



Diet

SF02-006

60% Fat Modification of AIN93G

A very high fat semi-pure diet formulation for laboratory rats and mice based on AIN-93G.

- The high fat content has resulted in a 74% increase in calculated energy. To allow for the high fat inclusion, the carbohydrate content has been reduced.
- The fatty acid profile has an increased proportion of saturated and mono-unsaturated fats.
- Changes in all other nutritional parameters have been kept to a minimum.
- In one research facility this formulation induced clear evidence of insulin resistance after six weeks feeding.
- The high fat content has necessitated a change in the diet from away from a pellet to a small block. The block contains around 25 grams of diet and can be fed "as is" or cut into smaller sections for feeding.

Calculated Nutritional Parameters	
Protein	19.40%
Total Fat	60.00%
Crude Fibre	4.70%
AD Fibre	4.70%
Digestible Energy	24 MJ / Kg
% Total calculated digestible energy from lipids	81.00%
% Total calculated digestible energy from protein	13.00%

Diet Form and Features

Ingredients	
Casein (Acid)	200 g/Kg
Sucrose	106 g/Kg
Canola Oil	100 g/Kg
Cocoa Butter	400 g/Kg
Clarified Butter Fat (Ghee)	100 g/Kg
Cellulose	50 g/Kg
DL Methionine	3.0 g/Kg
Calcium Carbonate	13.1 g/Kg
Sodium Chloride	2.6 g/Kg
AIN93 Trace Minerals	1.4 g/Kg
Potassium Citrate	2.5 g/Kg
Potassium Dihydrogen Phosphate	6.9 g/Kg
Potassium Sulphate	1.6 g/Kg
Choline Chloride (75%)	2.5 g/Kg
AIN93 Vitamins	10 g/Kg

Calculated Amino Acids	
Valine	1.30%
Leucine	1.80%
Isoleucine	0.90%
Threonine	0.80%
Methionine	0.80%
Cystine	0.06%
Lysine	1.50%
Phenylalanine	1.00%
Tyrosine	1.00%
Tryptophan	0.30%
Histidine	0.60%

Calculated Total Minerals	
Calcium	0.46%
Phosphorous	0.30%
Magnesium	0.08%
Sodium	0.11%
Chloride	0.16%
Potassium	0.38%
Sulphur	0.22%
Iron	70 mg/Kg
Copper	6.7 mg/Kg
Iodine	0.2 mg/Kg
Manganese	16.5 mg/Kg
Cobalt	No data
Zinc	50 mg/Kg
Molybdenum	0.15 mg/Kg
Selenium	0.3 mg/Kg
Cadmium	No data
Chromium	1.0 mg/Kg
Fluoride	1.0 mg/Kg
Lithium	0.1 mg/Kg
Boron	2.1 mg/Kg
Nickel	0.5 mg/Kg
Vanadium	0.1 mg/Kg

Calculated Total Vitamins		Calculated Fatty Acid Composition	
Vitamin A (Retinol)	4 790 IU/Kg	Saturated Fats C12:0 or less	1.10%
Vitamin D (Cholecalciferol)	1 000 IU/Kg	Myristic Acid 14:0	1.30%
Vitamin E (a Tocopherol acetate)	94 mg/Kg	Palmitic Acid 16:0	14.00%
Vitamin K (Menadione)	1 mg/Kg	Stearic Acid 18:0	16.00%
Vitamin C (Ascorbic acid)	None added	Arachidic Acid 20:0	0.50%
Vitamin B1 (Thiamine)	6.1 mg/Kg	Palmitoleic Acid 16:1	0.30%
Vitamin B2 (Riboflavin)	6.3 mg/Kg	Oleic Acid 18:1	22.00%
Niacin (Nicotinic acid)	30 mg/Kg	Gadoleic Acid 20:1	0.20%
Vitamin B6 (Pryridoxine)	7 mg/Kg	Linoleic Acid 18:2 n6	3.40%
Pantothenic Acid	16.5 mg/Kg	a Linolenic Acid 18:3 n3	1.20%
Biotin	200 ug/Kg	Arachadonic Acid 20:4 n6	Trace
Folic Acid	2 mg/Kg	EPA 20:5 n3	Trace
Inositol	None added	DHA 22:6 n3	No data
Vitamin B12 (Cyancobalamin)	103 ug/Kg	Total n3	1.39%
Choline	1670 mg/Kg	Total n6	3.41%
		Total Mono Unsaturated Fats	22.22%
		Total Polyunsaturated Fats	4.80%
		Total Saturated Fats	32.84%

Calculated data uses information from typical raw material composition. It could be expected that individual batches of diet will vary from this figure. **Diet post treatment by irradiation or auto clave could change these parameters.**

We are happy to provide full calculated nutritional information for all of our products, however we would like to emphasise that these diets have been specifically designed for manufacture by Specialty Feeds.