-3	122 (10)	10/10	120 (10)	98	10/10	120 (10)	98	10/10	112 (2)	92	2/10	- (-)	-	0/10	- (-)	-	0/10	
2-7	133 (10)	10/10	134 (10)	101	10/10	135 (10)	102	10/10	134 (2)	101	2/10	- (-)	-	0/10	- (-)	-	0/10	

&lt; &gt;:No.of effective animals, ( ) : No.of measured animals

Au.Wt.: g

TABLE 4 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control		60 ppm			180 ppm			540 ppm			1620 ppm			4860 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont.	No.of Surviv. <10>												
0-0	136 (10)	10/10	136 (10)	100	10/10	136 (10)	100	10/10	136 (10)	100	10/10	136 (10)	100	10/10	136 (10)	100	10/10
1-1	142 (10)	10/10	142 (10)	100	10/10	141 (10)	99	10/10	139 (10)	98	10/10	133 (10)	94	10/10	125 (10)	88	10/10
1-2	147 (10)	10/10	148 (10)	101	10/10	146 (10)	99	10/10	145 (10)	99	10/10	137 (10)	93	10/10	123 (10)	84	10/10
1-4	156 (10)	10/10	158 (10)	101	10/10	157 (10)	101	10/10	154 (10)	99	10/10	144 (10)	92	10/10	120 (10)	77	10/10
1-7	172 (10)	10/10	173 (10)	101	10/10	173 (10)	101	10/10	169 (10)	98	10/10	157 (10)	91	10/10	117 (10)	68	10/10
2-3	180 (10)	10/10	189 (10)	100	10/10	190 (10)	101	10/10	186 (10)	98	10/10	172 (10)	91	10/10	110 (10)	58	10/10
2-7	208 (10)	10/10	209 (10)	100	10/10	210 (10)	101	10/10	206 (10)	99	10/10	191 (10)	92	10/10	104 (10)	50	10/10

<>;No.of effective animals, ( ) : No.of measured animals Au.Wt.: g

TABLE 5 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control		60 ppm			180 ppm			540 ppm			1620 ppm			4860 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont.	No.of Surviv. <10>												
0-0	104 (10)	10/10	104 (10)	100	10/10	104 (10)	100	10/10	104 (10)	100	10/10	104 (10)	100	10/10	104 (10)	100	10/10
1-1	107 (10)	10/10	107 (10)	100	10/10	106 (10)	99	10/10	104 (10)	97	10/10	100 (10)	93	10/10	96 (10)	90	10/10
1-2	109 (10)	10/10	109 (10)	100	10/10	98 (10)	90	10/10	108 (10)	99	10/10	101 (10)	93	10/10	95 (10)	87	10/10
1-4	113 (10)	10/10	115 (10)	102	10/10	112 (10)	99	10/10	111 (10)	98	10/10	104 (10)	92	10/10	91 (10)	81	10/10
1-7	120 (10)	10/10	122 (10)	102	10/10	118 (10)	98	10/10	118 (10)	98	10/10	110 (10)	92	10/10	86 (10)	72	10/10
2-3	130 (10)	10/10	131 (10)	101	10/10	126 (10)	97	10/10	127 (10)	98	10/10	117 (10)	90	10/10	77 (10)	59	10/10
2-7	136 (10)	10/10	138 (10)	101	10/10	134 (10)	99	10/10	135 (10)	99	10/10	129 (10)	95	10/10	72 (7)	53	7/10

<>;No.of effective animals, ( ) : No.of measured animals Au.Wt.: g

TABLE 6 FOOD CONSUMPTION IN MALE RAT (TWO-WEEK STUDIES)

Control				60 ppm				180 ppm				540 ppm				1620 ppm				4860 ppm			
Week-Day on Study	Au.FC.	No.of <10>	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.															
1-7	14.2 (10)	10/10	14.7 (10)	104	10/10	14.7 (10)	104	10/10	13.5 (10)	95	10/10	10.6 (10)	75	10/10	6.4 (10)	45	10/10						
2-7	15.2 (10)	10/10	15.7 (10)	103	10/10	16.0 (10)	105	10/10	15.8 (10)	104	10/10	14.4 (10)	95	10/10	11.5 (10)	76	10/10						

&lt; &gt;:No.of effective animals,( ) :No.of measured animals Au.FC.:g

TABLE 7 FOOD CONSUMPTION IN FEMALE RAT (TWO-WEEK STUDIES)

Control				60 ppm				180 ppm				540 ppm				1620 ppm				4860 ppm			
Week-Day on Study	Au.FC.	No.of <10>	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.												
1-7	10.6 (10)	10/10	11.1 (10)	105	10/10	10.5 (10)	99	10/10	9.9 (10)	93	10/10	7.4 (10)	70	10/10	5.6 (10)	53	10/10						
2-7	11.2 (10)	10/10	11.6 (10)	104	10/10	11.1 (10)	99	10/10	11.5 (10)	103	10/10	11.0 (10)	98	10/10	11.1 (7)	90	7/10						

&lt; &gt;:No.of effective animals,( ) :No.of measured animals Au.FC.:g

STUDY NO. 000658

TABLE 8 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control				24.7 ppm				74.1 ppm				222 ppm				667 ppm				2000 ppm			
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv. <10>	Au.Wt. <10>	% of cont. <10>	No.of Surviv. <10>																
0-0	120 (10)	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10	
1-7	163 (10)	10/10	164 (10)	101	10/10	166 (10)	102	10/10	164 (10)	101	10/10	159 (10)	98	10/10	152 (10)	81	10/10							
2-7	186 (10)	10/10	198 (10)	101	10/10	202 (10)	103	10/10	199 (10)	102	10/10	194 (10)	99	10/10	161 (10)	82	10/10							
3-7	224 (10)	10/10	226 (10)	101	10/10	228 (10)	102	10/10	227 (10)	101	10/10	221 (10)	99	10/10	187 (10)	83	10/10							
4-7	244 (10)	10/10	246 (10)	101	10/10	248 (10)	102	10/10	248 (10)	102	10/10	242 (10)	99	10/10	211 (10)	86	10/10							
5-7	262 (10)	10/10	266 (10)	102	10/10	266 (10)	102	10/10	268 (10)	102	10/10	262 (10)	100	10/10	226 (10)	86	10/10							
6-7	272 (10)	10/10	280 (10)	103	10/10	279 (10)	103	10/10	283 (10)	104	10/10	277 (10)	102	10/10	242 (10)	89	10/10							
7-7	285 (10)	10/10	293 (10)	103	10/10	293 (10)	103	10/10	289 (10)	101	10/10	290 (10)	102	10/10	259 (10)	91	10/10							
8-7	293 (10)	10/10	304 (10)	104	10/10	301 (10)	103	10/10	305 (10)	104	10/10	303 (10)	103	10/10	273 (10)	93	10/10							
9-7	303 (10)	10/10	314 (10)	104	10/10	310 (10)	102	10/10	316 (10)	104	10/10	313 (10)	103	10/10	286 (10)	94	10/10							
10-7	309 (10)	10/10	324 (10)	105	10/10	318 (10)	103	10/10	326 (10)	106	10/10	323 (10)	105	10/10	297 (10)	96	10/10							
11-7	315 (10)	10/10	334 (10)	106	10/10	326 (10)	103	10/10	334 (10)	106	10/10	330 (10)	105	10/10	306 (10)	97	10/10							
12-7	321 (10)	10/10	341 (10)	106	10/10	332 (10)	103	10/10	341 (10)	106	10/10	338 (10)	105	10/10	314 (10)	98	10/10							
13-7	326 (10)	10/10	347 (10)	106	10/10	338 (10)	104	10/10	349 (10)	107	10/10	344 (10)	106	10/10	317 (10)	97	10/10							

< >:No.of effective animals,( ) :No.of measured animals

Au.Wt.: g

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TABLE 9 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control				24.7 ppm				74.1 ppm				222 ppm				667 ppm				2000 ppm			
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv. <10>	Au.Wt. <10>	% of cont. <10>	No.of Surviv. <10>																
0-0	100 (10)	10/10	100 (10)	100	10/10	100 (10)	100	10/10	100 (10)	100	10/10	100 (10)	100	10/10	100 (10)	100	10/10	100 (10)	100	10/10	100 (10)	100	10/10	
1-7	117 (10)	10/10	118 (10)	101	10/10	117 (10)	100	10/10	115 (10)	98	10/10	113 (10)	97	10/10	100 (10)	85	10/10							
2-7	131 (10)	10/10	132 (10)	101	10/10	131 (10)	100	10/10	128 (10)	98	10/10	126 (10)	96	10/10	114 (10)	87	10/10							
3-7	142 (10)	10/10	144 (10)	101	10/10	142 (10)	100	10/10	140 (10)	99	10/10	139 (10)	98	10/10	126 (10)	89	10/10							
4-7	149 (10)	10/10	152 (10)	102	10/10	150 (10)	101	10/10	147 (10)	99	10/10	148 (10)	99	10/10	136 (10)	91	10/10							
5-7	158 (10)	10/10	162 (10)	103	10/10	161 (10)	102	10/10	158 (10)	100	10/10	156 (10)	99	10/10	145 (10)	92	10/10							
6-7	164 (10)	10/10	168 (10)	102	10/10	168 (10)	102	10/10	165 (10)	101	10/10	165 (10)	101	10/10	151 (10)	92	10/10							
7-7	169 (10)	10/10	174 (10)	103	10/10	173 (10)	102	10/10	170 (10)	101	10/10	169 (10)	100	10/10	157 (10)	93	10/10							
8-7	173 (10)	10/10	178 (10)	103	10/10	179 (10)	103	10/10	177 (10)	102	10/10	175 (10)	101	10/10	163 (10)	94	10/10							
9-7	173 (10)	10/10	183 (10)	106	10/10	183 (10)	106	10/10	179 (10)	103	10/10	180 (10)	104	10/10	165 (10)	95	10/10							
10-7	178 (10)	10/10	187 (10)	105	10/10	186 (10)	104	10/10	184 (10)	103	10/10	184 (10)	103	10/10	171 (10)	96	10/10							
11-7	181 (10)	10/10	190 (10)	105	10/10	189 (10)	104	10/10	187 (10)	103	10/10	186 (10)	103	10/10	173 (10)	96	10/10							
12-7	185 (10)	10/10	193 (10)	104	10/10	192 (10)	104	10/10	190 (10)	103	10/10	189 (10)	103	10/10	176 (10)	95	10/10							
13-7	187 (10)	10/10	192 (10)	103	10/10	193 (10)	103	10/10	192 (10)	103	10/10	191 (10)	102	10/10	179 (10)	96	10/10							

< >:No.of effective animals,( ) :No.of measured animals

Au.Wt.: g

TABLE 10 FOOD CONSUMPTION IN MALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control			24.7 ppm			74.1 ppm			222 ppm			667 ppm			2000 ppm		
	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont.	No.of Surviv.													
1-7	13.6 (10)	10/10	14.0 (10)	103	10/10	14.4 (10)	106	10/10	13.9 (10)	102	10/10	12.7 (10)	93	10/10	8.6 (10)	63	10/10	
2-7	14.4 (10)	10/10	15.0 (10)	104	10/10	15.8 (10)	110	10/10	15.0 (10)	104	10/10	14.7 (10)	102	10/10	12.3 (10)	85	10/10	
3-7	15.4 (10)	10/10	15.9 (10)	103	10/10	15.9 (10)	103	10/10	16.2 (10)	105	10/10	15.7 (10)	102	10/10	13.2 (10)	86	10/10	
4-7	15.0 (10)	10/10	15.7 (10)	105	10/10	16.1 (10)	107	10/10	16.2 (10)	108	10/10	16.0 (10)	107	10/10	14.1 (10)	94	10/10	
5-7	15.1 (10)	10/10	15.9 (10)	105	10/10	15.9 (10)	105	10/10	16.5 (10)	109	10/10	16.2 (10)	107	10/10	14.1 (10)	93	10/10	
6-7	14.8 (10)	10/10	15.8 (10)	107	10/10	15.7 (10)	106	10/10	16.7 (10)	113	10/10	16.5 (10)	111	10/10	14.3 (10)	97	10/10	
7-7	14.5 (10)	10/10	15.3 (10)	105	10/10	15.5 (10)	107	10/10	15.3 (10)	106	10/10	16.3 (10)	112	10/10	14.9 (10)	103	10/10	
8-7	14.1 ( )	10/10	15.4 (10)	109	10/10	15.6 ( )	111	10/10	16.6 ( )	118	10/10	16.4 ( )	116	10/10	15.5 (10)	110	10/10	
9-7	14.0 (10)	10/10	15.1 (10)	108	10/10	14.7 (10)	105	10/10	16.1 (10)	115	10/10	15.8 (10)	113	10/10	15.6 (10)	111	10/10	
10-7	13.8 (10)	10/10	15.5 (10)	112	10/10	14.8 (10)	107	10/10	15.7 ( )	114	10/10	16.3 ( )	118	10/10	15.8 (10)	114	10/10	
11-7	13.8 (10)	10/10	15.4 (10)	112	10/10	14.9 (10)	108	10/10	15.7 (10)	114	10/10	16.1 (10)	117	10/10	15.8 (10)	114	10/10	
12-7	13.7 (10)	10/10	15.3 (10)	112	10/10	15.0 (10)	109	10/10	16.2 (10)	118	10/10	16.2 (10)	118	10/10	16.1 (10)	118	10/10	
13-7	13.2 (10)	10/10	14.6 (10)	111	10/10	14.5 (10)	110	10/10	15.5 (10)	117	10/10	15.4 (10)	117	10/10	15.4 (10)	117	10/10	

< >:No.of effective animals,( ):No.of measured animals

Au.FC.:g

TABLE 11 FOOD CONSUMPTION IN FEMALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control			24.7 ppm			74.1 ppm			222 ppm			667 ppm			2000 ppm		
	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont.	No.of Surviv.													
1-7	10.7 (10)	10/10	11.1 (10)	104	10/10	11.1 (10)	104	10/10	10.6 (10)	99	10/10	9.5 (10)	89	10/10	6.4 (10)	60	10/10	
2-7	10.5 (10)	10/10	10.7 (10)	102	10/10	10.9 (10)	104	10/10	10.5 (10)	100	10/10	10.5 (10)	100	10/10	9.4 (10)	90	10/10	
3-7	10.8 (10)	10/10	10.9 (10)	101	10/10	11.5 (10)	106	10/10	11.0 (10)	102	10/10	10.7 (10)	99	10/10	9.7 (10)	90	10/10	
4-7	10.3 (10)	10/10	10.6 (10)	103	10/10	10.8 (10)	106	10/10	10.6 (10)	103	10/10	10.8 (10)	105	10/10	10.9 (10)	106	10/10	
5-7	10.3 (10)	10/10	11.0 (10)	107	10/10	11.1 (10)	111	10/10	11.6 (10)	113	10/10	10.8 (10)	105	10/10	10.8 (10)	105	10/10	
6-7	10.4 (10)	10/10	10.9 (10)	105	10/10	12.3 (10)	118	10/10	11.0 (10)	106	10/10	11.3 (10)	109	10/10	10.6 (10)	102	10/10	
7-7	10.1 (10)	10/10	11.4 (10)	113	10/10	11.2 ( )	111	10/10	11.3 (10)	112	10/10	11.0 (10)	109	10/10	11.1 (10)	110	10/10	
8-7	9.7 ( )	10/10	11.0 (10)	113	10/10	11.4 (10)	118	10/10	12.1 (10)	125	10/10	11.3 (10)	116	10/10	10.4 ( )	107	10/10	
9-7	10.4 (10)	10/10	11.3 (10)	109	10/10	11.0 (10)	106	10/10	11.3 (10)	109	10/10	11.2 (10)	108	10/10	11.4 ( )	110	10/10	
10-7	10.2 (10)	10/10	11.1 (10)	100	10/10	11.7 (10)	115	10/10	11.2 (10)	110	10/10	11.6 (10)	114	10/10	11.6 ( )	116	10/10	
11-7	10.2 (10)	10/10	11.7 (10)	115	10/10	11.2 (10)	110	10/10	10.8 (10)	106	10/10	11.5 (10)	113	10/10	12.5 ( )	123	10/10	
12-7	10.3 (10)	10/10	11.4 (10)	111	10/10	10.7 ( )	104	10/10	11.2 (10)	109	10/10	11.4 ( )	111	10/10	10.7 ( )	104	10/10	
13-7	9.8 (10)	10/10	10.0 (10)	102	10/10	10.7 (10)	109	10/10	10.6 (10)	108	10/10	11.7 (10)	119	10/10	11.5 ( )	117	10/10	

< >:No.of effective animals,( ):No.of measured animals

Au.FC.:g

TABLE 12 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT  
(TWO-YEAR STUDIES)

Week-Day on Study	Control			40 ppm			200 ppm			1000 ppm		
	Au.Wt.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	Au.Wt.
0-0	123 (50)	50/50	123 (50)	100	50/50	123 (50)	100	50/50	123 (50)	100	50/50	
1-7	157 (50)	50/50	156 (50)	99	50/50	155 (50)	99	50/50	148 (50)	94	50/50	
2-7	190 (50)	50/50	190 (50)	100	50/50	190 (50)	100	50/50	179 (50)	94	50/50	
3-7	218 (50)	50/50	218 (50)	100	50/50	217 (50)	100	50/50	205 (50)	94	50/50	
4-7	238 (50)	50/50	238 (50)	100	50/50	237 (50)	100	50/50	226 (50)	95	50/50	
5-7	257 (50)	50/50	257 (50)	100	50/50	255 (50)	99	50/50	244 (50)	95	50/50	
6-7	272 (50)	50/50	270 (50)	99	50/50	270 (50)	99	50/50	259 (50)	95	50/50	
7-7	285 (50)	50/50	285 (50)	100	50/50	284 (50)	100	50/50	271 (50)	95	50/50	
8-7	298 (50)	50/50	298 (50)	100	50/50	297 (50)	100	50/50	283 (50)	95	50/50	
9-7	309 (50)	50/50	309 (50)	100	50/50	309 (50)	100	50/50	295 (50)	95	50/50	
10-7	316 (50)	50/50	317 (50)	100	50/50	317 (50)	100	50/50	303 (50)	96	50/50	
11-7	325 (50)	50/50	326 (50)	100	50/50	326 (50)	100	50/50	311 (50)	96	50/50	
12-7	331 (50)	50/50	332 (50)	100	50/50	331 (50)	100	50/50	316 (50)	95	50/50	
13-7	339 (50)	50/50	341 (50)	101	50/50	339 (50)	100	50/50	323 (50)	95	50/50	
14-7	343 (50)	50/50	345 (50)	101	50/50	344 (50)	100	50/50	328 (50)	96	50/50	
16-7	354 (49)	49/50	357 (50)	101	50/50	355 (50)	100	50/50	339 (50)	96	50/50	
18-7	363 (49)	49/50	365 (50)	101	50/50	364 (50)	100	50/50	347 (50)	96	50/50	
20-7	371 (49)	49/50	374 (50)	101	50/50	373 (50)	101	50/50	354 (50)	95	50/50	
22-7	380 (49)	49/50	382 (50)	101	50/50	381 (50)	100	50/50	361 (50)	95	50/50	
24-7	386 (49)	49/50	389 (50)	101	50/50	387 (50)	100	50/50	367 (50)	95	50/50	
26-7	391 (49)	49/50	395 (50)	101	50/50	393 (50)	101	50/50	373 (50)	95	50/50	
28-7	394 (49)	49/50	398 (50)	101	50/50	395 (50)	100	50/50	376 (50)	95	50/50	
30-7	403 (49)	49/50	406 (50)	101	50/50	403 (50)	100	50/50	383 (50)	95	50/50	
32-7	406 (49)	49/50	411 (50)	101	50/50	408 (50)	100	50/50	386 (50)	95	50/50	
34-7	412 (49)	49/50	417 (50)	101	50/50	414 (50)	100	50/50	389 (50)	94	50/50	
36-7	417 (49)	49/50	421 (50)	101	50/50	419 (50)	100	50/50	394 (50)	94	50/50	
38-7	424 (49)	49/50	428 (50)	101	50/50	426 (50)	100	50/50	399 (50)	94	50/50	
40-7	431 (49)	49/50	434 (50)	101	50/50	432 (50)	100	50/50	403 (50)	94	50/50	
42-7	435 (49)	49/50	439 (50)	101	50/50	438 (50)	101	50/50	411 (50)	94	50/50	
44-7	441 (49)	49/50	444 (50)	101	50/50	442 (50)	100	50/50	413 (50)	94	50/50	
46-7	445 (49)	49/50	450 (50)	101	50/50	447 (50)	100	50/50	416 (50)	93	50/50	
48-7	449 (49)	49/50	453 (50)	101	50/50	452 (50)	101	50/50	419 (50)	93	50/50	
50-7	454 (49)	49/50	458 (50)	101	50/50	456 (50)	100	50/50	423 (50)	93	50/50	
52-7	457 (49)	49/50	461 (50)	101	50/50	460 (50)	101	50/50	425 (50)	93	50/50	
54-7	462 (49)	49/50	466 (50)	101	50/50	464 (50)	100	50/50	428 (50)	93	50/50	
56-7	464 (49)	49/50	468 (50)	101	50/50	467 (50)	101	50/50	431 (50)	93	50/50	
58-7	466 (49)	49/50	469 (50)	101	50/50	468 (50)	100	50/50	431 (49)	92	49/50	
60-7	469 (49)	49/50	470 (50)	100	50/50	470 (50)	100	50/50	433 (49)	92	49/50	
62-7	471 (49)	49/50	471 (50)	100	50/50	471 (50)	100	50/50	432 (49)	92	49/50	
64-7	473 (49)	49/50	471 (50)	100	50/50	473 (50)	100	50/50	433 (48)	92	48/50	
66-7	473 (49)	49/50	471 (50)	100	50/50	474 (50)	100	50/50	434 (47)	92	47/50	
68-7	474 (49)	49/50	476 (49)	100	49/50	474 (50)	100	50/50	433 (47)	91	47/50	
70-7	474 (49)	49/50	476 (49)	100	49/50	475 (50)	100	50/50	435 (47)	92	47/50	
72-7	474 (49)	49/50	477 (49)	101	49/50	475 (50)	100	50/50	433 (43)	91	43/50	
74-7	474 (49)	49/50	476 (49)	100	49/50	474 (50)	100	50/50	432 (41)	91	41/50	
76-7	474 (49)	49/50	477 (49)	101	49/50	473 (50)	100	50/50	432 (40)	91	40/50	
78-7	472 (49)	49/50	477 (49)	101	49/50	472 (50)	100	50/50	429 (38)	91	38/50	
80-7	472 (49)	49/50	475 (49)	101	49/50	472 (50)	100	50/50	428 (37)	91	37/50	
82-7	472 (49)	49/50	476 (49)	101	49/50	470 (49)	100	49/50	426 (36)	90	36/50	
84-7	475 (48)	48/50	475 (48)	100	48/50	471 (47)	99	47/50	419 (34)	88	34/50	
86-7	475 (47)	47/50	472 (48)	99	48/50	469 (47)	99	47/50	423 (30)	89	30/50	
88-7	472 (47)	47/50	468 (48)	99	47/50	467 (46)	99	46/50	422 (29)	89	29/50	
90-7	468 (47)	47/50	470 (47)	100	47/50	462 (46)	99	46/50	420 (26)	90	25/50	
92-7	464 (46)	46/50	469 (47)	101	47/50	461 (45)	99	45/50	420 (25)	91	25/50	
94-7	457 (46)	46/50	464 (47)	102	47/50	458 (45)	100	45/50	421 (25)	92	25/50	
96-7	458 (45)	45/50	460 (47)	100	47/50	452 (45)	99	45/50	411 (21)	90	21/50	
98-7	455 (44)	44/50	456 (47)	100	47/50	445 (45)	98	45/50	413 (17)	91	17/50	
100-7	458 (43)	43/50	450 (47)	98	47/50	438 (44)	96	44/50	410 (17)	90	17/50	
102-7	451 (43)	43/50	444 (46)	98	46/50	442 (42)	98	42/50	402 (14)	89	14/50	
104-7	447 (43)	43/50	439 (46)	98	46/50	437 (42)	98	42/50	396 (12)	89	12/50	

