

All calculations are based off recommended nutritional content from:

Subcommittee on Laboratory Animal Nutrition, Committee on Animal Nutrition (1995) Nutrient Requirements of Laboratory Animals, Nutrient Requirements of the Laboratory Rat 4<sup>th</sup> rev. ed. 1995 National Academy Press Washington, DC.

These requirements are based on a purified diet. In laymen's terms, a purified diet is basically one made from the chemical components of nutrition, as opposed to using actual food ingredients. The average pet owner feeds a "natural ingredient" diet. A natural ingredient diet is one made from actual food ingredients, with or without chemical supplements, as opposed to being purely chemical.

Inert material (material the rat cannot digest, such as cellulose) in a natural ingredient diet acts to "dilute" the nutritional content. Natural ingredient diets may also vary in exact nutritional content from one batch to the next. This is due to the nature of the ingredients used. Foods tend to vary in nutritional content due to factors affecting growth, such as drought, soil quality, temperature, time harvested, age at harvest, time to process, etc. For this reason, these charts are not an exact measurement of all nutrients in all foods, but are meant to act as an estimate. These charts are not meant to be used as a strict guide, but as a reference to help pet owners determine the best diet for their pet rats.

Each diet seen on these charts has been analyzed and calculated to adjust for the energy content provided by each food. Actual energy needs will vary from one rat to the next, depending on its age, size, and metabolism. I used an average weight of 400 grams for females and 550 grams for males. If your rats weigh more or less, your rat will have a different energy requirement. In general, rats weighing less or with a slower metabolism would require less energy than rats weighing more or with a higher metabolism. The amount of food consumed is the amount required to meet that specific energy requirement shown. The nutritional content is calculated for that amount consumed. If a rat consumes more, or less, than this amount, their energy and nutrition consumption will be greater, or less, than the amounts shown. Some rats are known to over eat. These animals will consume a greater energy and nutrition content. As a result, they may gain weight. When calculating the amount of food required to maintain an animal, you want to use their ideal weight, not necessarily their current weight.

The nutritional content of different diets seen on this chart was acquired directly from the companies' websites. If there is a diet not on this chart you would like to see analyzed, I can add it, with some help from you. First look up the company's website to see if the complete nutritional content is provided. If so, you can simply send me a link to that page and I will take care of the rest. Remember, complete nutritional content should provide not just calories, fat, and protein, but also as many minerals, vitamins, and preferably even amino acids, as possible. You can look at these charts to see what nutrients are included. If the company does not provide a complete nutritional analysis online, call or write the company to request it. Once you have received it, send a copy to me, and I will do the rest.

These charts are not meant to promote one diet over another, but are strictly a reference to help pet owners decide which diet is best for their pets. When trying a new diet, remember to look at the animal, as well as the food. Quality of ingredients will affect the nutritional content as well as the availability of that nutrition. If your animal loses or gains too much weight, it may need to eat more or less, or may need a different diet. If the animal loses condition, they may be lacking in vital nutrients and require more or less of that food, or a different diet. Some symptoms of nutritional deficiency can mimic illness.

For more details, please check my blog: <http://nom-ology.blogspot.com>

**Basic Nutritional Requirements according to the Committee on Animal Nutrition (1995)**

<b>Per kg (10% moisture, 16-17 kJ ME/g)</b>	<b>Maintenance</b>	<b>Growth</b>	<b>Reproduction</b>
Fat	50.0 g	50.0 g	50.0 g
Linoleic acid (n-6)	6.0 g (males)	6.0 g (males)	3.0 g
	2.0 g (females)	2.0 g (females)	
Linolenic acid (n-3)	concentration not determined	concentration not determined	concentration not determined
Protein	50.0 g	150.0 g	150.0 g

**Amino Acids**

Arginine	Not determined	4.3 g	4.3 g
Aromatic AA's	1.9 g	10.2 g	10.2 g
Histidine	0.8 g	2.8 g	2.8 g
Isoleucine	3.1 g	6.2 g	6.2 g
Leucine	1.8 g	10.7 g	10.7 g
Lysine	1.1 g	9.2 g	9.2 g
Methionine + cystine	2.3 g	9.8 g	9.8 g
Threonine	1.8 g	6.2 g	6.2 g
Tryptophan	0.5 g	2.0 g	2.0 g
Valine	2.3 g	7.4 g	7.4 g
Other (including nonessentials)	41.3 g (gly, L-ala, L-ser)	66.0 g	66.0 g

**Minerals**

Calcium	5.0 g	5.0 g	6.3 g
Chloride	0.5 g	0.5 g	0.5 g
Magnesium	0.5 g	0.5 g	0.6 g
Phosphorus	3.0 g	3.0 g	3.7 g
Sodium	0.5 g	0.5 g	0.5 g
Potassium	3.6 g	3.6 g	3.6 g
Copper	5.0 mg	5.0 mg	8.0 mg
Iron	35.0 mg	35.0 mg	75.0 mg
Manganese	10.0 mg	10.0 mg	10.0 mg
Zinc	12.0 mg	12.0 mg	25.0 mg
Iodine	150.0 mg	150.0 mg	150.0 mg
Molybdenum	150.0 mg	150.0 mg	150.0 mg
Selenium	150.0 mg	150.0 mg	400.0 mg

**Vitamins**

A (as retinol)	0.7 mg (2300 IU)	0.7 mg (2300 IU)	0.7 mg (2300 IU)
D (as cholecalciferol)	0.025 mg (1000 IU)	0.025 mg (1000 IU)	0.025 mg (1000 IU)
E (as RRR-alpha-tocopherol)	18.0mg (27 IU)	18.0mg (27 IU)	18.0 mg (27 IU)
K (as phyloquinone)	1.0 mg	1.0 mg	1.0 mg
Biotin (as d-biotin)	0.2 mg	0.2 mg	0.2 mg
Choline (free base)	750.0 mg	750.0 mg	750.0 mg
Folic acid	1.0 mg	1.0 mg	1.0 mg
Niacin ( as nicotinic acid)	15.0 mg	15.0 mg	15.0 mg
Pantothenate (as Ca-d-pantothenate)	10.0 mg	10.0 mg	10.0 mg
Riboflavin	3.0 mg	3.0 mg	4.0 mg
Thiamin (as thiamin-HCl)	4.0 mg	4.0 mg	4.0 mg
B6 (as pyridoxine)	6.0 mg	6.0 mg	6.0 mg
B12	50.0 mcg	50.0 mcg	50.0 mcg

## Nutrition for Maintenance of the Adult Rat

	Required per day		Harlan Teklad 2014		Harlan Teklad 2016		Harlan Teklad 2018	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Amount consumed (g)			78	61	75	58	72	56
Energy (kJ)	940	734	940	734	940	734	940	734
Fat (g)	2.85	2.23	3.11	2.43	2.98	2.33	2.89	2.26
Linoleic acid (n-6) (g)	0.34	0.09	1.55	1.21	1.49	1.17	1.45	1.13
Linolenic acid (n-3) (g)	ND	ND	0.08	0.06	0.07	0.06	0.07	0.06
Protein (g)	2.85	2.23	11.11	8.67	12.23	9.55	11.86	9.26
Carbohydrate (g)	ND	ND	37.29	29.12	36.18	28.25	35.07	27.38
Fiber (g)	ND	ND	3.19	2.49	2.46	1.92	2.39	1.86
<b><u>Amino Acids (g)</u></b>								
Arginine (g)	ND	ND	0.62	0.49	0.60	0.47	0.58	0.45
Aromatic AA's (g)	0.11	0.08	0.85	0.67	1.04	0.82	1.01	0.79
Histidine (g)	0.05	0.04	0.31	0.24	0.30	0.23	0.29	0.23
Isoleucine (g)	0.18	0.14	0.47	0.36	0.52	0.41	0.51	0.40
Leucine (g)	0.10	0.08	1.09	0.85	1.42	1.11	1.37	1.07
Lysine (g)	0.06	0.05	0.54	0.42	0.60	0.47	0.58	0.45
Methionine + cystine (g)	0.13	0.10	0.47	0.36	0.45	0.35	0.43	0.34
Threonine (g)	0.10	0.08	0.39	0.30	0.45	0.35	0.43	0.34
Tryptophan (g)	0.03	0.02	0.16	0.12	0.15	0.12	0.14	0.11
Valine (g)	0.13	0.10	0.54	0.42	0.60	0.47	0.58	0.45
Other (includes nonessentials) (g)	2.35	1.84	5.67	4.43	6.12	4.78	5.93	4.63
<b><u>Minerals</u></b>								
Calcium (g)	0.29	0.22	0.54	0.42	0.75	0.58	0.72	0.56
Phosphorus (g)	0.17	0.13	0.47	0.36	0.52	0.41	0.51	0.40
Ca : P ratio	1.67	1.67	1.17	1.17	1.43	1.43	1.43	1.43
Chloride (g)	0.03	0.02	0.23	0.18	0.30	0.23	0.29	0.23
Magnesium (g)	0.03	0.02	0.16	0.12	0.15	0.12	0.14	0.11
Sodium (g)	0.03	0.02	0.08	0.06	0.15	0.12	0.14	0.11
Potassium (g)	0.21	0.16	0.47	0.36	0.45	0.35	0.43	0.34
Copper (mg)	0.29	0.22	1.17	0.91	1.12	0.87	1.08	0.85

