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VIII. APPENDIX.

TABLE 1.  
Average Daily Weight,\* Relative Weight and Increase in Weight during Pregnancy of Different Classes of Rats.

No. of Days after Service.	All Rats.				Females put with Males when Vaginas Opened.				Heavy Rats: First Pregnancy.				Rats that had One or More Litters.			
	Weight.	Daily Gain.	Relative Weight.	Daily Gain.	Weight.	Daily Gain.	Relative Weight.	Daily Gain.	Weight.	Daily Gain.	Relative Weight.	Daily Gain.	Weight.	Daily Gain.	Relative Weight.	Daily Gain.
	g.	g.	%	%	g.	g.	%	%	g.	g.	%	%	g.	g.	%	%
Birth.....22	255.0	50.3	118.2	23.3	193.6	45.2	136.1	36.5	247.3	48.4	119.2	23.3	278.6	52.0	113.6	21.2
21	305.3	8.3	141.5	3.8	238.8	10.2	162.6	8.2	295.7	7.8	142.5	3.7	330.6	6.6	134.8	2.7
20	297.0	8.7	137.7	4.0	228.6	10.0	184.4	8.1	287.9	8.0	138.8	3.9	324.0	9.5	132.1	3.8
19	288.3	9.1	133.7	4.2	218.6	10.2	176.3	8.2	279.9	9.1	134.9	4.4	314.5	8.8	128.2	3.6
18	279.2	9.2	129.5	4.3	208.4	8.8	168.1	7.1	270.8	9.2	130.5	4.4	305.7	9.5	124.6	3.8
17	270.0	7.9	125.2	3.7	199.6	7.8	161.0	6.3	261.6	7.6	126.1	3.7	296.2	8.3	120.8	3.5
16	262.1	5.4	121.5	2.5	191.8	5.6	154.7	4.5	254.0	5.7	122.4	2.8	287.9	4.9	117.3	1.9
15	256.7	3.7	119.0	1.7	186.2	5.2	150.2	4.2	248.3	3.5	119.6	1.6	283.0	3.9	115.4	1.6
14	253.0	3.5	117.3	1.6	181.0	5.0	146.0	4.1	244.8	3.6	118.0	1.7	279.1	3.0	113.8	1.2
13	249.5	2.3	115.7	1.1	176.0	2.0	144.9	1.6	241.2	1.8	116.3	0.9	276.1	3.0	112.6	1.3
12	247.2	3.2	114.6	1.5	174.0	6.6	140.3	5.3	239.4	3.0	115.4	1.5	273.1	2.9	111.3	1.2
11	244.0	3.0	113.1	1.3	167.4	1.6	135.0	1.3	236.4	3.7	113.9	1.8	270.2	2.0	110.1	0.8
10	241.0	4.3	111.8	2.1	165.8	5.4	133.7	4.3	232.7	4.2	112.1	2.0	268.2	4.6	109.3	1.8
9	236.7	2.5	109.7	1.1	160.4	4.4	129.4	3.6	228.5	2.5	110.1	1.2	263.6	2.1	107.5	0.9
8	234.2	2.4	108.6	1.1	156.0	3.8	125.8	3.1	226.0	2.2	108.9	1.1	261.5	2.4	106.6	1.0
7	231.8	2.2	107.5	1.0	152.2	4.0	122.4	3.2	223.8	2.2	107.8	0.9	259.1	2.2	105.6	0.9
6	229.6	1.8	106.5	0.9	148.2	4.0	119.5	3.2	221.8	1.8	106.9	0.9	256.9	1.6	104.7	0.6
5	224.8	2.5	105.6	1.1	144.2	3.0	116.3	2.4	220.0	3.1	106.0	1.5	255.3	1.2	104.1	0.5
4	225.3	2.3	104.5	1.1	141.2	5.4	113.9	4.4	216.9	1.7	104.5	0.8	254.1	3.0	103.6	1.3
3	223.0	2.9	103.4	1.4	135.8	3.8	109.5	3.0	215.2	3.3	103.7	1.6	251.1	2.0	102.3	0.8
2	220.1	3.8	102.0	1.8	132.0	4.0	106.5	3.8	211.9	3.9	102.1	1.9	249.6	3.8	101.5	1.5
1	216.2	1.2	100.2	0.5	127.4	2.2	102.7	1.7	208.0	1.1	100.2	0.5	245.3	1.2	100	0.5
Served.....0	215.0	0.7	99.7	0.3	125.2	1.2	101.0	1.0	206.9	0.6	99.7	0.3	244.1	1.2	99.5	0.5
No. Observat's	215.7	—	100	—	124.0	—	100	—	207.5	—	100	—	245.3	—	100	—

\* Weight 23 days before parturition taken as 100 and subsequent weights expressed as percentages of that weight to get relative weights.



TABLE 2.  
*Actual and Relative Increase in Weight of Rats during Different Periods of the Gestation Period.*

Class of Rats.	ACTUAL INCREASE.*						RELATIVE INCREASE.*											
	Up to 6 Days.		6-14 Days.		14-21 Days.		Gross Increase.		Permanent Increase.		Loss at Parturition.		Up to 6 Days. %	6-14 Days. %	14-21 Days. %	Gross Increase. %	Permanent Increase. %	Loss at Parturition. %
	Wght. g.	%	Wght. g.	%	Wght. g.	%	Wght. g.	%	Wght. g.	%	Wght. g.	%						
(1) All Rats.....	13.9	15.5	23.4	26.1	52.3	58.4	89.6	100	39.3	43.9	50.3	56.1	6.5	10.8	24.2	41.5	18.2	23.3
(2) Rats Served as Vaginas opened	24.2	21.1	32.8	28.6	57.8	50.3	114.8	100	69.6	60.6	45.2	39.4	19.5	26.5	46.6	92.6	56.1	36.5
(3) Heavy Rats First Pregnancy	14.3	16.2	23.0	26.1	50.9	57.7	88.2	100	39.8	45.1	48.4	54.9	6.9	11.1	24.5	42.5	19.2	23.3
(4) Rats that had One and more Pregnancies	11.6	13.6	22.2	26.1	51.5	60.4	85.2	100	33.3	39.1	52.0	61.0	4.7	9.1	22.0	35.8	13.6	22.2

\* Actual and relative weights obtained from Table 1.

GROWTH OF THE ALBINO RAT.

TABLE 4.  
Influence of Weight at Service on the Increase in Actual and Relative Weights  
at Different Periods of Pregnancy.

Weight Classes in g.	ACTUAL INCREASE.										RELATIVE INCREASE.								
	Up to 6 Days.		6-14 Days.		14-21 Days.		Gross Increase.		Permanent Increase.		Loss at Parturition.		Up to 6 Days. %	6-14 Days. %	14-21 Days. %	Gross In- crease. %	Per- ma- nent In- crease. %	Loss at Par- tur- tion. %	Aver- age No. per Litter.
	Wt. g.	Per Cent.	Wt. g.	Per Cent.	Wt. g.	Per Cent.	Wt. g.	Per Cent.	Wt. g.	Per Cent.	Wt. g.	Per Cent.							
First Pregnancies. 110-139	24.2	21.1	32.8	28.6	57.8	50.3	114.8	100	69.6	60.6	45.2	39.4	19.5	26.5	46.6	92.6	56.1	36.5	—
140-169	14.6	15.9	23.8	25.9	53.6	58.3	92.0	100	43.6	47.4	48.4	52.6	9.4	15.3	34.4	59.1	28.0	31.1	7.4
170-199	13.4	15.8	21.3	25.2	49.9	59.0	84.6	100	41.0	48.5	43.6	51.5	7.2	11.4	26.8	45.4	22.0	23.4	7.3
200-229	14.6	16.9	21.9	25.4	49.8	57.7	86.3	100	36.5	42.3	49.8	57.7	6.9	10.2	23.4	40.5	17.1	23.4	7.0
230-259	15.2	15.9	27.5	28.7	53.0	55.4	95.7	100	44.5	46.5	51.2	53.5	6.2	11.2	21.6	39.0	18.1	20.9	7.0
260-289 One and More	14.8	15.7	27.5	29.2	52.0	55.1	94.3	100	39.5	41.9	54.8	58.1	5.5	10.3	19.5	35.3	14.8	20.5	6.0
Pregnancies. 200-229	12.6	14.4	20.8	23.9	53.8	61.7	87.2	100	33.6	38.5	53.6	61.5	5.8	9.7	24.8	40.3	15.5	24.8	7.6
230-259	12.2	14.3	22.1	25.9	51.1	59.8	85.4	100	33.0	38.6	52.4	61.4	5.1	9.3	21.5	35.9	13.9	22.0	6.9
260-289	9.4	10.9	22.9	26.5	54.2	62.6	86.5	100	32.3	37.3	54.2	62.7	3.4	8.3	19.6	31.3	11.7	19.6	7.2

TABLE 3.