&lt; &gt;:No.of effective animals, ( ) : No.of measured animals

TABLE 13 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT  
(TWO-YEAR STUDIES)

Week-Day on Study	Control		40 ppm		200 ppm		1000 ppm				
	Au.Wt.	No.of Surviv. <50>	Au.Wt.	% of cont. <50>	No.of Surviv.	Au.Wt.	% of cont. <50>	No.of Surviv.	Au.Wt.	% of cont. <50>	No.of Surviv. <50>
0-0	102 (50)	50/50	102 (50)	100	50/50	102 (50)	100	50/50	102 (50)	100	50/50
1-7	119 (50)	50/50	119 (50)	100	50/50	117 (50)	98	50/50	111 (50)	93	50/50
2-7	133 (50)	50/50	133 (50)	100	50/50	131 (50)	98	50/50	127 (50)	95	50/50
3-7	144 (50)	50/50	145 (50)	101	50/50	143 (50)	99	50/50	138 (50)	96	50/50
4-7	153 (50)	50/50	152 (50)	99	50/50	151 (50)	99	50/50	146 (50)	95	50/50
5-7	162 (50)	50/50	162 (50)	100	50/50	159 (50)	98	50/50	154 (50)	95	50/50
6-7	168 (50)	50/50	168 (50)	100	50/50	166 (50)	99	50/50	159 (50)	95	50/50
7-7	174 (50)	50/50	176 (50)	101	50/50	172 (50)	99	50/50	167 (50)	96	50/50
8-7	179 (50)	50/50	179 (50)	100	50/50	176 (50)	98	50/50	171 (50)	96	50/50
9-7	184 (50)	50/50	185 (50)	101	50/50	181 (50)	98	50/50	176 (50)	96	50/50
10-7	188 (50)	50/50	187 (50)	99	50/50	184 (50)	98	50/50	179 (50)	95	50/50
11-7	192 (50)	50/50	193 (50)	101	50/50	190 (50)	99	50/50	184 (50)	96	50/50
12-7	196 (50)	50/50	195 (50)	99	50/50	192 (50)	98	50/50	187 (50)	95	50/50
13-7	200 (50)	50/50	198 (50)	99	50/50	196 (50)	98	50/50	189 (50)	95	50/50
14-7	200 (50)	50/50	200 (50)	100	50/50	197 (50)	99	50/50	189 (50)	95	50/50
16-7	204 (50)	50/50	204 (50)	100	50/50	202 (50)	99	50/50	193 (50)	95	50/50
18-7	208 (50)	50/50	208 (50)	100	50/50	205 (50)	99	50/50	195 (50)	94	50/50
20-7	212 (50)	50/50	212 (50)	100	50/50	208 (50)	98	50/50	198 (50)	93	50/50
22-7	216 (50)	50/50	216 (50)	100	50/50	212 (50)	98	50/50	201 (50)	93	50/50
24-7	219 (50)	50/50	219 (50)	100	50/50	214 (50)	98	50/50	203 (50)	93	50/50
26-7	221 (50)	50/50	222 (50)	100	50/50	216 (50)	98	50/50	206 (50)	93	50/50
28-7	222 (50)	50/50	222 (50)	100	50/50	216 (50)	97	50/50	207 (50)	93	50/50
30-7	226 (50)	50/50	227 (50)	100	50/50	221 (50)	98	50/50	210 (50)	93	50/50
32-7	229 (50)	50/50	230 (50)	100	50/50	224 (50)	98	50/50	213 (50)	93	50/50
34-7	232 (50)	50/50	232 (50)	100	50/50	226 (49)	97	50/50	215 (50)	93	50/50
36-7	235 (50)	50/50	236 (50)	100	50/50	229 (50)	97	50/50	216 (50)	92	50/50
38-7	240 (50)	50/50	240 (50)	100	50/50	232 (50)	97	50/50	219 (50)	91	50/50
40-7	245 (50)	50/50	245 (50)	100	50/50	237 (50)	97	50/50	223 (50)	91	50/50
42-7	247 (50)	50/50	248 (50)	100	50/50	240 (50)	97	50/50	224 (50)	91	50/50
44-7	252 (50)	50/50	252 (50)	100	50/50	242 (50)	96	50/50	226 (50)	90	50/50
46-7	256 (50)	50/50	256 (50)	100	50/50	246 (50)	96	50/50	227 (50)	89	50/50
48-7	259 (50)	50/50	260 (50)	100	50/50	248 (50)	96	50/50	229 (50)	88	50/50
50-7	263 (50)	50/50	264 (50)	100	50/50	250 (50)	95	50/50	231 (50)	88	50/50
52-7	266 (50)	50/50	268 (50)	101	50/50	254 (50)	95	50/50	232 (50)	87	50/50
54-7	271 (50)	50/50	272 (50)	100	50/50	259 (49)	96	49/50	235 (50)	87	50/50
56-7	275 (50)	50/50	276 (50)	100	50/50	263 (49)	96	49/50	237 (50)	86	50/50
58-7	278 (50)	50/50	279 (50)	100	50/50	265 (49)	95	49/50	238 (50)	86	50/50
60-7	281 (50)	50/50	283 (50)	101	50/50	268 (49)	95	49/50	240 (50)	85	50/50
62-7	286 (50)	50/50	287 (50)	100	50/50	271 (49)	95	49/50	242 (50)	85	50/50
64-7	288 (50)	50/50	289 (50)	100	50/50	274 (49)	95	49/50	243 (50)	84	50/50
66-7	293 (50)	50/50	295 (49)	101	49/50	279 (49)	95	49/50	246 (50)	84	50/50
68-7	295 (50)	50/50	298 (49)	101	49/50	282 (49)	96	49/50	248 (50)	84	50/50
70-7	299 (49)	49/50	302 (49)	101	49/50	286 (49)	96	49/50	250 (49)	84	49/50
72-7	301 (49)	49/50	306 (49)	102	49/50	288 (49)	96	49/50	252 (47)	84	47/50
74-7	306 (48)	48/50	311 (49)	102	49/50	291 (49)	95	48/50	253 (47)	83	47/50
76-7	307 (47)	47/50	313 (49)	102	49/50	294 (48)	96	48/50	254 (45)	83	45/50
78-7	313 (46)	46/50	319 (48)	102	48/50	297 (48)	95	48/50	257 (44)	82	44/50
80-7	314 (46)	46/50	321 (48)	102	48/50	299 (48)	95	48/50	251 (44)	83	44/50
82-7	315 (45)	45/50	323 (48)	103	48/50	302 (47)	96	47/50	250 (43)	83	43/50
84-7	317 (45)	45/50	327 (47)	103	47/50	307 (46)	97	46/50	253 (43)	83	43/50
86-7	320 (44)	44/50	328 (46)	103	46/50	307 (45)	96	45/50	265 (42)	83	42/50
88-7	324 (42)	42/50	329 (45)	102	45/50	308 (42)	95	42/50	265 (41)	82	41/50
90-7	330 (41)	41/50	330 (45)	100	45/50	307 (42)	93	42/50	266 (38)	81	38/50
92-7	330 (41)	41/50	331 (45)	100	45/50	310 (41)	94	41/50	266 (37)	81	37/50
94-7	326 (41)	41/50	328 (45)	101	45/50	309 (40)	95	40/50	269 (37)	83	37/50
96-7	331 (39)	39/50	327 (45)	99	45/50	308 (40)	93	39/50	267 (36)	81	36/50
98-7	332 (38)	38/50	329 (44)	99	43/50	310 (39)	93	39/50	270 (34)	81	34/50
100-7	329 (38)	38/50	336 (42)	102	42/50	308 (39)	94	39/50	271 (32)	82	32/50
102-7	329 (38)	38/50	336 (42)	102	41/50	308 (39)	94	39/50	266 (29)	81	29/50
104-7	327 (37)	36/50	340 (41)	104	41/50	303 (38)	93	38/50	263 (28)	80	28/50

( ) : No. of effective animals, ( ) : No. of measured animals

TABLE 14 FOOD CONSUMPTION IN MALE RAT  
(TWO-YEAR STUDIES)

Week-Day on Study	Control			40 ppm			200 ppm			1000 ppm		
	Au.FC.	No.of Surviv. <50>	Au.FC.	% of cont. <50>	No.of Surviv.	Au.FC.	% of cont. <50>	No.of Surviv.	Au.FC.	% of cont. <50>	No.of Surviv.	
1-7	13.2 (50)	50/50	13.1 (50)	99	50/50	12.9 (50)	98	50/50	10.9 (50)	83	50/50	
2-7	14.2 (50)	50/50	14.2 (49)	100	50/50	14.2 (50)	100	50/50	13.3 (50)	94	50/50	
3-7	14.7 (50)	50/50	14.9 (50)	101	50/50	14.8 (49)	101	50/50	13.8 (50)	94	50/50	
4-7	14.7 (50)	50/50	14.8 (50)	101	50/50	14.8 (50)	101	50/50	13.9 (50)	95	50/50	
5-7	15.0 (49)	50/50	15.0 (50)	100	50/50	14.8 (50)	99	50/50	14.4 (50)	96	50/50	
6-7	14.8 (50)	50/50	15.5 (44)	105	50/50	15.1 (50)	102	50/50	14.5 (50)	98	50/50	
7-7	15.3 (50)	50/50	15.5 (50)	101	50/50	15.7 (50)	103	50/50	14.9 (50)	97	50/50	
8-7	15.2 (50)	50/50	15.3 (50)	101	50/50	15.4 (50)	101	50/50	14.9 (50)	98	50/50	
9-7	15.3 (50)	50/50	15.5 (50)	101	50/50	15.6 (50)	102	50/50	15.1 (50)	99	50/50	
10-7	14.9 (50)	50/50	15.2 (50)	102	50/50	15.3 (50)	103	50/50	14.9 (50)	100	50/50	
11-7	15.3 (50)	50/50	15.6 (50)	102	50/50	15.6 (50)	102	50/50	15.2 (50)	99	50/50	
12-7	15.0 (50)	50/50	15.3 (50)	102	50/50	15.2 (50)	101	50/50	14.7 (50)	98	50/50	
13-7	15.0 (50)	50/50	15.2 (50)	101	50/50	15.2 (50)	101	50/50	14.8 (50)	99	50/50	
14-7	14.4 (50)	50/50	14.5 (50)	101	50/50	14.7 (50)	102	50/50	14.4 (50)	100	50/50	
15-7	14.4 (49)	49/50	14.6 (50)	101	50/50	14.6 (50)	101	50/50	14.5 (50)	101	50/50	
18-7	14.4 (49)	49/50	14.6 (50)	101	50/50	14.7 (50)	102	50/50	14.5 (50)	101	50/50	
20-7	14.7 (49)	49/50	14.8 (50)	101	50/50	14.9 (50)	101	50/50	14.6 (50)	99	50/50	
22-7	15.3 (48)	49/50	15.5 (50)	101	50/50	15.3 (50)	100	50/50	15.4 (50)	101	50/50	
24-7	15.3 (49)	49/50	15.6 (50)	102	50/50	15.6 (50)	102	50/50	15.5 (50)	101	50/50	
26-7	15.2 (49)	49/50	15.3 (50)	101	50/50	15.5 (50)	102	50/50	15.6 (49)	103	50/50	
28-7	14.9 (49)	49/50	15.1 (50)	101	50/50	15.1 (50)	101	50/50	15.5 (50)	104	50/50	
30-7	15.3 (49)	49/50	15.6 (50)	102	50/50	15.9 (50)	104	50/50	15.8 (49)	103	50/50	
32-7	14.9 (48)	49/50	15.3 (50)	103	50/50	15.3 (49)	103	50/50	15.5 (48)	104	50/50	
34-7	14.9 (49)	49/50	15.5 (50)	104	50/50	15.4 (50)	103	50/50	15.5 (49)	104	50/50	
36-7	15.0 (49)	49/50	15.4 (50)	103	50/50	15.6 (50)	104	50/50	15.6 (50)	104	50/50	
38-7	15.2 (49)	49/50	15.5 (50)	102	50/50	15.2 (50)	100	50/50	15.5 (49)	102	50/50	
40-7	15.4 (49)	49/50	15.7 (50)	102	50/50	15.6 (50)	101	50/50	15.7 (50)	102	50/50	
42-7	15.3 (49)	49/50	15.4 (50)	101	50/50	15.6 (50)	102	50/50	15.4 (49)	101	50/50	
44-7	15.1 (49)	49/50	15.5 (50)	103	50/50	15.4 (50)	102	50/50	15.3 (50)	101	50/50	
46-7	15.2 (49)	49/50	15.6 (50)	103	50/50	15.6 (50)	103	50/50	15.5 (50)	102	50/50	
48-7	15.3 (49)	49/50	15.4 (50)	101	50/50	15.7 (50)	103	50/50	15.7 (50)	103	50/50	
50-7	15.4 (49)	49/50	15.6 (50)	101	50/50	15.8 (50)	103	50/50	15.9 (50)	103	50/50	
52-7	15.4 (49)	49/50	15.5 (50)	101	50/50	15.6 (50)	101	50/50	15.7 (50)	102	50/50	
54-7	15.3 (49)	49/50	15.6 (50)	102	50/50	15.6 (50)	102	50/50	15.8 (49)	103	50/50	
56-7	15.4 (49)	49/50	15.8 (50)	103	50/50	15.6 (50)	101	50/50	15.8 (50)	103	50/50	
58-7	15.4 (49)	49/50	15.7 (50)	102	50/50	15.6 (50)	101	50/50	15.8 (49)	103	49/50	
60-7	15.5 (49)	49/50	15.4 (50)	99	50/50	15.7 (50)	101	50/50	15.8 (49)	102	49/50	
62-7	15.6 (49)	49/50	15.6 (50)	100	50/50	15.7 (50)	101	50/50	15.6 (49)	100	49/50	
64-7	15.8 (49)	49/50	15.5 (49)	98	50/50	15.8 (50)	100	50/50	16.0 (48)	101	48/50	
66-7	15.4 (49)	49/50	15.4 (50)	100	50/50	15.7 (50)	102	50/50	15.6 (46)	101	47/50	
68-7	15.5 (49)	49/50	15.6 (49)	101	49/50	15.9 (50)	103	50/50	15.7 (46)	101	47/50	
70-7	15.3 (49)	49/50	15.3 (48)	100	49/50	15.6 (50)	102	50/50	15.6 (47)	102	47/50	
72-7	15.2 (49)	49/50	15.4 (49)	101	49/50	15.7 (50)	103	50/50	15.8 (43)	104	43/50	
74-7	15.5 (49)	49/50	15.7 (49)	101	49/50	15.8 (50)	102	50/50	15.6 (40)	101	41/50	
76-7	15.5 (49)	49/50	15.8 (49)	102	49/50	15.8 (50)	102	50/50	15.9 (40)	103	40/50	
78-7	15.2 (49)	49/50	15.7 (49)	103	49/50	15.9 (50)	105	50/50	15.8 (37)	104	38/50	
80-7	15.5 (49)	49/50	15.5 (49)	100	49/50	16.1 (50)	104	50/50	15.5 (36)	100	37/50	
82-7	15.4 (49)	49/50	15.6 (49)	101	49/50	15.9 (49)	103	49/50	15.2 (35)	99	36/50	
84-7	15.3 (48)	48/50	15.6 (48)	102	48/50	15.9 (47)	104	47/50	14.8 (33)	97	34/50	
86-7	15.3 (47)	47/50	15.2 (48)	99	48/50	16.0 (47)	105	47/50	15.2 (28)	99	30/50	
88-7	14.8 (47)	47/50	15.1 (48)	102	47/50	15.6 (45)	105	46/50	15.3 (28)	103	29/50	
90-7	14.8 (47)	47/50	15.4 (47)	104	47/50	15.8 (45)	107	46/50	15.1 (25)	102	25/50	
92-7	14.7 (46)	46/50	15.5 (47)	105	47/50	15.7 (43)	107	45/50	15.5 (23)	105	25/50	
94-7	14.8 (46)	46/50	15.6 (47)	105	47/50	16.3 (43)	110	45/50	14.3 (23)	97	25/50	
96-7	15.2 (45)	45/50	15.3 (47)	101	47/50	15.6 (44)	103	45/50	14.7 (20)	97	21/50	
98-7	15.1 (44)	44/50	15.2 (47)	101	47/50	15.5 (43)	103	45/50	15.9 (16)	105	17/50	
100-7	15.5 (43)	43/50	15.5 (46)	100	47/50	15.4 (41)	99	44/50	15.5 (16)	100	17/50	
102-7	15.3 (43)	43/50	15.0 (45)	98	46/50	15.9 (40)	104	42/50	15.2 (12)	99	14/50	
104-7	15.0 (43)	43/50	15.6 (45)	104	46/50	16.2 (39)	108	42/50	20.6 (11)	137	12/50	

&lt; &gt;:No.of effective animals, ( ) :No.of measured animals

TABLE 15 FOOD CONSUMPTION IN FEMALE RAT  
(TWO-YEAR STUDIES)

