1,3,5,7-テトラアザトリシクロ〔3.3.1.1 ^{3,7}〕デカンのラット及びマウスを用いた経口投与によるがん原性予備試験（混水試験）報告書

試験番号

2 週 間　：ラット/0187；マウス/0188

1 3 週 間 ：ラット/0201；マウス/0202

TABLES

TABLES

T A B L E S (CONTINUED)

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE DRINKING WATER STUDIES OF TATCD

Two-week studies	Thirteen-week Studies
<Method of Administration>	
Drinking water	Drinking water
<Number of Groups>	
Male 6, Female 6	Male 6, Female 6
<Size of Groups>	
10 males and 10 females of each groups	10 males and 10 females of each groups
<Animals>	
Strain and Species	
F344/Ducrj(Fischer)rat	F344/Ducrj(Fischer)rat
Crj:BDF1 mouse	Crj:BDF1 mouse
Animal Source	
Charles River Japan, Inc.	Charles River Japan, Inc.
During of Time Held Before Study	
2 wk	2 wk
Age When Placed on Study	
6 wk	6 wk
Age When Killed	
8 wk	19 wk
<Doses>	
Rat--0, 6250, 12500, 25000, 50000, or 100000ppm; Mouse--0, 6250, 12500, 25000, 50000, or 100000ppm	Rat--0, 2500, 5000, 10000, 20000 or 40000ppm; Mouse--0, 5000, 10000, 20000, 40000, or 80000ppm
<Duration of Dosing>	
7d/wk for 2wk	7d/wk for 13wk
<Animal Maintenance>	
Feed	
CRF-1 (Oriental Yeast Co.,Ltd.) Sterilized by γ-ray Available ad libitum	Same as two-week studies
Water	
Sterilized by ultraviolet rays Automatic watering system Available ad libitum	Same as two-week studies
Animal per Cage	
Single (stainless steel wire)	Single (stainless steel wire)
Animal Room Environment	
Barrier system Temperature:24±2℃ Humidity :55±10% Fluorescent light 12h/d 15-17 room air changes /h	Same as two-week studies
<Type and Frequency of Observation>	
Clinical sign	
Observed 1×d	Observed 1×d
Body weight	
Weighed 0-0, 1-4, 1-7, 2-4, and 2-7 (wk-d)	Weighed 1×wk for 13wk
Food Consumption	
Weighed 1-7, 2-7 (wk-d)	Weighed 1×wk for 13wk
Water Consumption	
Weighed 1-4, 2-7, 2-4, and 2-7 (wk-d)	Weighed 1×wk for 13wk

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE DRINKING WATER STUDIES OF TATCD
(Continued)

Two-week Studies	Thirteen-week Studies
<Hematology>	
None	Red blood cell (RBC), Hemoglobin, Hematocrit, Mean corpuscular volume (MCV), Mean corpuscular hemoglobin (MCH), Mean corpuscular hemoglobin concentration (MCHC), Platelet, White blood cell (WBC), Differential WBC.
<Biochemistry>	
None	Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride, Phospholipid <rat only>, Glutamic oxaloacetic transaminase (GOT), Glutamic pyruvic transaminase (GPT), Lactate dehydrogenase (LDH), Alkaline phosphatase (ALP), γ-Glutamil transpeptidase (G-GTP) <rat only>, Creatine phosphokinase (CPK), Urea nitrogen, Creatinine <rat only>, Sodium, Potassium, Chloride, Calcium, Inorganic phosphorus.
<Urinalysis>	
None	pH, Protein, Glucose, Ketone body Bilirubin <rat only>, Occult blood Urobilinogen.
<Necropsy>	
Necropsy performed on all animals.	Same as two-week studies.
<Organ weight>	
None	Organ weight measurement performed on scheduled sacrificed animals. The following organs were weighed: brain, lung, liver, spleen, heart, kidney, adrenal, testis, ovary, thymus.
<Histopathologic Examination>	
Histopathologic examination performed on at least two animals per sex per groups.	Histopathologic examination performed on all animals.
The following organs were examined: nasal cavity, trachea, lung bone marrow, lymph node, thymus, spleen, heart, stomach, small intestine, large intestine, liver, pancreas, kidney, pituitary, thyroid, adrenal, testis, ovary, brain.	The following organs were examined: skin, nasal cavity, trachea, lung, bone marrow, lympho node, thymus, spleen, heart, tongue, salivary gland, esophagus, stomach, small intestine, large intestine, liver, pancreas, kidney, urinary bladder, pituitary, thyroid, adrenal, testis, epididymis, seminal vesicle, prostate, ovary, uterus, mammary gland, brain, spinal cord, peripheral nerve, eye, Harderian gland, muscle, bone.

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (TWO-WEEK STUDY)

Week-Day on Study	Control		6250 ppm			12500 ppm			25000 ppm			50000 ppm			100000 ppm		
	Av.Wt.	No.of Surviv. <10>	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.
0-0	123 (10)	10/10	123 (10)	100	10/10	123 (10)	100	10/10	123 (10)	100	10/10	123 (10)	100	10/10	123 (10)	100	10/10
1-1	126 (10)	10/10	127 (10)	101	10/10	126 (10)	100	10/10	125 (10)	99	10/10	121 (10)	96	10/10	114 (10)	90	10/10
1-2	128 (10)	10/10	128 (10)	100	10/10	128 (10)	100	10/10	127 (10)	99	10/10	122 (10)	95	10/10	105 (10)	82	10/10
1-4	136 (10)	10/10	134 (10)	99	10/10	136 (10)	100	10/10	134 (10)	99	10/10	129 (10)	95	10/10	95 (10)	70	10/10
1-7	147 (10)	10/10	144 (10)	98	10/10	147 (10)	100	10/10	144 (10)	98	10/10	139 (10)	95	10/10	77 (5)	52	5/10
2-3	159 (10)	10/10	158 (10)	99	10/10	158 (10)	99	10/10	156 (10)	98	10/10	148 (10)	93	10/10	- (-)	-	0/10
2-7	176 (10)	10/10	176 (10)	100	10/10	174 (10)	99	10/10	170 (10)	97	10/10	155 (10)	88	10/10	- (-)	-	0/10

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

TABLE 3 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (TWO-WEEK STUDY)

Week-Day on Study	Control		6250 ppm			12500 ppm			25000 ppm			50000 ppm			100000 ppm		
	Av.Wt.	No.of Surviv. <10>	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.
0-0	101 (10)	10/10	101 (10)	100	10/10	101 (10)	100	10/10	101 (10)	100	10/10	101 (10)	100	10/10	101 (10)	100	10/10
1-1	103 (10)	10/10	102 (10)	99	10/10	102 (10)	99	10/10	100 (10)	97	10/10	98 (10)	95	10/10	91 (10)	88	10/10
1-2	103 (10)	10/10	102 (10)	99	10/10	102 (10)	99	10/10	102 (10)	99	10/10	99 (10)	96	10/10	85 (10)	83	10/10
1-4	108 (10)	10/10	106 (10)	98	10/10	105 (10)	97	10/10	106 (10)	98	10/10	101 (10)	94	10/10	78 (10)	72	10/10
1-7	115 (10)	10/10	114 (10)	99	10/10	113 (10)	98	10/10	113 (10)	98	10/10	109 (10)	95	10/10	68 (9)	59	9/10
2-3	121 (10)	10/10	120 (10)	99	10/10	119 (10)	98	10/10	119 (10)	98	10/10	115 (10)	95	10/10	63 (1)	52	1/10
2-7	130 (10)	10/10	131 (10)	101	10/10	128 (10)	98	10/10	128 (10)	98	10/10	122 (10)	94	10/10	- (-)	-	0/10