*Influence of Weight of Females at Service on In**First Pregnancies.*

No. of Days after Service.	110-139 g.			140-169 g.			170-199 g.			200-229 g.		
	Weight. g.	Rela- tive Weight. %	Rela- tive Gain. %	Weight. g.	Rela- tive Weight. %	Rela- tive Gain. %	Weight. g.	Rela- tive Weight. %	Rela- tive Gain. %	Weight. g.	Rela- tive Weight. %	Rela- tive Gain. %
Birth..... 22	193.6	156.1	-36.5	199.2	128.0	-31.1	227.5	122.0	-23.4	249.7	117.1	-23.4
21	238.8	192.6	8.2	247.6	159.1	5.0	271.1	145.4	4.0	299.5	140.5	3.4
20	228.6	184.4	8.1	239.8	154.1	5.6	263.6	141.4	3.9	292.4	137.1	4.3
19	218.6	176.3	8.2	231.0	148.5	3.6	256.5	137.5	5.6	283.1	132.8	4.4
18	208.4	168.1	7.1	225.4	144.9	6.5	245.9	131.9	4.7	273.7	128.4	4.7
17	199.6	161.0	6.3	215.4	138.4	5.4	237.3	127.2	3.3	263.8	123.7	3.6
16	191.6	154.7	4.5	207.0	133.0	5.2	231.0	123.9	3.3	256.1	120.1	1.9
15	186.2	150.2	4.2	198.8	127.8	3.1	224.8	120.6	2.0	252.0	118.2	1.1
14	181.0	146.0	4.1	194.0	124.7	1.2	221.2	118.6	2.0	249.7	117.1	1.7
13	176.0	141.9	1.6	192.2	123.5	0.5	217.3	116.6	0.5	246.0	115.4	1.1
12	174.0	140.3	5.3	191.4	123.0	1.3	216.5	116.1	1.6	244.1	114.5	1.6
11	167.4	135.0	1.3	189.4	121.7	5.1	213.5	114.5	1.7	240.6	112.9	1.3
10	165.8	133.7	4.3	181.4	116.6	2.8	210.4	112.8	2.1	237.8	111.6	2.1
9	160.4	129.4	3.6	177.0	113.8	2.4	206.3	110.7	1.0	233.4	109.5	0.9
8	156.0	125.8	3.1	173.4	111.4	1.1	204.5	109.7	1.0	231.5	108.6	1.1
7	152.2	122.7	3.2	171.6	110.3	0.9	202.6	108.7	1.5	229.3	107.5	0.6
6	148.2	119.5	3.2	170.2	109.4	1.7	199.9	107.2	0	227.8	106.9	1.4
5	144.2	116.3	2.4	167.7	107.7	0.9	199.9	107.2	2.3	224.9	105.5	1.2
4	141.2	113.9	4.4	166.2	106.8	3.1	195.5	104.9	0.8	222.3	104.3	0.7
3	135.8	109.5	3.0	161.4	103.7	2.2	194.1	104.1	1.3	220.9	103.6	1.5
2	132.0	106.5	3.8	158.0	101.5	1.5	191.8	102.9	1.5	217.7	102.1	1.8
1	127.4	102.7	1.7	154.0	99.0	0.7	187.3	100.4	0.6	213.8	100.3	0.8
Served..... 0	125.2	101.0	1.0	153.0	98.3	-1.7	186.1	99.8	-0.2	212.2	99.5	-0.5
No. of Observations.	124.0	100	—	155.6	100	—	186.5	100	—	213.2	100	—
		(5)			(5)			(15)			(19)	



TABLE 3.

at Service on Increase in Weight during Pregnancy.

Rats that had One or More Litters.

230-259 g.			260-289 g.			200-229 g.			230-259 g.			260-289 g.		
Weight g.	Relative Weight. %	Relative Gain. %	Weight. g.	Relative Weight. %	Relative Gain. %	Weight. g.	Relative Weight. %	Relative Gain. %	Weight. g.	Relative Weight. %	Relative Gain. %	Weight. g.	Relative Weight. %	Relative Gain. %
289.8	118.1	-20.9	306.5	114.8	-20.5	250.0	115.5	-24.8	270.7	113.9	-22.0	308.3	117.7	-19.6
341.0	139.0	4.4	361.3	135.3	2.3	303.6	140.3	4.6	323.1	135.9	4.3	362.5	131.3	2.4
330.2	134.6	3.1	355.0	133.0	2.1	293.6	135.7	4.0	312.9	131.6	3.1	355.7	128.9	4.2
322.7	131.5	3.2	349.5	130.9	3.2	284.9	131.7	4.3	305.6	128.5	3.0	344.2	124.7	3.2
314.8	128.3	3.6	341.0	127.7	3.1	275.7	127.4	4.0	298.3	125.5	3.7	335.3	121.5	3.7
306.0	124.7	2.8	333.0	124.7	4.1	267.1	123.4	3.6	289.6	121.8	3.0	325.1	117.8	3.6
299.2	121.9	2.7	322.0	120.6	2.1	259.2	119.8	1.7	282.3	118.8	2.8	315.3	114.2	1.6
292.3	119.2	1.8	314.5	117.8	2.0	255.5	118.1	2.6	275.7	116.0	1.6	310.7	112.6	0.9
288.0	117.4	1.6	309.3	115.8	1.1	249.8	115.5	0.4	272.0	114.4	1.9	308.3	111.7	1.3
284.0	115.8	1.3	305.5	114.4	1.9	249.0	115.1	1.7	267.4	112.5	1.0	304.6	110.4	0.9
281.0	114.5	0.7	300.5	112.5	1.1	245.3	113.4	1.8	265.0	111.5	1.3	302.2	109.5	0.7
279.2	113.8	1.8	296.8	111.1	1.2	241.5	111.6	-0.1	261.9	110.2	1.1	300.4	108.8	1.4
274.7	112.0	1.9	293.5	109.9	1.2	241.6	111.7	1.8	259.4	109.1	1.8	296.3	107.4	1.9
270.2	110.1	1.5	290.3	108.7	1.9	237.8	109.9	1.0	254.7	107.2	0.5	291.1	105.5	1.0
266.3	108.6	1.5	285.3	106.8	0.4	235.6	108.9	1.8	253.7	106.7	1.1	288.3	104.5	0.3
262.8	107.1	0.9	284.0	106.4	0.9	231.8	107.1	1.3	251.0	105.6	0.5	287.6	104.2	0.8
260.5	106.2	0.8	281.8	105.5	0.6	229.0	105.8	0.2	249.9	105.1	0.5	285.4	103.4	0.9
258.5	105.4	1.4	280.0	104.9	1.0	228.5	105.6	1.1	248.6	104.6	0	283.0	102.5	0.3
255.2	104.0	0.8	277.5	103.9	0.7	226.2	104.5	1.4	248.6	104.6	1.7	282.1	102.2	0.8
253.2	103.2	1.6	275.5	103.2	1.8	223.0	103.1	0.7	244.7	102.9	0.5	280.0	101.4	1.4
249.2	101.6	1.2	270.8	101.4	1.0	221.6	102.4	2.5	243.4	102.4	1.3	277.1	100.4	0.9
246.3	100.4	-0.3	268.0	100.4	0.2	216.2	99.9	0.4	240.3	101.1	1.5	274.5	99.5	0
247.0	100.7	0.7	267.5	100.2	0.2	215.4	99.5	-0.5	236.9	99.6	-0.4	274.6	99.5	-0.5
245.3	100	—	267.0	100	—	216.4	100	—	237.7	100	—	276.0	100	—
	(6)			(4)			(11)			(7)			(10)	