Week-Day on Study	Control			40 ppm			200 ppm			1000 ppm		
	Avg.FC.	No.of Surviv.	% of <50>	Avg.FC.	% of cont. <50>	No.of Surviv.	Avg.FC.	% of cont. <50>	No.of Surviv.	Avg.FC.	% of cont. <50>	No.of Surviv.
1-7	10.6 (50)	50/50		10.6 (50)	100	50/50	10.3 (50)	97	50/50	8.3 (50)	78	50/50
2-7	10.6 (50)	50/50		10.6 (50)	100	50/50	10.4 (49)	98	50/50	10.1 (50)	95	50/50
3-7	10.7 (48)	50/50		10.9 (50)	102	50/50	10.9 (49)	102	50/50	10.2 (50)	95	50/50
4-7	10.6 (50)	50/50		10.6 (49)	100	50/50	10.8 (50)	102	50/50	10.2 (50)	96	50/50
5-7	10.9 (50)	50/50		11.0 (49)	101	50/50	10.8 (50)	99	50/50	10.6 (50)	97	50/50
6-7	10.4 (50)	50/50		10.9 (49)	105	50/50	10.6 (50)	102	50/50	10.3 (50)	99	50/50
7-7	10.8 (50)	50/50		11.4 (50)	106	50/50	11.0 (50)	102	50/50	10.5 (50)	97	50/50
8-7	10.7 (50)	50/50		10.8 (50)	101	50/50	10.6 (50)	99	50/50	10.3 (50)	96	50/50
9-7	10.7 (50)	50/50		11.1 (50)	104	50/50	11.1 (50)	104	50/50	10.9 (49)	102	50/50
10-7	10.7 (50)	50/50		10.7 (50)	100	50/50	10.8 (50)	101	50/50	10.6 (50)	99	50/50
11-7	11.1 (50)	50/50		11.4 (50)	103	50/50	11.5 (50)	104	50/50	11.6 (50)	105	50/50
12-7	11.2 (50)	50/50		11.1 (50)	99	50/50	11.0 (50)	98	50/50	11.1 (49)	99	50/50
13-7	11.1 (50)	50/50		11.1 (50)	100	50/50	11.4 (50)	103	50/50	11.4 (48)	103	50/50
14-7	10.3 (50)	50/50		10.6 (50)	103	50/50	10.7 (50)	104	50/50	11.0 (50)	107	50/50
16-7	10.4 (50)	50/50		10.4 (50)	100	50/50	10.8 (50)	104	50/50	10.8 (49)	104	50/50
18-7	10.5 (50)	50/50		11.0 (50)	105	50/50	10.9 (50)	104	50/50	11.3 (50)	108	50/50
20-7	10.7 (50)	50/50		11.0 (49)	103	50/50	10.7 (50)	100	50/50	10.8 (49)	101	50/50
22-7	10.9 (50)	50/50		11.4 (50)	105	50/50	10.9 (50)	100	50/50	11.4 (50)	105	50/50
24-7	10.7 (50)	50/50		11.0 (50)	103	50/50	10.8 (50)	101	50/50	10.7 (50)	100	50/50
26-7	10.8 (50)	50/50		11.0 (50)	102	50/50	11.0 (50)	102	50/50	11.1 (50)	103	50/50
28-7	10.4 (50)	50/50		10.7 (50)	103	50/50	10.6 (50)	102	50/50	10.7 (50)	103	50/50
30-7	11.0 (50)	50/50		11.5 (49)	105	50/50	11.3 (50)	103	50/50	11.3 (50)	103	50/50
32-7	11.0 (50)	50/50		11.6 (50)	105	50/50	11.2 (50)	102	50/50	11.3 (50)	103	50/50
34-7	11.1 (50)	50/50		11.4 (50)	103	50/50	11.1 (50)	100	50/50	11.2 (50)	101	50/50
36-7	11.1 (50)	50/50		11.4 (50)	103	50/50	11.3 (50)	102	50/50	11.3 (50)	102	50/50
38-7	11.5 (50)	50/50		11.7 (50)	102	50/50	11.4 (50)	99	50/50	11.5 (50)	100	50/50
40-7	11.4 (50)	50/50		11.7 (50)	103	50/50	11.5 (50)	101	50/50	11.4 (50)	100	50/50
42-7	11.3 (50)	50/50		11.9 (50)	105	50/50	11.2 (50)	99	50/50	10.8 (50)	96	50/50
44-7	11.5 (50)	50/50		12.1 (50)	105	50/50	11.2 (50)	97	50/50	11.0 (50)	96	50/50
46-7	11.6 (50)	50/50		12.1 (50)	104	50/50	11.4 (50)	98	50/50	11.3 (50)	97	50/50
48-7	11.6 (50)	50/50		12.1 (50)	104	50/50	11.5 (50)	99	50/50	11.6 (50)	100	50/50
50-7	11.7 (50)	50/50		12.4 (50)	106	50/50	11.6 (50)	99	50/50	11.7 (50)	100	50/50
52-7	11.7 (50)	50/50		12.3 (50)	105	50/50	11.9 (50)	102	50/50	11.9 (50)	102	50/50
54-7	11.7 (50)	50/50		12.3 (50)	105	50/50	11.8 (49)	101	49/50	12.1 (50)	103	50/50
56-7	11.8 (50)	50/50		12.5 (50)	106	50/50	11.9 (49)	101	49/50	12.2 (50)	103	50/50
58-7	12.0 (50)	50/50		12.5 (50)	104	50/50	11.9 (49)	99	49/50	12.5 (50)	104	50/50
60-7	12.2 (50)	50/50		12.5 (50)	102	50/50	12.1 (49)	99	49/50	12.3 (50)	101	50/50
62-7	12.2 (50)	50/50		12.6 (50)	103	50/50	12.2 (49)	100	49/50	12.6 (50)	103	50/50
64-7	12.1 (49)	50/50		12.6 (50)	104	50/50	12.4 (49)	102	49/50	12.7 (50)	105	50/50
66-7	12.5 (49)	50/50		12.9 (49)	103	49/50	12.4 (49)	99	49/50	12.7 (50)	102	50/50
68-7	12.3 (50)	50/50		12.8 (49)	104	49/50	12.3 (49)	100	49/50	12.7 (50)	103	50/50
70-7	12.4 (49)	49/50		12.9 (49)	104	49/50	12.2 (49)	98	49/50	12.3 (49)	99	49/50
72-7	12.1 (49)	49/50		13.1 (49)	108	49/50	12.3 (49)	102	49/50	12.8 (47)	106	47/50
74-7	12.5 (48)	48/50		13.7 (49)	110	49/50	12.6 (48)	101	48/50	13.0 (47)	104	47/50
76-7	12.6 (47)	47/50		13.1 (48)	104	49/50	12.5 (48)	99	48/50	13.2 (45)	105	45/50
78-7	12.8 (46)	46/50		13.5 (48)	105	48/50	12.8 (48)	100	48/50	13.2 (44)	103	44/50
80-7	12.7 (46)	46/50		13.3 (48)	105	48/50	12.7 (48)	100	48/50	13.3 (44)	105	44/50
82-7	12.7 (45)	45/50		13.2 (48)	104	48/50	12.9 (47)	102	47/50	13.4 (43)	106	43/50
84-7	12.4 (45)	45/50		13.4 (47)	108	47/50	12.9 (46)	104	46/50	13.5 (43)	109	43/50
86-7	12.4 (44)	44/50		13.3 (46)	107	46/50	12.7 (45)	102	45/50	13.3 (41)	107	42/50
88-7	12.8 (42)	42/50		13.2 (45)	103	45/50	12.8 (42)	100	42/50	13.6 (41)	106	41/50
90-7	12.9 (41)	41/50		13.4 (45)	104	45/50	12.8 (42)	99	42/50	13.5 (38)	105	38/50
92-7	12.8 (41)	41/50		13.5 (44)	105	45/50	13.2 (41)	103	41/50	13.4 (37)	105	37/50
94-7	12.8 (41)	41/50		13.2 (44)	103	45/50	13.7 (40)	107	40/50	13.2 (37)	103	37/50
96-7	12.9 (39)	39/50		13.2 (44)	102	45/50	12.6 (40)	98	39/50	12.8 (36)	99	36/50
98-7	13.1 (38)	38/50		13.3 (44)	102	43/50	13.5 (39)	103	39/50	13.5 (34)	103	34/50
100-7	12.6 (38)	38/50		14.1 (42)	112	42/50	13.4 (39)	106	39/50	12.8 (32)	102	32/50
102-7	13.0 (38)	38/50		13.7 (41)	105	41/50	13.2 (39)	102	39/50	13.6 (29)	105	29/50
104-7	12.6 (37)	36/50		13.4 (40)	106	41/50	12.3 (38)	98	38/50	13.5 (27)	107	28/50

&lt; &gt;:No.of effective animals,( ):No.of measured animals

Table 16 CLINICAL OBSERVATION ( 104W-SUMMRY ) -RAT: TWO-YEAR STUDIES-

Findings	Male				Female			
	1000ppm S (DM)*	200ppm S (DM)	40ppm S (DM)	0ppm S (DM)	1000ppm S (DM)	200ppm S (DM)	40ppm S (DM)	0ppm S (DM)
COLORED(着色)	0(12)	1( 0)	0( 1)	0( 1)	25(20)	18( 6)	13( 1)	6( 3)
FROG BELLY(腹部膨隆)	0( 4)	0( 0)	0( 0)	2( 0)	0( 6)	0( 0)	0( 1)	0( 0)
ANEMIA(貧血)	12(38)	42( 8)	6( 2)	6( 1)	28(22)	38(12)	2( 1)	3(10)
INTERNAL MASS(内部腫瘤)	2(15)	0( 0)	0( 0)	0( 0)	1( 7)	0( 0)	0( 0)	0( 2)
EXTERNAL MASS(外部腫瘤)								
M. EYE(眼腫瘤)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)
M. NOSE(鼻腫瘤)	1( 1)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)
M. PERI MOUTH(口周囲腫瘤)	0( 1)	0( 0)	1( 0)	0( 0)	1( 0)	2( 0)	1( 0)	0( 1)
M. MANDIBULAR(下顎部腫瘤)	0( 0)	0( 0)	0( 0)	0( 0)	0( 1)	0( 0)	0( 0)	0( 0)
M. EAR(耳介部腫瘤)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)
M. PERI EAR(耳根部腫瘤)	0( 0)	0( 2)	1( 1)	0( 0)	0( 1)	1( 0)	0( 1)	0( 0)
M. NECK(頸部腫瘤)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	0( 0)	1( 0)
M. FORLIMB(前肢腫瘤)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	1( 0)	1( 0)	0( 0)
M. BREAST(胸部腫瘤)	1( 0)	2( 1)	2( 1)	1( 0)	4( 1)	2( 0)	1( 0)	2( 0)
M. ABDOMEN(腹部腫瘤)	0( 2)	2( 0)	2( 0)	3( 1)	3( 3)	1( 2)	1( 0)	4( 2)
M. ANTERIOR. DORSUM(背側前部腫瘤)	0( 1)	2( 0)	1( 0)	1( 1)	0( 0)	2( 0)	1( 0)	1( 0)
M. POSTERIOR. DORSUM(背側後部腫瘤)	0( 1)	1( 1)	2( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)
M. SCROTUM(陰囊腫瘤)	0( 0)	2( 0)	1( 0)	1( 0)	-	-	-	-
M. HINDLIMB(後肢腫瘤)	0( 1)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)
M. GENITALIA(外陰部腫瘤)	0( 1)	0( 0)	0( 0)	0( 0)	4( 1)	5( 1)	2( 1)	4( 2)
M. TAIL(尾腫瘤)	1( 0)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)
NO. of Animals with EXTERNAL MASS	2( 7)	10( 3)	11( 2)	6( 2)	11( 5)	9( 3)	8( 2)	8( 4)
NO. of Survival Animals (Dead & Moribund Animals)	12(38)	42( 8)	46( 4)	43( 7)	28(22)	38(12)	41( 9)	36(14)
NO. of Observed Animals	50	50	50	50	50	50	50	50

\* : S=Survival Animals (DM=Dead & Moribund Animals)

Table 16 CLINICAL OBSERVATION ( 104W-SUMMRY ) -RAT: TWO-YEAR STUDIES-

Findings	Male				Female			
	1000ppm S (DM) *	200ppm S (DM)	40ppm S (DM)	0ppm S (DM)	1000ppm S (DM)	200ppm S (DM)	40ppm S (DM)	0ppm S (DM)
COLORED(着色)	0(12)	1( 0)	0( 1)	0( 1)	25(20)	18( 6)	13( 1)	6( 3)
FROG BELLY(腹部膨隆)	0( 4)	0( 0)	0( 0)	2( 0)	0( 6)	0( 0)	0( 1)	0( 0)
ANEMIA(貧血)	12(38)	42( 8)	6( 2)	6( 1)	28(22)	38(12)	2( 1)	3(10)
INTERNAL MASS(内部腫瘤)	2(15)	0( 0)	0( 0)	0( 0)	1( 7)	0( 0)	0( 0)	0( 2)
EXTERNAL MASS(外部腫瘤)								
M. EYE(眼腫瘤)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)
M. NOSE(鼻腫瘤)	1( 1)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)
M. PERI MOUTH(口周囲腫瘤)	0( 1)	0( 0)	1( 0)	0( 0)	1( 0)	2( 0)	1( 0)	0( 1)
M. MANDIBULAR(下顎部腫瘤)	0( 0)	0( 0)	0( 0)	0( 0)	0( 1)	0( 0)	0( 0)	0( 0)
M. EAR(耳介部腫瘤)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)
M. PERI EAR(耳根部腫瘤)	0( 0)	0( 2)	1( 1)	0( 0)	0( 1)	1( 0)	0( 1)	0( 0)
M. NECK(頸部腫瘤)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	0( 0)	1( 0)
M. FORLIMB(前肢腫瘤)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	1( 0)	1( 0)	0( 0)
M. BREAST(胸部腫瘤)	1( 0)	2( 1)	2( 1)	1( 0)	4( 1)	2( 0)	1( 0)	2( 0)
M. ABDOMEN(腹部腫瘤)	0( 2)	2( 0)	2( 0)	3( 1)	3( 3)	1( 2)	1( 0)	4( 2)
M. ANTERIOR. DORSUM(背側前部腫瘤)	0( 1)	2( 0)	1( 0)	1( 1)	0( 0)	2( 0)	1( 0)	1( 0)
M. POSTERIOR. DORSUM(背側後部腫瘤)	0( 1)	1( 1)	2( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)
M. SCROTUM(陰囊腫瘤)	0( 0)	2( 0)	1( 0)	1( 0)	-	-	-	-
M. HINDLIMB(後肢腫瘤)	0( 1)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)
M. GENITALIA(外陰部腫瘤)	0( 1)	0( 0)	0( 0)	0( 0)	4( 1)	5( 1)	2( 1)	4( 2)
M. TAIL(尾腫瘤)	1( 0)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)
No. of Animals with EXTERNAL MASS	2( 7)	10( 3)	11( 2)	6( 2)	11( 5)	9( 3)	8( 2)	8( 4)
No. of Survival Animals (Dead & Moribund Animals)	12(38)	42( 8)	46( 4)	43( 7)	28(22)	38(12)	41( 9)	36(14)
No. of Observed Animals	50	50	50	50	50	50	50	50

\* : S=Survival Animals (DM=Dead &amp; Moribund Animals)

TABLE 17 NEOPLASTIC LESIONS (SPLEEN) INCIDENCE AND STATISTICAL ANALYSIS : RAT:MALE

Group Name	Control	40 ppm	200 ppm	1000 ppm
SITE : spleen TUMOUR : fibroma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	1/50 ( 2.0)	15/50 (30.0)
Adjusted Rates(b)	0.0	0.0	2.38	58.82
Terminal Rates(c)	0/43 ( 0.0)	0/46 ( 0.0)	1/42 ( 2.4)	7/12 (58.3)
Standard Rates(d)	P=0.1627			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.5000	P=0.4950	P=0.0001**
SITE : spleen TUMOUR : fibrosarcoma				
Overall Rates(a)	0/50 ( 0.0)	1/50 ( 2.0)	0/50 ( 0.0)	29/50 (58.0)
Adjusted Rates(b)	0.0	2.17	0.0	58.33
Terminal Rates(c)	0/43 ( 0.0)	1/46 ( 2.2)	0/42 ( 0.0)	7/12 (58.3)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.4950	P=0.5000	P<0.0001**
SITE : spleen TUMOUR : osteosarcoma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	0/50 ( 0.0)	11/50 (22.0)
Adjusted Rates(b)	0.0	0.0	0.0	22.73
Terminal Rates(c)	0/43 ( 0.0)	0/46 ( 0.0)	0/42 ( 0.0)	1/12 ( 8.3)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.5000	P=0.5000	P=0.0009**
SITE : spleen TUMOUR : sarcoma NOS				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	1/50 ( 2.0)	6/50 (12.0)
Adjusted Rates(b)	0.0	0.0	2.38	21.05
Terminal Rates(c)	0/43 ( 0.0)	0/46 ( 0.0)	1/42 ( 2.4)	2/12 (16.7)
Standard Rates(d)	P=0.0028**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P=0.0001**			
Fisher Exact Test(e)		P=0.5000	P=0.4950	P=0.0190*
SITE : spleen TUMOUR : mononuclear cell leukemia				
Overall Rates(a)	7/50 (14.0)	2/50 ( 4.0)	1/50 ( 2.0)	2/50 ( 4.0)
Adjusted Rates(b)	9.30	4.35	2.17	0.0
Terminal Rates(c)	4/43 ( 9.3)	2/46 ( 4.3)	0/42 ( 0.0)	0/12 ( 0.0)
Standard Rates(d)	P=0.1749			
Prevalence Rates(d)	P=0.9537			
Combind analysis(d)	P=0.6320			
Cochran-Armitage Test(e)	P=0.2902			
Fisher Exact Test(e)		P=0.1045	P=0.0430*	P=0.1045
SITE : spleen TUMOUR : hemangiosarcoma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	5/50 (10.0)	7/50 (14.0)
Adjusted Rates(b)	0.0	0.0	10.42	17.65
Terminal Rates(c)	0/43 ( 0.0)	0/46 ( 0.0)	4/42 ( 9.5)	2/12 (16.7)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P=0.0179*			
Combind analysis(d)	P=0.0001**			
Cochran-Armitage Test(e)	P=0.0017**			
Fisher Exact Test(e)		P=0.5000	P=0.0360*	P=0.0101*
SITE : spleen TUMOUR : fibroma,fibrosarcoma,osteosarcoma,sarcoma:NOS,hemangiosarcoma				
Overall Rates(a)	0/50 ( 0.0)	1/50 ( 2.0)	7/50 (14.0)	47/50 (94.0)
Adjusted Rates(b)	0.0	2.17	14.58	100.00
Terminal Rates(c)	0/43 ( 0.0)	1/46 ( 2.2)	6/42 (14.3)	12/12 (100.0)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.4950	P=0.0101*	P<0.0001**

TABLE 18 NEOPLASTIC LESIONS (SPLEEN) INCIDENCE AND STATISTICAL ANALYSIS : RAT:FEMALE

Group Name	Control	40 ppm	200 ppm	1000 ppm
SITE : spleen				
TUMOUR : fibroma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	1/50 ( 2.0)	3/50 ( 6.0)
Adjusted Rates(b)	0.0	0.0	2.63	7.14
Terminal Rates(c)	0/36 ( 0.0)	0/42 ( 0.0)	1/38 ( 2.6)	2/28 ( 7.1)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0123*			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0146*			
Fisher Exact Test(e)		P=0.5000	P=0.4950	P=0.1325
SITE : spleen				
TUMOUR : fibrosarcoma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	0/50 ( 0.0)	17/50 (34.0)
Adjusted Rates(b)	0.0	0.0	0.0	25.00
Terminal Rates(c)	0/36 ( 0.0)	0/41 ( 0.0)	0/38 ( 0.0)	7/28 (25.0)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**?			
Fisher Exact Test(e)		P=0.5000	P=0.5000	P<0.0001**
SITE : spleen				
TUMOUR : osteosarcoma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	0/50 ( 0.0)	3/50 ( 6.0)
Adjusted Rates(b)	0.0	0.0	0.0	0.0
Terminal Rates(c)	0/36 ( 0.0)	0/41 ( 0.0)	0/38 ( 0.0)	1/28 ( 0.0)
Standard Rates(d)	P=0.0005**?			
Prevalence Rates(d)	P=-----			
Combind analysis(d)	P=0.0005**?			
Cochran-Armitage Test(e)	P=0.0030**			
Fisher Exact Test(e)		P=0.5000	P=0.5000	P=0.0009**
SITE : spleen				
TUMOUR : mononuclear cell leukemia				
Overall Rates(a)	11/50 (22.0)	1/50 ( 2.0)	7/50 (14.0)	4/50 ( 8.0)
Adjusted Rates(b)	12.50	2.44	5.26	4.35
Terminal Rates(c)	4/36 (11.1)	1/41 ( 2.4)	2/38 ( 5.3)	0/28 ( 0.0)
Standard Rates(d)	P=0.7000			
Prevalence Rates(d)	P=0.6696			
Combind analysis(d)	P=0.7686			
Cochran-Armitage Test(e)	P=0.3554			
Fisher Exact Test(e)		P=0.0052**	P=0.2711	P=0.0777
SITE : spleen				
TUMOUR : hemangiosarcoma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	2/50 ( 4.0)	4/50 ( 8.0)
Adjusted Rates(b)	0.0	0.0	2.63	8.11
Terminal Rates(c)	0/36 ( 0.0)	0/41 ( 0.0)	1/38 ( 2.6)	1/28 ( 3.6)
Standard Rates(d)	P=0.1606			
Prevalence Rates(d)	P=0.0093**			
Combind analysis(d)	P=0.0057**			
Cochran-Armitage Test(e)	P=0.0097**			
Fisher Exact Test(e)		P=0.5000	P=0.2574	P=0.0688
SITE : spleen				
TUMOUR : fibroma, fibrosarcoma, osteosarcoma, sarcoma:NOS, hemangiosarcoma				
Overall Rates(a)	0/50 ( 0.0)	0/50 ( 0.0)	3/50 ( 6.0)	26/50 (52.0)
Adjusted Rates(b)	0.0	0.0	5.26	38.24
Terminal Rates(c)	0/36 ( 0.0)	0/41 ( 0.0)	2/38 ( 5.3)	10/28 ( 35.7)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.5000	P=0.1325	P<0.0001**

TABLE 19 NUMBER OF RAT WITH SELECTED SPLEEN LESION (MALE)