## Nutrition for Maintenance of the Adult Rat

	Required per day		Harlan Teklad 2014		Harlan Teklad 2016		Harlan Teklad 2018	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Iron (mg)	2.00	1.56	13.60	10.62	14.92	11.65	14.46	11.29
Manganese (mg)	0.57	0.45	7.77	6.07	7.46	5.83	7.23	5.65
Zinc (mg)	0.68	0.53	5.44	4.25	5.22	4.08	5.06	3.95
Iodine (mcg)	8.55	6.68	0.47	0.36	0.45	0.35	0.43	0.34
Molybdenum (mcg)	8.55	6.68	ND	ND	ND	ND	ND	ND
Selenium (mcg)	8.55	6.68	0.02	0.01	0.02	0.01	0.02	0.01
<b><u>Vitamins</u></b>								
A (IU)	131.10	102.35	0.47	0.36	1.12	0.87	1.08	0.85
D (IU)	57.00	44.50	0.47	0.36	0.11	0.09	0.11	0.08
E (mg)	1.03	0.80	6.25	4.88	5.50	4.29	5.33	4.16
K (mg)	0.06	0.04	1.55	1.21	3.73	2.91	3.62	2.82
Biotin (mg)	0.01	0.01	0.02	0.02	0.03	0.02	0.03	0.02
Choline (mg)	42.75	33.38	80.02	62.48	76.84	60.00	74.48	58.16
Folic acid (mg)	0.06	0.04	0.16	0.12	0.30	0.23	0.29	0.23
Niacin (mg)	0.86	0.67	4.20	3.28	5.60	4.37	5.42	4.23
Pantothenate (mg)	0.57	0.45	1.32	1.03	2.46	1.92	2.39	1.86
Riboflavin (mg)	0.17	0.13	0.47	0.36	1.12	0.87	1.08	0.85
Thiamin (mg)	0.23	0.18	0.93	0.73	1.27	0.99	1.23	0.96
B6 (mg)	0.34	0.27	0.78	0.61	1.34	1.05	1.30	1.02
B12 (mcg)	2.85	2.23	2.33	1.82	5.97	4.66	5.78	4.52

\*ND = No Data

## Nutrition for Maintenance of the Adult Rat

	Required per day		Mazuri Rodent Diet		Mazuri Rodent Breeder 11F		Mazuri Rodent Breeder 6F		Mazuri Rodent Breeder 9F	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Amount consumed (g)			63	49	65	51	72	56	69	54
Energy (kJ)	940	734	940	734	940	734	940	734	940	734
Fat (g)	2.85	2.23	4.04	3.15	7.38	5.76	4.70	3.67	4.46	3.48
Linoleic acid (n-6) (g)	0.34	0.09	0.81	0.64	1.18	0.92	1.30	1.02	1.24	0.96
Linolenic acid (n-3) (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Protein (g)	2.85	2.23	15.14	11.82	11.75	9.18	129.29	100.95	122.68	95.80
Carbohydrate (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fiber (g)	ND	ND	2.52	1.97	3.92	3.06	4.34	3.39	4.12	3.21
<b><u>Amino Acids (g)</u></b>										
Arginine (g)	ND	ND	0.97	0.76	0.73	0.57	0.80	0.63	0.76	0.59
Aromatic AA's (g)	0.11	0.08	1.15	0.90	0.96	0.75	1.03	0.81	0.98	0.77
Histidine (g)	0.05	0.04	0.37	0.29	0.31	0.24	0.35	0.27	0.33	0.26
Isoleucine (g)	0.18	0.14	0.74	0.58	0.51	0.40	0.54	0.42	0.51	0.40
Leucine (g)	0.10	0.08	1.18	0.92	1.04	0.82	1.14	0.89	1.08	0.84
Lysine (g)	0.06	0.05	0.85	0.67	0.65	0.51	0.69	0.54	0.66	0.51
Methionine + cystine (g)	0.13	0.10	0.48	0.37	0.45	0.35	0.54	0.42	0.51	0.40
Threonine (g)	0.10	0.08	0.56	0.44	0.51	0.40	0.53	0.41	0.50	0.39
Tryptophan (g)	0.03	0.02	0.20	0.15	0.13	0.10	0.14	0.11	0.14	0.11
Valine (g)	0.13	0.10	0.76	0.59	0.64	0.50	0.71	0.55	0.67	0.53
Other (includes nonessentials) (g)	2.35	1.84	0.69	0.54	0.55	0.43	0.62	0.49	0.59	0.46
<b><u>Minerals</u></b>										
Calcium (g)	0.29	0.22	0.60	0.47	0.63	0.49	0.70	0.55	0.67	0.52
Phosphorus (g)	0.17	0.13	0.41	0.32	0.42	0.33	0.47	0.37	0.45	0.35
Ca : P ratio	1.67	1.67	1.46	1.46	1.49	1.49	1.49	1.49	1.49	1.49
Chloride (g)	0.03	0.02	0.25	0.20	0.35	0.28	0.39	0.30	0.37	0.29
Magnesium (g)	0.03	0.02	0.13	0.10	0.12	0.09	0.13	0.10	0.12	0.10
Sodium (g)	0.03	0.02	0.14	0.11	0.20	0.15	0.22	0.17	0.21	0.16
Potassium (g)	0.21	0.16	0.69	0.54	0.61	0.48	0.64	0.50	0.60	0.47

## Nutrition for Maintenance of the Adult Rat

	Required per day		Mazuri Rodent Diet		Mazuri Rodent Breeder 11F		Mazuri Rodent Breeder 6F		Mazuri Rodent Breeder 9F	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Copper (mg)	0.29	0.22	0.88	0.69	1.44	1.12	1.59	1.24	1.51	1.18
Iron (mg)	2.00	1.56	16.40	12.81	19.39	15.14	20.68	16.15	19.52	15.32
Manganese (mg)	0.57	0.45	5.05	3.94	9.53	7.44	11.06	8.64	10.50	8.20
Zinc (mg)	0.68	0.53	5.87	4.58	10.12	7.90	11.86	9.26	11.25	8.79
Iodine (mcg)	8.55	6.68	0.07	0.05	0.16	0.12	0.32	0.25	0.30	0.24
Molybdenum (mcg)	8.55	6.68	ND	ND	ND	ND	ND	ND	ND	ND
Selenium (mcg)	8.55	6.68	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00
<u>Vitamins</u>										
A (IU)	131.10	102.35	971.54	758.63	868.19	677.93	835.15	652.13	792.48	618.81
D (IU)	57.00	44.50	0.11	0.08	195.83	152.92	202.46	158.09	192.12	150.01
E (mg)	1.03	0.80	2.32	1.81	3.66	2.85	2.66	2.08	2.52	1.97
K (mg)	0.06	0.04	0.20	0.16	0.22	0.17	0.24	0.19	0.23	0.18
Biotin (mg)	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Choline (mg)	42.75	33.38	126.17	98.52	130.56	101.94	137.38	107.28	130.36	101.80
Folic acid (mg)	0.06	0.04	0.21	0.16	0.31	0.24	0.36	0.28	0.34	0.27
Niacin (mg)	0.86	0.67	4.98	3.89	3.92	3.06	7.88	6.15	7.48	5.84
Pantothenate (mg)	0.57	0.45	0.95	0.74	1.57	1.22	1.74	1.36	1.65	1.29
Riboflavin (mg)	0.17	0.13	0.32	0.25	0.65	0.51	0.68	0.53	0.64	0.50
Thiamin (mg)	0.23	0.18	1.07	0.84	1.31	1.02	1.45	1.13	1.37	1.07
B6 (mg)	0.34	0.27	0.38	0.30	0.91	0.71	1.08	0.85	1.03	0.80
B12 (mcg)	2.85	2.23	1.26	0.99	3.66	2.85	3.76	2.94	3.57	2.79

\*ND = No Data

\*\*If a value shows up as "0.00" this does NOT necessarily mean that nutrient is not present in the food. It may be present, but in such small amounts it will not show in 2 decimal points. This small amount is likely not significant enough to matter in the animal's diet and should be supplemented if required to maintain good health.

## Nutrition for Maintenance of the Adult Rat

	Required per day		Mazuri Rodent Pellets		Nutro Senior Dry Dog Food		EVO Turkey & Chicken Meal Senior Dry Dog Food		Innova Low Fat Adult Dry Dog Food	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Amount consumed (g)			67	52	66	52	55	43	281	220
Energy (kJ)	940	734	940	734	940	734	940	734	940	734
Fat (g)	2.85	2.23	4.36	3.41	0.66	0.52	8.91	6.95	19.70	15.38
Linoleic acid (n-6) (g)	0.34	0.09	2.16	1.68	2.32	1.81	1.72	1.34	5.07	3.96
Linolenic acid (n-3) (g)	ND	ND	0.40	0.31	0.13	0.10	0.10	0.08	1.44	1.12
Protein (g)	2.85	2.23	16.1	12.58	13.24	10.34	23.14	18.07	50.66	39.56
Carbohydrate (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fiber (g)	ND	ND	3.02	2.36	2.65	2.07	0.64	0.50	12.86	10.04
<b><u>Amino Acids (g)</u></b>										
Arginine (g)	ND	ND	1.05	0.82	ND	ND	1.85	1.44	3.26	2.55
Aromatic AA's (g)	0.11	0.08	1.25	0.98	ND	ND	1.92	1.50	3.41	2.66
Histidine (g)	0.05	0.04	0.39	0.30	ND	ND	0.51	0.39	1.15	0.90
Isoleucine (g)	0.18	0.14	0.85	0.66	ND	ND	1.06	0.82	1.94	1.52
Leucine (g)	0.10	0.08	1.26	0.98	ND	ND	1.86	1.46	3.38	2.64
Lysine (g)	0.06	0.05	0.93	0.73	ND	ND	1.75	1.36	2.84	2.22
Methionine + cystine (g)	0.13	0.10	0.51	0.40	ND	ND	0.88	0.69	1.66	1.30
Threonine (g)	0.10	0.08	0.60	0.47	ND	ND	1.04	0.82	1.83	1.43
Tryptophan (g)	0.03	0.02	0.21	0.17	ND	ND	0.26	0.20	ND	ND
Valine (g)	0.13	0.10	0.82	0.64	ND	ND	1.25	0.98	2.34	1.82
Other (includes nonessentials) (g)	2.35	1.84	0.00	0.00	ND	ND	ND	ND	0.17	0.13
<b><u>Minerals</u></b>										
Calcium (g)	0.29	0.22	0.64	0.50	0.76	0.59	1.15	0.90	1.89	1.47
Phosphorus (g)	0.17	0.13	0.44	0.34	0.60	0.47	0.74	0.58	1.77	1.38
Ca : P ratio	1.67	1.67	1.46	1.45	1.28	1.28	1.57	1.57	1.06	1.06
Chloride (g)	0.03	0.02	0.27	0.21	ND	ND	0.32	0.25	ND	ND
Magnesium (g)	0.03	0.02	0.15	0.12	ND	ND	0.04	0.03	0.34	0.26
Sodium (g)	0.03	0.02	0.15	0.12	0.20	0.16	0.15	0.12	0.34	0.26