TABLE 5

*First Pregnancy.*

No. of Days after Service.	2 and 3 per Litter.				4 and 5 per Litter.				6 and 7 per Litter.				
	Wt. g.	Daily Gain. g.	Rela- tive Wt. %	Rela- tive Gain. %	Wt. g.	Daily Gain. g.	Rela- tive Wt. %	Rela- tive Gain. %	Wt. g.	Daily Gain. g.	Rela- tive Wt. %	Rela- tive Gain. %	
Birth.....	22	270.3	-32.0	118.9	-14.1	258.8	-40.2	119.2	-18.6	235.0	-43.2	119.9	-23.0
	21	302.3	5.0	133.0	2.2	299.0	6.4	137.8	3.0	278.2	7.2	141.9	3.6
	20	297.3	6.6	130.8	2.9	292.6	6.0	134.8	2.7	271.0	7.0	138.3	3.6
	19	290.7	4.4	127.9	1.9	286.6	7.5	132.1	3.5	264.0	9.0	134.7	4.6
	18	286.3	4.6	126.0	2.1	279.1	7.1	128.6	3.3	255.0	8.4	130.1	4.3
	17	281.7	3.0	123.9	1.3	272.0	5.6	125.3	2.5	246.6	7.2	125.8	3.7
	16	278.7	4.4	122.6	1.9	266.4	6.2	122.8	2.9	239.4	6.2	122.1	3.1
	15	274.3	5.0	120.7	2.2	260.2	5.0	119.9	2.3	233.2	1.9	119.0	1.0
	14	269.3	0.6	118.5	0.3	255.2	3.5	117.6	1.6	231.3	4.3	118.0	2.2
	13	268.7	2.7	118.2	1.2	251.7	3.5	116.0	1.6	227.0	0.5	115.8	0.3
	12	266.0	3.3	117.0	1.5	248.2	4.3	114.4	2.0	227.5	3.8	116.1	2.0
	11	262.7	4.0	115.5	1.7	243.9	2.7	112.4	1.2	223.7	4.1	114.1	2.1
	10	258.7	6.7	113.8	2.9	241.2	3.1	111.2	1.5	219.6	3.4	112.0	1.7
	9	252.0	4.0	110.9	1.8	238.1	2.9	109.7	1.3	216.2	2.4	110.3	1.2
	8	248.0	3.7	109.1	1.6	235.2	0.6	108.4	0.3	213.8	3.0	109.1	1.6
	7	244.3	0	107.5	0	234.6	3.6	108.1	1.6	210.8	1.3	107.5	0.6
	6	244.3	4.3	107.5	1.9	231.0	1.2	106.5	0.6	209.5	0.5	106.9	0.3
	5	240.0	4.3	105.6	1.9	229.8	3.0	105.9	1.4	209.0	3.9	106.6	2.0
	4	235.7	1.4	103.7	0.6	226.8	2.0	104.5	0.9	205.1	0.9	104.6	0.4
	3	234.3	5.3	103.1	2.4	224.8	2.6	103.6	1.2	204.2	3.5	104.2	1.8
	2	229.0	8.7	100.7	3.8	222.2	3.3	102.4	1.5	200.7	3.9	102.4	2.0
	1	220.3	2.0	96.9	0.9	218.9	1.2	100.9	0.6	196.8	2.2	100.4	1.1
Served.....	0	222.3	-5.0	97.8	-2.2	217.7	0.7	100.3	0.3	194.6	-1.4	99.3	-0.7
		227.3	—	100	—	217.0	—	100	—	196.0	—	100	—
No. of Observations.			(3)				(9)				(13)		

475-476b



TABLE 5. (cont.)

*Influence of Litter Size on Increase in Weight of Females during Pregnancy.*

8 and 9 per Litter.				10 and 11 per Litter.				5 per Litter.			
Wt.	Daily Gain.	Relative Wt.	Relative Gain.	Wt.	Daily Gain.	Relative Wt.	Relative Gain.	Wt.	Daily Gain.	Relative Wt.	Relative Gain.
g.	g.	%	%	g.	g.	%	%	g.	g.	%	%
250.8	-54.3	119.1	-25.8	227.3	-65.5	117.7	-34.0	312.2	-41.4	119.4	-15.9
305.1	8.7	144.9	4.1	292.8	9.5	151.7	4.9	353.6	7.8	135.3	3.0
296.4	9.3	140.8	4.4	283.3	10.8	146.8	5.6	345.8	11.8	132.3	4.5
287.1	10.9	136.4	5.2	272.5	7.5	141.2	3.9	334.0	7.6	127.8	2.9
276.2	11.2	131.2	5.4	265.0	10.0	137.3	5.3	326.4	8.8	124.9	3.4
265.0	9.3	125.8	4.4	254.8	7.8	132.0	4.0	317.6	7.2	121.5	2.8
255.7	5.1	121.4	2.4	247.0	7.5	128.0	3.9	310.4	5.4	118.7	2.0
250.6	3.6	119.0	1.7	239.5	3.2	124.1	1.7	305.0	3.2	116.7	1.2
247.0	3.1	117.3	1.5	236.3	6.0	122.4	3.1	301.8	5.4	115.5	2.1
243.9	2.8	115.8	1.3	230.3	0.5	119.3	0.3	296.4	2.2	113.4	0.9
241.1	2.2	114.5	1.1	229.8	0.8	119.0	0.3	294.2	3.8	112.5	1.4
238.9	3.9	113.4	1.8	229.0	4.0	118.7	2.1	290.4	3.8	111.1	1.5
235.0	4.0	111.6	1.9	225.0	7.7	116.6	4.0	286.6	4.8	109.6	1.8
231.0	2.3	109.7	1.1	217.3	2.8	112.6	1.5	281.8	2.0	107.8	0.8
228.7	2.0	108.6	0.9	214.5	2.5	111.1	1.3	279.8	0.4	107.0	0.1
226.7	2.1	107.7	1.0	212.0	1.7	109.8	0.9	279.4	3.4	106.9	1.3
224.6	2.3	106.7	1.1	210.3	2.3	108.9	1.1	276.0	3.2	105.6	1.1
222.3	2.1	105.6	1.0	208.0	5.2	107.8	2.7	272.8	-1.6	104.4	-0.6
220.2	2.9	104.6	1.4	202.8	0.3	105.1	0.2	274.4	5.0	105.0	1.9
217.3	3.1	103.2	1.5	202.5	1.7	104.9	0.9	269.4	1.0	103.1	0.4
214.2	3.5	101.7	1.6	200.8	4.0	104.0	2.1	268.4	4.6	102.7	1.8
210.7	0.4	100.1	0.2	196.8	2.3	101.9	1.1	263.8	1.6	100.9	0.6
210.3	-0.3	99.9	-0.1	194.5	1.5	100.8	0.8	262.2	0.8	100.3	0.3
210.6	—	100	—	193.0	—	100	—	261.4	—	100	—
(20)				(4)				(5)			

← 475-476a

475-476c →

TABLE 5 (cont.)

Pregnancy.