	Control	40ppm	200ppm	1000ppm
Number examined	50	50	50	50
<b>Non-neoplastic lesions</b>				
Capsule hyperplasia	0	0	43	47
Fibrosis	0	1	40	47
Fatty metamorphosis	0	0	14	24
Extramedullary hematopoiesis	4	4	18	13
Congestion	0	0	10	0
Deposit of hemosiderin	4	5	6	0
Follicular hyperplasia	0	1	0	0
<b>Neoplastic lesions</b>				
Fibrosarcoma (a)	0	1	0	29
Fibroma (b)	0	0	1	15
Osteosarcoma (c)	0	0	0	11
Hemangiosarcoma (d)	0	0	5	7
Sarcoma:NOS (e)	0	0	1	6
(a)/(b)/(c)/(d)/(e) #	0	1	7	47
Mononuclear cell leukemia	7	2	1	2
<b>Metastasis:spleen tumor to other organs</b>				
Liver	0	0	0	24
Pancreas	0	0	0	23
Peritoneum	0	0	0	21
Testis	0	0	0	4
Prostate	0	0	0	3
Lung/bronchus	0	0	0	2
Lymph node	0	0	0	2
Semin vesicle	0	0	0	2
Subcutis	0	0	0	1
Urin bladder	0	0	0	1
Adrenal gland	0	0	0	1
All site ##	0	0	0	30

# : Number of rat with neoplastic lesions except mononuclear cell leukemia.

## : Number of rat with metastasis of spleen tumor

TABLE 20 NUMBER OF RAT WITH SELECTED SPLEEN LESION (FEMALE)

	Control	40ppm	200ppm	1000ppm
Number examined	50	50	50	50
<b>Non-neoplastic lesions</b>				
Capsule hyperplasia	0	0	42	46
Fibrosis	2	3	31	45
Extramedullary hematopoiesis	8	16	26	20
Congestion	0	0	24	11
Fatty metamorphosis	0	0	6	9
Deposit of hemosiderin	7	8	10	6
<b>Neoplastic lesions</b>				
Fibrosarcoma (a)	0	0	0	17
Hemangiosarcoma (b)	0	0	2	4
Fibroma (c)	0	0	1	3
Osteosarcoma (d)	0	0	0	3
Sarcoma:NOS (e)	0	0	0	1
(a)/(b)/(c)/(d)/(e) #	0	0	3	26
Mononuclear cell leukemia	11	1	7	4
<b>Metastasis:spleen tumor to other organs</b>				
Liver	0	0	0	13
Peritoneum	0	0	0	11
Pancreas	0	0	0	9
Lung/bronchus	0	0	0	4
Adrenal gland	0	0	0	4
Lymph node	0	0	0	1
Heart	0	0	0	1
Large intestine	0	0	0	1
All site ##	0	0	0	20

# : Number of rat with neoplastic lesions except mononuclear cell leukemia.

## : Number of rat with metastasis of spleen tumor

TABLE 21 NEOPLASTIC LESIONS (LIVER) INCIDENCE AND STATISTICAL ANALYSIS : RAT:MALE

Group Name	Control	40 ppm	200 ppm	1000 ppm
SITE	: liver			
TUMOUR	: hepatocellular adenoma			
Overall Rates(a)	0/50 ( 0.0)	2/50 ( 4.0)	5/50 (10.0)	0/50 ( 0.0)
Adjusted Rates(b)	0.0	4.35	11.90	0.0
Terminal Rates(c)	0/43 ( 0.0)	2/46 ( 4.3)	5/42 (11.9)	0/12 ( 0.0)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.4313			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.3008			
Fisher Exact Test(e)		P=0.2574	P=0.0360*	P=0.5000

TABLE 22 NEOPLASTIC LESIONS (ADRENAL GLAND) INCIDENCE AND STATISTICAL ANALYSIS : RAT:MALE

Group Name	Control	40 ppm	200 ppm	1000 ppm
SITE	: adrenal gland			
TUMOUR	: pheochromocytoma			
Overall Rates(a)	7/50 (14.0)	7/50 (14.0)	6/50 (12.0)	16/50 (32.0)
Adjusted Rates(b)	15.56	15.22	14.29	61.54
Terminal Rates(c)	6/43 (14.0)	7/46 (15.2)	6/42 (14.3)	7/12 (58.3)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P<0.0001**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0041**			
Fisher Exact Test(e)		P=0.3882	P=0.4863	P=0.0704

TABLE 23 NEOPLASTIC LESIONS (ADRENAL GLAND) INCIDENCE AND STATISTICAL ANALYSIS : RAT:FEMALE

Group Name	Control	40 ppm	200 ppm	1000 ppm
SITE	: adrenal gland			
TUMOUR	: pheochromocytoma			
Overall Rates(a)	3/50 ( 6.0)	6/50 (12.0)	4/50 ( 8.0)	16/50 (32.0)
Adjusted Rates(b)	7.50	12.77	10.53	40.00
Terminal Rates(c)	2/36 ( 5.6)	4/41 ( 9.8)	4/38 (10.5)	10/28 (35.7)
Standard Rates(d)	P=0.1648			
Prevalence Rates(d)	P=0.0001**			
Combind analysis(d)	P<0.0001**			
Cochran-Armitage Test(e)	P=0.0001**			
Fisher Exact Test(e)		P=0.2728	P=0.4895	P=0.0049**

TABLE 24 CAUSE OF DEATH(SUMMARY) :RAT

Sex	Male				Female			
	Control	40ppm	200ppm	1000ppm	Control	40ppm	200ppm	1000ppm
Number of Dead/Moribund Animal	7	4	8	38	14	9	12	22
no microscopical confirmation	1	0	0	0	1	0	2	0
urinary retention	0	0	0	1	0	0	0	0
chronic nephropathy	1	1	3	0	1	0	0	1
Tumor death : leukemia	3	0	0	0	6	0	5	0
: nasal cavity	0	0	0	0	1	1	0	0
: subcutis	0	1	2	0	0	0	0	0
: spleen	0	0	0	37	0	0	1	15
: liver	0	0	0	0	1	0	0	0
: pituitary	1	1	1	0	2	3	3	2
: adrenal	0	0	1	0	0	0	0	1
: uterus	-	-	-	-	1	3	0	2
: mammary gland	0	0	0	0	0	0	1	0
: peripheral nerves	0	0	0	0	0	1	0	0
: spinal cord	1	0	0	0	0	0	0	0
: Zymbal gland	0	1	1	0	0	1	0	1
: retroperitoneum	0	0	0	0	1	0	0	0

TABLE 27 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (TWO-WEEK STUDIES)

Week-Day on Study	Control		111 ppm			333 ppm			1000 ppm			3000 ppm			9000 ppm		
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt. <10>	% of cont. <10>	No.of Surviv. <10>												
0-0	23.5 (10)	10/10	23.5 (10)	100	10/10	23.5 (10)	100	10/10	23.5 (10)	100	10/10	23.6 (10)	100	10/10	23.6 (10)	100	10/10
1-1	23.6 (10)	10/10	24.1 (10)	102	10/10	23.5 (10)	100	10/10	23.8 (10)	101	10/10	23.1 (10)	98	10/10	21.7 (10)	92	10/10
1-2	23.6 (10)	10/10	24.0 (10)	102	10/10	23.5 (10)	100	10/10	23.7 (10)	100	10/10	23.0 (10)	97	10/10	20.8 (10)	88	10/10
1-4	23.1 (10)	10/10	23.3 (10)	101	10/10	22.7 (10)	98	10/10	22.9 (10)	99	10/10	23.1 (10)	100	10/10	19.5 (10)	84	10/10
1-7	24.0 (10)	10/10	25.0 (10)	104	10/10	24.7 (10)	103	10/10	24.4 (10)	102	10/10	23.7 (10)	99	10/10	18.1 (10)	75	10/10
2-3	25.1 (10)	10/10	25.4 (10)	101	10/10	24.4 (10)	97	10/10	25.3 (10)	101	10/10	24.3 (10)	97	10/10	16.3 (10)	65	7/10
2-7	24.7 (10)	10/10	24.3 (10)	98	10/10	24.4 (10)	99	10/10	24.1 (10)	98	10/10	24.7 (10)	100	10/10	17.6 (5)	71	5/10

&lt; &gt;:No.of effective animals,( ) :No.of measured animals

TABLE 28 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (TWO-WEEK STUDIES)

Week-Day on Study	Control		111 ppm			333 ppm			1000 ppm			3000 ppm			9000 ppm		
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt. <10>	% of cont. <10>	No.of Surviv. <10>												
0-0	18.8 (10)	10/10	18.8 (10)	100	10/10	18.8 (10)	100	10/10	18.8 (10)	100	10/10	18.8 (10)	100	10/10	18.8 (10)	100	10/10
1-1	18.5 (10)	10/10	18.8 (10)	102	10/10	19.0 (10)	103	10/10	18.4 (10)	99	10/10	18.2 (10)	98	10/10	16.8 (10)	91	10/10
1-2	18.5 (10)	10/10	18.9 (10)	102	10/10	18.9 (10)	102	10/10	18.3 (10)	99	10/10	18.1 (10)	98	10/10	15.8 (10)	85	10/10
1-4	18.0 (10)	10/10	18.5 (10)	103	10/10	18.4 (10)	102	10/10	18.4 (10)	102	10/10	18.1 (10)	101	10/10	14.5 (10)	81	10/10
1-7	18.0 (10)	10/10	18.2 (10)	101	10/10	18.8 (10)	99	10/10	18.7 (10)	98	10/10	18.4 (10)	97	10/10	12.8 (10)	67	8/10
2-3	19.4 (10)	10/10	19.6 (10)	101	10/10	19.6 (10)	101	10/10	19.4 (10)	100	10/10	19.5 (10)	101	10/10	13.0 (3)	67	2/10
2-7	19.0 (10)	10/10	19.3 (10)	102	10/10	19.4 (10)	102	10/10	19.4 (10)	102	10/10	19.8 (10)	104	10/10	13.1 (1)	69	1/10

&lt; &gt;:No.of effective animals,( ) :No.of measured animals

TABLE 29 FOOD CONSUMPTION IN MALE MOUSE (TWO-WEEK STUDIES)

Control				111 ppm				333 ppm				1000 ppm				3000 ppm				9000 ppm			
Week-Day on Study	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont.	No.of Surviv.	Au.FC.	% of cont.	No.of Surviv.															
1-7	3.8 (10)	10/10	3.9 (10)	103	10/10	3.8 (10)	100	10/10	3.8 (10)	100	10/10	3.5 (10)	92	10/10	1.7 (10)	45	10/10						
2-7	3.6 (10)	10/10	3.3 (10)	92	10/10	3.5 (10)	97	10/10	3.7 (10)	103	10/10	3.6 (10)	100	10/10	2.0 (5)	56	5/10						

<>:No.of effective animals,( ):No.of measured animals

TABLE 30 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-WEEK STUDIES)

Control				111 ppm				333 ppm				1000 ppm				3000 ppm				9000 ppm			
Week-Day on Study	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont.	No.of Surviv.	Au.FC.	% of cont.	No.of Surviv.															
1-7	3.3 (10)	10/10	3.4 (10)	103	10/10	3.4 (10)	103	10/10	3.3 (10)	100	10/10	2.6 (10)	79	10/10	2.0 (10)	61	8/10						
2-7	3.3 (10)	10/10	3.4 (10)	103	10/10	3.5 (10)	106	10/10	3.7 (10)	112	10/10	3.1 (10)	94	10/10	2.6 (1)	79	1/10						

<>:No.of effective animals,( ):No.of measured animals

TABLE 31 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control				74.1 ppm				222 ppm				667 ppm				2000 ppm				6000 ppm			
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt.	% of cont. <9>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.																
0-0	22.7 (10)	10/10	22.6 (9)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	
1-7	22.8 (10)	10/10	23.3 (9)	102	9/9 *	23.4 (10)	103	10/10	22.7 (10)	100	10/10	23.2 (10)	102	10/10	20.2 (10)	89	10/10	20.4 (10)	80	10/10	20.4 (10)	80	10/10	
2-7	25.5 (10)	10/10	25.8 (9)	101	9/9	25.2 (10)	99	10/10	25.2 (10)	99	10/10	24.4 (10)	96	10/10	21.0 (10)	80	10/10	21.0 (10)	80	10/10	21.0 (10)	80	10/10	
3-7	26.1 (10)	10/10	26.6 (9)	102	9/9	25.9 (10)	99	10/10	25.6 (10)	98	10/10	25.1 (10)	96	10/10	22.6 (10)	83	10/10	22.6 (10)	83	10/10	22.6 (10)	83	10/10	
4-7	27.1 (10)	10/10	27.3 (9)	101	9/9	26.9 (10)	99	10/10	27.3 (10)	101	10/10	26.4 (10)	97	10/10	22.9 (10)	82	10/10	22.9 (10)	82	10/10	22.9 (10)	82	10/10	
5-7	27.9 (10)	10/10	27.7 (9)	98	9/9	27.7 (10)	99	10/10	27.4 (10)	98	10/10	26.3 (10)	94	10/10	24.2 (10)	85	10/10	24.2 (10)	85	10/10	24.2 (10)	85	10/10	
6-7	28.4 (10)	10/10	28.5 (9)	100	9/9	28.9 (10)	102	10/10	28.2 (10)	99	10/10	27.5 (10)	97	10/10	25.1 (10)	86	10/10	25.1 (10)	86	10/10	25.1 (10)	86	10/10	
7-7	29.2 (10)	10/10	28.9 (9)	98	9/9	29.6 (10)	101	10/10	29.5 (10)	101	10/10	28.8 (10)	96	10/10	26.4 (10)	88	10/10	26.4 (10)	88	10/10	26.4 (10)	88	10/10	
8-7	30.0 (10)	10/10	30.6 (9)	102	9/9	30.7 (10)	102	10/10	30.5 (10)	102	10/10	29.0 (10)	96	10/10	26.7 (10)	88	10/10	26.7 (10)	88	10/10	26.7 (10)	88	10/10	
9-7	30.3 (10)	10/10	30.7 (9)	101	9/9	31.0 (10)	102	10/10	30.9 (10)	102	10/10	29.0 (10)	96	10/10	27.1 (10)	87	10/10	27.1 (10)	87	10/10	27.1 (10)	87	10/10	
10-7	31.1 (10)	10/10	32.4 (9)	104	9/9	32.5 (10)	105	10/10	32.2 (10)	104	10/10	30.2 (10)	97	10/10	27.6 (10)	90	10/10	27.6 (10)	90	10/10	27.6 (10)	90	10/10	
11-7	30.7 (10)	10/10	32.2 (9)	105	9/9	32.0 (10)	104	10/10	31.9 (10)	104	10/10	29.6 (10)	96	10/10	27.7 (10)	86	10/10	27.7 (10)	86	10/10	27.7 (10)	86	10/10	
12-7	32.2 (10)	10/10	33.7 (9)	105	9/9	33.7 (10)	105	10/10	33.6 (10)	104	10/10	31.4 (10)	98	10/10	28.2 (10)	85	10/10	28.2 (10)	85	10/10	28.2 (10)	85	10/10	
13-7	33.1 (10)	10/10	33.9 (9)	102	9/9	34.0 (10)	105	10/10	35.4 (10)	107	10/10	32.5 (10)	98	10/10										

< >:No.of effective animals, ( ) :No.of measured animals Au.Wt.: g

\* One male mouse of the 74.1 ppm group accidentally died on 1st-week 6th-day (1-6)

TABLE 32 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control				74.1 ppm				222 ppm				667 ppm				2000 ppm				6000 ppm			
	Au.Wt. <10>	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv.																			
0-0	19.1 (10)	10/10	19.1 (10)	100	10/10	19.1 (10)	100	10/10	19.1 (10)	100	10/10	19.1 (10)	100	10/10	19.1 (10)	100	10/10	19.1 (10)	100	10/10	19.1 (10)	100	10/10	
1-7	19.2 (10)	10/10	19.4 (10)	101	10/10	19.8 (10)	103	10/10	19.7 (10)	103	10/10	19.6 (10)	102	10/10	17.0 (10)	86	10/10	15.8 (10)	82	10/10	17.0 (10)	86	10/10	
2-7	19.8 (10)	10/10	20.1 (10)	102	10/10	20.2 (10)	102	10/10	20.2 (10)	102	10/10	20.3 (10)	103	10/10	17.3 (10)	89	10/10	17.3 (10)	89	10/10	17.3 (10)	89	10/10	
3-7	20.1 (10)	10/10	20.2 (10)	100	10/10	20.7 (10)	103	10/10	20.1 (10)	100	10/10	20.6 (10)	102	10/10	19.1 (10)	95	10/10	19.1 (10)	95	10/10	19.1 (10)	95	10/10	
4-7	20.1 (10)	10/10	20.2 (10)	100	10/10	20.2 (10)	100	10/10	21.1 (10)	105	10/10	20.9 (10)	104	10/10	19.6 (10)	94	10/10	19.6 (10)	94	10/10	19.6 (10)	94	10/10	
5-7	20.9 (10)	10/10	21.0 (10)	102	10/10	21.4 (10)	102	10/10	21.6 (10)	103	10/10	22.5 (10)	108	10/10	20.3 (10)	92	10/10	20.3 (10)	92	10/10	20.3 (10)	92	10/10	
6-7	22.0 (10)	10/10	22.1 (10)	100	10/10	22.9 (10)	104	10/10	22.6 (10)	103	10/10	22.8 (10)	104	10/10	20.7 (10)	95	10/10	23.1 (10)	105	10/10	23.1 (10)	105	10/10	
7-7	21.9 (10)	10/10	22.5 (10)	103	10/10	23.0 (10)	105	10/10	23.1 (10)	105	10/10	23.3 (10)	106	10/10	21.0 (9)	94	10/10	21.0 (9)	94	10/10	21.0 (9)	94	10/10	
8-7	22.4 (10)	10/10	23.3 (10)	104	10/10	23.6 (10)	105	10/10	23.4 (10)	104	10/10	23.6 (10)	105	10/10	21.5 (9)	94	10/10	21.5 (9)	94	10/10	21.5 (9)	94	10/10	
9-7	22.8 (10)	10/10	23.7 (10)	104	10/10	23.0 (10)	101	10/10	23.8 (10)	104	10/10	24.2 (10)	106	10/10	21.9 (9)	92	10/10	21.9 (9)	92	10/10	21.9 (9)	92	10/10	
10-7	23.7 (10)	10/10	24.4 (10)	103	10/10	25.2 (10)	106	10/10	24.7 (10)	104	10/10	25.2 (10)	106	10/10	22.6 (9)	103	10/10	22.6 (9)	103	10/10	22.6 (9)	103	10/10	
11-7	22.0 (10)	10/10	23.4 (10)	106	10/10	24.6 (10)	112	10/10	24.0 (10)	109	10/10	24.4 (10)	111	10/10	22.9 (9)	95	10/10	22.9 (9)	95	10/10	22.9 (9)	95	10/10	
12-7	24.2 (10)	10/10	25.6 (10)	106	10/10	26.0 (10)	107	10/10	25.9 (10)	107	10/10	25.5 (10)	105	10/10	23.0 (9)	95	10/10	23.0 (9)	95	10/10	23.0 (9)	95	10/10	
13-7	24.3 (10)	10/10	25.7 (10)	106	10/10	26.4 (10)	109	10/10	26.0 (10)	107	10/10	25.7 (10)	106	10/10										

< >:No.of effective animals, ( ) :No.of measured animals Au.Wt.: g

TABLE 33 FOOD CONSUMPTION IN MALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control		74.1 ppm		222 ppm		667 ppm		2000 ppm		6000 ppm			
	Au.FC. <10>	No.of Surviv. <10>	Au.FC. <10>	% of cont. <10>	No.of Surviv. <10>									
1-7	3.6 (10)	10/10	3.8 ( 9)	106	9/ 9 *	4.0 (10)	111	10/10	3.6 (10)	100	10/10	3.6 (10)	100	10/10
2-7	4.2 (10)	10/10	4.2 ( 9)	100	9/ 9	4.2 (10)	100	10/10	4.1 (10)	98	10/10	3.7 (10)	88	10/10
3-7	3.7 (10)	10/10	3.0 ( 9)	105	9/ 9	3.9 (10)	105	10/10	3.7 (10)	100	10/10	3.7 (10)	100	10/10
4-7	3.5 (10)	10/10	3.9 ( 9)	111	9/ 9	3.9 (10)	111	10/10	3.8 (10)	111	10/10	3.8 (10)	109	10/10
5-7	3.6 (10)	10/10	3.7 ( 9)	103	9/ 9	3.7 (10)	103	10/10	3.4 (10)	94	10/10	3.5 (10)	97	10/10
6-7	3.5 (10)	10/10	3.7 ( 9)	106	9/ 9	4.0 (10)	114	10/10	3.7 (10)	106	10/10	3.7 (10)	106	10/10
7-7	3.8 (10)	10/10	3.7 ( 9)	97	9/ 9	3.8 (10)	103	10/10	3.8 (10)	103	10/10	3.7 (10)	97	10/10
8-7	3.6 (10)	10/10	3.9 ( 9)	108	9/ 9	4.0 (10)	111	10/10	3.8 (10)	106	10/10	3.8 (10)	106	10/10
9-7	3.6 (10)	10/10	3.8 ( 9)	106	9/ 9	3.9 (10)	108	10/10	3.7 (10)	103	10/10	3.8 (10)	106	10/10
10-7	3.6 (10)	10/10	4.2 ( 9)	117	9/ 9	4.1 (10)	114	10/10	4.1 (10)	114	10/10	4.0 (10)	111	10/10
11-7	3.3 (10)	10/10	3.6 ( 9)	109	9/ 9	3.5 (10)	106	10/10	3.4 (10)	103	10/10	3.5 (10)	106	10/10
12-7	4.0 (10)	10/10	4.3 ( 9)	108	9/ 9	4.3 (10)	108	10/10	4.2 (10)	105	10/10	4.2 (10)	105	10/10
13-7	3.5 (10)	10/10	3.5 ( 9)	100	9/ 9	3.8 (10)	111	10/10	4.1 (10)	117	10/10	4.0 (10)	114	10/10