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

TABLE 4 WATER CONSUMPTION IN MALE RAT (TWO-WEEK STUDY)

Week-Day on Study	Control Av.WC.	Control No.of Surviv. <10>	6250 ppm Av.WC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.WC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.WC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.WC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.WC.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
1-3	18.4 (10)	10/10	19.1 (10)	104	10/10	20.5 (10)	111	10/10	21.6 (10)	117	10/10	20.5 (10)	111	10/10	14.2 (10)	77	10/10
1-7	18.7 (10)	10/10	17.8 (10)	95	10/10	21.0 (10)	112	10/10	21.4 (10)	114	10/10	20.6 (10)	110	10/10	8.0 (10)	43	5/10
2-3	19.2 (10)	10/10	20.3 (10)	106	10/10	20.5 (10)	107	10/10	21.2 (10)	110	10/10	22.6 (10)	118	10/10	- (-)	-	0/10
2-7	19.6 (10)	10/10	20.3 (10)	104	10/10	20.5 (10)	105	10/10	21.0 (10)	107	10/10	24.1 (10)	123	10/10	- (-)	-	0/10

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

TABLE 5 WATER CONSUMPTION IN FEMALE RAT (TWO-WEEK STUDY)

Week-Day on Study	Control Av.WC.	Control No.of Surviv. <10>	6250 ppm Av.WC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.WC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.WC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.WC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.WC.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
1-3	15.6 (10)	10/10	16.6 (10)	106	10/10	18.0 (10)	115	10/10	17.9 (10)	115	10/10	17.9 (10)	115	10/10	8.6 (10)	55	10/10
1-7	16.3 (10)	10/10	17.7 (10)	109	10/10	17.2 (10)	106	10/10	18.8 (10)	115	10/10	19.9 (10)	122	10/10	10.5 (9)	64	9/10
2-3	16.3 (10)	10/10	18.1 (10)	111	10/10	18.2 (10)	112	10/10	17.7 (10)	109	10/10	18.5 (10)	113	10/10	13.5 (5)	83	1/10
2-7	16.4 (10)	10/10	18.3 (10)	112	10/10	18.4 (10)	112	10/10	18.0 (10)	110	10/10	19.7 (9)	120	10/10	11.3 (1)	69	0/10

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

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

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	6250 ppm Av.FC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.FC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.FC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.FC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.FC.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
1-7	14.3 (10)	10/10	13.8 (10)	97	10/10	14.3 (10)	100	10/10	13.7 (10)	96	10/10	12.1 (10)	85	10/10	3.8 (10)	27	5/10
2-7	14.9 (10)	10/10	15.3 (10)	103	10/10	15.0 (10)	101	10/10	14.5 (10)	97	10/10	12.4 (10)	83	10/10	- (-)	-	0/10

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

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

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	6250 ppm Av.FC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.FC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.FC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.FC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.FC.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
1-7	11.6 (10)	10/10	11.4 (10)	98	10/10	11.1 (10)	96	10/10	11.2 (10)	97	10/10	10.2 (10)	88	10/10	3.8 (10)	33	9/10
2-7	12.0 (10)	10/10	11.9 (10)	99	10/10	11.9 (10)	99	10/10	11.6 (10)	97	10/10	10.7 (10)	89	10/10	3.0 (1)	25	0/10

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

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

Week on Study	Control Av.Wt.	Control No.of Surviv. <10>	2500 ppm Av.Wt.	2500 ppm % of cont. <10>	2500 ppm No.of Surviv.	5000 ppm Av.Wt.	5000 ppm % of cont. <10>	5000 ppm No.of Surviv.	10000 ppm Av.Wt.	10000 ppm % of cont. <10>	10000 ppm No.of Surviv.	20000 ppm Av.Wt.	20000 ppm % of cont. <10>	20000 ppm No.of Surviv.	40000 ppm Av.Wt.	40000 ppm % of cont. <10>	40000 ppm No.of Surviv.
0	134 (10)	10/10	134 (10)	100	10/10	134 (10)	100	10/10	134 (10)	100	10/10	134 (10)	100	10/10	134 (10)	100	10/10
1	167 (10)	10/10	166 (10)	99	10/10	164 (10)	98	10/10	163 (10)	98	10/10	162 (10)	97	10/10	155 (10)	93	10/10
2	199 (10)	10/10	196 (10)	98	10/10	192 (10)	96	10/10	191 (10)	96	10/10	190 (10)	95	10/10	180 (10)	90	10/10
3	225 (10)	10/10	220 (10)	98	10/10	216 (10)	96	10/10	212 (10)	94	10/10	212 (10)	94	10/10	199 (10)	88	10/10
4	243 (10)	10/10	236 (10)	97	10/10	233 (10)	96	10/10	227 (10)	93	10/10	227 (10)	93	10/10	212 (10)	87	10/10
5	261 (10)	10/10	251 (10)	96	10/10	247 (10)	95	10/10	241 (10)	92	10/10	243 (10)	93	10/10	226 (10)	87	10/10
6	273 (10)	10/10	261 (10)	96	10/10	259 (10)	95	10/10	251 (10)	92	10/10	253 (10)	93	10/10	237 (10)	87	10/10
7	286 (10)	10/10	272 (10)	95	10/10	270 (10)	94	10/10	263 (10)	92	10/10	265 (10)	93	10/10	249 (10)	87	10/10
8	300 (10)	10/10	285 (10)	95	10/10	283 (10)	94	10/10	276 (10)	92	10/10	276 (10)	92	10/10	260 (10)	87	10/10
9	310 (10)	10/10	292 (10)	94	10/10	290 (10)	94	10/10	284 (10)	92	10/10	285 (10)	92	10/10	267 (10)	86	10/10
10	316 (10)	10/10	300 (10)	95	10/10	298 (10)	94	10/10	291 (10)	92	10/10	293 (10)	93	10/10	275 (10)	87	10/10
11	325 (10)	10/10	308 (10)	95	10/10	308 (10)	95	10/10	301 (10)	93	10/10	302 (10)	93	10/10	284 (10)	87	10/10
12	335 (10)	10/10	317 (10)	95	10/10	315 (10)	94	10/10	310 (10)	93	10/10	311 (10)	93	10/10	293 (10)	87	10/10
13	343 (10)	10/10	324 (10)	94	10/10	323 (10)	94	10/10	318 (10)	93	10/10	316 (10)	92	10/10	299 (10)	87	10/10