## One and More Pregnancies.

6 and 7 per Litter.				8 and 9 per Litter.				11 per Litter.				12 per Litter.			
Wt.	Daily Gain.	Relative Wt.	Relative Gain.	Wt.	Daily Gain.	Relative Wt.	Relative Gain.	Wt.	Daily Gain.	Relative Wt.	Relative Gain.	Wt.	Daily Gain.	Relative Wt.	Relative Gain.
g.	g.	%	%	g.	g.	%	%	g.	g.	%	%	g.	g.	%	%
261.4	-49.3	113.3	-21.3	207.6	-57.3	115.9	-24.8	272.5	-72.0	110.5	-29.3	306.7	-84.3	105.0	-28.9
310.7	8.7	134.6	3.8	324.9	9.8	140.7	4.2	344.5	11.5	139.8	4.7	391.0	10.7	133.9	3.6
302.0	6.6	130.8	2.8	315.1	10.8	136.5	4.7	333.0	18.5	135.1	7.5	380.3	11.6	130.3	4.0
295.4	7.7	128.0	3.3	304.3	8.7	131.8	3.8	314.5	11.5	127.6	4.7	368.7	13.4	126.3	4.6
287.7	9.4	124.7	4.1	295.6	9.5	128.0	4.1	303.0	9.5	122.9	3.8	355.3	14.3	121.7	4.9
278.3	7.9	120.6	3.4	286.1	9.8	123.9	4.2	293.5	2.0	119.1	4.9	341.0	7.3	116.8	2.5
270.4	3.2	117.2	1.4	276.3	6.0	119.7	2.6	281.5	4.5	114.2	1.8	333.7	6.7	114.3	2.3
267.2	4.9	115.8	2.2	270.3	4.9	117.1	2.1	277.0	2.5	112.4	1.0	327.0	1.0	112.0	0.4
262.3	1.9	113.6	0.8	265.4	1.7	115.0	0.8	274.5	1.5	111.4	0.4	326.0	7.0	111.6	2.4
260.4	2.8	112.8	1.2	263.7	3.4	114.2	1.5	273.5	4.5	111.0	1.9	319.0	2.7	109.2	0.9
257.6	4.0	111.6	1.7	260.3	2.6	112.7	1.1	269.0	1.0	109.1	0.4	316.3	1.3	108.3	0.4
253.6	0.2	109.9	0.1	257.7	2.3	111.6	1.0	268.0	3.0	108.7	1.2	315.0	3.7	107.9	1.3
253.4	4.0	109.8	1.7	255.4	4.4	110.6	1.9	265.0	5.5	107.5	2.2	311.3	5.3	106.6	1.8
249.4	1.0	108.1	0.5	251.0	3.4	108.7	1.5	259.5	1.5	105.3	0.6	306.0	3.3	104.8	1.1
248.4	3.8	107.6	1.6	247.6	2.9	107.2	1.2	258.0	3.5	104.7	1.5	302.7	-0.3	103.7	-0.1
244.6	2.1	106.0	0.9	244.7	1.4	106.0	0.6	254.5	-0.5	103.2	-0.2	303.0	3.3	103.8	1.3
242.5	1.1	105.1	0.5	243.3	-0.7	105.4	-0.3	255.0	3.5	103.4	1.4	299.7	4.4	102.5	1.4
241.4	0.8	104.6	0.4	244.0	2.6	105.7	1.1	251.5	5.5	102.0	2.2	295.3	3.0	101.1	1.0
240.6	2.0	104.2	0.8	241.4	5.3	104.6	2.3	246.0	-3.0	99.8	-1.2	292.3	2.0	100.1	0.7
238.6	2.9	103.4	1.3	236.1	0.5	102.3	0.3	249.0	4.5	101.0	1.8	290.3	1.6	99.4	0.5
235.7	4.0	102.1	1.7	235.6	5.0	102.0	2.1	244.5	4.5	99.2	1.8	288.7	1.0	98.9	0.4
231.7	1.8	100.4	0.8	230.6	0.7	99.9	0.4	240.0	-1.0	97.4	-0.4	287.7	0	98.5	0
229.9	-0.9	99.6	-0.4	229.9	-1.0	99.5	-0.5	241.0	-5.5	97.8	-2.2	287.7	-4.3	98.5	-1.5
230.8	-	100	-	230.9	-	100	-	246.5	-	100	-	292.0	-	100	-

(10)

(7)

(2)

(3)



475-476b

TABLE 6.  
*Influence of Litter Size on the Increase in Actual and Relative Weights at Different Periods of Pregnancy.*

Litter Size.	ACTUAL INCREASE.										RELATIVE INCREASE.								
	Up to 6 Days.		6-14 Days.		14-21 Days.		Gross Increase.		Permanent Increase.		Loss at Parturition.		Up to 6 Days. %	6-14 Days. %	14-21 Days. %	Gross Increase. %	Permanent Increase. %	Loss at Parturition. %	
	Wt. g.	%	Wt. g.	%	Wt. g.	%	Wt. g.	%	Wt. g.	%	Wt. g.	%							
<i>First Pregnancy.</i>																			
2 and 3.....	17.0	22.7	25.0	33.3	33.0	44.0	75.0	100	43.0	57.3	32.0	42.7	7.5	11.0	14.5	33.0	18.9	14.1	
4 and 5.....	14.0	17.1	24.2	29.5	43.8	53.4	82.0	100	41.8	51.0	40.2	49.0	6.5	11.1	20.2	37.8	19.2	18.6	
6 and 7.....	13.5	16.4	21.8	26.5	46.9	57.1	82.2	100	39.0	47.4	43.2	52.6	6.9	11.1	23.9	41.9	19.9	22.0	
8 and 9.....	14.0	14.8	22.4	23.7	58.1	61.5	94.5	100	40.2	42.5	54.3	57.5	6.7	10.6	27.6	44.9	19.1	25.8	
10 and 11.....	17.3	17.3	26.0	26.1	56.5	56.6	99.8	100	34.3	34.4	65.5	65.6	8.9	13.5	29.3	51.7	17.7	34.0	
<i>One and More Pregnancies.</i>																			
5.....	14.6	15.8	25.8	28.0	51.8	56.2	92.2	100	50.8	55.1	41.4	44.9	5.6	9.9	19.8	35.3	19.4	15.9	
6 and 7.....	11.7	14.6	19.8	24.8	48.4	60.6	79.9	100	30.6	38.3	49.3	61.7	5.1	8.5	21.0	34.6	13.3	21.3	
8 and 9.....	12.4	13.2	22.1	23.5	59.5	63.3	94.0	100	36.7	39.0	57.3	61.0	5.4	9.6	25.7	40.7	15.9	24.8	
11.....	8.5	8.7	19.5	19.9	70.0	71.4	98.0	100	26.0	26.5	72.0	73.5	3.4	8.0	28.4	39.8	10.5	29.3	
12.....	7.7	7.8	26.3	26.6	65.0	65.6	99.0	100	14.7	14.8	84.3	85.2	2.5	9.1	22.3	33.9	5.0	28.9	



GROWTH OF THE ALBINO RAT.

TABLE 7.  
Loss at Parturition and Litter Weight of the Different Classes of Rats and of Different Litter Sizes.

Class.	No. Lit- ters.	Aver- age No. per Litter.	Maxi- mum Wt. g.	Weight after Partu- rition.		Loss.		Weight of Young.				Birth Adnexa.				Per Cent. of Total Loss of Mother's Weight.	
				g.	g.	Wt. g.	Per Cent.*	Total.	Per One Young.		Total.	Per One Young.		Per Cent.*	Per Cent.*	Young.	Adnexa.
									Wt. g.	Per Cent.*		Wt. g.	Per Cent.*				
Young Virgin...	5	7.8	238.8	193.6	45.2	23.3	37.0	19.1	4.74	2.45	8.2	4.2	1.05	.54	82	18	
Plateau Virgin...	49	7.0	295.7	247.3	48.4	19.6	36.0	14.6	5.12	2.07	12.4	5.0	1.77	.72	74	26	
One and More Pregnancies	29	7.5	330.6	278.6	52.0	18.7	38.8	13.9	5.19	1.86	13.2	4.7	1.76	.63	75	25	
All Rats.....	83	7.2	305.3	255.0	50.3	19.7	37.1	14.5	5.12	2.01	13.2	5.2	1.83	.72	74	26	
<i>Litter Size.</i>																	
2 and 3.....	3	2.7	302.3	270.3	32.0	11.8	15.7	5.8	5.9	2.18	16.3	6.0	6.04	2.23	49	51	
4 and 5.....	15	4.8	311.5	271.7	39.8	14.6	24.1	8.9	5.01	1.84	15.7	5.8	3.27	1.20	61	39	
6 and 7.....	23	6.4	292.3	246.5	45.8	18.6	34.1	13.8	5.3	2.15	11.7	4.7	1.83	.74	74	26	
8 and 9.....	31	8.5	303.8	249.5	53.3	21.4	42.9	17.2	5.05	2.02	10.4	4.3	1.22	.49	80	20	
10 and 11.....	7	10.4	304.1	236.9	67.2	28.4	54.0	22.8	5.18	2.19	13.2	5.6	1.27	.54	80	20	
12.....	3	12	391.0	306.7	84.3	27.5	50.8	16.6	4.23	1.38	33.5	10.9	2.89	.94	60	40	

\* The percentages are expressed as ratios of weight at parturition.