### Nutrition for Maintenance of the Adult Rat

	Required per day		Mazuri Rodent Pellets		Nutro Senior Dry Dog Food		EVO Turkey & Chicken Meal Senior Dry Dog Food		Innova Low Fat Adult Dry Dog Food	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Potassium (g)	0.21	0.16	0.83	0.64	ND	ND	0.38	0.30	ND	ND
Copper (mg)	0.29	0.22	1.01	0.79	ND	ND	0.89	0.69	3.95	3.08
Iron (mg)	2.00	1.56	13.29	10.38	ND	ND	1.10	0.86	32.60	25.45
Manganese (mg)	0.57	0.45	5.84	4.56	2.65	2.07	1.10	0.86	8.16	6.37
Zinc (mg)	0.68	0.53	6.18	4.82	16.55	12.92	13.14	10.26	52.38	41.25
Iodine (mcg)	8.55	6.68	0.06	0.05	ND	ND	0.22	0.17	0.67	0.52
Molybdenum (mcg)	8.55	6.68	ND	ND	ND	ND	ND	ND	ND	ND
Selenium (mcg)	8.55	6.68	0.02	0.02	ND	ND	0.05	0.04	0.10	0.08
<b><u>Vitamins</u></b>										
A (IU)	131.10	102.35	1,034.00	807.40	860.56	671.97	1,556.39	1,215.31	6,563.68	5,125.25
D (IU)	57.00	44.50	100.71	78.64	ND	ND	143.14	111.77	63,337.71	49,457.32
E (mg)	1.03	0.80	2.70	2.11	11.09	8.66	34.07	26.60	174.49	136.25
K (mg)	0.06	0.04	0.20	0.16	ND	ND	ND	ND	ND	ND
Biotin (mg)	0.01	0.01	0.01	0.01	ND	ND	0.01	0.01	0.03	0.02
Choline (mg)	42.75	33.38	134.29	104.86	92.68	72.37	111.50	87.06	367.06	286.62
Folic acid (mg)	0.06	0.04	0.19	0.15	ND	ND	0.04	0.03	ND	ND
Niacin (mg)	0.86	0.67	5.71	4.46	ND	ND	1.82	1.42	14.64	11.43
Pantothenate (mg)	0.57	0.45	1.01	0.79	ND	ND	1.17	0.91	5.98	4.67
Riboflavin (mg)	0.17	0.13	0.34	0.26	0.40	0.31	0.27	0.21	1.21	0.94
Thiamin (mg)	0.23	0.18	0.94	0.73	0.66	0.52	0.22	0.17	1.85	1.45
B6 (mg)	0.34	0.27	0.40	0.31	0.66	0.52	0.25	0.19	1.96	1.53
B12 (mcg)	2.85	2.23	1.34	1.05	ND	ND	0.23	0.18	ND	ND

\*ND = No Data

## Nutrition for Maintenance of the Adult Rat

	Required per day		Innova Senior Dry Dog Food		"Suebee Mix"		Rat Fan Club Molasses Mix	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Amount consumed (g)			282	220	64	50	157	123
Energy (kJ)	940	734	940	734	940	734	940	734
Fat (g)	2.85	2.23	22.58	17.63	3.26	2.55	7.20	5.63
Linoleic acid (n-6) (g)	0.34	0.09	5.08	3.97	65.00	50.76	0.31	0.24
Linolenic acid (n-3) (g)	ND	ND	1.67	1.30	3.17	2.47	0.01	0.01
Protein (g)	2.85	2.23	50.81	39.68	7.56	5.90	13.71	10.70
Carbohydrate (g)	ND	ND	ND	ND	47.30	36.94	31.68	24.74
Fiber (g)	ND	ND	15.53	12.12	5.36	4.19	5.02	3.92
<b><u>Amino Acids (g)</u></b>								
Arginine (g)	ND	ND	3.36	2.62	0.33	0.26	0.71	0.56
Aromatic AA's (g)	0.11	0.08	3.47	2.71	0.44	0.34	0.84	0.66
Histidine (g)	0.05	0.04	1.16	0.90	0.17	0.13	0.32	0.25
Isoleucine (g)	0.18	0.14	1.98	1.54	0.25	0.20	0.49	0.39
Leucine (g)	0.10	0.08	3.53	2.76	0.26	0.21	0.85	0.66
Lysine (g)	0.06	0.05	2.91	2.27	0.24	0.19	0.58	0.45
Methionine + cystine (g)	0.13	0.10	1.69	1.32	0.20	0.15	0.38	0.30
Threonine (g)	0.10	0.08	1.86	1.45	0.32	0.18	0.48	0.37
Tryptophan (g)	0.03	0.02	ND	ND	0.07	0.05	0.16	0.13
Valine (g)	0.13	0.10	2.37	1.85	0.29	0.22	0.52	0.41
Other (includes nonessentials) (g)	2.35	1.84	ND	ND	2.90	2.26	6.14	4.80
<b><u>Minerals</u></b>								
Calcium (g)	0.29	0.22	2.09	1.63	0.42	0.33	0.69	0.54
Phosphorus (g)	0.17	0.13	1.83	1.43	0.19	0.14	0.28	0.22
Ca : P ratio	1.67	1.67	1.14	1.14	2.26	2.26	2.49	2.49
Chloride (g)	0.03	0.02	ND	ND	ND	ND	ND	ND
Magnesium (g)	0.03	0.02	0.34	0.26	0.07	0.05	0.11	0.08
Sodium (g)	0.03	0.02	0.31	0.24	0.09	0.07	0.06	0.05
Potassium (g)	0.21	0.16	ND	ND	0.30	0.23	0.34	0.26

## Nutrition for Maintenance of the Adult Rat

	Required per day		Innova Senior Dry Dog Food		"Suebee Mix"		Rat Fan Club Molasses Mix	
	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)	female (400 g)	male (550 g)
Copper (mg)	0.29	0.22	4.65	3.63	0.28	0.22	0.49	0.38
Iron (mg)	2.00	1.56	42.38	33.09	18.01	14.07	7.02	5.48
Manganese (mg)	0.57	0.45	9.26	7.23	1.06	0.83	1.90	1.48
Zinc (mg)	0.68	0.53	65.39	51.06	7.88	6.16	6.18	4.83
Iodine (mcg)	8.55	6.68	0.84	0.65	ND	ND	ND	ND
Molybdenum (mcg)	8.55	6.68	ND	ND	ND	ND	ND	ND
Selenium (mcg)	8.55	6.68	0.17	0.13	10.08	7.87	24.76	19.34
<u>Vitamins</u>								
A (IU)	131.10	102.35	6,440.55	5,029.11	300.43	234.59	128.31	100.19
D (IU)	57.00	44.50	621.59	485.37	44.87	35.04	22.96	17.93
E (mg)	1.03	0.80	175.02	136.66	12.83	10.02	7.25	5.66
K (mg)	0.06	0.04	ND	ND	0.14	0.11	2.15	1.68
Biotin (mg)	0.01	0.01	0.03	0.02	ND	ND	0.00	0.00
Choline (mg)	42.75	33.38	370.62	289.40	6.07	4.74	35.49	27.71
Folic acid (mg)	0.06	0.04	0.22	0.17	187.10	146.10	92.63	72.33
Niacin (mg)	0.86	0.67	14.46	11.29	17.78	13.89	20.92	16.33
Pantothenate (mg)	0.57	0.45	5.91	4.61	4.97	3.88	2.96	2.31
Riboflavin (mg)	0.17	0.13	1.19	0.93	1.32	1.03	3.00	2.35
Thiamin (mg)	0.23	0.18	1.83	1.43	1.38	1.08	2.97	2.32
B6 (mg)	0.34	0.27	1.67	1.30	1.07	0.84	3.05	2.38
B12 (mcg)	2.85	2.23	0.84	0.65	2.87	2.24	3.17	2.47

\*ND = No Data

\*\*If a value shows up as "0.00" this does NOT necessarily mean that nutrient is not present in the food. It may be present, but in such small amounts it will not show in 2 decimal points. This small amount is likely not significant enough to matter in the animal's diet and should be supplemented if required to maintain good health.

\*\*\*"Suebee Mix" Ingredients: 227g whole oats, 227g dry pasta, 150g puffed wheat, 181g puffed rice, 31g dried sunflower seed kernels, 113g unsalted roasted soy nuts, 227g dried bananas, 340g whole grain Total cereal, 113g nuts & fruit muesli.