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

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

Week on Study	Control Av.Wt.	Control No.of Surviv. <10>	2500 ppm Av.Wt.	2500 ppm % of cont. <10>	2500 ppm No.of Surviv.	5000 ppm Av.Wt.	5000 ppm % of cont. <10>	5000 ppm No.of Surviv.	10000 ppm Av.Wt.	10000 ppm % of cont. <10>	10000 ppm No.of Surviv.	20000 ppm Av.Wt.	20000 ppm % of cont. <10>	20000 ppm No.of Surviv.	40000 ppm Av.Wt.	40000 ppm % of cont. <10>	40000 ppm No.of Surviv.
0	101 (10)	10/10	102 (10)	101	10/10	101 (10)	100	10/10	101 (10)	100	10/10	102 (10)	101	10/10	102 (10)	101	10/10
1	118 (10)	10/10	118 (10)	100	10/10	117 (10)	99	10/10	116 (10)	98	10/10	116 (10)	98	10/10	111 (10)	94	10/10
2	133 (10)	10/10	133 (10)	100	10/10	132 (10)	99	10/10	131 (10)	98	10/10	131 (10)	98	10/10	124 (10)	93	10/10
3	145 (10)	10/10	144 (10)	99	10/10	143 (10)	99	10/10	140 (10)	97	10/10	141 (10)	97	10/10	134 (10)	92	10/10
4	154 (10)	10/10	152 (10)	99	10/10	151 (10)	98	10/10	148 (10)	96	10/10	147 (10)	95	10/10	141 (10)	92	10/10
5	161 (10)	10/10	160 (10)	99	10/10	159 (10)	99	10/10	154 (10)	96	10/10	154 (10)	96	10/10	147 (10)	91	10/10
6	166 (10)	10/10	164 (10)	99	10/10	163 (10)	98	10/10	157 (10)	95	10/10	157 (10)	95	10/10	151 (10)	91	10/10
7	173 (10)	10/10	171 (10)	99	10/10	167 (10)	97	10/10	162 (10)	94	10/10	163 (10)	94	10/10	157 (10)	91	10/10
8	176 (10)	10/10	175 (10)	99	10/10	173 (10)	98	10/10	165 (10)	94	10/10	167 (10)	95	10/10	160 (10)	91	10/10
9	181 (10)	10/10	175 (10)	97	10/10	177 (10)	98	10/10	170 (10)	94	10/10	171 (10)	94	10/10	164 (10)	91	10/10
10	186 (10)	10/10	181 (10)	97	10/10	181 (10)	97	10/10	172 (10)	92	10/10	174 (10)	94	10/10	166 (10)	89	10/10
11	190 (10)	10/10	186 (10)	98	10/10	185 (10)	97	10/10	176 (10)	93	10/10	174 (10)	92	10/10	169 (10)	89	10/10
12	192 (10)	10/10	189 (10)	98	10/10	189 (10)	98	10/10	180 (10)	94	10/10	181 (10)	94	10/10	173 (10)	90	10/10
13	196 (10)	10/10	191 (10)	97	10/10	191 (10)	97	10/10	181 (10)	92	10/10	183 (10)	93	10/10	174 (10)	89	10/10

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

TABLE 10 WATER CONSUMPTION IN MALE RAT (THIRTEEN-WEEK STUDY)

Week-Day on Study	Control Av.WC.	Control No.of Surviv. <10>	5000ppm Av.WC.	5000ppm % of cont. <10>	5000ppm No.of Surviv.	10000ppm Av.WC.	10000ppm % of cont. <10>	10000ppm No.of Surviv.	20000ppm Av.WC.	20000ppm % of cont. <10>	20000ppm No.of Surviv.	40000ppm Av.WC.	40000ppm % of cont. <10>	40000ppm No.of Surviv.	80000ppm Av.WC.	80000ppm % of cont. <10>	80000ppm No.of Surviv.
1-7	5.1 (10)	10/10	5.2 (10)	102	10/10	5.2 (10)	102	10/10	5.5 (10)	108	10/10	6.4 (10)	125	10/10	7.9 (10)	155	10/10
2-7	4.9 (10)	10/10	4.7 (10)	96	10/10	5.0 (10)	102	10/10	5.2 (10)	106	10/10	5.7 (10)	116	10/10	6.7 (10)	137	10/10
3-7	4.6 (10)	10/10	4.7 (10)	102	10/10	4.8 (10)	104	10/10	5.2 (10)	113	10/10	5.6 (10)	122	10/10	7.5 (10)	163	10/10
4-7	4.4 (10)	10/10	4.7 (10)	107	10/10	4.7 (10)	107	10/10	5.0 (10)	114	10/10	5.3 (10)	120	10/10	7.5 (10)	170	10/10
5-7	4.6 (10)	10/10	4.8 (10)	104	10/10	4.5 (10)	98	10/10	4.9 (10)	107	10/10	5.1 (10)	111	10/10	7.5 (10)	163	10/10
6-7	4.3 (10)	10/10	4.6 (10)	107	10/10	4.7 (10)	109	10/10	4.7 (10)	109	10/10	5.3 (10)	123	10/10	7.4 (10)	172	10/10
7-7	4.3 (10)	10/10	4.7 (10)	109	10/10	4.6 (10)	107	10/10	4.8 (10)	112	10/10	5.2 (10)	121	10/10	7.1 (10)	165	10/10
8-7	4.3 (10)	10/10	4.4 (10)	102	10/10	4.6 (10)	107	10/10	5.1 (10)	119	10/10	5.1 (10)	119	10/10	6.3 (9)	147	9/10
9-7	4.0 (10)	10/10	4.1 (10)	103	10/10	4.2 (10)	105	10/10	4.6 (10)	115	10/10	4.9 (10)	123	10/10	6.0 (9)	150	9/10
10-7	3.9 (10)	10/10	4.2 (10)	108	10/10	4.3 (10)	110	10/10	4.4 (10)	113	10/10	4.9 (10)	126	10/10	6.2 (9)	159	9/10
11-7	3.7 (10)	10/10	4.0 (10)	108	10/10	4.1 (10)	111	10/10	4.3 (10)	116	10/10	4.6 (10)	124	10/10	6.0 (9)	162	9/10
12-7	3.6 (10)	10/10	3.9 (10)	108	10/10	4.0 (10)	111	10/10	4.3 (10)	119	10/10	4.6 (10)	128	10/10	5.8 (9)	161	9/10
13-7	3.6 (10)	10/10	3.8 (10)	106	10/10	3.9 (10)	108	10/10	4.2 (10)	117	10/10	4.5 (10)	125	10/10	5.6 (9)	156	9/10

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

TABLE 11 WATER CONSUMPTION IN FEMALE RAT (THIRTEEN-WEEK STUDY)

Week-Day on Study	Control Av.WC.	Control No.of Surviv. <10>	5000ppm Av.WC.	5000ppm % of cont. <10>	5000ppm No.of Surviv.	10000ppm Av.WC.	10000ppm % of cont. <10>	10000ppm No.of Surviv.	20000ppm Av.WC.	20000ppm % of cont. <10>	20000ppm No.of Surviv.	40000ppm Av.WC.	40000ppm % of cont. <10>	40000ppm No.of Surviv.	80000ppm Av.WC.	80000ppm % of cont. <10>	80000ppm No.of Surviv.
1-7	4.9 (10)	10/10	5.0 (10)	102	10/10	5.0 (10)	102	10/10	5.4 (10)	110	10/10	5.7 (10)	116	10/10	7.2 (10)	147	10/10
2-7	4.7 (10)	10/10	5.2 (10)	111	10/10	5.2 (10)	111	10/10	5.3 (10)	113	10/10	5.6 (10)	119	10/10	7.3 (9)	155	10/10
3-7	4.6 (10)	10/10	5.0 (10)	109	10/10	4.8 (10)	104	10/10	6.0 (10)	130	10/10	6.0 (10)	130	10/10	9.2 (10)	200	10/10
4-7	5.0 (10)	10/10	5.2 (10)	104	10/10	4.9 (10)	98	10/10	5.7 (10)	114	10/10	6.0 (10)	120	10/10	9.6 (10)	192	10/10
5-7	5.5 (10)	10/10	5.5 (10)	100	10/10	4.5 (10)	82	10/10	5.9 (10)	107	10/10	6.6 (9)	120	10/10	9.9 (10)	180	10/10
6-7	5.2 (10)	10/10	5.5 (10)	106	10/10	4.8 (10)	92	10/10	5.6 (10)	108	10/10	5.9 (10)	113	10/10	9.7 (10)	187	10/10
7-7	5.5 (10)	10/10	5.5 (10)	100	10/10	5.0 (10)	91	10/10	6.3 (10)	115	10/10	6.2 (10)	113	10/10	9.7 (10)	176	10/10
8-7	5.8 (10)	10/10	5.5 (10)	95	10/10	4.9 (10)	84	10/10	5.9 (10)	102	10/10	6.0 (10)	103	10/10	9.5 (10)	164	10/10
9-7	6.8 (10)	10/10	5.3 (10)	78	10/10	4.8 (10)	71	10/10	6.5 (10)	96	10/10	5.6 (10)	82	10/10	10.1 (10)	149	10/10
10-7	6.1 (10)	10/10	4.8 (10)	79	10/10	4.7 (10)	77	10/10	5.9 (10)	97	10/10	5.7 (10)	93	10/10	10.3 (10)	169	10/10
11-7	6.7 (10)	10/10	4.8 (10)	72	10/10	4.8 (10)	72	10/10	5.9 (10)	88	10/10	5.7 (10)	85	10/10	10.7 (10)	160	10/10
12-7	6.6 (10)	10/10	4.7 (10)	71	10/10	4.7 (10)	71	10/10	5.7 (10)	86	10/10	5.5 (10)	83	10/10	8.6 (10)	130	9/10
13-7	5.9 (10)	10/10	4.8 (10)	81	10/10	5.1 (10)	86	10/10	5.9 (10)	100	10/10	5.5 (10)	93	10/10	7.3 (9)	124	9/10