TABLE 8.  
*Weights of Pseudo Pregnant Rats.*

No. of Days after Service.	VIRGIN RATS.					RATS THAT HAD ONE LITTER.					
	1	2	3	Aver age.	Rel. Wt.	4	5	6	7	Aver. age.	Rel. Wt.
Served 0	g. 244	g. 226	g. 224	g. 231	% 100	g. 243	g. 254	g. 281	g. 255	g. 258	% 100
1	248	230	228	235	102	245	258	282	258	261	101
2	253	233	231	239	103	247	262	285	257	263	102
3	255	236	234	242	105	252	266	284	263	266	103
4	256	236	235	242	105	256	268	293	263	270	105
5	258	239	237	245	106	257	270	294	265	272	105
6	261	243	237	247	107	258	272	298	266	274	106
7	267	240	241	249	108	262	275	298	268	276	107
8	267	244	243	251	109	265	278	302	270	279	108
9	268	246	246	253	110	266	282	306	270	281	109
10	268	251	242	254	110	269	286	309	271	284	110
11	262	246	241	250	108	271	281	311	270	283	110
12	258	243	240	247	107	264	274	306	264	277	107
13	256	240	238	245	106	261	268	300	260	272	105
14	258	242	237	246	106	255	269	296	262	271	105
15	258	243	235	245	106	255	266	296	263	270	105

TABLE 9.  
*Weights of Uteri.*

Class of Rats.	Number of Female.	Weight when Killed.	Weight of dressed Uterus.	Remarks.
Young Virgins.....	2	g. 185	g. 0.38	Not served.
".....	4	200	0.47	Not served.
".....	5	193	1.02	Not served—Uterus (both horns) full of clear fluid.
".....	3	174	0.5	Served previous night.
".....	1	190	0.5	Served previous night.
".....	6	195	0.4	Served 30-36 hours previously.
".....	8	195	0.36	Served 30-36 hours previously.
Old Virgin.....	28	255	1.15	Not served. Filled with milky fluid. Weight of uterus when empty 0.7 g.
Old females that had one or two litters	{ 9	286	0.7	Not served.
	{ 10	243	0.8	Not served.

GROWTH OF THE ALBINO RAT.

TABLE 10.  
*Weights of Foetuses at Different Ages.*

No. of Days Pregnant.	Number of Foetuses and Average Weight per Foetus of Individual Females.										Total.		Average No. per Female.	Average Weight per Foetus. g.	Average Weights of Angulo. g.	Average Weights of Stotsenburg. g.
	Average Weight. g.		No.		Average Weight. g.		No.		Average Weight. g.		No.	Weight. g.				
	No.	Average Weight. g.	No.	Average Weight. g.	No.	Average Weight. g.	No.	Average Weight. g.								
13	7	.07	6	.13	5	.06	8	.06	—	—	26	2.06	0.08	0.034	0.040	
14	9	.25	10	.13	7	.16	6	.13	10	.14	42	6.84	0.16	0.10	0.112	
15	6	.24	5	.18	7	.24	8	.25	—	—	26	6.00	0.23	0.19	0.168	
16	10	.39	7	.39	6	.38	7	.42	—	—	30	11.85	0.40	0.30	0.310	
17	9	.84	10	.68	3	.68	10	.76	—	—	32	23.98	0.75	0.68	0.548	
18	11	1.32	7	1.2	3	1.27	8	1.21	—	—	29	36.49	1.26	0.89	1.00	
19	9	2.13	9	2.01	1	2.13	3	1.96	7	1.96	29	59.04	2.04	1.43	1.58	
20	5	2.79	9	3.56	4	3.32	10	3.37	—	—	28	93.02	3.32	2.39	2.63	
21	11	4.6	9	4.81	7	5.03	8	4.94	—	—	35	168.59	4.82	3.67	3.98	
Unborn	22	—	—	—	—	—	—	—	—	—	—	—	—	—	5.09	4.63
Born	22	—	—	—	—	—	—	—	—	—	159	—	5.09	5.93	—	—

TABLE 11.

*Daily Weights and Gains of Rats from Birth to Weaning.*

Age in Days.	Number of Rats.	Average Weight.	Daily Gain.	Relative Gain.
Birth.....	159	g.	g.	%
1.....	147	5.09	—	—
2.....	143	5.37	.28	5.5
3.....	138	6.08	.71	13.2
4.....	142	7.09	1.01	16.6
5.....	141	8.08	.99	14.0
6.....	140	9.21	1.13	14.0
7.....	139	10.53	1.32	14.3
8.....	137	11.90	1.37	13.0
9.....	137	13.39	1.49	12.5
10.....	137	14.91	1.52	11.4
11.....	137	16.50	1.59	10.7
12.....	135	18.13	1.63	9.9
13.....	135	19.84	1.71	9.4
14.....	133	21.56	1.72	8.7
15.....	133	23.13	1.57	7.3
16.....	133	24.65	1.52	6.6
17.....	133	25.98	1.33	5.4
18.....	133	27.52	1.54	5.9
19.....	129	28.91	1.39	5.1
20.....	126	30.67	1.76	6.1
21.....	123	32.63	1.96	6.4
22.....	119	35.03	2.40	7.4
23.....	119	37.26	2.23	6.4
24.....	119	39.80	2.54	6.8
25.....	119	42.58	2.78	7.0
26.....	119	45.16	2.53	6.1
27.....	119	47.92	2.76	6.1
27.....	119	51.18	3.26	6.8



TABLE 13.  
Weights of Uteri and Foetuses of Old Rats (8 months old) Pregnant for the First Time.

Days Pregnant.	Num-ber of Fe-male.	Weight when Killed.	Weight of Dressed Uterus.	NUMBER OF LIVINO FOETUSES.			NUMBER OF DEAD FOETUSES.			Total Num-ber of Foetuses.	WEIGHT OF FOETUSES. g.							
				Right Horn.		Left Horn.		Right Horn.			Left Horn.		Right Horn.		Left Horn.		Both Horns.	
				Total.	Aver-age.	Total.	Aver-age.	Total.	Aver-age.		Total.	Aver-age.	Total.	Aver-age.	Total.	Aver-age.	Total.	Aver-age.
0.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3.....	8	256	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6.....	25	257	0.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11.....	36	301	3.08	6	2	8	1	1	2	10	—	—	—	—	—	—	—	—
12.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13.....	51	271	5.6	5	2	7	—	3	3	10	—	—	—	—	—	—	—	—
14.....	53	267	1.05	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—
15.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16.....	6	260	1.67	—	—	—	—	—	4	4	—	—	—	—	—	—	—	—
17.....	46	283	10.3	3	3	6	1	1	2	8	—	—	—	—	—	—	—	—
18.....	24	286	8.27	2	1	3	1	3	4	7	—	—	—	—	—	—	—	—
19.....	65	299	21.1	3	4	7	—	1	1	8	—	—	—	—	—	—	—	—
19.....	98	275	6.97	1	—	1	1	2	3	4	—	—	—	—	—	—	—	—

GROWTH OF THE ALBINO RAT.

TABLE 14.  
Weights of Uteri and Foetuses of Females (11 months old) that had Two Litters.

Days Pregnant.	Num-ber of Fe-male.	Weight when Killed. g.	Weight of Dressed Uterus. g.	NUMBER OF LIVING FOETUSES.			NUMBER OF DEAD FOETUSES.			Total Num-ber of Foetuses.	WEIGHTS OF FOETUSES. g.*													
				Right Horn.	Left Horn.	Total.	Right Horn.	Left Horn.	Total.		Right Horn.		Left Horn.		Both Horns.									
											Total.	Aver-age.	Total.	Aver-age.	Total.	Aver-age.								
0.....	48	303	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1.....	25	272	0.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12.....	486	294	3.17	3	4	7	1	1	2	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13.....	*86	260	5.47	4	2	6	—	1	1	7	0.52	0.13	0.28	0.14	0.80	0.13	—	—	—	—	—	—	—	0.13
14.....	†8	324	3.03	1	1	2	3	3	6	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15.....	‡68	253	7.07	3	2	5	1	—	1	6	0.6	0.2	0.3	0.15	0.9	0.2	—	—	—	—	—	—	—	0.18
16.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17.....	9	318	21.45	4	6	10	—	2	2	12	3.27	0.82	4.31	0.72	7.58	0.82	—	—	—	—	—	—	—	0.76
18.....	24	320	16.66	2	1	3	2	2	4	7	2.52	1.26	1.30	1.30	3.82	1.26	—	—	—	—	—	—	—	1.27
19.....	65	329	14.5	3	—	3	3	2	5	8	5.88	1.96	—	—	5.88	1.96	—	—	—	—	—	—	—	1.96
20.....	425	322	23.85	2	2	4	3	1	4	8	6.71	3.36	6.58	3.29	13.29	3.36	—	—	—	—	—	—	—	3.32

\* No. 86 Gestation probably nearer 14 days.

† No. 8 Gestation probably 12-13 days as foetuses could not be weighed.

‡ No. 68 Gestation probably nearer 14 days.