&lt; &gt;:No.of effective animals,( ):No.of measured animals

Au.FC.: g

\* One male mouse of the 74.1ppm group accidentally died on 1st-week 6th-day (1-6)

TABLE 34 FOOD CONSUMPTION IN FEMALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control		74.1 ppm		222 ppm		667 ppm		2000 ppm		6000 ppm			
	Au.FC. <10>	No.of Surviv. <10>	Au.FC. <10>	% of cont. <10>	No.of Surviv. <10>									
1-7	3.4 (10)	10/10	3.5 (10)	103	10/10	3.8 (10)	112	10/10	3.7 (10)	109	10/10	3.2 (10)	94	10/10
2-7	3.8 (10)	10/10	3.0 (10)	103	10/10	4.0 (10)	105	10/10	4.0 (10)	105	10/10	3.6 (10)	95	10/10
3-7	3.8 (10)	10/10	3.9 (10)	103	10/10	4.1 (10)	108	10/10	3.9 (10)	103	10/10	3.7 (9)	97	10/10
4-7	3.6 (10)	10/10	3.7 (10)	103	10/10	3.7 (10)	103	10/10	4.2 (10)	117	10/10	3.6 (10)	100	10/10
5-7	3.5 (10)	10/10	3.6 (10)	103	10/10	3.7 (10)	105	10/10	3.7 (10)	106	10/10	3.6 (10)	103	10/10
6-7	3.8 (10)	10/10	3.0 (10)	103	10/10	4.2 (10)	111	10/10	4.1 (10)	108	10/10	3.6 (10)	95	10/10
7-7	3.8 (10)	10/10	4.0 (10)	105	10/10	4.0 (10)	105	10/10	4.2 (10)	111	10/10	3.9 (10)	103	10/10
8-7	3.8 (10)	10/10	4.0 (10)	105	10/10	4.1 (10)	108	10/10	4.1 (10)	108	10/10	3.8 (10)	100	10/10
9-7	4.1 (10)	10/10	4.4 (10)	107	10/10	4.2 (10)	102	10/10	4.5 (10)	110	10/10	4.0 (10)	98	10/10
10-7	4.3 (10)	10/10	4.4 (10)	102	10/10	4.8 (10)	112	10/10	4.5 (10)	105	10/10	4.0 (10)	93	10/10
11-7	3.5 (10)	10/10	3.7 (10)	106	10/10	3.8 (10)	109	10/10	3.9 (10)	111	10/10	3.7 (10)	106	10/10
12-7	4.6 (10)	10/10	4.8 (10)	104	10/10	4.8 (10)	104	10/10	5.0 (10)	109	10/10	4.0 (10)	87	10/10
13-7	4.0 (10)	10/10	4.2 (10)	105	10/10	4.5 (10)	113	10/10	4.6 (10)	115	10/10	4.1 (10)	103	10/10

&lt; &gt;:No.of effective animals,( ):No.of measured animals

Au.FC.: g

TABLE 35 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE  
(TWO-YEAR STUDIES)

Week-Day on Study	Control			125 ppm			500 ppm			2000 ppm		
	Au.Wt.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	
0-0	17.2 (50)	50/50	17.1 (50)	99	50/50	17.1 (50)	99	50/50	17.1 (50)	99	50/50	
1-7	22.1 (50)	50/50	22.7 (50)	103	50/50	23.0 (50)	104	50/50	21.6 (50)	98	50/50	
2-7	24.7 (50)	50/50	23.7 (50)	96	50/50	24.0 (50)	97	50/50	23.4 (50)	95	50/50	
3-7	25.1 (50)	50/50	25.2 (50)	100	50/50	25.4 (50)	101	50/50	24.5 (50)	98	50/50	
4-7	25.1 (50)	50/50	26.1 (50)	100	50/50	25.6 (50)	98	50/50	25.2 (50)	97	50/50	
5-7	26.3 (50)	50/50	26.1 (50)	99	50/50	26.2 (50)	100	50/50	25.9 (50)	98	50/50	
6-7	27.0 (50)	50/50	27.0 (50)	100	50/50	27.1 (50)	100	50/50	26.5 (50)	98	50/50	
7-7	27.8 (50)	50/50	28.0 (50)	100	50/50	28.1 (50)	101	50/50	27.3 (50)	98	50/50	
8-7	28.3 (50)	50/50	28.6 (50)	101	50/50	28.5 (50)	101	50/50	27.6 (50)	98	50/50	
9-7	26.9 (50)	50/50	27.1 (50)	101	50/50	27.3 (50)	101	50/50	26.4 (50)	98	50/50	
10-7	29.1 (50)	50/50	28.4 (50)	98	50/50	28.8 (50)	99	50/50	27.1 (50)	93	50/50	
11-7	30.0 (50)	50/50	29.7 (50)	99	50/50	30.2 (50)	101	50/50	28.6 (49)	95	49/50	
12-7	30.6 (50)	50/50	30.6 (50)	100	50/50	30.7 (50)	100	50/50	29.3 (49)	96	49/50	
13-7	29.2 (50)	50/50	29.6 (50)	101	50/50	29.2 (50)	100	50/50	28.4 (49)	97	49/50	
14-7	30.2 (50)	50/50	30.3 (50)	100	50/50	30.6 (50)	101	50/50	29.6 (49)	98	49/50	
16-7	31.5 (50)	50/50	31.2 (50)	99	50/50	29.3 (50)	93	50/50	30.1 (49)	96	49/50	
18-7	33.2 (50)	50/50	32.9 (50)	99	50/50	32.4 (50)	98	50/50	31.1 (49)	94	49/50	
20-7	32.7 (50)	50/50	32.8 (50)	100	50/50	32.0 (50)	98	50/50	30.5 (49)	93	49/50	
22-7	32.8 (50)	50/50	32.9 (50)	100	50/50	32.0 (50)	97	50/50	30.4 (49)	92	49/50	
24-7	33.0 (50)	50/50	33.0 (50)	100	50/50	32.9 (49)	100	49/50	31.5 (49)	95	49/50	
26-7	33.8 (50)	50/50	33.6 (50)	99	50/50	33.0 (49)	98	49/50	31.0 (49)	92	49/50	
28-7	34.3 (50)	50/50	33.6 (50)	98	50/50	34.3 (49)	100	49/50	32.3 (49)	94	49/50	
30-7	34.7 (50)	50/50	34.5 (50)	99	50/50	34.9 (49)	101	49/50	32.9 (49)	95	49/50	
32-7	35.9 (50)	50/50	35.5 (50)	99	50/50	35.7 (49)	99	49/50	33.7 (49)	94	49/50	
34-7	34.8 (50)	50/50	34.3 (50)	99	50/50	34.6 (49)	99	49/50	32.9 (49)	95	49/50	
36-7	34.8 (50)	50/50	33.8 (50)	97	50/50	34.5 (49)	99	49/50	33.1 (49)	95	49/50	
38-7	35.1 (50)	50/50	34.5 (50)	98	50/50	35.3 (48)	101	48/50	34.0 (49)	97	49/50	
40-7	36.4 (50)	50/50	35.8 (50)	98	50/50	36.8 (48)	101	48/50	35.0 (49)	96	49/50	
42-7	35.7 (50)	50/50	34.7 (50)	97	50/50	35.8 (48)	100	48/50	34.2 (48)	96	48/50	
44-7	36.5 (50)	50/50	35.3 (50)	97	50/50	36.5 (48)	100	48/50	34.6 (48)	95	48/50	
46-7	35.2 (50)	50/50	34.4 (49)	98	50/50	34.0 (48)	97	48/50	32.7 (48)	93	48/50	
48-7	35.7 (50)	50/50	34.3 (50)	96	50/50	35.4 (48)	99	48/50	34.5 (48)	97	48/50	
50-7	36.5 (50)	50/50	35.9 (50)	98	50/50	36.9 (48)	101	48/50	35.4 (48)	97	48/50	
52-7	35.0 (50)	50/50	34.3 (50)	98	50/50	35.1 (48)	100	48/50	34.1 (48)	97	48/50	
54-7	34.9 (50)	50/50	34.5 (50)	99	50/50	35.5 (48)	102	48/50	34.5 (48)	99	48/50	
56-7	36.2 (50)	50/50	35.8 (50)	99	50/50	36.8 (48)	102	48/50	35.8 (48)	99	48/50	
58-7	36.3 (50)	50/50	36.3 (50)	100	50/50	37.7 (48)	104	48/50	36.5 (48)	101	48/50	
60-7	36.4 (49)	49/50	36.8 (50)	101	50/50	38.0 (48)	104	48/50	36.2 (48)	99	48/50	
62-7	36.8 (49)	49/50	36.6 (50)	99	50/50	37.4 (48)	102	48/50	36.2 (48)	98	48/50	
64-7	36.5 (49)	49/50	36.2 (50)	99	50/50	37.4 (48)	102	48/50	36.3 (48)	99	48/50	
66-7	34.6 (49)	49/50	34.0 (50)	98	50/50	35.4 (47)	102	47/50	34.3 (48)	99	48/50	
68-7	35.3 (49)	49/50	33.5 (50)	95	50/50	34.8 (46)	99	46/50	34.0 (48)	96	48/50	
70-7	35.2 (49)	49/50	33.2 (50)	94	50/50	34.9 (46)	99	46/50	34.4 (47)	98	47/50	
72-7	34.8 (49)	49/50	32.2 (50)	93	50/50	34.6 (46)	99	46/50	34.0 (47)	98	47/50	
74-7	34.7 (49)	49/50	32.7 (50)	94	50/50	35.1 (46)	101	46/50	34.1 (47)	98	47/50	
76-7	35.5 (49)	49/50	33.1 (50)	93	50/50	34.3 (46)	97	46/50	33.6 (47)	95	47/50	
78-7	34.9 (49)	49/50	32.5 (50)	93	50/50	34.0 (46)	97	46/50	33.4 (47)	96	47/50	
80-7	35.6 (49)	48/50	34.2 (50)	96	50/50	35.5 (46)	100	46/50	34.7 (47)	97	47/50	
82-7	34.9 (48)	48/50	34.1 (50)	98	50/50	35.5 (46)	102	46/50	34.6 (47)	99	47/50	
84-7	35.1 (48)	48/50	34.5 (50)	98	50/50	35.7 (45)	102	45/50	34.9 (46)	99	46/50	
86-7	35.3 (48)	48/50	34.4 (50)	97	50/50	35.3 (45)	100	45/50	35.3 (46)	100	46/50	
88-7	35.1 (48)	48/50	34.5 (50)	98	50/50	34.7 (45)	99	45/50	34.8 (46)	99	46/50	
90-7	35.3 (48)	48/50	34.6 (50)	98	50/50	35.1 (45)	99	45/50	35.5 (45)	101	45/50	
92-7	35.1 (48)	48/50	34.5 (49)	98	49/50	35.4 (45)	101	45/50	35.7 (44)	102	44/50	
94-7	35.7 (47)	47/50	35.2 (49)	99	49/50	35.7 (44)	100	44/50	35.8 (44)	100	44/50	
96-7	35.5 (47)	47/50	34.7 (49)	98	49/50	35.5 (44)	100	44/50	35.3 (43)	99	43/50	
98-7	35.8 (47)	47/50	34.8 (49)	97	49/50	35.9 (44)	100	44/50	35.2 (43)	98	43/50	
100-7	35.6 (47)	47/50	34.7 (49)	97	49/50	35.6 (44)	100	44/50	35.5 (42)	100	42/50	
102-7	36.4 (47)	47/50	35.5 (49)	98	49/50	36.5 (43)	100	43/50	34.7 (42)	95	42/50	
104-7	38.5 (47)	47/50	37.1 (49)	96	49/50	37.4 (42)	97	42/50	35.8 (38)	93	38/50	

<>:No.of effective animals, ( ):No.of measured animals

TABLE 36 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE  
(TWO-YEAR STUDIES)

Week-Day on Study	Control			125 ppm			500 ppm			2000 ppm		
	Au.Wt.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	Au.Wt.	% of cont.	No.of Surviv. <50>	
0-0	15.1 (50)	50/50	15.1 (50)	100	50/50	15.1 (50)	100	50/50	15.1 (50)	100	50/50	
1-7	19.1 (50)	50/50	19.2 (50)	101	50/50	18.5 (50)	97	50/50	17.7 (50)	93	50/50	
2-7	20.2 (50)	50/50	20.4 (50)	101	50/50	20.4 (50)	101	50/50	20.1 (50)	100	50/50	
3-7	21.1 (50)	50/50	21.4 (50)	101	50/50	21.0 (50)	100	50/50	20.8 (50)	99	50/50	
4-7	20.6 (50)	50/50	20.7 (50)	100	50/50	20.7 (50)	100	50/50	21.4 (50)	104	50/50	
5-7	21.3 (50)	50/50	21.5 (50)	101	50/50	21.0 (50)	99	50/50	21.8 (50)	102	50/50	
6-7	20.8 (50)	50/50	21.3 (50)	102	50/50	21.7 (50)	104	50/50	22.0 (50)	106	50/50	
7-7	22.8 (50)	50/50	23.0 (50)	100	50/50	22.8 (50)	100	50/50	22.9 (50)	100	50/50	
8-7	22.2 (50)	50/50	22.0 (50)	99	50/50	22.2 (50)	100	50/50	22.3 (50)	100	50/50	
9-7	21.1 (50)	50/50	21.6 (50)	102	50/50	21.9 (50)	101	50/50	22.6 (50)	107	50/50	
10-7	23.0 (50)	50/50	23.3 (50)	101	50/50	22.9 (50)	100	50/50	23.9 (50)	104	50/50	
11-7	23.7 (50)	50/50	23.5 (50)	99	50/50	23.4 (50)	99	50/50	23.9 (50)	101	50/50	
12-7	24.1 (50)	50/50	24.3 (50)	101	50/50	24.0 (50)	100	50/50	24.4 (49)	101	49/50	
13-7	23.8 (50)	50/50	24.2 (50)	101	50/50	23.6 (50)	99	50/50	24.4 (49)	102	49/50	
14-7	24.1 (50)	50/50	25.0 (50)	104	50/50	23.8 (50)	99	50/50	25.0 (49)	104	49/50	
15-7	24.1 (50)	50/50	23.5 (50)	98	50/50	24.5 (50)	102	50/50	25.6 (49)	106	48/50	
18-7	24.7 (50)	50/50	25.2 (50)	102	50/50	25.0 (50)	101	50/50	25.1 (48)	102	48/50	
20-7	25.5 (49)	49/50	26.0 (50)	102	50/50	25.3 (50)	99	50/50	25.9 (48)	102	48/50	
22-7	25.0 (49)	49/50	24.9 (50)	100	50/50	25.0 (50)	100	50/50	25.6 (48)	102	48/50	
24-7	25.7 (49)	49/50	25.8 (50)	100	50/50	25.2 (50)	98	50/50	26.0 (48)	101	48/50	
25-7	25.3 (49)	49/50	25.4 (50)	97	50/50	26.2 (50)	100	50/50	26.4 (48)	100	47/50	
28-7	26.5 (49)	49/50	26.1 (50)	98	50/50	25.7 (50)	97	50/50	26.5 (47)	100	47/50	
30-7	27.3 (49)	49/50	27.6 (50)	101	50/50	28.0 (50)	103	50/50	28.5 (47)	104	47/50	
32-7	27.4 (49)	49/50	27.6 (50)	101	50/50	26.5 (50)	97	50/50	27.3 (47)	100	47/50	
34-7	28.3 (49)	49/50	28.5 (50)	101	50/50	28.6 (50)	101	50/50	29.1 (47)	103	47/50	
35-7	29.1 (49)	49/50	29.2 (50)	100	50/50	28.7 (50)	99	50/50	29.2 (47)	100	47/50	
38-7	27.2 (49)	49/50	27.9 (50)	103	50/50	28.3 (50)	104	50/50	28.4 (47)	104	47/50	
40-7	29.6 (49)	49/50	29.8 (50)	101	50/50	29.9 (50)	101	50/50	30.1 (47)	102	47/50	
42-7	28.5 (49)	49/50	28.8 (50)	101	50/50	28.5 (50)	100	50/50	29.2 (46)	102	46/50	
44-7	28.1 (49)	49/50	28.9 (50)	103	50/50	29.0 (49)	103	49/50	29.1 (46)	104	46/50	
46-7	29.5 (49)	49/50	30.3 (50)	103	50/50	30.1 (49)	102	49/50	30.4 (46)	103	46/50	
48-7	30.0 (49)	49/50	30.8 (50)	103	50/50	31.2 (49)	104	49/50	30.9 (46)	103	46/50	
50-7	29.8 (48)	48/50	30.7 (50)	103	50/50	30.8 (49)	104	49/50	31.1 (46)	104	46/50	
52-7	29.1 (48)	48/50	30.1 (50)	103	50/50	30.5 (49)	105	49/50	30.4 (46)	104	46/50	
54-7	30.9 (48)	48/50	31.5 (50)	102	50/50	31.8 (49)	103	49/50	30.6 (45)	99	45/50	
56-7	29.7 (48)	48/50	30.4 (50)	102	50/50	31.1 (49)	105	49/50	31.0 (45)	104	45/50	
58-7	29.6 (48)	48/50	30.8 (50)	104	50/50	31.2 (49)	105	49/50	31.3 (45)	106	45/50	
60-7	30.4 (48)	48/50	31.2 (50)	103	50/50	31.3 (49)	103	49/50	31.9 (45)	105	45/50	
62-7	29.9 (48)	48/50	30.5 (49)	102	49/50	30.8 (49)	103	49/50	31.0 (45)	104	45/50	
64-7	30.5 (48)	48/50	31.9 (49)	105	49/50	32.3 (49)	106	49/50	31.8 (44)	104	44/50	
66-7	31.2 (48)	48/50	32.0 (49)	103	49/50	32.6 (49)	104	49/50	32.0 (44)	103	44/50	
68-7	30.3 (48)	48/50	30.8 (49)	102	49/50	31.1 (49)	103	49/50	30.7 (44)	101	44/50	
70-7	30.3 (48)	48/50	31.1 (49)	103	49/50	30.7 (49)	101	49/50	30.7 (44)	101	44/50	
72-7	30.0 (48)	48/50	31.3 (48)	104	48/50	31.0 (49)	103	49/50	30.8 (43)	103	43/50	
74-7	29.6 (47)	46/50	30.7 (48)	104	48/50	31.1 (47)	105	47/50	31.2 (42)	105	42/50	
76-7	29.8 (45)	45/50	30.9 (48)	104	48/50	30.8 (46)	103	46/50	30.7 (41)	103	41/50	
78-7	29.6 (44)	44/50	30.8 (48)	104	48/50	31.1 (49)	103	46/50	30.7 (41)	102	41/50	
80-7	30.4 (44)	44/50	31.4 (48)	103	48/50	31.2 (43)	103	43/50	31.1 (41)	102	41/50	
82-7	29.5 (42)	42/50	31.4 (47)	106	47/50	31.7 (43)	107	43/50	30.9 (41)	105	40/50	
84-7	29.9 (41)	41/50	31.0 (46)	104	46/50	31.4 (43)	105	43/50	31.2 (40)	104	40/50	
86-7	29.6 (41)	41/50	31.0 (46)	105	46/50	31.1 (43)	105	43/50	30.7 (40)	104	40/50	
88-7	30.3 (41)	41/50	31.8 (45)	105	44/50	31.3 (42)	103	42/50	30.9 (39)	102	39/50	
90-7	30.5 (41)	41/50	31.8 (44)	104	44/50	31.6 (42)	104	42/50	31.1 (39)	102	39/50	
92-7	30.3 (41)	40/50	31.9 (43)	105	43/50	31.2 (42)	103	42/50	30.5 (39)	101	39/50	
94-7	29.8 (39)	39/50	31.1 (43)	104	43/50	31.4 (41)	105	41/50	30.9 (37)	103	36/50	
96-7	30.2 (39)	38/50	31.2 (41)	103	41/50	31.3 (41)	104	40/50	31.2 (34)	103	34/50	
98-7	31.0 (38)	37/50	31.5 (40)	102	39/50	31.9 (39)	103	39/50	31.3 (33)	101	33/50	
100-7	29.8 (37)	37/50	31.5 (38)	106	38/50	30.7 (37)	103	37/50	29.8 (32)	100	32/50	
102-7	29.7 (36)	35/50	30.5 (38)	103	37/50	31.0 (36)	104	36/50	30.0 (30)	101	30/50	
104-7	29.0 (32)	32/50	30.4 (35)	105	35/50	31.0 (35)	107	35/50	30.6 (29)	106	29/50	

&lt; &gt;:No.of effective animals, ( ) :No.of measured animals

TABLE 37 FOOD CONSUMPTION IN MALE MOUSE  
(TWO-YEAR STUDIES)