### Nutrition for Growth of the Weanling Rat (50g weight)

	Required per day	Harlan Teklad 2014	Harlan Teklad 2016	Harlan Teklad 2018	Mazuri Rodent Diet	Mazuri Rodent Breeder 11F	Mazuri Rodent Breeder 6F
<u>Minimum</u> Amount consumed (g)		743	713	691	603	624	691
<u>Minimum</u> Energy (kJ)	8,987	8,987	8,987	8,987	8,987	8,987	8,987
Fat (g)	28.09	29.71	28.53	27.65	38.60	70.52	44.94
Linoleic acid (n-6) (g) Females:	3.37	14.85	14.27	13.83	7.78	11.23	12.44
Males:	1.12						
Linolenic acid (n-3) (g)	ND	0.74	0.71	0.69	ND	ND	0.97
Protein (g)	84.26	106.21	116.97	113.37	144.76	112.34	1,236.06
Carbohydrate (g)	ND	356.51	345.93	335.28	ND	ND	ND
Fiber (g)	ND	30.45	23.54	22.81	24.13	37.45	41.48

### Amino Acids (g)

Arginine (g)	ND	5.94	5.71	5.53	9.29	6.99	7.67
Aromatic AA's (g)	5.73	8.17	9.99	9.68	11.04	9.17	9.89
Histidine (g)	1.57	2.97	2.85	2.77	3.56	3.00	3.32
Isoleucine (g)	3.48	4.46	4.99	4.84	7.12	4.87	5.18
Leucine (g)	6.01	10.40	13.55	13.13	11.28	9.99	10.85
Lysine (g)	5.17	5.20	5.71	5.53	8.14	6.24	6.64
Methionine + cystine (g)	5.50	4.46	4.28	4.15	4.58	6.90	5.12
Threonine (g)	3.48	3.71	4.28	4.15	5.37	4.87	5.05
Tryptophan (g)	1.12	1.49	1.43	1.38	1.87	1.25	1.38
Valine (g)	4.16	5.20	5.71	5.53	7.24	6.12	6.77
Other (includes nonessentials) (g)	37.07	54.22	58.49	56.69	6.63	5.30	5.95

### Minerals

Calcium (g)	2.81	5.20	7.13	6.91	5.73	6.05	6.71
Phosphorus (g)	1.69	4.46	4.99	4.84	3.92	4.06	4.49
Ca : P ratio	1.67	1.17	1.43	1.43	1.46	1.49	1.49
Chloride (g)	0.28	2.23	2.85	2.77	2.41	3.37	3.73
Magnesium (g)	0.28	1.49	1.43	1.38	1.21	1.12	1.24
Sodium (g)	0.28	0.74	1.43	1.38	1.33	1.87	2.07
Potassium (g)	2.02	4.46	4.28	4.15	6.63	5.87	6.08
Copper (mg)	2.81	11.14	10.70	10.37	8.44	13.73	15.21
Iron (mg)	19.66	129.98	142.65	138.26	156.82	185.36	197.71

### Nutrition for Growth of the Weanling Rat (50g weight)

	Required per day	Harlan Teklad 2014	Harlan Teklad 2016	Harlan Teklad 2018	Mazuri Rodent Diet	Mazuri Rodent Breeder 11F	Mazuri Rodent Breeder 6F
Manganese (mg)	5.62	74.27	71.33	69.13	48.25	91.12	105.77
Zinc (mg)	6.74	51.99	49.93	48.39	56.09	96.74	113.37
Iodine (mcg)	84.26	4.46	4.28	4.15	0.66	1.50	3.04
Molybdenum (mcg)	84.26	ND	ND	ND	ND	ND	ND
Selenium (mcg)	84.26	0.17	0.16	0.16	0.11	0.01	0.05

### Vitamins

A (IU)	1,291.98	4.46	10.70	10.37	9,288.58	8,300.49	7,984.60
D (IU)	561.73	4.46	1.07	1.04	1.03	1,872.29	1,935.66
E (mg)	15.17	59.72	52.57	50.95	22.20	34.95	25.44
K (mg)	0.56	14.85	35.66	34.57	1.93	2.06	2.28
Biotin (mg)	0.11	0.19	0.29	0.28	0.11	0.19	0.19
Choline (mg)	421.30	765.01	734.65	712.05	1,206.31	1,248.19	1,313.48
Folic acid (mg)	0.56	1.49	2.85	2.77	1.99	3.00	3.46
Niacin (mg)	8.43	40.11	53.49	51.85	47.65	37.45	75.35
Pantothenate (mg)	5.62	12.63	23.54	22.81	9.05	14.98	16.59
Riboflavin (mg)	1.69	4.46	10.70	10.37	3.02	6.24	6.50
Thiamin (mg)	2.25	8.91	12.13	11.75	10.25	12.48	13.83
B6 (mg)	3.37	7.43	12.84	12.44	3.62	8.74	10.37
B12 (mcg)	28.09	22.28	57.06	55.30	12.06	34.95	35.95

\*ND = No Data

### Nutrition for Growth of the Weanling Rat (50g weight)

	Required per day	Mazuri Rodent Breeder 9F	Mazuri Rodent Pellets	Nutro Senior Dry Dog Food	EVO Turkey & Chicken Meal Senior Dry Dog Food	Innova Low Fat Adult Dry Dog Food	Innova Senior Dry Dog Food
Minimum Amount consumed (g)		656	642	633	526	2,691	2,699
Minimum Energy (kJ)	8,987	8,987	8,987	8,987	8,987	8,987	8,987
Fat (g)	28.09	42.64	41.73	6.33	85.14	188.35	215.90
Linoleic acid (n-6) (g) Females:	3.37						
Males:	1.12	11.81	20.61	22.15	16.40	48.43	48.58
Linolenic acid (n-3) (g)	ND	0.92	3.79	1.27	1.00	13.72	15.92
Protein (g)	28.09	1,172.90	154.06	126.58	221.26	484.33	485.78
Carbohydrate (g)	ND	ND	ND	ND	ND	ND	ND
Fiber (g)	ND	39.36	28.89	25.32	6.15	122.97	148.43

### Amino Acids (g)

Arginine (g)	ND	7.28	10.08	ND	17.66	31.21	32.12
Aromatic AA's (g)	1.07	9.38	11.94	ND	18.34	32.56	33.20
Histidine (g)	0.45	3.15	3.72	ND	4.84	11.03	11.07
Isoleucine (g)	1.74	4.92	8.09	ND	10.09	18.57	18.89
Leucine (g)	1.01	10.30	12.00	ND	17.82	32.29	33.73
Lysine (g)	0.62	6.30	8.92	ND	16.71	27.18	27.80
Methionine + cystine (g)	1.29	4.85	4.88	ND	8.41	15.88	16.19
Threonine (g)	1.01	4.79	5.78	ND	9.99	17.49	17.81
Tryptophan (g)	0.28	1.31	2.05	ND	2.47	ND	ND
Valine (g)	1.29	6.43	7.83	ND	11.98	22.33	22.67
Other (includes nonessentials) (g)	23.20	5.64	0.00	ND	ND	1.61	ND

### Minerals

Calcium (g)	2.81	6.36	6.10	7.28	11.04	18.03	19.97
Phosphorus (g)	1.69	4.26	4.17	5.70	7.04	16.95	17.54
Ca : P ratio	1.67	1.49	1.46	1.28	1.57	1.06	1.14
Chloride (g)	0.28	3.54	2.57	ND	3.10	ND	ND
Magnesium (g)	0.28	1.18	1.48	ND	0.42	3.23	3.24
Sodium (g)	0.28	1.97	1.41	1.90	1.42	3.23	2.97
Potassium (g)	2.02	5.77	7.90	ND	3.68	ND	ND
Copper (mg)	2.81	14.43	9.63	ND	8.49	37.75	44.50
Iron (mg)	19.66	187.61	127.10	ND	10.55	311.67	405.17

### Nutrition for Growth of the Weanling Rat (50g weight)

	Required per day	Mazuri Rodent Breeder 9F	Mazuri Rodent Pellets	Nutro Senior Dry Dog Food	EVO Turkey & Chicken Meal Senior Dry Dog Food	Innova Low Fat Adult Dry Dog Food	Innova Senior Dry Dog Food
Manganese (mg)	5.62	100.37	55.85	25.32	10.55	78.00	88.52
Zinc (mg)	6.74	107.58	59.06	158.22	125.62	505.07	625.15
Iodine (mcg)	84.26	2.89	0.58	ND	2.07	6.40	8.02
Molybdenum (mcg)	84.26	ND	ND	ND	ND	ND	ND
Selenium (mcg)	84.26	0.05	0.21	ND	0.47	1.00	1.59

### Vitamins

A (IU)	1,291.98	7,576.63	9,885.70	8,227.54	14,880.05	62,752.94	61,575.79
D (IU)	561.73	1,836.76	962.89	ND	1,368.47	605,548.90	5,942.75
E (mg)	10.11	24.14	25.81	106.01	325.74	1,668.25	1,673.26
K (mg)	0.56	2.16	1.93	ND	ND	ND	ND
Biotin (mg)	0.11	0.18	0.12	ND	0.07	0.30	0.30
Choline (mg)	421.30	1,246.37	1,283.86	886.04	1,065.99	3,509.32	3,543.39
Folic acid (mg)	0.56	3.28	1.80	ND	0.43	ND	2.11
Niacin (mg)	8.43	71.50	54.56	ND	17.42	140.00	138.23
Pantothenate (mg)	5.62	15.74	9.63	ND	11.17	57.20	56.46
Riboflavin (mg)	1.69	6.17	3.21	3.80	2.61	11.57	11.39
Thiamin (mg)	2.25	13.12	8.99	6.33	2.09	17.73	17.52
B6 (mg)	3.37	9.84	3.85	6.33	2.38	18.78	15.98
B12 (mcg)	28.09	34.11	12.84	ND	2.15	ND	8.02

\*ND = No Data

\*\*If a value shows up as "0.00" this does NOT necessarily mean that nutrient is not present in the food. It may be present, but in such small amounts it will not show in 2 decimal points. This small amount is likely not significant enough to matter in the animal's diet and should be supplemented if required to maintain good health.