TABLE 15.

*Weights of Uteri and Foetuses of a Mixed Lot of Rats.*

G. N. MURRAY.

Days Pregnant.	Num- ber of Fe- male.	Weight when Killed. g.	Weight of Uterus, g.	NUMBER OF LIVING FOETUSES.			NUMBER OF DEAD FOETUSES.			Total Num- ber of Fo- etuses.	TOTAL AND AVERAGE WEIGHTS OF FOETUSES, g.													
				Right Horn.	Left Horn.	Total.	Right Horn.	Left Horn.	Total.		Right Horn.		Left Horn.		Both Horns.									
											Total.	Aver- age.	Total.	Aver- age.	Total.	Aver- age.								
				Right Horn.			Left Horn.				Right Horn.		Left Horn.		Both Horns.									
7.....	49	294	0.92	5	5	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
8.....	3	285	0.92	4	5	9	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11.....	70	287	1.36	4	—	4	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13.....	40	224	4.4	4	1	5	—	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13.....	6	218	4.42	2	6	8	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14.....	50	325	8.0	6	4	10	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14.....	8	228	6.0	4	3	7	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14.....	81	244	5.5	1	5	6	1	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14.....	39	314	8.45	5	5	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15.....	51	294	9.1	5	2	7	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15.....	33	246	9.75	3	5	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16.....	45	312	12.62	5	2	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18.....	5	275	34.6	4	4	8	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19.....	18	294	35.8	1	6	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20.....	32	304	53.3	8	2	10	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21.....	35	272	48.45	5	2	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21.....	53	323	51.6	4	4	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



GROWTH OF THE ALBINO RAT.

TABLE 16  
Litter Size and Average Weight at Birth.

Litter Size.	Number of Litters.	Males.		Females.		Males and Females.		Smoothed Weight, g.	Sex Ratio.	Total Litter Weight, g.
		Number.	Average Weight, g.	Number.	Average Weight, g.	Number.	Average Weight, g.			
2.....	3	3	5.80	3	5.90	6	5.85	5.67	100	11.7
3.....	7	13	5.41	8	5.50	21	5.44	5.57	163	16.3
4.....	21	47	5.62	37	5.48	84	5.56	5.476	127	22.2
5.....	26	67	5.46	63	5.16	130	5.31	5.38	106	26.6
6.....	29	92	5.28	82	5.32	174	5.30	5.29	112	31.8
7.....	44	159	5.32	149	4.95	308	5.14	5.195	107	36.0
8.....	55	200	5.11	240	4.92	440	5.01	5.107	83	40.1
9.....	46	180	5.03	234	4.82	414	4.90	5.017	77	44.1
10.....	20	91	5.16	109	4.84	200	4.99	4.93	83	49.9
11.....	19	109	5.10	100	4.91	209	5.01	4.845	109	55.1
12.....	4	27	4.82	21	4.63	48	4.74	4.76	129	56.9
2-12.....	274	988	5.19	1,046	4.96	2,034	5.07	—	94.5	37.7

TABLE 17.  
*Influence of Age of Mother on Litter Size and Average Birth Weight.*

Age of Mother. (Months.)	Average Weight of Mother. g.	Parity.	Number of Litters.	Average Number of Pups per Litter at Birth.			AVERAGE BIRTH WEIGHTS.						Total Weight of Litter at Birth. g.
				Males.	Fe- males.	Both.	Males.		Females.		Males and Females.		
							Num- ber.	Weight. g.	Num- ber.	Weight. g.	Num- ber.	Weight.	
2-3.....	243	1	13	3.7	4.7	8.4	48	5.26	61	5.08	109	5.16	43.3
4-5.....	246	1.1	86	3.7	4.0	7.7	318	5.21	344	4.96	662	5.08	39.1
6-7.....	278	1.5	41	3.4	3.9	7.3	139	5.29	159	5.06	298	5.17	37.6
8-9.....	284	2.3	19	3.6	3.3	6.9	68	5.11	63	5.00	131	5.06	34.9
10-11.....	291	2.6	13	2.8	2.8	5.7	37	5.33	37	5.10	74	5.21	29.7
12-13.....	310	3.3	6	2.5	2.2	4.7	15	5.51	13	5.17	28	5.35	25.0
14-15.....	321	4.4	7	3.0	2.7	5.7	21	5.49	19	5.27	40	5.39	30.8

TABLE 18.  
*Influence of Age of Mother on Birth Weights when Litter Size remains constant.*

Litter Size.	6-7			8-9			10-11		
	Number of Litters.	Number of Pups.	Average Birth Weight. g.	Number of Litters.	Number of Pups.	Average Birth Weight. g.	Number of Litters.	Number of Pups.	Average Birth Weight. g.
2-3.....	1	7	5.1	0	77	5.11	2	21	5.09
4-5.....	22	146	5.19	37	314	4.96	14	148	5.03
6-7.....	14	92	5.22	15	127	5.14	5	53	5.11
8-9.....	7	46	5.15	4	33	4.94	2	22	4.85
10-11.....	4	25	5.18	2	17	4.86	1	10	5.4
12-13.....	—	—	—	2	16	5.16	—	—	—
14-15.....	1	7	5.47	2	17	5.05	—	—	—

TABLE 19.  
*Influence of Parity on Birth Weight and Litter Size.*

Parity.	Age of Mothers, Months.	Weight of Mothers, g.	Number of Litters.	NUMBER PER LITTER AT BIRTH.			AVERAGE WEIGHT AT BIRTH. g.						Total Litter Weight, g.
				NUMBER PER LITTER AT BIRTH.			Males.		Females.		Both.		
				Males.	Females.	Both.	Number.	Weight, g.	Number.	Weight, g.	Number.	Weight, g.	
				Number.	Weight, g.	Number.	Weight, g.	Number.	Weight, g.	Number.	Weight, g.		
1st Litter.....	4.8	245	139	3.7	3.9	7.6	510	5.20	543	4.98	1,053	5.09	38.6
2nd Litter.....	7.2	280	54	3.9	3.8	7.7	211	5.19	204	4.87	415	5.04	38.7
3rd Litter.....	9.4	294	23	3.4	4.0	7.3	78	5.26	91	5.05	169	5.15	37.8
4th Litter.....	11.6	305	13	3.4	3.5	6.8	44	5.38	45	5.09	89	5.23	35.8
5th Litter.....	14.3	311	6	2.8	3.7	6.5	17	5.39	22	5.21	39	5.29	34.4
6th Litter.....	16.7	—	3	3.3	2.7	6.0	10	5.53	8	4.61	18	5.12	30.7

TABLE 20.  
*Influence of Weight of Mother after Parturition on Litter Size and Birth Weight.*

Weight of Mother. g.	Parity.	Age of Mother. (Months).	NUMBER PER LITTER AT BIRTH.			AVERAGE WEIGHTS AT BIRTH.						Number of Litters.
			Males.	Females.	Both.	Males.		Females.		Both.		
						Number.	Weight, g.	Number.	Weight, g.	Number.	Weight, g.	
180-199.	1	3.6	5.3	2.1	7.4	37	5.12	15	5.09	52	5.11	7
200-219.	1.1	4.6	3.9	3.2	7.0	104	5.28	86	4.90	190	5.11	27
220-239.	1.2	4.8	3.7	3.9	7.6	133	5.25	139	5.03	272	5.14	36
240-259.	1.3	4.8	3.6	4.3	7.9	158	5.27	188	4.96	346	5.10	44
260-279.	1.8	6.0	3.9	4.2	8.1	162	5.04	177	4.93	339	4.98	42
280-299.	2.3	7.4	3.4	4.0	7.4	136	5.22	160	5.04	296	5.12	40
300-319.	2.3	8.6	3.3	3.3	6.6	88	5.23	89	4.99	177	5.11	27
320-339.	3.4	11.7	3.5	3.7	7.2	38	5.52	41	4.93	79	5.21	11
340-359.	3.8	13.5	2.5	1.8	4.3	10	5.95	7	5.0	17	5.56	4

TABLE 21.  
*Influence of Weight of Mothers on Birth Weight and Litter Size.*  
*First litters only.*