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

TABLE 12 FOOD CONSUMPTION IN MALE RAT (THIRTEEN-WEEK STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	2500 ppm Av.FC.	2500 ppm % of cont. <10>	2500 ppm No.of Surviv.	5000 ppm Av.FC.	5000 ppm % of cont. <10>	5000 ppm No.of Surviv.	10000 ppm Av.FC.	10000 ppm % of cont. <10>	10000 ppm No.of Surviv.	20000 ppm Av.FC.	20000 ppm % of cont. <10>	20000 ppm No.of Surviv.	40000 ppm Av.FC.	40000 ppm % of cont. <10>	40000 ppm No.of Surviv.
1	15.0 (10)	10/10	14.9 (10)	99	10/10	14.9 (10)	99	10/10	14.5 (10)	97	10/10	14.5 (10)	97	10/10	12.7 (10)	85	10/10
2	16.3 (10)	10/10	16.1 (10)	99	10/10	15.6 (10)	96	10/10	16.0 (10)	98	10/10	15.7 (10)	96	10/10	14.7 (10)	90	10/10
3	17.1 (10)	10/10	16.7 (10)	98	10/10	16.0 (10)	94	10/10	16.0 (10)	94	10/10	16.2 (10)	95	10/10	15.0 (10)	88	10/10
4	17.3 (10)	10/10	16.6 (10)	96	10/10	16.6 (10)	96	10/10	16.4 (10)	95	10/10	16.4 (10)	95	10/10	14.9 (10)	86	10/10
5	17.1 (10)	10/10	16.0 (10)	94	10/10	16.0 (10)	94	10/10	15.4 (10)	90	10/10	16.0 (10)	94	10/10	14.3 (10)	84	10/10
6	16.6 (10)	10/10	15.3 (10)	92	10/10	15.5 (10)	93	10/10	14.8 (10)	89	10/10	15.2 (10)	92	10/10	14.0 (10)	84	10/10
7	16.5 (10)	10/10	15.5 (10)	94	10/10	15.3 (10)	93	10/10	15.1 (10)	92	10/10	15.7 (10)	95	10/10	14.4 (10)	87	10/10
8	16.4 (10)	10/10	15.3 (10)	93	10/10	15.4 (10)	94	10/10	14.8 (10)	90	10/10	15.4 (10)	94	10/10	14.1 (10)	86	10/10
9	16.5 (10)	10/10	15.1 (10)	92	10/10	15.0 (10)	91	10/10	14.7 (10)	89	10/10	15.3 (10)	93	10/10	14.5 (10)	88	10/10
10	16.3 (10)	10/10	15.2 (10)	93	10/10	15.2 (10)	93	10/10	14.7 (10)	90	10/10	15.4 (10)	94	10/10	14.0 (10)	86	10/10
11	16.6 (10)	10/10	15.5 (10)	93	10/10	15.4 (10)	93	10/10	15.1 (10)	91	10/10	15.8 (10)	95	10/10	14.6 (10)	88	10/10
12	16.3 (10)	10/10	14.7 (10)	90	10/10	14.7 (10)	90	10/10	14.6 (10)	90	10/10	15.2 (10)	93	10/10	14.4 (10)	88	10/10
13	16.4 (10)	10/10	15.4 (10)	94	10/10	15.1 (10)	92	10/10	15.2 (10)	93	10/10	15.5 (10)	95	10/10	14.9 (10)	91	10/10

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

TABLE 13 FOOD CONSUMPTION IN FEMALE RAT (THIRTEEN-WEEK STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	2500 ppm Av.FC.	2500 ppm % of cont. <10>	2500 ppm No.of Surviv.	5000 ppm Av.FC.	5000 ppm % of cont. <10>	5000 ppm No.of Surviv.	10000 ppm Av.FC.	10000 ppm % of cont. <10>	10000 ppm No.of Surviv.	20000 ppm Av.FC.	20000 ppm % of cont. <10>	20000 ppm No.of Surviv.	40000 ppm Av.FC.	40000 ppm % of cont. <10>	40000 ppm No.of Surviv.
1	12.0 (10)	10/10	11.4 (10)	95	10/10	11.4 (10)	95	10/10	11.0 (10)	92	10/10	11.1 (10)	93	10/10	10.1 (10)	84	10/10
2	12.8 (10)	10/10	12.1 (10)	95	10/10	12.4 (10)	97	10/10	11.8 (10)	92	10/10	11.9 (10)	93	10/10	11.2 (10)	88	10/10
3	12.9 (10)	10/10	12.4 (10)	96	10/10	12.2 (10)	95	10/10	11.5 (10)	89	10/10	11.8 (10)	91	10/10	11.2 (10)	87	10/10
4	12.7 (10)	10/10	12.3 (10)	97	10/10	12.2 (10)	96	10/10	11.6 (10)	91	10/10	11.4 (10)	90	10/10	11.2 (10)	88	10/10
5	12.3 (10)	10/10	11.8 (10)	96	10/10	11.9 (10)	97	10/10	11.1 (10)	90	10/10	11.2 (10)	91	10/10	10.9 (10)	89	10/10
6	11.6 (10)	10/10	11.3 (10)	97	10/10	11.3 (10)	97	10/10	10.5 (10)	91	10/10	10.4 (10)	90	10/10	10.1 (10)	87	10/10
7	12.2 (10)	10/10	11.9 (10)	98	10/10	11.4 (10)	93	10/10	10.7 (10)	88	10/10	10.7 (10)	88	10/10	10.6 (10)	87	10/10
8	11.6 (10)	10/10	11.3 (10)	97	10/10	11.4 (10)	98	10/10	10.4 (10)	90	10/10	10.7 (10)	92	10/10	10.3 (10)	89	10/10
9	11.5 (10)	10/10	10.6 (10)	92	10/10	11.0 (10)	96	10/10	10.2 (10)	89	10/10	10.2 (10)	89	10/10	9.9 (10)	86	10/10
10	11.7 (10)	10/10	11.1 (10)	95	10/10	11.1 (10)	95	10/10	10.0 (10)	85	10/10	10.2 (10)	87	10/10	9.7 (10)	83	10/10
11	11.7 (10)	10/10	11.5 (10)	98	10/10	11.4 (10)	97	10/10	10.3 (10)	88	10/10	10.0 (10)	85	10/10	10.1 (10)	86	10/10
12	11.5 (10)	10/10	11.3 (10)	98	10/10	11.2 (10)	97	10/10	10.4 (10)	90	10/10	10.6 (10)	92	10/10	9.9 (10)	86	10/10
13	11.5 (10)	10/10	10.9 (10)	95	10/10	11.0 (10)	96	10/10	10.0 (10)	87	10/10	10.4 (10)	90	10/10	9.6 (10)	83	10/10