Week-Day on Study	Control			125 ppm			500 ppm			2000 ppm		
	Au.FC.	No.of <50>	Au.FC.	% of cont.	No.of <50>	Au.FC.	% of cont.	No.of <50>	Au.FC.	% of cont.	No.of <50>	
		Surviv.			Surviv.			Surviv.			Surviv.	
1-7	4.4 (50)	50/50	4.6 (50)	105	50/50	4.7 (50)	107	50/50	3.8 (50)	86	50/50	
2-7	4.0 (50)	50/50	3.6 (50)	90	50/50	3.6 (50)	90	50/50	3.5 (50)	88	50/50	
3-7	3.5 (50)	50/50	3.7 (50)	106	50/50	4.4 (50)	126	50/50	3.5 (50)	100	50/50	
4-7	3.7 (50)	50/50	3.7 (50)	100	50/50	3.6 (50)	97	50/50	3.5 (50)	95	50/50	
5-7	3.6 (50)	50/50	3.7 (50)	103	50/50	3.7 (50)	103	50/50	3.6 (50)	100	50/50	
6-7	3.9 (50)	50/50	4.0 (50)	103	50/50	3.9 (50)	100	50/50	3.7 (50)	95	50/50	
7-7	4.0 (50)	50/50	4.1 (50)	103	50/50	4.1 (50)	103	50/50	3.7 (50)	93	50/50	
8-7	3.8 (50)	50/50	3.8 (50)	100	50/50	3.6 (50)	95	50/50	3.8 (50)	100	50/50	
9-7	3.3 (50)	50/50	3.4 (50)	103	50/50	3.4 (50)	103	50/50	3.3 (50)	100	50/50	
10-7	4.0 (50)	50/50	3.7 (50)	93	50/50	3.7 (50)	93	50/50	3.3 (50)	83	50/50	
11-7	4.0 (50)	50/50	4.1 (50)	103	50/50	4.0 (50)	100	50/50	3.7 (49)	93	49/50	
12-7	3.9 (50)	50/50	3.9 (50)	100	50/50	3.8 (50)	97	50/50	3.6 (49)	92	49/50	
13-7	3.3 (50)	50/50	3.5 (50)	106	50/50	3.4 (50)	103	50/50	3.3 (49)	100	49/50	
14-7	4.0 (50)	50/50	3.9 (50)	98	50/50	3.9 (50)	98	50/50	3.8 (49)	95	49/50	
16-7	3.9 (50)	50/50	3.7 (50)	95	50/50	3.1 (50)	79	50/50	3.6 (49)	92	49/50	
18-7	4.3 (50)	50/50	4.1 (50)	95	50/50	4.1 (50)	95	50/50	4.0 (49)	93	49/50	
20-7	4.3 (50)	50/50	4.4 (50)	102	50/50	4.3 (50)	100	50/50	3.8 (49)	88	49/50	
22-7	3.7 (50)	50/50	3.6 (50)	97	50/50	3.2 (50)	86	50/50	3.4 (49)	92	49/50	
24-7	4.2 (50)	50/50	4.1 (49)	98	50/50	4.0 (49)	95	49/50	3.8 (49)	90	49/50	
26-7	4.0 (49)	50/50	4.0 (50)	100	50/50	3.8 (49)	95	49/50	3.5 (49)	88	49/50	
28-7	4.0 (50)	50/50	3.8 (50)	95	50/50	3.9 (49)	98	49/50	3.8 (49)	95	49/50	
30-7	4.1 (50)	50/50	4.2 (50)	102	50/50	4.1 (49)	100	49/50	3.9 (49)	95	49/50	
32-7	4.4 (50)	50/50	4.5 (50)	102	50/50	4.4 (49)	100	49/50	4.0 (49)	91	49/50	
34-7	3.7 (50)	50/50	3.6 (50)	97	50/50	3.6 (49)	97	49/50	3.6 (49)	97	49/50	
36-7	3.8 (50)	50/50	3.5 (50)	92	50/50	3.6 (49)	95	49/50	3.6 (49)	95	49/50	
38-7	4.2 (50)	50/50	4.1 (50)	98	50/50	4.2 (48)	100	48/50	3.9 (49)	93	49/50	
40-7	4.5 (50)	50/50	4.4 (50)	98	50/50	4.4 (48)	98	48/50	4.1 (49)	91	49/50	
42-7	4.2 (50)	50/50	4.0 (50)	95	50/50	4.2 (48)	100	48/50	3.9 (48)	93	48/50	
44-7	4.2 (50)	50/50	4.1 (50)	98	50/50	4.1 (48)	98	48/50	4.0 (48)	95	48/50	
46-7	3.8 (50)	50/50	3.7 (50)	97	50/50	3.4 (48)	89	48/50	3.2 (48)	84	48/50	
48-7	4.0 (50)	50/50	3.8 (50)	95	50/50	3.8 (48)	95	48/50	3.8 (48)	95	48/50	
50-7	- (-)	50/50	4.1 (25)	103	50/50	4.3 (48)	108	48/50	4.0 (48)	100	48/50	
52-7	3.7 (50)	50/50	3.6 (50)	97	50/50	3.5 (48)	95	48/50	3.6 (48)	97	48/50	
54-7	4.0 (50)	50/50	4.3 (50)	108	50/50	4.3 (48)	108	48/50	4.1 (48)	103	48/50	
56-7	4.5 (50)	50/50	4.7 (50)	104	50/50	4.6 (48)	102	48/50	4.4 (48)	98	48/50	
58-7	4.2 (50)	50/50	4.3 (50)	102	50/50	4.6 (48)	110	48/50	4.4 (48)	105	48/50	
60-7	4.2 (49)	49/50	4.2 (50)	100	50/50	4.1 (48)	98	48/50	4.0 (48)	95	48/50	
62-7	4.5 (49)	49/50	4.5 (50)	100	50/50	4.4 (48)	98	48/50	4.4 (48)	98	48/50	
64-7	4.3 (49)	49/50	3.9 (50)	91	50/50	4.0 (48)	93	48/50	4.1 (48)	95	48/50	
66-7	3.4 (49)	49/50	3.3 (50)	97	50/50	3.4 (47)	100	47/50	3.5 (48)	103	48/50	
68-7	3.8 (49)	49/50	3.4 (50)	89	50/50	3.5 (46)	92	46/50	3.6 (48)	95	48/50	
70-7	4.0 (49)	49/50	3.7 (50)	93	50/50	3.9 (46)	98	46/50	3.9 (47)	98	47/50	
72-7	4.1 (49)	49/50	3.8 (50)	93	50/50	4.0 (46)	98	46/50	4.0 (47)	98	47/50	
74-7	4.2 (49)	49/50	4.2 (50)	100	50/50	4.4 (46)	105	46/50	4.2 (47)	100	47/50	
76-7	4.4 (49)	49/50	4.2 (50)	95	50/50	3.9 (46)	89	46/50	3.9 (47)	89	47/50	
78-7	4.3 (49)	49/50	3.8 (50)	88	50/50	3.9 (46)	91	46/50	4.0 (47)	93	47/50	
80-7	4.3 (49)	48/50	4.3 (50)	100	50/50	4.4 (46)	102	46/50	4.2 (47)	98	47/50	
82-7	4.1 (48)	48/50	4.2 (50)	102	50/50	4.2 (46)	102	46/50	4.0 (47)	98	47/50	
84-7	3.8 (48)	48/50	4.0 (50)	105	50/50	4.0 (45)	105	45/50	4.0 (46)	105	46/50	
86-7	4.0 (48)	48/50	3.9 (50)	98	50/50	3.9 (45)	98	45/50	4.0 (46)	100	46/50	
88-7	4.2 (48)	48/50	4.2 (50)	100	50/50	4.0 (45)	95	45/50	4.0 (46)	95	46/50	
90-7	4.4 (48)	48/50	4.2 (50)	95	50/50	4.3 (45)	98	45/50	4.2 (45)	95	45/50	
92-7	4.3 (48)	48/50	4.3 (49)	100	49/50	4.3 (45)	100	45/50	4.3 (44)	100	44/50	
94-7	4.5 (47)	47/50	4.5 (49)	100	49/50	4.3 (43)	96	44/50	4.2 (44)	93	44/50	
96-7	4.3 (47)	47/50	4.3 (49)	100	49/50	4.3 (44)	100	44/50	4.2 (43)	98	43/50	
98-7	4.6 (47)	47/50	4.4 (49)	96	49/50	4.5 (44)	98	44/50	4.4 (43)	96	43/50	
100-7	4.6 (47)	47/50	4.3 (49)	93	49/50	4.3 (44)	93	44/50	4.4 (42)	96	42/50	
102-7	4.8 (47)	47/50	4.8 (49)	100	49/50	4.6 (43)	96	43/50	4.1 (42)	85	42/50	
104-7	5.0 (47)	47/50	4.7 (49)	94	49/50	4.6 (42)	92	42/50	4.4 (38)	88	38/50	

&lt; &gt;: No. of effective animals, ( ) : No. of measured animals

TABLE 38 FOOD CONSUMPTION IN FEMALE MOUSE  
(TWO-YEAR STUDIES)

Week-Day on Study	Control		125 ppm			500 ppm			2000 ppm		
	Au.F.C.	No.of <50>	Au.F.C.	% of cont.	No.of <50>	Au.F.C.	% of cont.	No.of <50>	Au.F.C.	% of cont.	No.of <50>
1-7	4.4 (50)	50/50	4.4 (49)	100	50/50	4.3 (50)	98	50/50	3.2 (50)	73	50/50
2-7	3.3 (50)	50/50	3.4 (50)	103	50/50	3.5 (50)	106	50/50	3.3 (50)	100	50/50
3-7	4.3 (42)	50/50	3.5 (49)	81	50/50	3.4 (50)	79	50/50	3.2 (50)	74	50/50
4-7	3.3 (50)	50/50	3.3 (50)	100	50/50	3.4 (50)	103	50/50	3.3 (50)	100	50/50
5-7	3.5 (50)	50/50	3.6 (50)	103	50/50	3.6 (50)	103	50/50	3.3 (50)	94	50/50
6-7	3.4 (50)	50/50	3.5 (50)	103	50/50	3.8 (50)	112	50/50	3.4 (50)	100	50/50
7-7	4.0 (50)	50/50	3.9 (50)	98	50/50	3.9 (50)	98	50/50	3.7 (50)	93	50/50
8-7	3.6 (50)	50/50	3.4 (50)	94	50/50	3.4 (50)	94	50/50	3.4 (50)	94	50/50
9-7	3.5 (50)	50/50	3.4 (50)	97	50/50	3.6 (50)	103	50/50	3.6 (50)	103	50/50
10-7	4.2 (50)	50/50	4.0 (50)	95	50/50	4.0 (50)	95	50/50	3.7 (50)	88	50/50
11-7	3.9 (50)	50/50	3.7 (50)	95	50/50	3.9 (50)	100	50/50	3.5 (50)	90	50/50
12-7	3.7 (50)	50/50	3.6 (50)	97	50/50	3.7 (50)	100	50/50	3.5 (49)	95	49/50
13-7	3.9 (50)	50/50	3.7 (50)	95	50/50	3.7 (50)	95	50/50	3.5 (49)	90	49/50
14-7	3.9 (50)	50/50	3.8 (50)	97	50/50	3.8 (50)	97	50/50	3.8 (49)	97	49/50
15-7	3.9 (50)	50/50	3.3 (50)	85	50/50	3.8 (50)	97	50/50	3.6 (49)	92	48/50
16-7	4.0 (50)	50/50	3.7 (50)	93	50/50	3.8 (50)	95	50/50	3.7 (48)	93	48/50
17-7	4.2 (49)	49/50	4.2 (50)	100	50/50	4.2 (50)	100	50/50	3.8 (48)	90	48/50
20-7	4.2 (49)	49/50	3.5 (50)	95	50/50	3.6 (50)	97	50/50	3.6 (48)	97	48/50
22-7	3.7 (49)	49/50	3.5 (50)	95	50/50	3.8 (49)	97	50/50	3.7 (48)	93	48/50
24-7	4.0 (49)	49/50	3.8 (50)	95	50/50	3.8 (49)	95	50/50	3.7 (48)	93	48/50
26-7	4.2 (49)	49/50	3.6 (50)	86	50/50	4.2 (50)	100	50/50	3.7 (48)	88	47/50
28-7	4.5 (49)	49/50	4.0 (50)	89	50/50	4.0 (50)	89	50/50	3.9 (47)	87	47/50
30-7	4.4 (49)	49/50	4.2 (50)	95	50/50	4.4 (50)	100	50/50	4.1 (47)	93	47/50
32-7	4.3 (49)	49/50	4.3 (50)	100	50/50	4.0 (50)	93	50/50	3.9 (47)	91	47/50
34-7	4.0 (49)	49/50	4.0 (50)	100	50/50	4.2 (50)	105	50/50	4.1 (47)	103	47/50
36-7	4.2 (49)	49/50	4.0 (50)	95	50/50	4.1 (50)	98	50/50	4.0 (47)	95	47/50
38-7	3.6 (49)	49/50	3.8 (50)	106	50/50	3.9 (50)	108	50/50	3.4 (47)	94	47/50
40-7	4.5 (49)	49/50	4.1 (50)	91	50/50	4.2 (50)	93	50/50	4.2 (47)	93	47/50
42-7	3.7 (49)	49/50	3.7 (50)	100	50/50	3.9 (50)	105	50/50	3.8 (46)	103	46/50
44-7	3.6 (49)	49/50	3.7 (50)	103	50/50	3.9 (49)	108	49/50	3.6 (46)	100	46/50
46-7	4.0 (49)	49/50	4.1 (50)	103	50/50	4.1 (49)	103	49/50	4.0 (46)	100	46/50
48-7	4.0 (48)	48/50	3.9 (50)	98	50/50	4.2 (49)	105	49/50	4.0 (46)	100	46/50
50-7	3.9 (48)	48/50	4.0 (50)	103	50/50	4.4 (49)	113	49/50	4.0 (46)	103	46/50
52-7	3.7 (48)	48/50	3.7 (50)	100	50/50	3.9 (49)	105	49/50	3.7 (46)	100	46/50
54-7	4.9 (48)	48/50	4.8 (50)	98	50/50	4.9 (49)	100	49/50	3.9 (45)	80	45/50
56-7	4.2 (48)	48/50	4.1 (50)	98	50/50	4.3 (49)	102	49/50	4.0 (45)	95	45/50
58-7	4.1 (48)	48/50	4.0 (50)	98	50/50	4.1 (49)	100	49/50	3.8 (45)	93	45/50
60-7	4.3 (48)	48/50	4.0 (50)	93	50/50	4.0 (49)	93	49/50	3.9 (45)	91	45/50
62-7	4.1 (48)	48/50	4.1 (49)	100	49/50	3.9 (49)	95	49/50	3.8 (45)	93	45/50
64-7	4.3 (48)	48/50	4.3 (49)	100	49/50	4.4 (49)	102	49/50	4.0 (44)	93	44/50
66-7	4.4 (48)	48/50	4.3 (49)	98	49/50	4.4 (49)	100	49/50	4.2 (44)	95	44/50
68-7	4.0 (48)	48/50	3.8 (49)	95	49/50	3.8 (49)	95	49/50	3.8 (44)	95	44/50
70-7	4.5 (48)	48/50	4.2 (49)	93	49/50	4.2 (49)	93	49/50	4.0 (44)	89	44/50
72-7	4.2 (48)	48/50	4.3 (48)	102	48/50	4.2 (49)	100	49/50	4.0 (43)	95	43/50
74-7	4.2 (47)	46/50	4.0 (48)	95	48/50	4.4 (47)	105	47/50	3.9 (42)	93	42/50
76-7	4.0 (45)	45/50	4.0 (48)	100	48/50	4.1 (46)	103	46/50	3.7 (41)	93	41/50
78-7	3.9 (44)	44/50	3.9 (48)	100	48/50	4.1 (45)	105	44/50	3.7 (41)	95	41/50
80-7	4.2 (44)	44/50	3.9 (48)	93	48/50	4.1 (43)	98	43/50	3.8 (41)	90	41/50
82-7	3.9 (42)	42/50	4.1 (47)	105	47/50	4.3 (43)	110	43/50	3.9 (41)	100	40/50
84-7	4.1 (41)	41/50	4.1 (46)	100	46/50	4.1 (43)	100	43/50	4.0 (40)	98	40/50
86-7	4.2 (41)	41/50	4.1 (46)	98	46/50	4.2 (43)	100	43/50	3.9 (40)	93	40/50
88-7	4.6 (41)	41/50	4.3 (45)	93	44/50	4.3 (42)	93	42/50	4.1 (39)	89	39/50
90-7	4.5 (41)	41/50	4.5 (44)	100	44/50	4.5 (42)	100	42/50	4.2 (39)	93	39/50
92-7	4.2 (41)	40/50	4.2 (43)	100	43/50	4.4 (42)	105	42/50	4.3 (39)	102	39/50
94-7	4.1 (39)	39/50	4.2 (43)	102	43/50	4.2 (41)	102	41/50	4.3 (37)	105	36/50
96-7	4.4 (39)	38/50	4.2 (41)	95	41/50	4.4 (41)	100	40/50	4.2 (34)	95	34/50
98-7	4.4 (38)	37/50	4.2 (40)	95	39/50	4.4 (39)	100	39/50	4.4 (33)	100	33/50
100-7	4.3 (37)	37/50	4.3 (38)	100	38/50	4.2 (37)	98	37/50	4.2 (32)	98	32/50
102-7	3.8 (36)	35/50	3.5 (38)	92	37/50	4.0 (36)	105	36/50	3.7 (30)	97	30/50
104-7	3.8 (32)	32/50	3.8 (35)	100	35/50	4.0 (35)	105	35/50	4.0 (29)	105	29/50

&lt; &gt;:No.of effective animals, ( ):No.of measured animals

Table 39 CLINICAL OBSERVATION ( 104W-SUMMRY ) -MOUSE:TWO-YEAR STUDIES-

Findings	Male				Female			
	2000ppm S (DM) *	500ppm S (DM)	125ppm S (DM)	0ppm S (DM)	2000ppm S (DM)	500ppm S (DM)	125ppm S (DM)	0ppm S (DM)
ANEMIA(貧血)	38(12)	42( 8)	1( 1)	2( 2)	29(21)	20(10)	3( 7)	2( 5)
INTERNAL MASS(内部腫瘤)	1( 2)	1( 0)	0( 0)	0( 1)	1( 2)	1( 6)	4( 2)	2( 3)
EXTERNAL MASS(外部腫瘤)								
M. EYE(眼腫瘤)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 1)	0( 0)
M. NOSE(鼻腫瘤)	1( 1)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)
M. PERI MOUTH(口周囲腫瘤)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)	1( 0)	0( 1)
M. ORAL CAVITY(口腔内部腫瘤)	0( 0)	0( 0)	0( 0)	0( 0)	0( 1)	0( 0)	0( 0)	0( 0)
M. PERI EAR(耳根部腫瘤)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 1)	0( 0)
M. NECK(頸部腫瘤)	0( 0)	0( 1)	0( 0)	0( 0)	0( 0)	0( 2)	1( 1)	0( 0)
M. FORLIMB(前肢腫瘤)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	1( 0)	1( 0)	0( 0)
M. BREAST(胸部腫瘤)	0( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 1)	0( 0)	0( 0)
M. ABDOMEN(腹部腫瘤)	1( 0)	0( 0)	0( 0)	0( 0)	0( 0)	0( 2)	0( 1)	0( 1)
M. ANTERIOR. DORSUM(背側前部腫瘤)	0( 1)	0( 0)	0( 0)	0( 0)	1( 0)	0( 0)	0( 0)	0( 0)
M. ANUS(肛門腫瘤)	0( 0)	0( 0)	0( 1)	0( 0)	0( 0)	0( 1)	0( 0)	0( 0)
No. of Animals with EXTERNAL MASS	2( 2)	1( 1)	1( 1)	2( 0)	1( 1)	1( 6)	3( 4)	0( 2)
No. of Survival Animals (Dead & Moribund Animals)	38(12)	42( 8)	49( 1)	47( 3)	29(21)	35(15)	35(15)	32(18)
No. of Observed Animals	50	50	50	50	50	50	50	50

\* : S=Survival Amimals (DM=Dead & Moribund Animals)

TABLE 40 NUMBER OF MOUSE WITH SELECTED SPLEEN LESION (MALE)

	Control	125ppm	500ppm	2000ppm
Number examined	50	50	50	50
<b>Non-neoplastic lesions</b>				
Congestion	0	0	0	29
Extramedullary hematopoiesis	1	2	6	9
Leukemic cell infiltration	1	0	0	3
Deposit of melanin	2	4	4	2
Follicular hyperplasia	4	5	4	2
Atrophy	0	1	0	0
Deposit of hemosiderin	0	0	1	0
<b>Neoplastic lesions</b>				
Hemangioma/hemangiosarcoma	5	0	2	4

TABLE 41 NUMBER OF MOUSE WITH SELECTED SPLEEN LESION (FEMALE)

	Control	125ppm	500ppm	2000ppm
Number examined	50	50	50	50
<b>Non-neoplastic lesions</b>				
Congestion	0	1	0	26
Deposit of hemosiderin	0	0	3	9
Ossification	0	0	0	6
Extramedullary hematopoiesis	3	7	8	6
Leukemic cell infiltration	5	8	1	3
Follicular hyperplasia	3	4	0	3
Metastasis:uterus tumor	1	0	1	2
Deposit of melanin	5	6	6	1
Atrophy	5	2	0	0
<b>Neoplastic lesions</b>				
Hemangiosarcoma	0	1	5	2
Hemangioma/hemangiosarcoma	0	1	5	3