### Nutrition for Growth of the Weanling Rat (50g weight)

	Required per day	"Suebee Mix"	Rat Fan Club Molasses Mix
Minimum Amount consumed (g)		610	1,500
Minimum Energy (kJ)	8,987	8,987	8,987
Fat (g)	28.09	31.21	68.88
Linoleic acid (n-6) (g) Females:	3.37	621.47	3.00
Males:	1.12		
Linolenic acid (n-3) (g)	ND	30.26	0.09
Protein (g)	28.09	72.28	131.05
Carbohydrate (g)	ND	452.26	302.89
Fiber (g)	ND	51.26	47.98

#### Amino Acids (g)

Arginine (g)	ND	3.15	6.84
Aromatic AA's (g)	1.07	4.18	8.04
Histidine (g)	0.45	1.62	3.04
Isoleucine (g)	1.74	2.39	4.72
Leucine (g)	1.01	2.51	8.11
Lysine (g)	0.62	2.34	5.50
Methionine + cystine (g)	1.29	1.87	3.68
Threonine (g)	1.01	2.17	4.59
Tryptophan (g)	0.28	0.64	1.56
Valine (g)	1.29	2.74	5.01
Other (includes nonessentials) (g)	23.20	27.71	58.71

#### Minerals

Calcium (g)	2.81	4.00	6.63
Phosphorus (g)	1.69	1.77	2.67
Ca : P ratio	1.67	2.26	2.49
Chloride (g)	0.28	ND	ND
Magnesium (g)	0.28	0.66	1.02
Sodium (g)	0.28	0.88	0.56
Potassium (g)	2.02	2.86	3.23
Copper (mg)	2.81	2.65	4.70
Iron (mg)	19.66	172.22	67.08

### Nutrition for Growth of the Weanling Rat (50g weight)

	Required per day	"Suebee Mix"	Rat Fan Club Molasses Mix
Manganese (mg)	5.62	10.15	18.16
Zinc (mg)	6.74	75.38	59.10
Iodine (mcg)	84.26	ND	ND
Molybdenum (mcg)	84.26	ND	ND
Selenium (mcg)	84.26	96.38	236.77
<u>Vitamins</u>			
A (IU)	1,291.98	2,872.31	1,226.77
D (IU)	561.73	429.02	219.51
E (mg)	10.11	122.68	69.28
K (mg)	0.56	1.31	20.54
Biotin (mg)	0.11	ND	0.04
Choline (mg)	421.30	57.99	339.29
Folic acid (mg)	0.56	1,788.80	885.61
Niacin (mg)	8.43	170.03	199.96
Pantothenate (mg)	5.62	47.53	28.34
Riboflavin (mg)	1.69	12.62	28.72
Thiamin (mg)	2.25	13.17	28.39
B6 (mg)	3.37	10.25	29.17
B12 (mcg)	28.09	27.48	30.28

\*ND = No Data

\*\*"Suebee Mix" Ingredients: 227g whole oats, 227g dry pasta, 150g puffed wheat, 181g puffed rice, 31g dried sunflower seed kernels, 113g unsalted roasted soy nuts, 227g dried bananas, 340g whole grain Total cereal, 113g nuts & fruit muesli.

### Nutrition for Gestation of the 400g Female Rat

	Required per day		Harlan Teklad 2014 Maintenance		Harlan Teklad 2016		Harlan Teklad 2018	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late
Amount consumed (g)			99	182	95	175	92	170
Energy (kJ) (per g)	1,193	2,207	1,193	2,207	1,193	2,207	1,193	2,207
Fat (g)	3.73	6.90	3.94	7.30	3.79	7.01	3.67	6.79
Linoleic acid (n-6) (g)	0.22	0.00	1.97	3.65	1.89	3.50	1.84	3.40
Linolenic acid (n-3) (g)	ND	ND	0.10	0.18	0.09	0.18	0.09	0.17
Protein (g)	11.18	20.69	14.10	26.08	15.53	28.72	15.05	27.84
Carbohydrate (g)	ND	ND	47.32	87.54	45.91	84.94	44.50	82.33
Fiber (g)	ND	ND	4.04	7.48	3.12	5.78	3.03	5.60
<b>Amino Acids (g)</b>								
Arginine (g)	ND	ND	0.79	1.46	0.76	1.40	0.73	1.36
Aromatic AA's (g)	0.76	1.41	1.08	2.01	1.33	2.45	1.28	2.38
Histidine (g)	0.21	0.39	0.39	0.73	0.38	0.70	0.37	0.68
Isoleucine (g)	0.46	0.86	0.59	1.09	0.66	1.23	0.64	1.19
Leucine (g)	0.80	1.48	1.38	2.55	1.80	3.33	1.74	3.23
Lysine (g)	0.69	1.27	0.69	1.28	0.76	1.40	0.73	1.36
Methionine + cystine (g)	0.73	1.35	0.59	1.09	0.57	1.05	0.55	1.02
Threonine (g)	0.46	0.86	0.49	0.91	0.57	1.05	0.55	1.02
Tryptophan (g)	0.15	0.28	0.20	0.36	0.19	0.35	0.18	0.34
Valine (g)	0.55	1.02	0.69	1.28	0.76	1.40	0.73	1.36
Other (includes nonessentials) (g)	4.92	9.10	7.20	13.31	7.76	14.36	7.52	13.92
<b>Minerals</b>								
Calcium (g)	0.47	0.87	0.69	1.28	0.95	1.75	0.92	1.70
Phosphorus (g)	0.28	0.51	0.59	1.09	0.66	1.23	0.64	1.19
Ca : P ratio	1.70	1.70	1.17	1.17	1.43	1.43	1.43	1.43
Chloride (g)	0.04	0.07	0.30	0.55	0.38	0.70	0.37	0.68
Magnesium (g)	0.04	0.08	0.20	0.36	0.19	0.35	0.18	0.34
Sodium (g)	0.04	0.07	0.10	0.18	0.19	0.35	0.18	0.34
Potassium (g)	0.27	0.50	0.59	1.09	0.57	1.05	0.55	1.02
Copper (mg)	0.60	1.10	1.48	2.74	1.42	2.63	1.38	2.55

### Nutrition for Gestation of the 400g Female Rat

	Required per day		Harlan Teklad 2014 Maintenance		Harlan Teklad 2016		Harlan Teklad 2018	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late
Iron (mg)	5.59	10.35	17.25	31.92	18.93	35.03	18.35	33.95
Manganese (mg)	0.75	1.38	9.86	18.24	9.47	17.51	9.18	16.98
Zinc (mg)	1.86	3.45	6.90	12.77	6.63	12.26	6.42	11.88
Iodine (mcg)	11.18	20.69	0.59	1.09	0.57	1.05	0.55	1.02
Molybdenum (mcg)	11.18	20.69	ND	ND	ND	ND	ND	ND
Selenium (mcg)	29.82	55.18	0.02	0.04	0.02	0.04	0.02	0.04
<b><u>Vitamins</u></b>								
A (IU)	171.49	317.26	0.59	1.09	1.42	2.63	1.38	2.55
D (IU)	74.56	137.94	0.59	1.09	0.14	0.26	0.14	0.25
E (mg)	2.01	3.72	7.93	14.66	6.98	12.91	6.76	12.51
K (mg)	0.07	0.14	1.97	3.65	4.73	8.76	4.59	8.49
Biotin (mg)	0.01	0.03	0.03	0.05	0.04	0.07	0.04	0.07
Choline (mg)	55.92	103.46	101.54	187.85	97.51	180.39	94.51	174.84
Folic acid (mg)	0.07	0.14	0.20	0.36	0.38	0.70	0.37	0.68
Niacin (mg)	1.12	2.07	5.32	9.85	7.10	13.14	6.88	12.73
Pantothenate (mg)	0.75	1.38	1.68	3.10	3.12	5.78	3.03	5.60
Riboflavin (mg)	0.30	0.55	0.59	1.09	1.42	2.63	1.38	2.55
Thiamin (mg)	0.30	0.55	1.18	2.19	1.61	2.98	1.56	2.89
B6 (mg)	0.45	0.83	0.99	1.82	1.70	3.15	1.65	3.06
B12 (mcg)	3.73	6.90	2.96	5.47	7.57	14.01	7.34	13.58

\*ND = No Data

### Nutrition for Gestation of the 400g Female Rat

	Required per day		Mazuri Rodent Diet		Mazuri Rodent Breeder 11F		Mazuri Rodent Breeder 6F		Mazuri Rodent Breeder 9F	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late	402 g early	402 g late
Amount consumed (g)			80	148	83	153	92	170	87	161
Energy (kJ) (per g)	1,193	2,207	1,193	2,207	1,193	2,207	1,193	2,207	1,193	2,207
Fat (g)	3.73	6.90	5.12	9.48	9.36	17.32	5.96	11.03	5.66	10.47
Linoleic acid (n-6) (g)	0.22	0.00	1.03	1.91	1.49	2.75	1.65	3.06	1.57	2.90
Linolenic acid (n-3) (g)	ND	ND	ND	ND	ND	ND	0.13	0.24	0.12	0.23
Protein (g)	11.18	20.69	19.21	35.55	14.91	27.58	164.06	303.51	155.68	288.01
Carbohydrate (g)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fiber (g)	ND	ND	3.20	5.92	4.97	9.19	5.51	10.19	5.22	9.66

### Amino Acids (g)

Arginine (g)	ND	ND	1.23	2.28	0.93	1.72	1.02	1.88	0.97	1.79
Aromatic AA's (g)	0.76	1.41	1.47	2.71	1.22	2.25	1.31	2.43	1.25	2.30
Histidine (g)	0.21	0.39	0.47	0.87	0.40	0.74	0.44	0.81	0.42	0.77
Isoleucine (g)	0.46	0.86	0.94	1.75	0.65	1.20	0.69	1.27	0.65	1.21
Leucine (g)	0.80	1.48	1.50	2.77	1.3	2.45	1.44	2.67	1.37	2.53
Lysine (g)	0.69	1.27	1.08	2.00	0.83	1.53	0.88	1.63	0.84	1.55
Methionine + cystine (g)	0.73	1.35	0.61	1.13	0.57	1.06	0.68	1.26	0.64	1.19
Threonine (g)	0.46	0.86	0.71	1.32	0.65	1.20	0.67	1.24	0.64	1.18
Tryptophan (g)	0.15	0.28	0.25	0.46	0.17	0.31	0.18	0.34	0.17	0.32
Valine (g)	0.55	1.02	0.96	1.78	0.81	1.50	0.90	1.66	0.85	1.58
Other (includes nonessentials) (g)	4.92	9.10	0.88	1.63	0.70	1.30	0.79	1.46	0.75	1.39