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

TABLE 14 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	Control Av.Wt.	Control No.of Surviv. <10>	6250 ppm Av.Wt.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.Wt.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.Wt.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.Wt.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.Wt.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
0-0	24.2 (10)	10/10	24.2 (10)	100	10/10	24.2 (10)	100	10/10	24.2 (10)	100	10/10	24.2 (10)	100	10/10	24.2 (10)	100	10/10
1-1	23.8 (10)	10/10	23.7 (10)	100	10/10	23.6 (10)	99	10/10	23.6 (10)	99	10/10	22.9 (10)	96	10/10	21.4 (10)	90	10/10
1-2	24.0 (10)	10/10	24.2 (10)	101	10/10	24.0 (10)	100	10/10	23.9 (10)	100	10/10	22.1 (10)	92	10/10	20.6 (10)	86	10/10
1-4	24.5 (10)	10/10	24.8 (10)	101	10/10	24.2 (10)	99	10/10	24.4 (10)	100	10/10	24.2 (10)	99	10/10	20.0 (10)	82	10/10
1-7	25.0 (10)	10/10	25.2 (10)	101	10/10	24.7 (10)	99	10/10	24.8 (10)	99	10/10	24.6 (10)	98	10/10	19.5 (10)	78	10/10
2-3	25.6 (10)	10/10	25.7 (10)	100	10/10	25.5 (10)	100	10/10	25.4 (10)	99	10/10	25.3 (10)	99	10/10	19.9 (10)	78	10/10
2-7	26.2 (10)	10/10	26.6 (10)	102	10/10	26.2 (10)	100	10/10	26.3 (10)	100	10/10	26.2 (10)	100	10/10	18.8 (10)	72	10/10

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

TABLE 15 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	Control Av.Wt.	Control No.of Surviv. <10>	6250 ppm Av.Wt.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.Wt.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.Wt.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.Wt.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.Wt.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
0-0	19.3 (10)	10/10	19.3 (10)	100	10/10	19.3 (10)	100	10/10	19.3 (10)	100	10/10	19.3 (10)	100	10/10	19.3 (10)	100	10/10
1-1	18.8 (10)	10/10	17.9 (10)	95	10/10	17.2 (10)	91	10/10	17.2 (10)	91	10/10	17.6 (10)	94	10/10	16.8 (10)	89	10/10
1-2	19.1 (10)	10/10	19.0 (10)	99	10/10	18.7 (10)	98	10/10	18.1 (10)	95	10/10	18.6 (10)	97	10/10	16.0 (10)	84	10/10
1-4	19.3 (10)	10/10	19.7 (10)	102	10/10	19.2 (10)	99	10/10	19.1 (10)	99	10/10	19.1 (10)	99	10/10	15.8 (10)	82	10/10
1-7	19.6 (10)	10/10	19.6 (10)	100	10/10	19.5 (10)	99	10/10	19.1 (10)	97	10/10	19.4 (10)	99	10/10	15.6 (10)	80	10/10
2-3	20.2 (10)	10/10	20.4 (10)	101	10/10	20.0 (10)	99	10/10	19.9 (10)	99	10/10	20.2 (10)	100	10/10	16.5 (9)	82	9/10
2-7	20.7 (10)	10/10	21.0 (10)	101	10/10	20.7 (10)	100	10/10	20.7 (10)	100	10/10	20.6 (10)	100	10/10	14.9 (9)	72	9/10

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

TABLE 16 WATER CONSUMPTION IN MALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	Control Av.WC.	Control No.of Surviv. <10>	6250 ppm Av.WC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.WC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.WC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.WC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.WC.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
1-3	4.5 (10)	10/10	4.9 (10)	109	10/10	5.1 (10)	113	10/10	5.8 (10)	129	10/10	5.0 (10)	111	10/10	4.0 (10)	89	10/10
1-7	4.6 (10)	10/10	4.8 (10)	104	10/10	5.1 (10)	111	10/10	5.7 (10)	124	10/10	5.6 (10)	122	10/10	7.9 (10)	172	10/10
2-3	4.7 (10)	10/10	4.8 (10)	102	10/10	5.2 (10)	111	10/10	5.4 (10)	115	10/10	5.2 (10)	111	10/10	8.6 (10)	183	10/10
2-7	4.2 (10)	10/10	4.5 (10)	107	10/10	4.7 (10)	112	10/10	4.8 (10)	114	10/10	4.8 (10)	114	10/10	6.3 (10)	150	10/10

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

TABLE 17 WATER CONSUMPTION IN FEMALE MOUSE (TWO-WEEK STUDY)

Control Av.WC.	Control No.of Surviv. <10>	6250 ppm Av.WC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.WC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.WC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.WC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.WC.	100000 ppm % of cont. <10>
4.2 (10)	10/10	4.5 (10)	107	10/10	4.4 (10)	105	10/10	4.6 (10)	110	10/10	5.8 (10)	138	10/10	4.5 (10)	107
4.8 (10)	10/10	5.0 (10)	104	10/10	4.9 (10)	102	10/10	5.5 (10)	115	10/10	6.0 (10)	125	10/10	7.9 (10)	165
4.9 (10)	10/10	5.0 (8)	102	10/10	5.2 (10)	106	10/10	5.6 (10)	114	10/10	6.2 (10)	127	10/10	9.9 (10)	202
5.1 (10)	10/10	4.7 (10)	92	10/10	4.9 (10)	96	10/10	5.1 (10)	100	10/10	5.8 (10)	114	10/10	5.2 (9)	102

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

TABLE 18 FOOD CONSUMPTION IN MALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	6250 ppm Av.FC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.FC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.FC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.FC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.FC.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
1-7	4.1 (10)	10/10	4.1 (10)	100	10/10	3.9 (10)	95	10/10	3.9 (10)	95	10/10	3.8 (10)	93	10/10	2.4 (10)	59	10/10
2-7	4.1 (10)	10/10	4.0 (10)	98	10/10	4.1 (10)	100	10/10	4.1 (10)	100	10/10	4.1 (10)	100	10/10	3.2 (10)	78	10/10

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

TABLE 19 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-WEEK STUDY)

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	6250 ppm Av.FC.	6250 ppm % of cont. <10>	6250 ppm No.of Surviv.	12500 ppm Av.FC.	12500 ppm % of cont. <10>	12500 ppm No.of Surviv.	25000 ppm Av.FC.	25000 ppm % of cont. <10>	25000 ppm No.of Surviv.	50000 ppm Av.FC.	50000 ppm % of cont. <10>	50000 ppm No.of Surviv.	100000 ppm Av.FC.	100000 ppm % of cont. <10>	100000 ppm No.of Surviv.
1-7	3.3 (10)	10/10	3.3 (10)	100	10/10	3.3 (10)	100	10/10	3.1 (10)	94	10/10	3.2 (10)	97	10/10	2.2 (10)	67	10/10
2-7	3.6 (10)	10/10	3.6 (10)	100	10/10	3.7 (10)	103	10/10	3.6 (10)	100	10/10	3.6 (10)	100	10/10	2.7 (9)	75	9/10

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

TABLE 20 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (THIRTEEN-WEEK STUDY)

