

# R A T S

## Care and Feeding

	Number of Adults	Number of Young	Cage Dimensions*		Height
			Length	Width	
<b>Breeding/Lactation</b>	1 female	8	30 cm	20 cm	20 cm
<b>Growing</b>	10-15		60 cm	50 cm	25 cm
<b>Experimental</b>	Varies according to experiment		Variable		

Feeding Recommendations	Daily Feed Usage	Fisher	Larger Strains**	Water Requirement	Begin Dry Food Consumption
	Adult Male	Ad libitum	Ad libitum	Ad libitum	12 days
	Adult Female	12-15 gm	20-35 gm		
	Pregnant & Lactating Female	12-15 gm	15-25 gm		
	Growing Male	30-40 gm	30-55 gm		
	Growing Female	12-15 gm	15-30 gm		
		12-15 gm	14-22 gm		

Environmental Data	Room Temp.	Humidity	Light	Litter Material
	21-27 °C	45-55%	12 hrs/day	Shavings, beet pulp, corn cob, commercial bedding

## Biological Values

Blood Chemical Composition	Water	Calcium	Sodium	Chloride	Phosphorus	Potassium
	92-94 gm/100ml	6.2 mEq/L	144 mEq/L	110 mEq/L	5.9 mg/100ml	5.9 mEq/L
	Magnesium	Cholesterol	Glucose	Serum Protein	Albumin	Globulin
Values are for plasma, except where noted	1.6 mg/100ml	28-76 mg/100ml	56-76 mg/100ml (whole blood)	6.3 gm/100ml	3.4-4.3 gm/100ml	1.8-2.5 gm/100ml

Oxygen Consumption and Body Temperature	Observed Weight	Temperature	Oxygen Consumption	Breathing Rate	Heart Rate Adult	Heart Rate Newborn
	250 gm	38.2 °C	0.88 mlO <sub>2</sub> /gm/hr	94/minute (75-115)	382/minute (261-600)	161/minute (81-241)

Hematological Values	Whole Blood Volume (T-1824 dye)	Clotting Time	RBC Life Span	RBC Diameter	RBC Rate of Sedimentation
	58 ml/kg	20 sec.	45-68 days	6.8 microns	0.7-1.8 mm/hr
	Blood pH	RBC	Hematocrit	Platelets	Hb
	7.35	7.2-9.6 10 <sup>6</sup> /mm <sup>3</sup>	46 ml/100ml	706-796 10 <sup>3</sup> /mm <sup>3</sup>	14.8 gm/100ml

Total and Differential White Blood Cell Counts	Leucocytes	Neutros	Eosinos	Basos	Lymphos	Monos
	14.0 10 <sup>3</sup> /mm <sup>3</sup>	3.1 10 <sup>3</sup> /mm <sup>3</sup>	0.3 10 <sup>3</sup> /mm <sup>3</sup>	0.10 10 <sup>3</sup> /mm <sup>3</sup>	10.2 10 <sup>3</sup> /mm <sup>3</sup>	0.30 10 <sup>3</sup> /mm <sup>3</sup>

## Life Cycle Information

Weight Adult Male	Weight Adult Female	Weight at Birth	Breeding Age Male	Breeding Age Female	Estrus Cycle
300-400 gm	250-300 gm	5-6 gm	100 days 300 gm	100 days 200 gm	5 days
Gestation	Weaning Age	Litter Size	Rebreed After Parturition	Breeding Life Male	Breeding Life Female
20-22 days 21 days avg.	21 days 40-50 gm	8-12	Immediately	1 year	1 year
<b>Mating Data:</b> Pair or colony: 1 male, 10 females					

\* Refer to the "Guide for the Care and use of Laboratory Animals" — NIH Publication No. 85-23, Revised 1985.  
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\*\* Depends on Strain of rats. Some Investigators restrict the feed of rats derived from Sprague-Dawley Inc. Levels of 21-22 gr/day for male rats and 16-17 gr/day for female rats are levels of feed restrictions frequently used.