TABLE 42 CAUSE OF DEATH(SUMMARY) :MOUSE

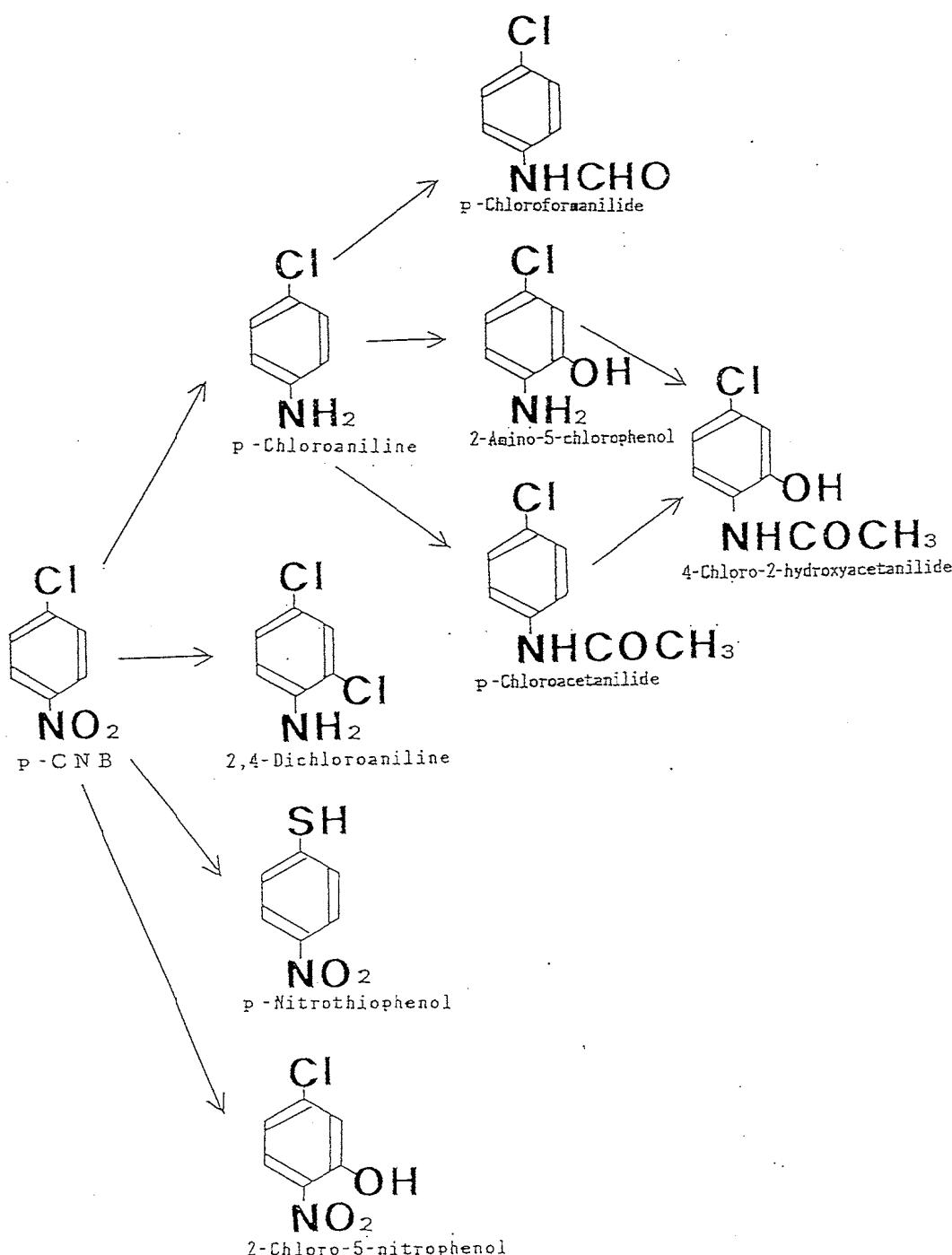
Sex	Male				Female			
	Control	125ppm	500ppm	2000ppm	Control	125ppm	500ppm	2000ppm
Number of Dead/Moribund Animal	3	1	8	12	18	15	15	21
no microscopical confirmation	0	0	0	2	3	1	0	6
trauma	0	0	1	0	0	0	0	0
respiratory system lesion	0	1	0	1	0	0	0	2
hepatic lesion	0	0	1	0	0	2	0	0
urinary system lesion	1	0	0	0	0	0	0	0
renal lesion	0	0	0	0	0	1	0	0
CNS disorders	0	0	1	0	1	0	0	0
pneumonia	0	0	0	0	0	0	0	1
arteritis	0	0	1	0	1	0	0	1
Tumor death : leukemia	1	0	1	5	7	5	7	5
: lung	0	0	0	0	1	1	0	0
: bone marrow	0	0	0	1	0	0	0	0
: spleen	1	0	0	1	0	0	1	0
: tooth	0	0	0	0	1	0	0	0
: liver	0	0	2	2	1	0	0	2
: parathyroid	0	0	1	0	0	0	0	0
: uterus	-	-	-	-	3	4	7	3
: Harder gland	0	0	0	0	0	1	0	0
: peritoneum	0	0	0	0	0	0	0	1

P - クロロニトロベンゼンのラット及びマウスを用いた  
経口(混餌)によるがん原性試験結果報告書

## FIGURES

中央労働災害防止協会  
日本バイオアッセイ研究センター

FIGURE 1. METABOLIC PATHWAY OF P-CHLORONITROBENZENE



( Reference NO.12 )

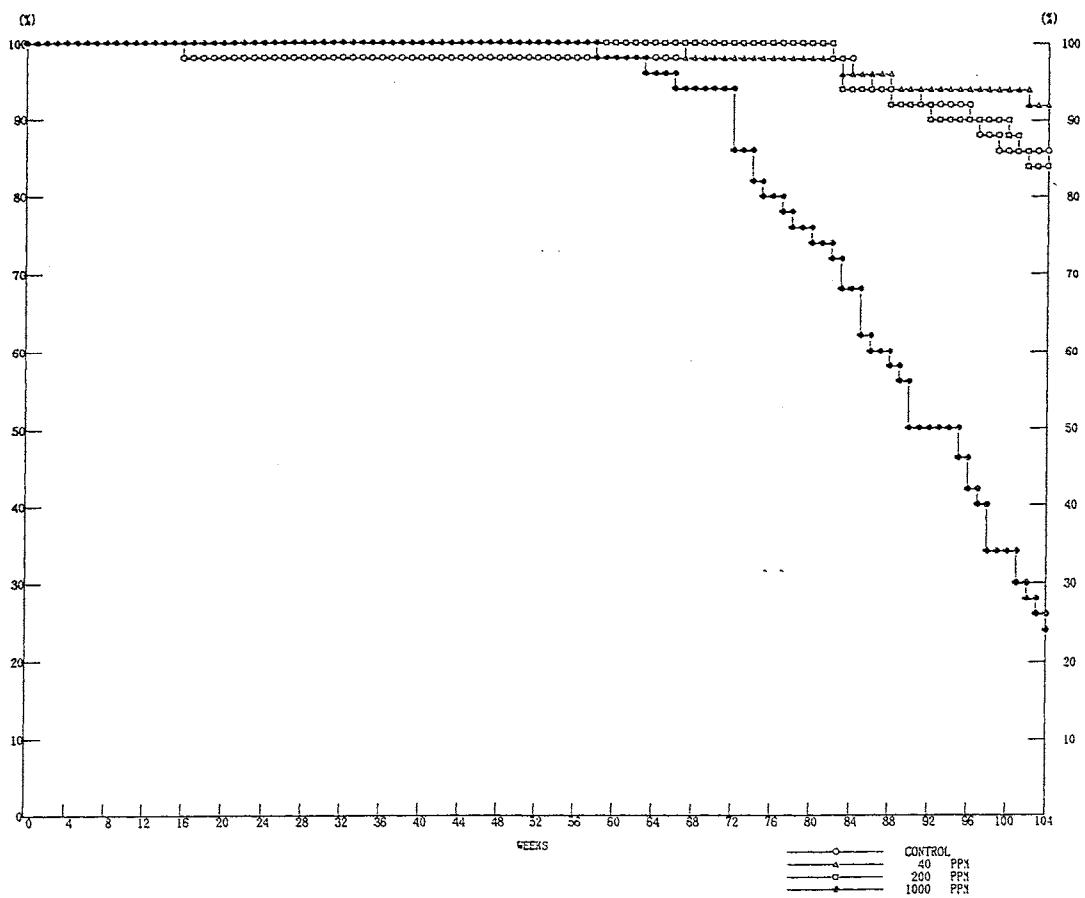


FIGURE 2 SURVIVAL ANIMAL RATE : RAT:MALE (TWO-YEAR STUDIES)

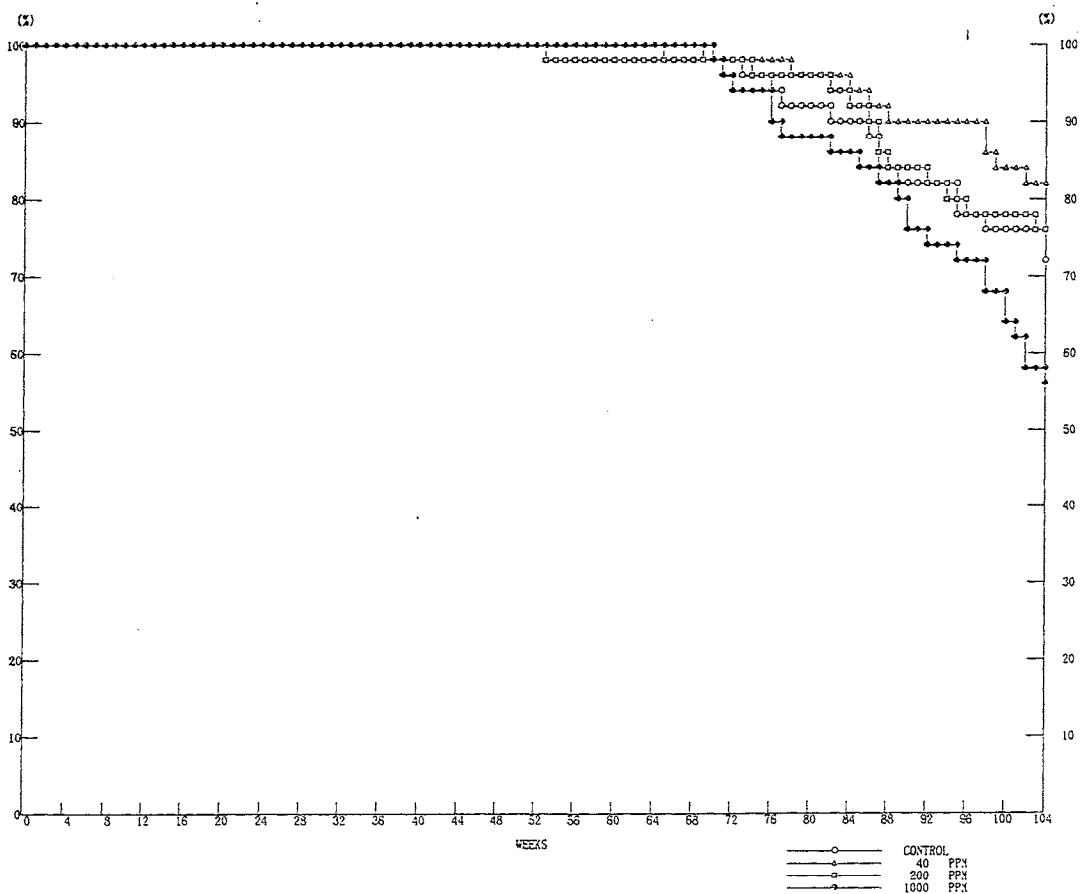


FIGURE 3 SURVIVAL ANIMAL RATE : RAT:FEMALE (TWO-YEAR STUDIES)

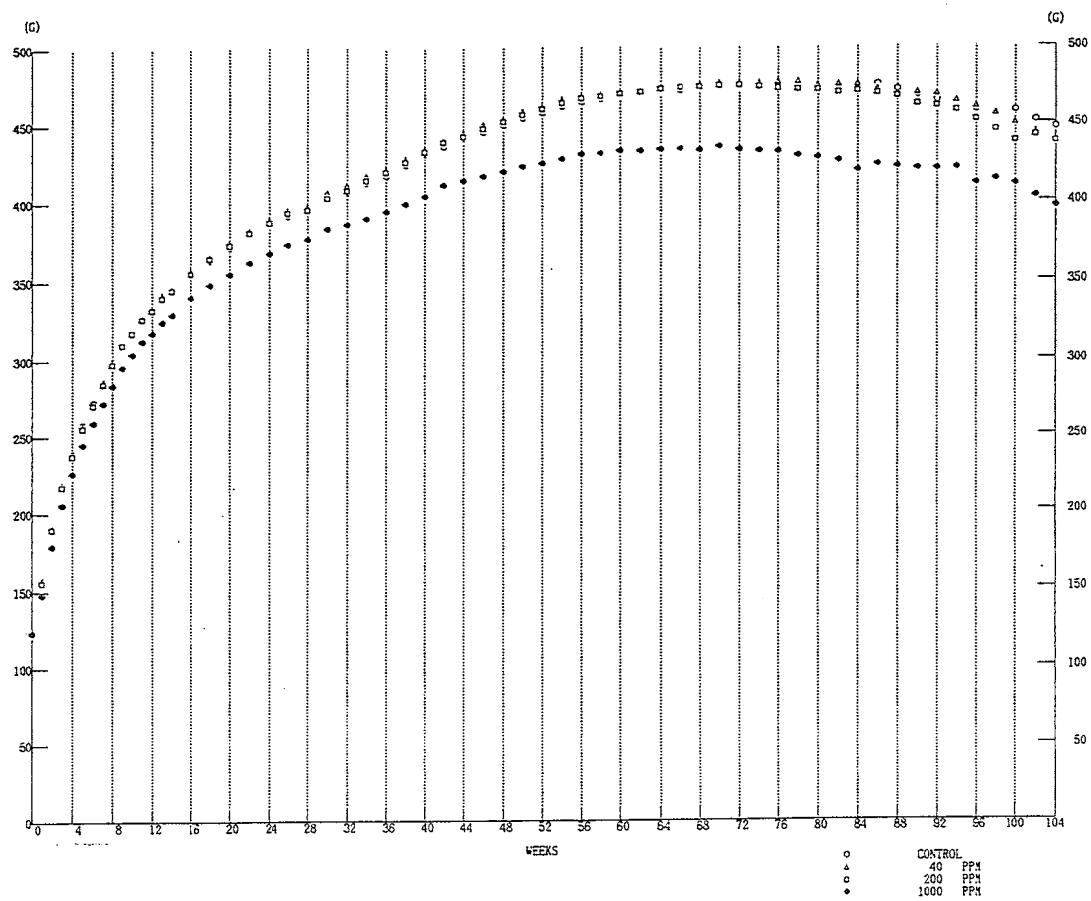


FIGURE 4 BODY WEIGHT CHANGES : RAT:MALE(TWO-YEAR STUDIES)

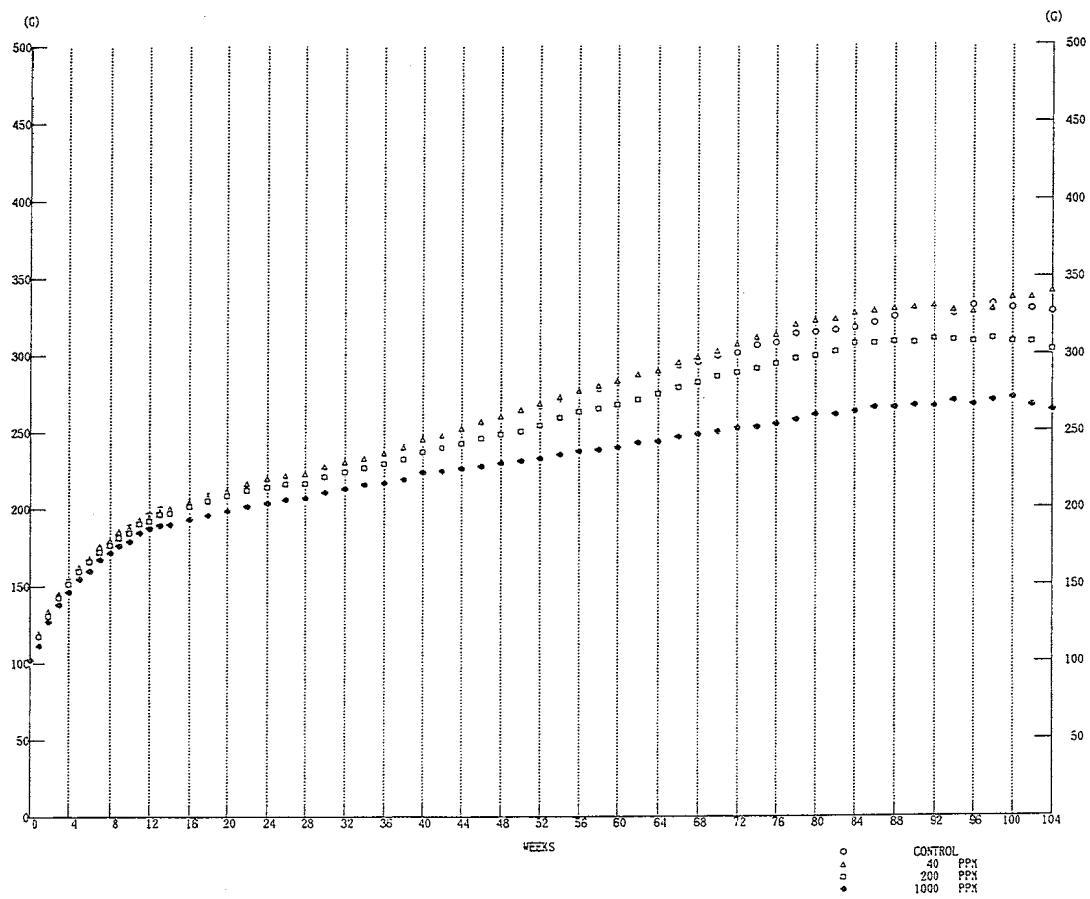


FIGURE 5 BODY WEIGHT CHANGES : RAT:FEMALE(TWO-YEAR STUDIES)

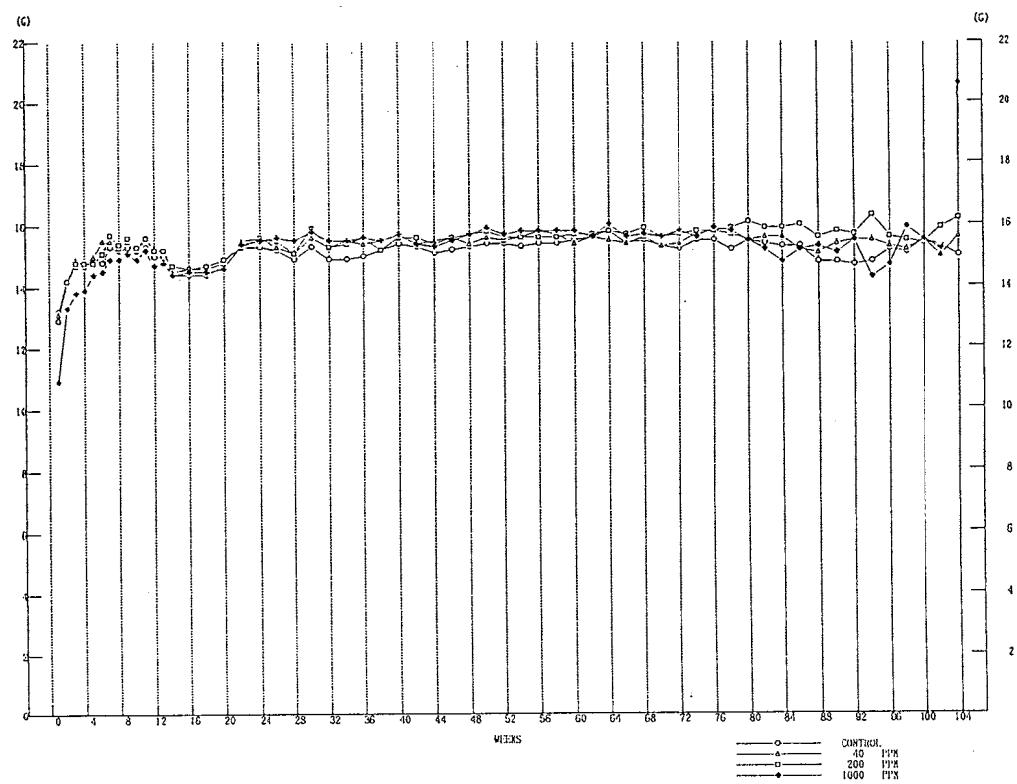


FIGURE 6 FOOD CONSUMPTION : RAT:MALE(TWO-YEAR STUDIES)