Week on Study	Control Av.Wt.	Control No.of Surviv. <10>	5000ppm Av.Wt.	5000ppm % of cont. <10>	5000ppm No.of Surviv.	10000ppm Av.Wt.	10000ppm % of cont. <10>	10000ppm No.of Surviv.	20000ppm Av.Wt.	20000ppm % of cont. <10>	20000ppm No.of Surviv.	40000ppm Av.Wt.	40000ppm % of cont. <10>	40000ppm No.of Surviv.	80000ppm Av.Wt.	80000ppm % of cont. <10>	80000ppm No.of Surviv.
0	24.1 (10)	10/10	24.1 (10)	100	10/10	24.1 (10)	100	10/10	24.1 (10)	100	10/10	24.1 (10)	100	10/10	24.1 (10)	100	10/10
1	24.9 (10)	10/10	25.3 (10)	102	10/10	25.1 (10)	101	10/10	24.9 (10)	100	10/10	25.2 (10)	101	10/10	23.2 (10)	93	10/10
2	26.0 (10)	10/10	26.4 (10)	102	10/10	26.2 (10)	101	10/10	26.3 (10)	101	10/10	26.3 (10)	101	10/10	24.7 (10)	95	10/10
3	26.7 (10)	10/10	27.4 (10)	103	10/10	27.2 (10)	102	10/10	27.2 (10)	102	10/10	27.1 (10)	101	10/10	25.2 (10)	94	10/10
4	27.7 (10)	10/10	28.1 (10)	101	10/10	28.0 (10)	101	10/10	28.2 (10)	102	10/10	28.0 (10)	101	10/10	26.0 (10)	94	10/10
5	28.5 (10)	10/10	29.3 (10)	103	10/10	29.1 (10)	102	10/10	29.0 (10)	102	10/10	28.9 (10)	101	10/10	26.5 (10)	93	10/10
6	29.6 (10)	10/10	30.3 (10)	102	10/10	30.3 (10)	102	10/10	30.1 (10)	102	10/10	29.8 (10)	101	10/10	27.0 (10)	91	10/10
7	30.3 (10)	10/10	31.0 (10)	102	10/10	30.8 (10)	102	10/10	30.6 (10)	101	10/10	30.1 (10)	99	10/10	26.6 (10)	88	10/10
8	31.7 (10)	10/10	32.2 (10)	102	10/10	32.1 (10)	101	10/10	31.7 (10)	100	10/10	31.4 (10)	99	10/10	29.1 (9)	92	9/10
9	32.7 (10)	10/10	33.5 (10)	102	10/10	33.0 (10)	101	10/10	32.5 (10)	99	10/10	32.0 (10)	98	10/10	29.7 (9)	91	9/10
10	33.8 (10)	10/10	34.6 (10)	102	10/10	34.2 (10)	101	10/10	33.0 (10)	98	10/10	33.2 (10)	98	10/10	30.5 (9)	90	9/10
11	34.4 (10)	10/10	35.4 (10)	103	10/10	34.7 (10)	101	10/10	33.8 (10)	98	10/10	33.6 (10)	98	10/10	31.0 (9)	90	9/10
12	35.3 (10)	10/10	36.2 (10)	103	10/10	35.6 (10)	101	10/10	34.5 (10)	98	10/10	34.5 (10)	98	10/10	31.7 (9)	90	9/10
13	35.9 (10)	10/10	36.7 (10)	102	10/10	36.3 (10)	101	10/10	35.5 (10)	99	10/10	35.1 (10)	99	10/10	32.5 (9)	91	9/10

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

TABLE 21 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (THIRTEEN-WEEK STUDY)

Week on Study	Control Av.Wt.	Control No.of Surviv. <10>	5000ppm Av.Wt.	5000ppm % of cont. <10>	5000ppm No.of Surviv.	10000ppm Av.Wt.	10000ppm % of cont. <10>	10000ppm No.of Surviv.	20000ppm Av.Wt.	20000ppm % of cont. <10>	20000ppm No.of Surviv.	40000ppm Av.Wt.	40000ppm % of cont. <10>	40000ppm No.of Surviv.	80000ppm Av.Wt.	80000ppm % of cont. <10>	80000ppm No.of Surviv.
0	18.9 (10)	10/10	19.0 (10)	101	10/10	19.0 (10)	101	10/10	19.0 (10)	101	10/10	19.0 (10)	101	10/10	19.0 (10)	101	10/10
1	20.1 (10)	10/10	19.2 (10)	96	10/10	19.5 (10)	97	10/10	19.6 (10)	98	10/10	19.5 (10)	97	10/10	17.3 (10)	86	10/10
2	20.6 (10)	10/10	20.4 (10)	99	10/10	20.7 (10)	100	10/10	20.2 (10)	98	10/10	20.2 (10)	98	10/10	19.4 (10)	94	10/10
3	20.8 (10)	10/10	20.2 (10)	97	10/10	20.9 (10)	100	10/10	20.3 (10)	98	10/10	20.6 (10)	99	10/10	19.4 (10)	93	10/10
4	21.4 (10)	10/10	21.1 (10)	99	10/10	21.2 (10)	99	10/10	20.9 (10)	98	10/10	20.9 (10)	98	10/10	19.9 (10)	93	10/10
5	22.0 (10)	10/10	21.6 (10)	98	10/10	21.7 (10)	99	10/10	21.9 (10)	100	10/10	21.5 (10)	98	10/10	20.2 (10)	92	10/10
6	22.4 (10)	10/10	22.0 (10)	98	10/10	22.2 (10)	99	10/10	21.8 (10)	97	10/10	22.0 (10)	98	10/10	20.0 (10)	89	10/10
7	22.4 (10)	10/10	21.8 (10)	97	10/10	22.1 (10)	99	10/10	21.9 (10)	98	10/10	22.1 (10)	99	10/10	20.4 (10)	91	10/10
8	23.2 (10)	10/10	22.8 (10)	98	10/10	23.2 (10)	100	10/10	23.3 (10)	100	10/10	22.8 (10)	98	10/10	21.4 (10)	92	10/10
9	23.7 (10)	10/10	23.7 (10)	100	10/10	23.1 (10)	97	10/10	22.9 (10)	97	10/10	23.2 (10)	98	10/10	21.7 (10)	92	10/10
10	23.3 (10)	10/10	23.2 (10)	100	10/10	23.7 (10)	102	10/10	22.8 (10)	98	10/10	22.9 (10)	98	10/10	21.5 (10)	92	10/10
11	23.8 (10)	10/10	23.4 (10)	98	10/10	23.4 (10)	98	10/10	23.7 (10)	100	10/10	23.0 (10)	97	10/10	22.0 (10)	92	10/10
12	23.7 (10)	10/10	23.8 (10)	100	10/10	23.9 (10)	101	10/10	23.8 (10)	100	10/10	23.6 (10)	100	10/10	23.2 (9)	98	9/10
13	24.6 (10)	10/10	24.1 (10)	98	10/10	23.6 (10)	96	10/10	23.9 (10)	97	10/10	23.3 (10)	95	10/10	22.9 (9)	93	9/10

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

TABLE 22 WATER CONSUMPTION IN MALE MOUSE (THIRTEEN-WEEK STUDY)