### Minerals

Calcium (g)	0.47	0.87	0.76	1.41	0.80	1.49	0.89	1.65	0.84	1.56
Phosphorus (g)	0.28	0.51	0.52	0.96	0.54	1.00	0.60	1.10	0.57	1.05
Ca : P ratio	1.70	1.70	1.46	1.46	1.49	1.49	1.49	1.49	1.49	1.49
Chloride (g)	0.04	0.07	0.32	0.59	0.45	0.83	0.50	0.92	0.47	0.87
Magnesium (g)	0.04	0.08	0.16	0.30	0.15	0.28	0.17	0.31	0.16	0.29
Sodium (g)	0.04	0.07	0.18	0.33	0.25	0.46	0.28	0.51	0.26	0.48
Potassium (g)	0.27	0.50	0.88	1.63	0.78	1.44	0.81	1.49	0.77	1.42
Copper (mg)	0.60	1.10	1.12	2.07	1.82	3.37	2.02	3.73	1.92	3.54

### Nutrition for Gestation of the 400g Female Rat

	Required per day		Mazuri Rodent Diet		Mazuri Rodent Breeder 11F		Mazuri Rodent Breeder 6F		Mazuri Rodent Breeder 9F	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late	402 g early	402 g late
Iron (mg)	5.59	10.35	20.81	38.51	24.60	45.51	26.24	48.55	24.90	46.07
Manganese (mg)	0.75	1.38	6.40	11.85	12.09	22.37	14.04	25.97	13.32	24.64
Zinc (mg)	1.86	3.45	7.45	13.77	12.84	23.75	15.05	27.84	14.28	26.42
Iodine (mcg)	11.18	20.69	0.09	0.16	0.20	0.37	0.40	075	0.38	0.71
Molybdenum (mcg)	11.18	20.69	ND	ND	ND	ND	ND	ND	ND	ND
Selenium (mcg)	29.82	55.18	0.01	0.03	0.00	0.00	0.01	0.01	0.01	0.01
<b><u>Vitamins</u></b>										
A (IU)	171.49	317.26	1,232.87	2,280.81	1,101.72	2,038.19	1,059.79	1,960.62	1,005.64	1,860.44
D (IU)	74.56	137.94	0.14	0.25	248.51	459.74	256.92	475.30	243.79	451.02
E (mg)	2.01	3.72	2.95	5.45	4.64	8.58	3.38	6.25	3.20	5.93
K (mg)	0.07	0.14	0.26	0.47	0.27	0.51	0.30	0.56	0.29	0.53
Biotin (mg)	0.01	0.03	0.01	0.03	0.02	0.05	0.03	0.05	0.02	0.05
Choline (mg)	55.92	103.46	160.11	296.21	165.67	306.49	174.34	322.53	165.43	306.05
Folic acid (mg)	0.07	0.14	0.26	0.49	0.40	0.74	0.46	0.85	0.44	0.81
Niacin (mg)	1.12	2.07	6.32	11.70	4.97	9.19	10.00	18.50	9.49	17.56
Pantothenate (mg)	0.75	1.38	1.20	2.22	1.99	3.68	2.20	4.07	2.09	3.87
Riboflavin (mg)	0.30	0.55	0.40	0.74	0.83	1.53	0.86	1.60	0.82	1.51
Thiamin (mg)	0.30	0.55	1.36	2.52	1.66	3.06	1.84	3.40	1.74	3.22
B6 (mg)	0.45	0.83	0.48	0.89	1.16	2.15	1.38	2.55	1.31	2.42
B12 (mcg)	3.73	6.90	1.60	2.96	4.64	8.58	4.77	8.83	4.53	8.38

\*ND = No Data

\*\*If a value shows up as "0.00" this does NOT necessarily mean that nutrient is not present in the food. It may be present, but in such small amounts it will not show in 2 decimal points. This small amount is likely not significant enough to matter in the animal's diet and should be supplemented if required to maintain good health.

## Nutrition for Gestation of the 400g Female Rat

	Required per day		Mazuri Rodent Pellets		Nutro Senior Dry Dog Food		EVO Turkey & Chicken Meal Senior Dry Dog Food		Innova Low Fat Adult Dry Dog Food	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late	402 g early	402 g late
Amount consumed (g)			85	158	84	155	70	129	357	661
Energy (kJ) (per g)	1,193	2,207	1,193	2,207	1,193	2,207	1,193	2,207	1,193	2,207
Fat (g)	3.73	6.90	5.54	10.25	0.84	1.55	11.30	20.91	25.00	46.25
Linoleic acid (n-6) (g)	0.22	0.00	2.74	5.06	2.94	5.44	2.18	4.03	6.43	11.89
Linolenic acid (n-3) (g)	ND	ND	0.50	0.83	0.17	0.31	0.13	0.25	1.82	3.37
Protein (g)	11.18	20.69	20.45	37.83	16.80	31.08	29.37	54.33	64.28	118.93
Carbohydrate (g)	ND	ND	ND	ND	ND	ND	14.65	27.10	206.07	381.23
Fiber (g)	ND	ND	3.83	7.09	3.36	6.22	0.82	1.51	16.32	30.19

### Amino Acids (g)

Arginine (g)	ND	ND	1.34	2.47	ND	ND	2.34	4.34	4.14	7.66
Aromatic AA's (g)	0.76	1.41	1.58	2.93	ND	ND	2.43	4.50	4.32	7.99
Histidine (g)	0.21	0.39	0.49	0.91	ND	ND	0.64	1.19	1.46	2.71
Isoleucine (g)	0.46	0.86	1.07	1.99	ND	ND	1.34	2.48	2.46	4.56
Leucine (g)	0.80	1.48	1.59	2.95	ND	ND	2.36	4.37	4.29	7.93
Lysine (g)	0.69	1.27	1.18	2.19	ND	ND	2.22	4.10	3.61	6.67
Methionine + cystine (g)	0.73	1.35	0.65	1.20	ND	ND	1.12	2.06	2.11	3.90
Threonine (g)	0.46	0.86	0.77	1.42	ND	ND	1.33	2.45	2.32	4.29
Tryptophan (g)	0.15	0.28	0.27	0.50	ND	ND	0.33	0.61	ND	ND
Valine (g)	0.55	1.02	1.04	1.92	ND	ND	1.59	2.94	2.96	5.48
Other (includes nonessentials) (g)	4.92	9.10	0.00	0.00	ND	ND	ND	ND	0.21	0.40

### Minerals

Calcium (g)	0.47	0.87	0.81	1.50	0.97	1.79	1.46	2.71	2.39	4.43
Phosphorus (g)	0.28	0.51	0.55	1.02	0.76	1.40	0.93	1.73	2.25	4.16
Ca : P ratio	1.70	1.70	1.46	1.46	1.28	1.28	1.57	1.57	1.06	1.06
Chloride (g)	0.04	0.07	0.34	0.63	ND	ND	0.41	0.76	ND	ND
Magnesium (g)	0.04	0.08	0.20	0.36	ND	ND	0.06	0.10	0.43	0.79
Sodium (g)	0.04	0.07	0.19	0.35	0.25	0.47	0.19	0.35	0.43	0.79
Potassium (g)	0.27	0.50	1.05	1.94	ND	ND	0.49	0.90	ND	ND
Copper (mg)	0.60	1.10	1.28	2.36	ND	ND	1.13	2.09	5.01	9.27

### Nutrition for Gestation of the 400g Female Rat

	Required per day		Mazuri Rodent Pellets		Nutro Senior Dry Dog Food		EVO Turkey & Chicken Meal Senior Dry Dog Food		Innova Low Fat Adult Dry Dog Food	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late	402 g early	402 g late
Iron (mg)	5.59	10.35	16.87	31.21	ND	ND	1.40	2.59	41.37	76.53
Manganese (mg)	0.75	1.38	7.41	13.71	3.36	6.22	1.40	2.59	10.35	19.15
Zinc (mg)	1.86	3.45	7.84	14.50	21.00	38.85	16.67	30.85	67.04	124.02
Iodine (mcg)	11.18	20.69	0.08	0.14	ND	ND	0.27	0.51	0.85	1.57
Molybdenum (mcg)	11.18	20.69	ND	ND	ND	ND	ND	ND	ND	ND
Selenium (mcg)	29.82	55.18	0.03	0.05	ND	ND	0.06	0.12	0.1	0.24

### Vitamins

A (IU)	171.49	317.26	1,312.12	2,427.44	1,092.04	2,020.27	1,975.02	3,653.80	8,329.17	15,409.00
D (IU)	74.56	137.94	127.80	236.44	ND	ND	181.64	336.03	80,874.20	148,692.68
E (mg)	2.01	3.72	3.43	6.34	14.07	26.03	43.24	79.99	221.43	409.64
K (mg)	0.07	0.14	0.26	0.47	ND	ND	ND	ND	ND	ND
Biotin (mg)	0.01	0.03	0.02	0.03	ND	ND	0.01	0.02	0.04	0.07
Choline (mg)	55.92	103.46	170.41	315.25	117.60	217.57	141.49	261.76	465.79	861.71
Folic acid (mg)	0.07	0.14	0.24	0.44	ND	ND	0.06	0.10	ND	ND
Niacin (mg)	1.12	2.07	7.24	13.40	ND	ND	2.31	4.28	18.58	34.38
Pantothenate (mg)	0.75	1.38	1.28	2.36	ND	ND	1.48	2.74	7.59	14.04
Riboflavin (mg)	0.30	0.55	0.43	0.79	0.50	0.93	0.35	0.64	1.54	2.84
Thiamin (mg)	0.30	0.55	1.19	2.21	0.84	1.55	0.28	0.51	2.35	4.35
B6 (mg)	0.45	0.83	0.51	0.95	0.84	1.55	0.32	0.58	2.49	4.61
B12 (mcg)	3.73	6.90	1.70	3.15	ND	ND	0.29	0.53	ND	ND

\*ND = No Data

\*\*If a value shows up as "0.00" this does NOT necessarily mean that nutrient is not present in the food. It may be present, but in such small amounts it will not show in 2 decimal points. This small amount is likely not significant enough to matter in the animal's diet and should be supplemented if required to maintain good health.