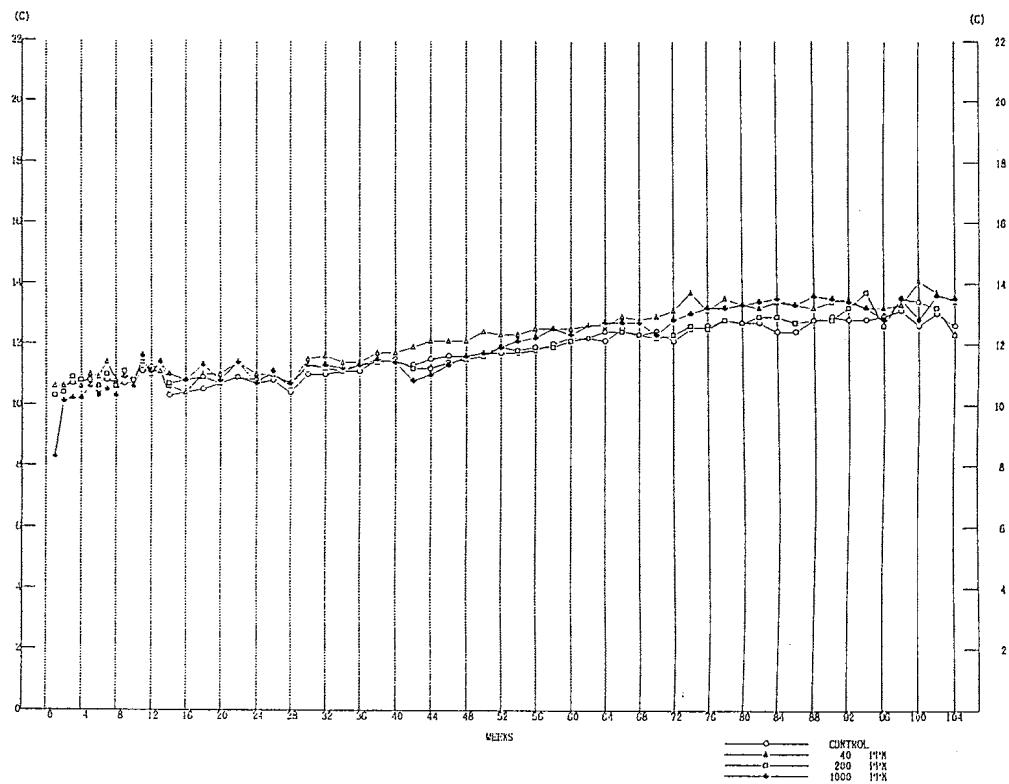


FIGURE 7 FOOD CONSUMPTION : RAT:FEMALE(TWO-YEAR STUDIES)

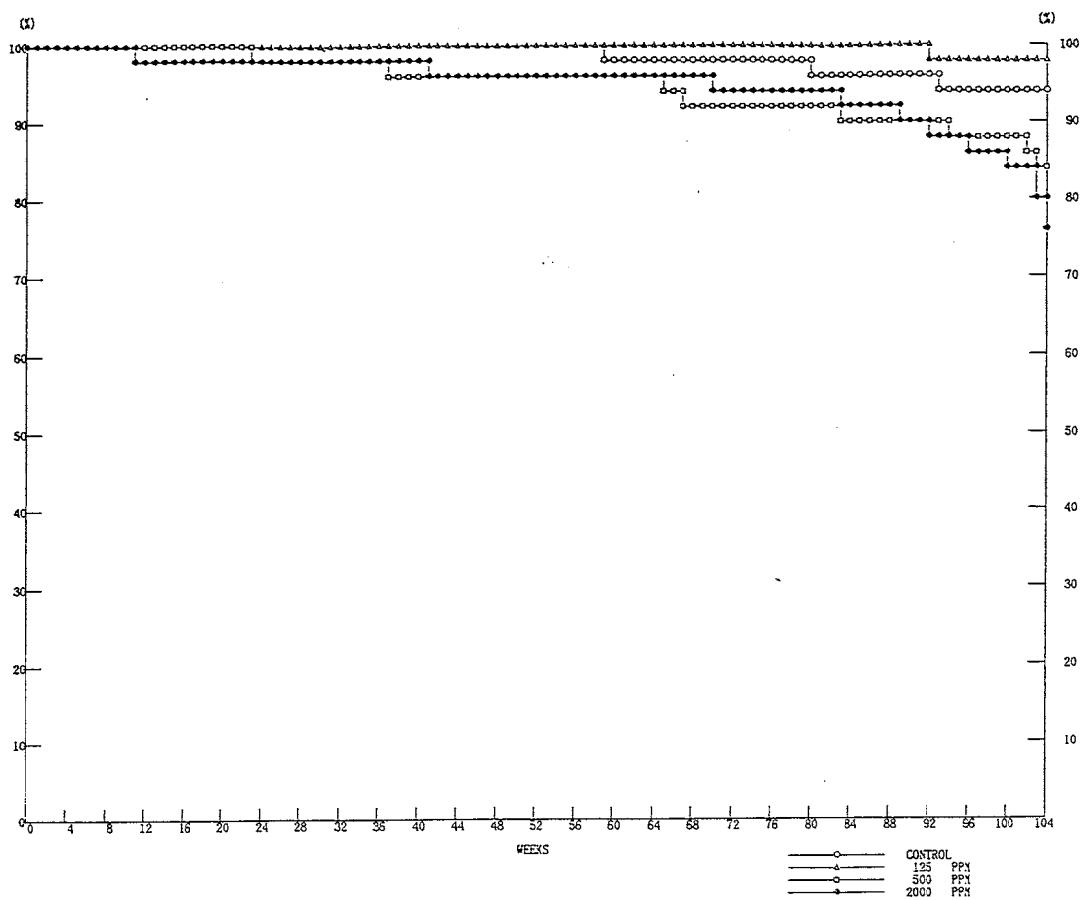


FIGURE 8 SURVIVAL ANIMAL RATE : MOUSE:MALE (TWO-YEAR STUDIES)

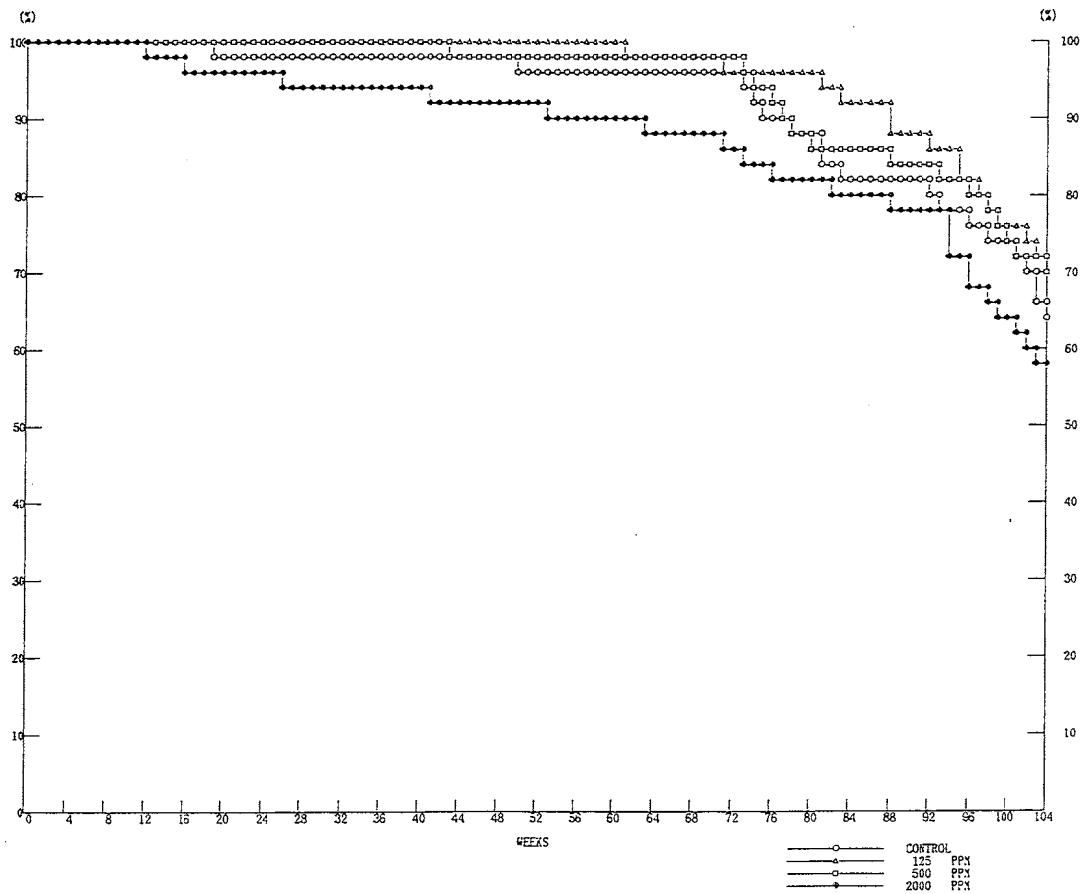


FIGURE 9 SURVIVAL ANIMAL RATE : MOUSE:FEMALE (TWO-YEAR STUDIES)

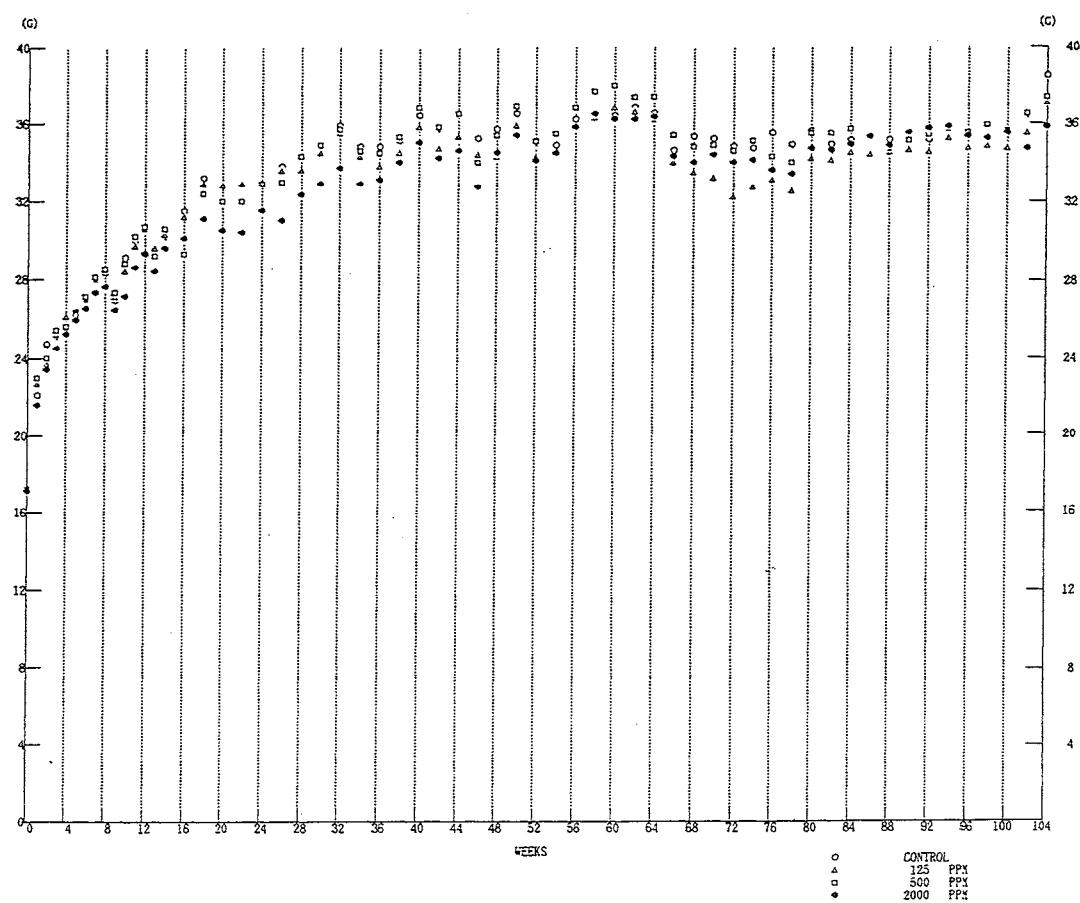


FIGURE 10 BODY WEIGHT CHANGES : MOUSE:MALE (TWO-YEAR STUDIES)

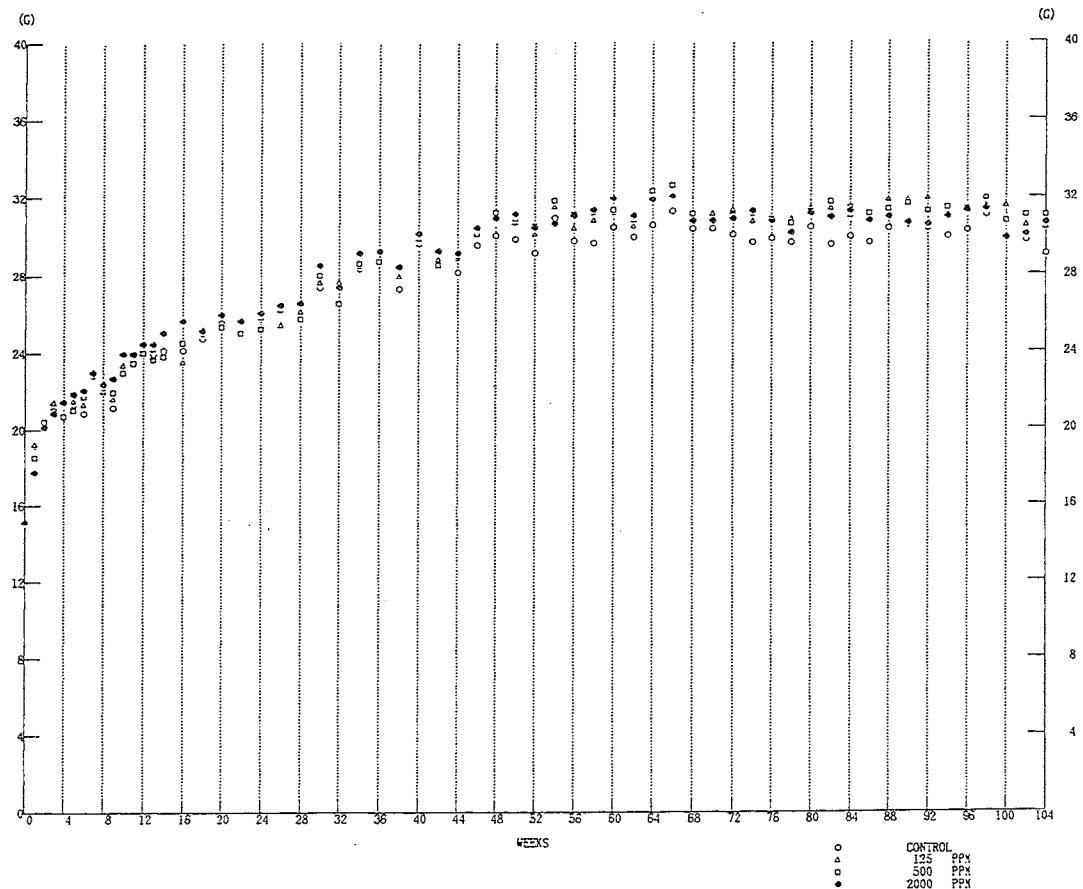


FIGURE 11 BODY WEIGHT CHANGES : MOUSE:FEMALE (TWO-YEAR STUDIES)

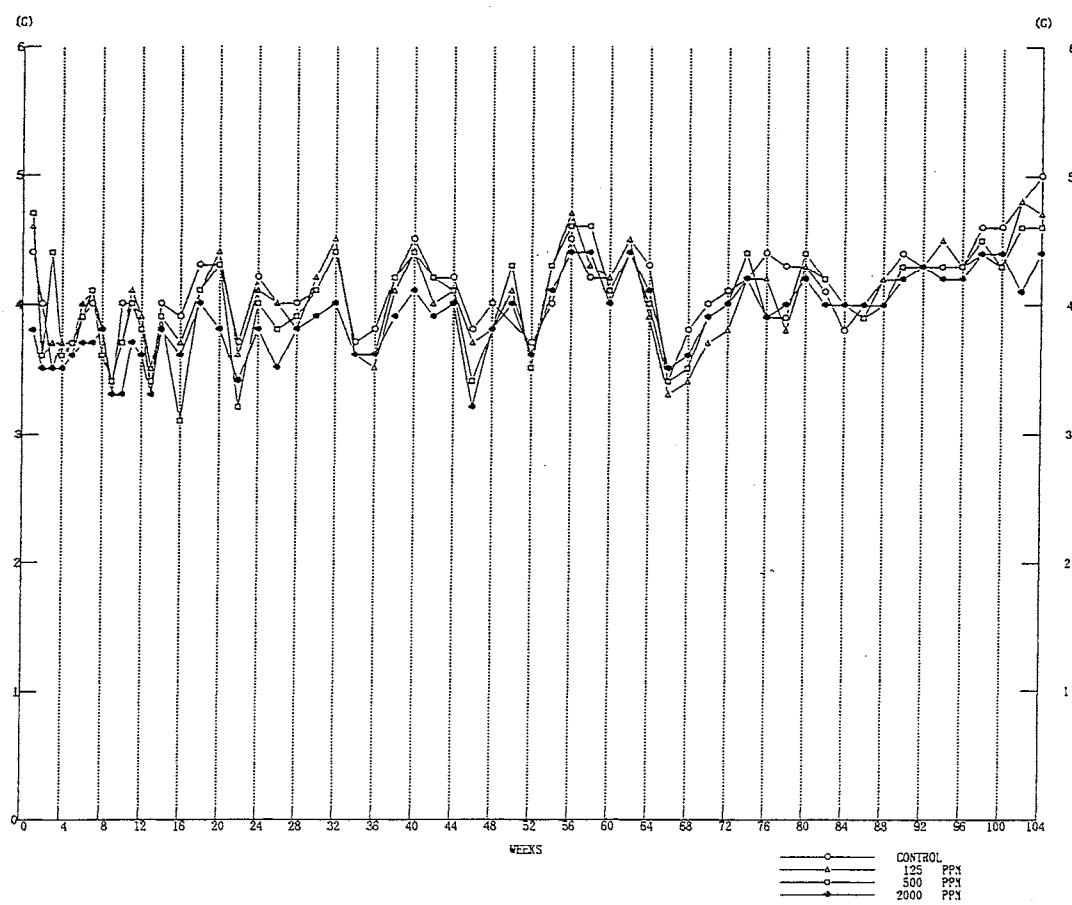


FIGURE 12 FOOD CONSUMPTION : MOUSE:MALE(TWO-YEAR STUDIES)

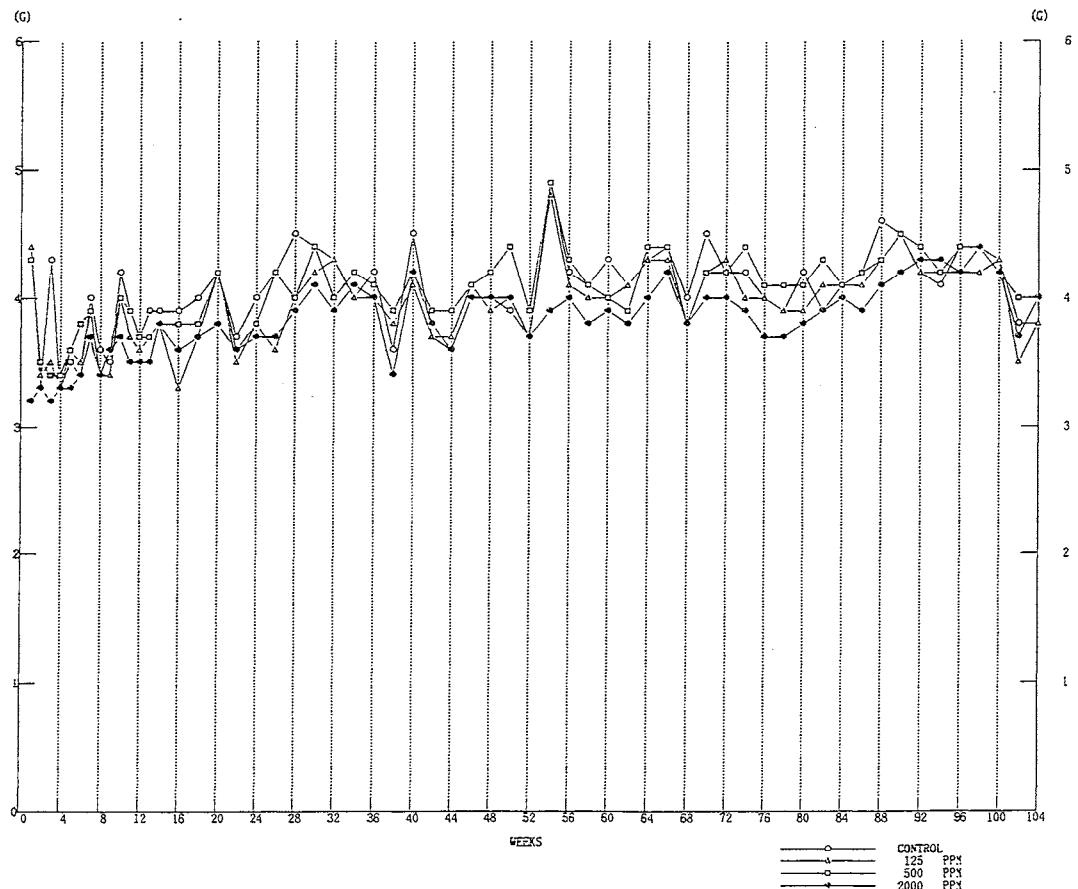


FIGURE 13 FOOD CONSUMPTION : MOUSE:FEMALE(TWO-YEAR STUDIES)