Week-Day on Study	Control		5000ppm			10000ppm			20000ppm			40000ppm			80000ppm		
	Av.WC.	No.of Surviv. <10>	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.
1-7	5.1 (10)	10/10	5.2 (10)	102	10/10	5.2 (10)	102	10/10	5.5 (10)	108	10/10	6.4 (10)	125	10/10	7.9 (10)	155	10/10
2-7	4.9 (10)	10/10	4.7 (10)	96	10/10	5.0 (10)	102	10/10	5.2 (10)	106	10/10	5.7 (10)	116	10/10	6.0 (9)	122	10/10
3-7	4.6 (10)	10/10	4.7 (10)	102	10/10	4.8 (10)	104	10/10	5.2 (10)	113	10/10	5.6 (10)	122	10/10	7.5 (10)	163	10/10
4-7	4.4 (10)	10/10	4.7 (10)	107	10/10	4.7 (10)	107	10/10	5.0 (10)	114	10/10	5.3 (10)	120	10/10	7.5 (10)	170	10/10
5-7	4.6 (10)	10/10	4.8 (10)	104	10/10	4.5 (10)	98	10/10	4.9 (10)	107	10/10	5.1 (10)	111	10/10	7.5 (10)	163	10/10
6-7	4.3 (10)	10/10	4.6 (10)	107	10/10	4.7 (10)	109	10/10	4.7 (10)	109	10/10	5.3 (10)	123	10/10	7.4 (10)	172	10/10
7-7	4.3 (10)	10/10	4.7 (10)	109	10/10	4.6 (10)	107	10/10	4.8 (10)	112	10/10	5.2 (10)	121	10/10	7.1 (10)	165	10/10
8-7	4.3 (10)	10/10	4.4 (10)	102	10/10	4.6 (10)	107	10/10	5.1 (10)	119	10/10	5.1 (10)	119	10/10	6.3 (9)	147	9/10
9-7	4.0 (10)	10/10	4.1 (10)	103	10/10	4.2 (10)	105	10/10	4.6 (10)	115	10/10	4.9 (10)	123	10/10	6.0 (9)	150	9/10
10-7	3.9 (10)	10/10	4.2 (10)	108	10/10	4.3 (10)	110	10/10	4.4 (10)	113	10/10	4.9 (10)	126	10/10	6.2 (9)	159	9/10
11-7	3.7 (10)	10/10	4.0 (10)	108	10/10	4.1 (10)	111	10/10	4.3 (10)	116	10/10	4.6 (10)	124	10/10	6.0 (9)	162	9/10
12-7	3.6 (10)	10/10	3.9 (10)	108	10/10	4.0 (10)	111	10/10	4.3 (10)	119	10/10	4.6 (10)	128	10/10	5.8 (9)	161	9/10
13-7	3.6 (10)	10/10	3.8 (10)	106	10/10	3.9 (10)	108	10/10	4.2 (10)	117	10/10	4.5 (10)	125	10/10	5.6 (9)	156	9/10

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

TABLE 23 WATER CONSUMPTION IN FEMALE MOUSE (THIRTEEN-WEEK STUDY)

Week-Day on Study	Control		5000ppm			10000ppm			20000ppm			40000ppm			80000ppm		
	Av.WC.	No.of Surviv. <10>	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.	Av.WC.	% of cont. <10>	No.of Surviv.
1-7	4.9 (10)	10/10	5.0 (10)	102	10/10	5.0 (10)	102	10/10	5.4 (10)	110	10/10	5.7 (10)	116	10/10	7.2 (10)	147	10/10
2-7	4.7 (10)	10/10	5.2 (10)	111	10/10	5.2 (10)	111	10/10	5.3 (10)	113	10/10	5.6 (10)	119	10/10	7.3 (9)	155	10/10
3-7	4.6 (10)	10/10	5.0 (10)	109	10/10	4.8 (10)	104	10/10	6.0 (10)	130	10/10	6.0 (10)	130	10/10	9.2 (10)	200	10/10
4-7	5.0 (10)	10/10	5.2 (10)	104	10/10	4.9 (10)	98	10/10	5.7 (10)	114	10/10	6.0 (10)	120	10/10	9.6 (10)	192	10/10
5-7	5.5 (10)	10/10	5.5 (10)	100	10/10	4.5 (10)	82	10/10	5.9 (10)	107	10/10	6.6 (9)	120	10/10	9.9 (10)	180	10/10
6-7	5.2 (10)	10/10	5.5 (10)	106	10/10	4.8 (10)	92	10/10	5.6 (10)	108	10/10	5.9 (10)	113	10/10	9.7 (10)	187	10/10
7-7	5.5 (10)	10/10	5.5 (10)	100	10/10	5.0 (10)	91	10/10	6.3 (10)	115	10/10	6.2 (10)	113	10/10	9.7 (10)	176	10/10
8-7	5.8 (10)	10/10	5.5 (10)	95	10/10	4.9 (10)	84	10/10	5.9 (10)	102	10/10	6.0 (10)	103	10/10	9.5 (10)	164	10/10
9-7	6.8 (10)	10/10	5.3 (10)	78	10/10	4.8 (10)	71	10/10	6.5 (10)	96	10/10	5.6 (10)	82	10/10	10.1 (10)	148	10/10
10-7	6.1 (10)	10/10	4.8 (10)	79	10/10	4.7 (10)	77	10/10	5.9 (10)	97	10/10	5.7 (10)	93	10/10	10.3 (10)	169	10/10
11-7	6.7 (10)	10/10	4.8 (10)	72	10/10	4.8 (10)	72	10/10	5.9 (10)	88	10/10	5.7 (10)	85	10/10	10.7 (10)	160	10/10
12-7	6.6 (10)	10/10	4.7 (10)	71	10/10	4.7 (10)	71	10/10	5.7 (10)	86	10/10	5.5 (10)	83	10/10	8.6 (10)	130	9/10
13-7	5.9 (10)	10/10	4.8 (10)	81	10/10	5.1 (10)	86	10/10	5.9 (10)	100	10/10	5.5 (10)	93	10/10	7.3 (9)	124	9/10

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

TABLE 24 FOOD CONSUMPTION IN MALE MOUSE (THIRTEEN-WEEK STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	5000ppm Av.FC.	5000ppm % of cont. <10>	5000ppm No.of Surviv.	10000ppm Av.FC.	10000ppm % of cont. <10>	10000ppm No.of Surviv.	20000ppm Av.FC.	20000ppm % of cont. <10>	20000ppm No.of Surviv.	40000ppm Av.FC.	40000ppm % of cont. <10>	40000ppm No.of Surviv.	80000ppm Av.FC.	80000ppm % of cont. <10>	80000ppm No.of Surviv.
1	3.9 (10)	10/10	4.0 (10)	103	10/10	3.9 (10)	100	10/10	4.1 (10)	105	10/10	4.1 (10)	105	10/10	3.4 (10)	87	10/10
2	3.9 (10)	10/10	4.0 (10)	103	10/10	4.0 (10)	103	10/10	4.1 (10)	105	10/10	4.0 (10)	103	10/10	4.0 (10)	103	10/10
3	3.9 (10)	10/10	3.9 (10)	100	10/10	3.9 (10)	100	10/10	4.0 (10)	103	10/10	3.9 (10)	100	10/10	3.8 (10)	97	10/10
4	4.0 (10)	10/10	4.0 (10)	100	10/10	4.0 (10)	100	10/10	4.2 (10)	105	10/10	4.1 (10)	103	10/10	3.9 (10)	98	10/10
5	3.9 (10)	10/10	3.9 (10)	100	10/10	4.0 (10)	103	10/10	4.1 (10)	105	10/10	4.0 (10)	103	10/10	3.8 (10)	97	10/10
6	4.0 (10)	10/10	4.1 (10)	103	10/10	4.2 (10)	105	10/10	4.2 (10)	105	10/10	4.1 (10)	103	10/10	3.8 (10)	95	10/10
7	3.9 (10)	10/10	4.1 (10)	105	10/10	4.0 (10)	103	10/10	4.1 (10)	105	10/10	4.0 (10)	103	10/10	3.5 (10)	92	10/10
8	4.2 (10)	10/10	4.2 (10)	100	10/10	4.2 (10)	100	10/10	4.2 (10)	100	10/10	4.2 (10)	100	10/10	4.0 (9)	95	9/10
9	4.1 (10)	10/10	4.3 (10)	105	10/10	4.2 (10)	102	10/10	4.2 (10)	102	10/10	4.1 (10)	100	10/10	4.0 (9)	98	9/10
10	4.2 (10)	10/10	4.4 (10)	105	10/10	4.3 (10)	102	10/10	4.2 (10)	100	10/10	4.3 (10)	102	10/10	4.1 (9)	98	9/10
11	4.1 (10)	10/10	4.2 (10)	102	10/10	4.2 (10)	102	10/10	4.1 (10)	100	10/10	4.1 (10)	100	10/10	3.9 (9)	95	9/10
12	4.2 (10)	10/10	4.3 (10)	102	10/10	4.2 (10)	100	10/10	4.2 (10)	100	10/10	4.2 (10)	100	10/10	4.1 (9)	98	9/10
13	4.0 (10)	10/10	4.1 (10)	103	10/10	4.1 (10)	103	10/10	4.2 (10)	105	10/10	4.2 (10)	105	10/10	4.0 (9)	100	9/10

