



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 C57BL/6 Mice. Results will vary with different strains of rats and mice.
- 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	27 MJ / Kg
% Total calculated digestible energy from lipids	81.00%
% Total calculated digestible energy from protein	13.00%

Diet Form and Features

- Semi pure diet. 15mm x 20mm block to mimic similar size of pellet.
- Packed in plastic trays. Trays packed in groups of five (5). with a protective layer of cling wrap between each tray to protect diet.
- Vacuum packed under nitrogen in oxygen impermeable bags. Packed in cardboard cartons for protection during transit.
- Diet must be stored under 20°C
- Diet not suitable for irradiation or autoclave
- Lead time 2 weeks



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
L 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 as Fed	
Valine	1.30%
Leucine	1.80%
Isoleucine	0.90%
Threonine	0.80%
Methionine	0.80%
Cysteine	0.06%
Lysine	1.50%
Phenylalanine	1.00%
Tyrosine	1.00%
Tryptophan	0.30%
Histidine	0.60%

Calculated Total Minerals as Fed	
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 as Fed	
Vitamin A (Retinol)	4 790 IU/Kg
Vitamin D (Cholecalciferol)	1 000 IU/Kg
Vitamin E (a Tocopherol acetate)	94 mg/Kg
Vitamin K (Menadione)	1 mg/Kg
Vitamin C (Ascorbic acid)	None added
Vitamin B1 (Thiamine)	6.1 mg/Kg
Vitamin B2 (Riboflavin)	6.3 mg/Kg
Niacin (Nicotinic acid)	30 mg/Kg
Vitamin B6 (Pryridoxine)	7 mg/Kg
Pantothenic Acid	16.5 mg/Kg
Biotin	200 ug/Kg
Folic Acid	2 mg/Kg
Inositol	None added
Vitamin B12 (Cyancobalamin)	103 ug/Kg
Choline	1970 mg/Kg

Calculated Fatty Acid Composition as Fed	
Saturated Fats C12:0 or less	1.10%
Myristic Acid 14:0	1.30%
Palmitic Acid 16:0	14.00%
Stearic Acid 18:0	16.00%
Arachidic Acid 20:0	0.50%
Palmitoleic Acid 16:1	0.30%
Oleic Acid 18:1	22.00%
Gadoleic Acid 20:1	0.20%
Linoleic Acid 18:2 n6	3.40%
a Linolenic Acid 18:3 n3	1.20%
Arachadonic Acid 20:4 n6	Trace
EPA 20:5 n3	Trace
DHA 22:6 n3	No data
Total n3	1.39%
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.