Weight Class. g.	Number of Litters.	Weight of Mothers. g.	Age of Mothers. (Mths.)	Number per Litter at Birth.			AVERAGE WEIGHTS AT BIRTH.						Sex Ratio.
				Males.	Fe- males.	Both.	Males.		Females.		Both.		
							Num- ber.	Weight. g.	Num- ber.	Weight. g.	Num- ber.	Weight. g.	
180-199.....	7	188	3.6	5.3	2.1	7.4	37	5.39	15	5.09	52	5.31	247
200-219.....	24	210	4.5	3.9	3.1	7.0	94	5.31	74	4.99	168	5.16	127
220-239.....	31	230	4.6	3.7	3.8	7.6	116	5.15	119	4.91	235	5.03	98
240-259.....	34	249	4.7	3.2	4.4	7.6	108	5.25	149	5.0	257	5.10	73
260-279.....	20	267	5.0	3.2	4.4	7.6	64	5.20	88	5.02	152	5.10	73
280-299.....	15	286	5.1	3.1	4.5	7.7	47	5.22	68	5.05	115	5.12	69
300-319.....	7	316	6.5	5.0	3.6	8.6	35	5.20	25	5.04	60	5.13	140

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TABLE 22.  
*Litter Size at Birth and Number of Young Weaned.*

Litter Size at Birth.	NUMBER AT BIRTH.			NUMBER WEANED.			PER CENT. WEANED.				
	Males.		Females.	Males.		Females.	Both Sexes.		Males.	Fe- males.	Both Sexes.
	Num- ber.	Number per Litter.	Num- ber.	Number per Litter.	Num- ber.	Number per Litter.	Num- ber.	Number per Litter.			
2....	3	1	3	1	3	1	6	2	100	100	100
3....	13	1.9	8	1.1	12	0.9	21	18	92.3	75.0	85.7
4....	45	2.3	35	1.7	40	2.0	80	72	88.9	91.4	90.0
5....	38	2.2	47	2.8	32	1.9	85	71	84.2	83.0	83.5
6....	74	3.1	70	2.9	64	2.7	144	127	86.5	90.0	88.2
7....	140	3.9	112	3.1	121	3.4	252	215	86.4	83.9	85.3
8....	155	3.5	197	4.5	135	3.1	352	304	87.1	85.8	86.4
9....	167	4.0	211	5.0	131	3.1	378	295	78.4	77.7	78.0
10....	78	4.6	92	5.4	68	4.0	170	146	87.2	84.8	85.9
11....	105	5.8	93	5.2	86	4.8	198	163	81.9	82.8	82.3
12....	27	6.8	21	5.2	22	5.5	48	40	81.5	85.7	83.3
2-12..	845	3.64	889	3.83	714	3.08	1,734	1,457	84.5	83.6	84.0

TABLE 23.  
Litter Size at Birth and Weights at Birth, 2, 3 and 4 Weeks of Age.

Litter Size.	Number of Litters.	NUMBERS AND WEIGHTS AT BIRTH.						NUMBERS AND WEIGHTS AT TWO WEEKS.					
		Males.		Females.		Both Sexes.		Males.		Females.		Both Sexes.	
		Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.
2.....	3	5.80*	5.90	5.85	3	30.7	3	30.0	6	30.3			
3.....	7	5.41	5.50	5.44	12	20.4	6	24.8	18	21.9			
4.....	20	5.70	5.53	5.62	40	29.3	32	27.5	72	28.5			
5.....	17	5.63	5.29	5.44	32	26.1	39	25.1	71	25.5			
6.....	24	5.25	5.29	5.27	64	26.9	63	26.6	127	26.7			
7.....	36	5.38	5.03	5.22	121	23.3	94	22.1	215	22.7			
8.....	44	5.18	4.97	5.06	135	23.9	169	22.7	304	23.2			
9.....	42	5.06	4.84	4.94	131	20.9	164	19.3	295	20.0			
10.....	17	5.16	4.87	5.01	68	22.2	78	20.3	146	21.2			
11.....	18	5.10	4.94	5.03	87	22.7	77	21.3	164	22.1			
12.....	4	4.82	4.63	4.74	22	22.5	18	20.8	40	21.8			



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TABLE 23.—(continued).

Litter Size.	Num-ber of Litters.	NUMBERS AND WEIGHTS AT 3 WEEKS.						NUMBERS AND WEIGHTS AT 4 WEEKS.						TOTAL LITTER WEIGHTS AT		
		Males.		Females.		Both Sexes.		Males.		Females.		Both Sexes.		2 Weeks.	3 Weeks.	4 Weeks.
		Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.			
2.....	3	3	50.3	3	48.7	6	49.5	3	72.0	3	69.3	6	70.1	61	99	141
3.....	7	12	35.8	6	41.0	18	37.5	12	53.8	6	60.7	18	56.1	56	96	144
4.....	20	40	45.2	32	43.2	72	44.3	40	66.5	32	62.2	72	64.6	103	159	233
5.....	17	32	40.8	39	39.5	71	40.0	32	62.7	39	58.5	71	60.4	107	167	252
6.....	24	64	41.8	63	41.0	127	41.4	64	62.3	63	60.5	127	61.4	142	219	325
7.....	36	121	35.7	94	34.0	215	34.9	121	55.2	94	52.6	215	54.1	136	209	323
8.....	44	135	36.1	169	34.2	304	35.1	135	56.4	169	52.3	304	54.2	160	242	274
9.....	42	131	30.8	164	30.9	295	31.9	131	51.6	164	48.3	295	49.8	141	224	350
10.....	17	68	34.3	78	32.6	146	33.4	68	56.5	78	52.1	146	54.2	182	287	465
11.....	18	86	34.4	77	32.4	163	33.5	86	53.7	77	50.3	163	52.1	201	303	472
12.....	4	22	34.0	18	31.4	40	32.9	22	52.2	18	47.9	40	50.3	218	328	503

Birth weights of all males weaned, 5.23 (845).  
 Birth weights of all females weaned, 5.00 (889).  
 Birth weights of all males and females weaned, 5.11 (1734).

Birth weights of males in litters where none weaned, 5.01 (143).  
 Birth weights of females in litters where none weaned, 4.74 (157).  
 Birth weights of males and females in litters where none weaned, 4.87 (300).

TABLE 24.

*Percentage Increase in Total Litter Weight with Increase in Litter Size.*

Litter Size.	2 WEEKS.		3 WEEKS.		4 WEEKS.	
	Actual Weight. g.	Per Cent.	Actual Weight. g.	Per Cent.	Actual Weight. g.	Per Cent.
2.....	61	100	99	100	141	100
Per Cent.....	100	—	162	—	231	—
3.....	56	92	96	97	144	102
Per Cent.....	100	—	171	—	257	—
4.....	103	169	159	161	213	165
Per Cent.....	100	—	154	—	223	—
5.....	107	175	167	169	232	179
Per Cent.....	100	—	156	—	236	—
6.....	112	233	219	221	325	230
Per Cent.....	100	—	154	—	229	—
7.....	136	223	209	211	323	229
Per Cent.....	100	—	154	—	238	—
8.....	160	262	242	244	374	265
Per Cent.....	100	—	151	—	234	—
9.....	141	231	224	226	350	248
Per Cent.....	100	—	159	—	248	—
10.....	182	298	237	290	465	330
Per Cent.....	100	—	158	—	255	—
11.....	201	330	303	306	472	335
Per Cent.....	100	—	151	—	235	—
12.....	218	357	328	331	503	357
Per Cent.....	100	—	150	—	231	—

TABLE 26.

*Average Weights of Pups in Litters where All Were Reared as Compared with those from Litters where Some Were Killed.*

Litter Size at Four Weeks.	REARED ALL.		KILLED ONE AND MORE.		KILLED TWO AND MORE.		ALL LITTERS.	
	Number of Litters.	Average Weight per Pup. g.	Number of Litters.	Average Weight per Pup. g.	Number of Litters.	Average Weight per Pup. g.	Number of Litters.	Average Weight per Pup. g.
4.....	13	66.8	17	53.3	13	52.5	30	59.1
5.....	9	62.4	18	59.4	14	47.6	27	60.5
6.....	12	59.1	25	52.5	15	52.7	37	54.6
7.....	17	54.7	17	53.0	9	54.1	34	53.9
8.....	22	54.4	14	49.4	4	47.1	36	52.6
9.....	16	52.2	12	55.6	5	56.6	28	53.8

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TABLE 25.  
Litter Size at Weaning and Average Weights at Weaning.