## Nutrition for Gestation of the 400g Female Rat

	Required per day		Innova Senior Dry Dog Food		"Suebee Mix"		Rat Fan Club Molasses Mix	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late
Amount consumed (g)			358	663	81	150	199	368
Energy (kJ) (per g)	1,193	2,207	1,193	2,207	1,193	2,207	1,193	2,207
Fat (g)	3.73	6.90	28.66	53.02	4.14	7.66	9.14	16.91
Linoleic acid (n-6) (g)	0.22	0.00	6.45	11.93	82.49	152.60	0.04	0.74
Linolenic acid (n-3) (g)	ND	ND	2.11	3.91	4.02	7.43	0.01	0.02
Protein (g)	11.18	20.69	64.48	119.28	9.59	17.75	17.39	32.18
Carbohydrate (g)	ND	ND	ND	ND	60.03	111.05	40.20	74.38
Fiber (g)	ND	ND	19.70	36.45	6.80	12.59	6.37	11.78
<b><u>Amino Acids (g)</u></b>								
Arginine (g)	ND	ND	4.26	7.89	0.42	0.77	0.91	1.68
Aromatic AA's (g)	0.76	1.41	4.41	8.15	0.56	1.03	1.07	1.98
Histidine (g)	0.21	0.39	1.47	2.72	0.21	0.40	0.40	0.75
Isoleucine (g)	0.46	0.86	2.51	4.64	0.31	0.59	0.63	1.16
Leucine (g)	0.80	1.48	4.48	8.28	0.33	0.62	1.08	1.99
Lysine (g)	0.69	1.27	3.69	6.83	0.31	0.57	0.73	1.35
Methionine + cystine (g)	0.73	1.35	2.15	3.98	0.25	0.46	0.49	0.90
Threonine (g)	0.46	0.86	2.36	4.37	0.29	0.53	0.61	1.13
Tryptophan (g)	0.15	0.28	ND	ND	0.08	0.16	0.21	0.38
Valine (g)	0.55	1.02	3.01	5.57	0.36	0.67	0.67	1.23
Other (includes nonessentials) (g)	4.92	9.10	ND	ND	3.68	6.81	7.79	14.42
<b><u>Minerals</u></b>								
Calcium (g)	0.47	0.87	2.65	4.90	0.53	0.98	0.88	1.63
Phosphorus (g)	0.28	0.51	2.33	4.31	0.23	0.43	0.35	0.66
Ca : P ratio	1.70	1.70	1.14	1.14	2.26	2.26	2.49	2.49
Chloride (g)	0.04	0.07	ND	ND	ND	ND	ND	ND
Magnesium (g)	0.04	0.08	0.43	0.80	0.09	0.16	0.14	0.25
Sodium (g)	0.04	0.07	0.39	0.73	0.12	0.22	0.07	0.14
Potassium (g)	0.27	0.50	ND	ND	0.38	0.70	0.43	0.79
Copper (mg)	0.60	1.10	5.91	10.93	0.35	0.65	0.62	1.15
Iron (mg)	5.59	10.35	53.79	99.49	22.86	42.29	8.90	16.47

### Nutrition for Gestation of the 400g Female Rat

	Required per day		Innova Senior Dry Dog Food		"Suebee Mix"		Rat Fan Club Molasses Mix	
	400 g early	400 g late	400 g early	400 g late	401 g early	401 g late	402 g early	402 g late
Manganese (mg)	0.75	1.38	11.75	21.74	1.35	2.49	2.41	4.46
Zinc (mg)	1.86	3.45	82.98	153.51	10.00	18.51	7.84	14.51
Iodine (mcg)	11.18	20.69	1.06	1.97	ND	ND	ND	ND
Molybdenum (mcg)	11.18	20.69	ND	ND	ND	ND	ND	ND
Selenium (mcg)	29.82	55.18	0.21	0.39	12.79	23.67	31.43	58.14

### Vitamins

A (IU)	171.49	317.26	8,172.92	15,119.95	381.24	705.30	162.83	301.23
D (IU)	74.56	137.94	788.78	1,459.24	56.94	105.35	29.14	53.90
E (mg)	2.01	3.72	222.09	410.87	16.28	30.13	9.20	17.01
K (mg)	0.07	0.14	ND	ND	0.17	0.32	2.73	5.04
Biotin (mg)	0.01	0.03	0.04	0.07	ND	ND	0.01	0.01
Choline (mg)	55.92	103.46	470.31	870.08	7.70	14.24	45.03	83.31
Folic acid (mg)	0.07	0.14	0.28	0.52	237.43	439.24	117.55	217.46
Niacin (mg)	1.12	2.07	18.35	33.94	22.57	41.75	26.54	49.10
Pantothenate (mg)	0.75	1.38	7.49	13.86	6.31	11.67	3.76	6.96
Riboflavin (mg)	0.30	0.55	1.51	2.80	1.68	3.10	3.81	7.05
Thiamin (mg)	0.30	0.55	2.32	4.30	1.75	3.23	3.77	6.97
B6 (mg)	0.45	0.83	2.12	3.92	1.36	2.52	3.87	7.16
B12 (mcg)	3.73	6.90	1.06	1.97	3.65	6.75	4.02	7.44

\*ND = No Data

\*\*"Suebee Mix" Ingredients: 227g whole oats, 227g dry pasta, 150g puffed wheat, 181g puffed rice, 31g dried sunflower seed kernels, 113g unsalted roasted soy nuts, 227g dried bananas, 340g whole grain Total cereal, 113g nuts & fruit muesli.

### Nutrition for Lactation of the 400g Female Rat

	Required per day	Harlan Teklad 2014	Harlan Teklad 2016	Harlan Teklad 2018	Mazuri Rodent Diet	Mazuri Rodent Breeder 11F	Mazuri Rodent Breeder 6F
Minimum Amount consumed (g)		214	205	199	173	179	199
Minimum Energy (kJ) (per g)	2,584	2,584	2,584	2,584	2,584	2,584	2,584
Fat (g)	8.08	8.54	8.20	7.95	11.10	20.28	12.92
Linoleic acid (n-6) (g)	0.48	4.27	4.10	3.98	2.24	3.23	3.58
Linolenic acid (n-3) (g)	ND	0.21	0.21	0.20	ND	ND	0.28
Protein (g)	24.23	30.54	33.64	32.60	41.63	32.31	355.45
Carbohydrate (g)	ND	102.52	99.48	96.42	ND	ND	ND
Fiber (g)	ND	8.76	6.77	6.56	6.94	10.77	11.93
<b><u>Amino Acids (g)</u></b>							
Arginine (g)	ND	1.71	1.64	1.59	2.67	2.01	2.21
Aromatic AA's (g)	1.65	2.35	2.87	2.78	3.17	2.64	2.84
Histidine (g)	0.45	0.85	0.82	0.80	1.02	0.86	0.95
Isoleucine (g)	1.00	1.28	1.44	1.39	2.05	1.40	1.49
Leucine (g)	1.73	2.99	3.90	3.78	3.24	2.87	3.12
Lysine (g)	1.49	1.50	1.64	1.59	2.34	1.79	1.91
Methionine + cystine (g)	1.58	1.28	1.23	1.19	1.32	1.24	1.47
Threonine (g)	1.00	1.07	1.23	1.19	1.54	1.40	1.45
Tryptophan (g)	0.32	0.43	0.41	0.40	0.54	0.36	0.40
Valine (g)	1.20	1.50	1.64	1.59	2.08	1.76	1.95
Other (includes nonessentials) (g)	10.66	15.59	16.82	16.30	1.91	1.53	1.71
<b><u>Minerals</u></b>							
Calcium (g)	1.02	1.50	2.05	1.99	1.65	1.74	1.93
Phosphorus (g)	0.60	1.28	1.44	1.39	1.13	1.17	1.29
Ca : P ratio	1.70	1.17	1.43	1.43	1.46	1.49	1.49
Chloride (g)	0.08	0.64	0.82	0.80	0.69	0.97	1.07
Magnesium (g)	0.10	0.43	0.41	0.40	0.35	0.32	0.36
Sodium (g)	0.08	0.21	0.41	0.40	0.38	0.54	0.60
Potassium (g)	0.58	1.28	1.23	1.19	1.91	1.69	1.75
Copper (mg)	1.29	3.20	3.08	2.98	2.43	3.95	4.37
Iron (mg)	12.11	37.38	41.02	39.76	45.10	53.30	56.86
Manganese (mg)	1.62	21.36	20.51	19.88	13.88	26.20	30.42
Zinc (mg)	4.04	14.95	14.36	13.92	16.13	27.82	32.60

### Nutrition for Lactation of the 400g Female Rat

	Required per day	Harlan Teklad 2014	Harlan Teklad 2016	Harlan Teklad 2018	Mazuri Rodent Diet	Mazuri Rodent Breeder 11F	Mazuri Rodent Breeder 6F
Iodine (mcg)	24.23	1.28	1.23	1.19	0.19	0.43	0.87
Molybdenum (mcg)	24.23	ND	ND	ND	ND	ND	ND
Selenium (mcg)	64.61	0.05	0.05	0.05	0.03	0.00	0.01

