

DESCRIPTION

Advanced Protocol® PicoLab® Verified Rodent 50 IF Diet is a Constant Nutrition®, 20 % protein diet, formulated for rat and mouse colonies where dietary estrogenic activity needs to be assured. This diet is formulated using the unique and innovative concept of Constant Nutrition®, paired with the selection of highest quality ingredients to assure minimal inherent biological variation in long-term studies. Irradiation and special 4-ply packaging provide a virtually bacteria-free diet. It is especially suited for animals maintained in barrier facilities. To be fed free choice.

Features and Benefits

- Constant Nutrition® formula helps minimize nutritional variables
- Formulated with 20% protein
- Verified to contain less than 50 ppm total isoflavones (genistein, daidzein and glycitein)
- Precision processing assures Constant Nutrition® quality
- Irradiation gives reliable microbial control and eliminates the need for autoclaving

Product Forms Available

- Oval pellets, 10 mm x 16 mm x 25 mm length (3/8"x5/8"x1")
- Meal (ground pellets), special order

Other Versions Available

- 5V11: Advanced Protocol Extruded Verified Rodent 50 IF Diet

Strains not requiring high fat diets for optimum reproductive performance should be fed 5V02 (4.5% fat). Strains requiring high fat diets should receive Advanced Protocol® Verified PicoLab® Mouse 50 IF Diet - 5V03 (9% fat) when involved in protocols measuring estrogen-sensitive parameters.

An estrogen-sensitive parameter in the growing, ovariectomized mouse is the uterus. A smaller uterus indicates less estrogenic activity in the diet. As a percent of total body weight, mice receiving a diet with less than 50 ppm total isoflavones produced a uterus that was 15% smaller than those receiving a diet with approximately 400 ppm total isoflavones.

Outbred (Sprague-Dawley) rats consuming 5001 had similar reproductive performance (pups at birth and weaning) to those consuming 5V02.

Inbred (Fischer-344) rats are more sensitive to low isoflavone levels. They produced fewer pups when fed 5V02 (<50 ppm isoflavone) compared to 5001 (>400 ppm isoflavone).

GUARANTEED ANALYSIS

Crude protein not less than	20.0%
Crude fat not less than	4.5%
Crude fiber not more than	6.0%

INGREDIENTS

Ground corn, ground wheat, wheat middlings, corn gluten meal, casein, soybean oil, calcium carbonate, brewers dried yeast, potassium carbonate, dicalcium phosphate, monocalcium phosphate, salt, DL-methionine, L-lysine, menadione dimethylpyrimidinol bisulfite, choline chloride, magnesium oxide, L-tryptophan, pyridoxine hydrochloride, chromium potassium sulfate, tocopherols (a preservative), cholecalciferol, vitamin A acetate, biotin, dl-alpha tocopheryl acetate, thiamin mononitrate, folic acid, calcium pantothenate, vitamin B₁₂ supplement, nicotinic acid, riboflavin, ferrous sulfate, manganese oxide, zinc oxide, ferrous carbonate, copper sulfate, zinc sulfate, calcium iodate, cobalt carbonate, sodium selenite.

FEEDING DIRECTIONS

Feed ad libitum. Plenty of fresh, clean water should be available to the animals at all times.

Rats- All rats will eat varying amounts of feed depending on their genetic origin. Larger strains will eat up to 30 grams per day. Smaller strains will eat up to 15 grams per day. Feeders in rat cages should be designed to hold two to three days supply of feed at one time.

Mice-Adult mice will eat up to 5 grams of pelleted ration daily. Some of the larger strains may eat as much as 8 grams per day per animal. Feed should be available on a free choice basis in wire feeders above the floor of the cage.

Hamsters-Adults will eat up to 14 grams per day.

CHEMICAL COMPOSITION¹

Nutrients²		Sulfur, %	.022
Protein, %	20.0	Sodium, %	.024
Arginine, %	.079	Chlorine, %	.085
Cystine, %	.027	Fluorine, ppm	.15
Glycine, %	.061	Iron, ppm	.200
Histidine, %	.047	Zinc, ppm	.120
Isoleucine, %	.096	Manganese, ppm	.130
Leucine, %	.231	Copper, ppm	.15
Lysine, %	.115	Cobalt, ppm	.045
Methionine, %	.051	Iodine, ppm	.15
Phenylalanine, %	.107	Chromium, ppm	.10
Tyrosine, %	.081	Selenium, ppm	.033
Threonine, %	.070		
Tryptophan, %	.024	Vitamins	
Valine, %	.105	Carotene, ppm	.20
Serine, %	.103	Vitamin K (as menadione), ppm	.71
Aspartic Acid, %	.142	Thiamin Hydrochloride, ppm	.18
Glutamic Acid, %	.506	Riboflavin, ppm	.85
Alanine, %	.130	Niacin, ppm	.120
Proline, %	.206	Pantothenic Acid, ppm	.22
Taurine, %	.000	Choline Chloride, ppm	.2000
Fat (ether extract), %	.50	Folic Acid, ppm	.27
Fat (acid hydrolysis), %	.61	Pyridoxine, ppm	.11
Cholesterol, ppm	.000	Biotin, ppm	.030
Linoleic Acid, %	.291	B ₁₂ , mcg/kg	.51
Linolenic Acid, %	.028	Vitamin A, IU/gm	.15
Arachidonic Acid, %	.000	Vitamin D ₃ (added), IU/gm	.20
Omega-3 Fatty Acids, %	.028	Vitamin E, IU/kg	.100
Total Saturated Fatty Acids, %	.095	Ascorbic Acid, mg/gm	—
Total Monounsaturated			
Fatty Acids, %	.119	Calories provided by:	
Fiber (Crude), %	.31	Protein, %	.22.894
Neutral Detergent Fiber ³ , %	.153	Fat (ether extract), %	.12.729
Acid Detergent Fiber ⁴ , %	.44	Carbohydrates, %	.64.377
Nitrogen-Free Extract		*Product Code	
(by difference), %	.56.4	1. Formulation based on calculated values from the latest ingredient analysis information. Since nutrient composition of natural ingredients varies and some nutrient loss will occur due to manufacturing processes, analysis will differ accordingly.	
Starch, %	.41.9	2. Nutrients expressed as percent of ration except where otherwise indicated. Moisture content is assumed to be 10.0% for the purpose of calculations.	
Glucose, %	.020	3. NDF = approximately cellulose, hemicellulose and lignin.	
Fructose, %	.019	4. ADF = approximately cellulose and lignin.	
Sucrose, %	.036	5. Physiological Fuel Value (kcal/gm) = Sum of decimal fractions of protein, fat and carbohydrate (use Nitrogen Free Extract) x 4,9,4 kcal/gm respectively.	
Lactose, %	.000		
Total Digestible Nutrients, %	.77.7		
Gross Energy, kcal/gm	4.17		
Physiological Fuel Value⁵,			
kcal/gm	3.50		
Metabolizable Energy,			
kcal/gm	3.27		
Minerals			
Ash, %	.5.3		
Calcium, %	.081		
Phosphorus, %	.055		
Phosphorus (non-phytate), %	.030		
Potassium, %	.080		
Magnesium, %	.020		