Litter Size at Weaning.	Number of Litters.	NUMBERS AND WEIGHTS AT WEANING.						Sex Ratio at Weaning.	Litter Size at Birth.	Litter Size at Birth Cent. of Litter.	Sex Ratio at Birth.	Weight of Rats in Litters of same Size at Birth and Weaning.	
		Males.		Females.		Both Sexes.						Number of Litters.	Average Weight. g.
		Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.						
2.....	12	10	52.4	14	51.1	24	51.6	71.4	4.4	221	100	3	70.7
3.....	16	29	57.5	19	57.4	48	57.5	152.6	4.7	158	162.5	4	58.4
4.....	30	61	61.7	59	56.4	120	59.1	103.4	5.6	140	128.6	13	66.8
5.....	27	70	62.0	65	58.8	135	60.5	107.7	6.4	123	80.9	9	62.4
6.....	37	118	55.5	104	53.6	221	54.6	113.5	7.4	124	105.7	12	59.1
7.....	32	112	56.0	112	52.1	224	54.1	100.0	8.0	114	125.0	17	54.7
8.....	36	125	54.7	163	51.0	238	52.6	76.7	8.5	106	78.7	22	54.4
9.....	28	118	56.2	134	51.7	252	53.8	88.1	9.5	105	79.1	16	52.2
10.....	7	31	58.1	39	54.8	70	56.3	79.5	10.4	104	84.8	4	61.4
11.....	5	27	48.2	28	46.6	55	47.4	96.4	11.0	100	112.9	5	47.4
12.....	2	11	46.6	13	43.7	24	45.0	84.6	12.0	100	128.6	2	45.0

TABLE 27.

*Influence of Age of Mother on Number of Rats Weaned.*

Age of Mother. (Months.)	Number of Litters.	AT BIRTH.		AT WEANING.		Percentage Weaned.
		Number of Rats.	Number per Litter.	Number of Rats.	Number per Litter.	
2-3.....	13	109	8.4	102	7.9	93.6
4-5.....	86	662	7.7	533	6.4	80.5
6-7.....	41	298	7.3	265	6.5	88.9
8-9.....	19	131	6.9	95	5.3	72.5
10-11.....	13	74	5.7	68	5.2	91.9
12-13.....	6	28	4.7	26	4.3	92.9
14-15.....	7	40	5.7	37	5.3	92.5

TABLE 28.

*Age of Dam and Average Weights of Young at Weaning.*

Age of Dams. (Months.)	Number of Litters.	AVERAGE WEIGHTS AND NUMBERS AT WEANING.						Total Litter Weight at Weaning.
		Males.		Females.		Both Sexes.		
		Num-ber.	Weight. g.	Num-ber.	Weight. g.	Num-ber.	Weight. g.	
2-3.....	13	43	53.6	59	51.1	102	52.1	409
4-5.....	86	247	52.1	265	48.8	512	50.4	311
6-7.....	41	121	56.5	141	53.7	265	55.0	355
8-9.....	19	47	59.6	44	60.0	91	59.8	302
10-11.....	13	33	65.9	35	61.9	68	63.9	334
12-13.....	6	15	56.5	11	48.8	26	52.9	229
14-15.....	7	19	66.2	18	59.6	37	63.0	333

TABLE 29.  
Age of Dam and Average Weight at Weaning when Litter Size at Birth is Constant.  
Litter size 6-7.

Age of Dam. (Months.)	Number, Average Litter Size, and Average Weights at Weaning.											
	Number of Litters.			Males.			Females.			Both Sexes.		
	Number.	Number per Litter.	Average Weight. g.	Number.	Number per Litter.	Average Weight. g.	Number.	Number per Litter.	Average Weight. g.	Number.	Number per Litter.	Average Weight. g.
2-3.....	1	4	60.5	3	3	55.7	7	7	58.4			
4-5.....	20	68	54.0	53	2.7	54.1	121	6.1	54.0			
6-7.....	14	40	57.6	38	2.7	56.2	78	5.6	56.9			
8-9.....	7	18	60.5	18	2.6	63.3	36	5.1	61.9			
10-11.....	4	11	60.3	12	3.0	56.6	23	5.8	58.3			
14-15.....	1	5	55.4	2	2	50.5	7	7	54.0			

Litter size 8-9.

2-3.....	9	26	49.5	44	4.9	47.7	70	7.8	48.4			
4-5.....	34	103	52.5	134	3.9	48.8	237	7.0	50.4			
6-7.....	15	51	56.4	65	4.3	53.5	116	7.7	54.8			
8-9.....	3	11	68.1	8	2.7	67.5	19	6.3	67.8			
10-11.....	2	6	61.2	8	4	57.0	14	7.0	58.8			
12-13.....	2	7	53.0	7	3.5	43.7	14	7.0	48.4			
14-15.....	2	7	62.6	9	4.5	54.0	16	8.0	57.8			

TABLE 30.  
 Age of Dam and Average Weight of Young at Weaning when Litter Size at Weaning is Constant.

Age of Dam. (Months.)	LITTER SIZE 6-7.						LITTER SIZE 8-9.									
	Number and Average Weight at Weaning.						Number and Average Weight at Weaning.									
	Number of Litters.		Males.		Females.		Both Sexes.		Number of Litters.		Males.		Females.		Both Sexes.	
	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.	Num-ber.	Average Weight. g.
2-3.....	3	11	57.5	10	51.0	21	56.9	6	16	47.6	36	46.5	51	46.8		
4-5.....	27	83	52.7	88	50.4	171	51.6	24	97	51.5	105	48.1	202	49.7		
6-7.....	12	39	52.0	38	53.5	77	52.7	13	46	58.3	61	52.6	107	55.0		
8-9.....	4	12	60.4	13	63.5	25	62.0	2	9	69.8	9	65.2	18	67.5		
10-11.....	4	12	63.7	13	59.2	25	61.4	2	5	60.4	12	61.9	17	61.5		
12-13.....	2	7	53.0	7	43.7	14	48.4	—	—	—	—	—	—	—		
14-15.....	2	9	62.0	5	61.8	14	61.9	1	3	52.3	6	46.3	9	48.3		

GROWTH OF THE ALBINO RAT.

TABLE 31.  
*Influence of Parity on Number of Rats Weaned.*

Parity.	Number of Litters.	At Birth.		At Weaning.		Per-centage Weaned.	Age of Dam. (Mths.)
		Number of Rats.	Number per Litter.	Number of Rats.	Number per Litter.		
First.....	139	1,053	7.6	891	6.4	84.6	4.8
Second.....	54	415	7.7	330	6.1	79.5	7.2
Third.....	23	169	7.3	147	6.4	87.0	9.4
Fourth.....	13	89	6.8	81	6.2	91.0	11.6
Fifth.....	6	39	6.5	34	5.7	87.2	14.3
Sixth.....	3	18	6.0	18	6.0	100.0	16.7

TABLE 32.  
*Litter Parity and Average Weight per Young and Total Litter Weight at Weaning.*

Parity.	Number of Litters.	AVERAGE WEIGHTS AND NUMBERS AT WEANING.						Total Litter Weight. g.
		Males.		Females.		Both Sexes.		
		Number.	Average Weight. g.	Number.	Average Weight. g.	Number.	Average Weight. g.	
First.....	139	433	55.1	458	51.6	891	53.3	342
Second.....	54	172	55.2	158	51.4	330	53.4	326
Third.....	23	66	61.9	81	57.0	147	59.2	378
Fourth.....	13	38	57.7	43	55.4	81	56.5	352
Fifth.....	6	15	64.6	19	60.2	34	62.1	352
Sixth.....	3	10	75.6	8	70.4	18	73.3	440

TABLE 33.  
*Weight of Dam and Number of Pups Weaned.*

Weight of Mothers. g.	Number of Litters.	AT BIRTH.		AT WEANING.		Per-centage Weaned.	First Litters only.
		Number of Rats.	Number per Litter.	Number of Rats.	Number per Litter.		
180-199.....	6	47	7.8	43	7.2	91.5	82.7
200-219.....	24	163	6.8	140	5.8	85.9	82.1
220-239.....	37	282	7.6	246	6.6	87.2	84.6
240-259.....	42	331	7.9	270	6.4	81.6	80.5
260-279.....	40	329	8.2	278	7.0	84.5	81.6
280-299.....	40	296	7.4	242	6.1	81.8	83.5
300-319.....	23	151	6.6	132	5.7	87.4	80.0
320-339.....	9	67	7.4	53	6.0	80.6	—
340-359.....	10	61	6.1	53	5.3	86.9	—