### Vitamins

A (IU)	371.52	1.28	3.08	2.98	2,671.12	2,386.98	2,296.14
D (IU)	161.53	1.28	0.31	0.30	0.29	538.42	556.64
E (mg)	4.36	17.17	15.12	14.65	6.38	10.05	7.32
K (mg)	0.16	4.27	10.26	9.94	0.56	0.59	0.66
Biotin (mg)	0.03	0.06	0.08	0.08	0.03	0.05	0.06
Choline (mg)	121.15	219.99	211.26	204.76	346.90	358.94	377.72
Folic acid (mg)	0.16	0.43	0.82	0.80	0.57	0.86	0.99
Niacin (mg)	2.42	11.53	15.38	14.91	13.70	10.77	21.67
Pantothenate (mg)	1.62	3.63	6.77	6.56	2.60	4.31	4.77
Riboflavin (mg)	0.65	1.28	3.08	2.98	0.87	1.79	1.87
Thiamin (mg)	0.65	2.56	3.49	3.38	2.95	3.59	3.98
B6 (mg)	0.97	2.14	3.69	3.58	1.04	2.51	2.98
B12 (mcg)	8.08	6.41	16.41	15.90	3.47	10.05	10.34

\*ND = No Data

\*\*If a value shows up as "0.00" this does NOT necessarily mean that nutrient is not present in the food. It may be present, but in such small amounts it will not show in 2 decimal points. This small amount is likely not significant enough to matter in the animal's diet and should be supplemented if required to maintain good health.

## Nutrition for Lactation of the 400g Female Rat

	Required per day	Mazuri Rodent Breeder 9F	Mazuri Rodent Pellets	Nutro Senior Dry Dog Food	EVO Turkey & Chicken Meal Senior Dry Dog Food	Innova Low Fat Adult Dry Dog Food	Innova Senior Dry Dog Food
Minimum Amount consumed (g)		189	85	182	151	774	776
Minimum Energy (kJ) (per g)	2,584	2,584	2,584	2,584	2,584	2,584	2,584
Fat (g)	8.08	12.26	12.00	1.82	24.48	54.16	62.09
Linoleic acid (n-6) (g)	0.48	3.40	5.93	6.37	4.72	13.93	13.97
Linolenic acid (n-3) (g)	ND	0.26	1.09	0.36	0.29	3.95	4.58
Protein (g)	24.23	337.29	44.30	36.40	63.63	139.28	139.70
Carbohydrate (g)	ND	ND	ND	ND	31.74	446.47	ND
Fiber (g)	ND	11.32	8.31	7.28	1.77	35.36	42.69
<b><u>Amino Acids (g)</u></b>							
Arginine (g)	ND	2.09	2.90	ND	5.08	8.98	9.24
Aromatic AA's (g)	1.65	2.70	3.43	ND	5.27	9.36	9.55
Histidine (g)	0.45	0.91	1.07	ND	1.39	3.17	3.18
Isoleucine (g)	1.00	1.41	2.33	ND	2.90	5.34	5.43
Leucine (g)	1.73	2.96	3.45	ND	5.12	9.29	9.70
Lysine (g)	1.49	1.81	2.57	ND	4.81	7.82	7.99
Methionine + cystine (g)	1.58	1.40	1.40	ND	2.42	4.57	4.66
Threonine (g)	1.00	1.38	1.66	ND	2.87	5.03	5.12
Tryptophan (g)	0.32	0.38	0.59	ND	0.71	ND	ND
Valine (g)	1.20	1.85	2.25	ND	3.45	6.42	6.52
Other (includes nonessentials) (g)	10.66	1.62	0.00	ND	ND	0.46	ND
<b><u>Minerals</u></b>							
Calcium (g)	1.02	1.83	1.75	2.09	3.17	5.18	5.74
Phosphorus (g)	0.60	1.23	1.20	1.64	2.03	4.87	5.04
Ca : P ratio	1.70	1.49	1.46	1.28	1.57	1.06	1.14
Chloride (g)	0.08	1.02	0.74	ND	0.89	ND	ND
Magnesium (g)	0.10	0.34	0.42	ND	0.12	0.93	0.93
Sodium (g)	0.08	0.57	0.41	0.55	0.41	0.93	0.85
Potassium (g)	0.58	1.66	2.27	ND	1.06	ND	ND
Copper (mg)	1.29	4.15	2.77	ND	2.44	10.86	12.80
Iron (mg)	12.11	53.95	36.55	ND	3.03	89.63	116.52
Manganese (mg)	1.62	28.86	16.06	7.28	3.03	22.43	25.46

### Nutrition for Lactation of the 400g Female Rat

	Required per day	Mazuri Rodent Breeder 9F	Mazuri Rodent Pellets	Nutro Senior Dry Dog Food	EVO Turkey & Chicken Meal Senior Dry Dog Food	Innova Low Fat Adult Dry Dog Food	Innova Senior Dry Dog Food
Zinc (mg)	4.04	30.94	16.98	45.50	36.12	145.24	179.77
Iodine (mcg)	24.23	0.83	0.17	ND	0.60	1.84	2.31
Molybdenum (mcg)	24.23	ND	ND	ND	ND	ND	ND
Selenium (mcg)	64.61	0.01	0.06	ND	0.14	0.29	0.46

### Vitamins

A (IU)	371.52	2,178.82	2,842.84	2,366.00	4,279.07	18,045.92	17,707.41
D (IU)	161.53	528.20	276.90	ND	393.53	174,138.26	1,708.96
E (mg)	4.36	6.94	7.42	30.49	93.67	479.74	481.18
K (mg)	0.16	0.62	0.55	ND	ND	ND	ND
Biotin (mg)	0.03	0.05	0.04	ND	0.02	0.09	0.09
Choline (mg)	121.15	358.42	369.20	254.80	306.55	1,009.18	1,018.98
Folic acid (mg)	0.16	0.94	0.52	ND	0.12	ND	0.61
Niacin (mg)	2.42	20.56	15.69	ND	5.01	40.26	39.75
Pantothenate (mg)	1.62	4.53	2.77	ND	3.21	16.45	16.24
Riboflavin (mg)	0.65	1.77	0.92	1.09	0.75	3.33	3.28
Thiamin (mg)	0.65	3.77	2.58	1.82	0.60	5.10	5.04
B6 (mg)	0.97	2.83	1.11	1.82	0.68	5.40	4.59
B12 (mcg)	8.08	9.81	3.69	ND	0.62	ND	2.31

\*ND = No Data

\*\*If a value shows up as "0.00" this does NOT necessarily mean that nutrient is not present in the food. It may be present, but in such small amounts it will not show in 2 decimal points. This small amount is likely not significant enough to matter in the animal's diet and should be supplemented if required to maintain good health.

## Nutrition for Lactation of the 400g Female Rat

	Required per day	"Suebee Mix"	Rat Fan Club Molasses Mix
Minimum Amount consumed (g)		175	431
Minimum Energy (kJ) (per g)	2,584	2,584	2,584
Fat (g)	8.08	8.97	19.81
Linoleic acid (n-6) (g)	0.48	178.72	0.86
Linolenic acid (n-3) (g)	ND	8.70	0.03
Protein (g)	24.23	20.79	37.68
Carbohydrate (g)	ND	130.06	87.10
Fiber (g)	ND	14.74	13.80
<b><u>Amino Acids (g)</u></b>			
Arginine (g)	ND	0.91	1.97
Aromatic AA's (g)	1.65	1.20	2.31
Histidine (g)	0.45	0.46	0.87
Isoleucine (g)	1.00	0.69	1.36
Leucine (g)	1.73	0.72	2.33
Lysine (g)	1.49	0.67	1.58
Methionine + cystine (g)	1.58	0.54	1.06
Threonine (g)	1.00	0.62	1.32
Tryptophan (g)	0.32	0.18	0.45
Valine (g)	1.20	0.79	1.44
Other (includes nonessentials) (g)	10.66	7.97	16.88
<b><u>Minerals</u></b>			
Calcium (g)	1.02	1.15	1.91
Phosphorus (g)	0.60	0.51	0.77
Ca : P ratio	1.70	2.26	2.49
Chloride (g)	0.08	ND	ND
Magnesium (g)	0.10	0.19	0.29
Sodium (g)	0.08	0.25	0.16
Potassium (g)	0.58	0.82	0.93
Copper (mg)	1.29	0.76	1.35
Iron (mg)	12.11	49.52	19.29
Manganese (mg)	1.62	2.92	5.2
Zinc (mg)	4.04	21.68	17.00

### Nutrition for Lactation of the 400g Female Rat

	Required per day	"Suebee Mix"	Rat Fan Club Molasses Mix
Iodine (mcg)	24.23	ND	ND
Molybdenum (mcg)	24.23	ND	ND
Selenium (mcg)	64.61	27.72	68.09
<u>Vitamins</u>			
A (IU)	371.52	825.99	352.78
D (IU)	161.53	123.37	6312
E (mg)	4.36	35.28	19.92
K (mg)	0.16	0.38	5.91
Biotin (mg)	0.03	ND	0.01
Choline (mg)	121.15	16.68	97.57
Folic acid (mg)	0.16	514.41	254.68
Niacin (mg)	2.42	48.90	57.50
Pantothenate (mg)	1.62	13.67	8.15
Riboflavin (mg)	0.65	3.63	8.26
Thiamin (mg)	0.65	3.79	8.17
B6 (mg)	0.97	2.95	8.39
B12 (mcg)	8.08	7.90	8.71

\*ND = No Data

\*\*"Suebee Mix" Ingredients: 227g whole oats, 227g dry pasta, 150g puffed wheat, 181g puffed rice, 31g dried sunflower seed kernels, 113g unsalted roasted soy nuts, 227g dried bananas, 340g whole grain Total cereal, 113g nuts & fruit muesli.