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

TABLE 25 FOOD CONSUMPTION IN FEMALE MOUSE (THIRTEEN-WEEK STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	5000ppm Av.FC.	5000ppm % of cont. <10>	5000ppm No.of Surviv.	10000ppm Av.FC.	10000ppm % of cont. <10>	10000ppm No.of Surviv.	20000ppm Av.FC.	20000ppm % of cont. <10>	20000ppm No.of Surviv.	40000ppm Av.FC.	40000ppm % of cont. <10>	40000ppm No.of Surviv.	80000ppm Av.FC.	80000ppm % of cont. <10>	80000ppm No.of Surviv.
1	3.6 (10)	10/10	3.4 (10)	94	10/10	3.5 (10)	97	10/10	3.4 (10)	94	10/10	3.4 (10)	94	10/10	3.0 (10)	83	10/10
2	3.4 (10)	10/10	3.5 (10)	103	10/10	3.5 (10)	103	10/10	3.4 (10)	100	10/10	3.5 (10)	103	10/10	3.4 (10)	100	10/10
3	3.5 (10)	10/10	3.5 (10)	100	10/10	3.4 (10)	97	10/10	3.4 (10)	97	10/10	3.5 (10)	100	10/10	3.4 (10)	97	10/10
4	3.7 (10)	10/10	3.7 (10)	100	10/10	3.6 (10)	97	10/10	3.6 (10)	97	10/10	3.7 (10)	100	10/10	3.6 (10)	97	10/10
5	3.8 (10)	10/10	3.8 (10)	100	10/10	3.7 (10)	97	10/10	3.8 (10)	100	10/10	3.8 (10)	100	10/10	3.6 (10)	95	10/10
6	3.8 (10)	10/10	3.7 (10)	97	10/10	3.7 (10)	97	10/10	3.7 (10)	97	10/10	3.7 (10)	97	10/10	3.5 (10)	92	10/10
7	3.8 (10)	10/10	3.8 (10)	100	10/10	3.8 (10)	100	10/10	3.9 (10)	103	10/10	3.9 (10)	103	10/10	3.6 (10)	95	10/10
8	4.0 (10)	10/10	4.1 (10)	103	10/10	3.9 (10)	98	10/10	4.0 (10)	100	10/10	4.0 (10)	100	10/10	3.7 (10)	93	10/10
9	4.1 (10)	10/10	4.1 (10)	100	10/10	3.9 (10)	95	10/10	3.9 (10)	95	10/10	4.0 (10)	98	10/10	3.7 (10)	90	10/10
10	3.9 (10)	10/10	3.9 (10)	100	10/10	4.0 (10)	103	10/10	3.8 (10)	97	10/10	3.9 (10)	100	10/10	3.7 (10)	95	10/10
11	3.9 (10)	10/10	3.9 (10)	100	10/10	3.8 (10)	97	10/10	3.9 (10)	100	10/10	3.8 (10)	97	10/10	3.5 (10)	90	10/10
12	3.9 (10)	10/10	4.0 (10)	103	10/10	3.9 (10)	100	10/10	3.9 (10)	100	10/10	4.0 (10)	103	10/10	3.6 (10)	92	9/10
13	4.0 (10)	10/10	3.9 (10)	98	10/10	3.7 (10)	93	10/10	3.9 (10)	98	10/10	3.8 (10)	95	10/10	3.6 (9)	90	9/10

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

TABLE 26 Height of Gastric Mucosa (Fundus, μm):F344 Rats

Study No. : 0201

Male

	Dose					
	0ppm	2500ppm	5000ppm	10000ppm	20000ppm	40000ppm
Superficial Layer	122.9 ± 7.6	121.7 ± 4.1	120.0 ± 6.3	118.0 ± 4.5	125.0 ± 10.0	146.0 ± 15.2 **
Middle Layer	295.7 ± 39.9	311.7 ± 13.3	270.0 ± 35.8	280.0 ± 27.4	297.5 ± 37.7	244.0 ± 33.6 *
Deep Layer	107.1 ± 17.0	103.3 ± 8.2	98.3 ± 7.5	106.0 ± 8.9	105.0 ± 10.0	104.0 ± 23.0

Female

	Dose					
	0ppm	2500ppm	5000ppm	10000ppm	20000ppm	40000ppm
Superficial Layer	117.1 ± 13.8	113.8 ± 10.6	108.3 ± 7.5	106.0 ± 5.5	106.7 ± 12.1	118.8 ± 12.5
Middle Layer	227.1 ± 33.0	237.5 ± 21.9	228.3 ± 25.6	216.0 ± 28.8	228.3 ± 19.4	172.5 ± 36.9 *
Deep Layer	100.0 ± 5.8	100.0 ± 5.3	103.3 ± 5.2	104.0 ± 11.4	106.7 ± 8.2	102.5 ± 11.6

Significant difference ; *:P≦0.05 **:p≦0.01 Test of t (Student)

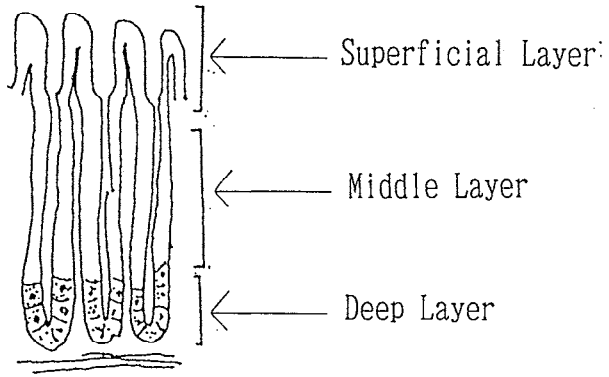

TABLE 27 Height of Gastric Mucosa (Fundus, μm):BDF1 Mice

Study No. : 0202

Male

	Dose					
	0ppm	5000ppm	10000ppm	20000ppm	40000ppm	80000ppm
Superficial Layer	103.3 ± 8.2	110.0 ± 10.7	100.0 ± 7.1	105.0 ± 7.6	108.6 ± 12.1	143.3 ± 13.2**
Middle Layer	243.3 ± 37.2	222.5 ± 36.5	212.0 ± 32.7	186.3 ± 29.7**	131.4 ± 47.4**	142.2 ± 42.7**
Deep Layer	93.3 ± 5.2	87.5 ± 13.9	86.0 ± 8.9	92.5 ± 12.8	97.1 ± 9.5	66.7 ± 16.6**

Female

	Dose					
	0ppm	5000ppm	10000ppm	20000ppm	40000ppm	80000ppm
Superficial Layer	91.4 ± 15.7	102.5 ± 12.8	100.0 ± 11.5	110.0 ± 15.8	96.3 ± 9.2	110.0 ± 16.0*
Middle Layer	184.3 ± 57.4	187.5 ± 45.3	195.7 ± 50.9	166.0 ± 23.0	137.5 ± 59.0	135.0 ± 21.4*
Deep Layer	81.4 ± 15.7	85.0 ± 12.0	85.7 ± 14.0	84.0 ± 8.9	90.0 ± 14.1	86.3 ± 15.1

Significant difference ; *:p≦0.05 **:p≦0.01 Test of t (Student)