

**DESCRIPTION**

Advanced Protocol® Verified 75 IF Irradiated is a Constant Nutrition® formulation providing 20% protein for mice and rats in protocols where low 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.

**Features and Benefits**

- Constant Nutrition® formula helps minimize nutritional variables
- Formulated with 20% protein
- Verified to contain less than 75 ppm total isoflavones (genistein, daidzein and glycitein)
- Provides proper nutrients without affecting outcome in estrogen-sensitive protocols
- 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**

- 5V75: Advanced Protocol Verified 75 IF Diet (Non-Irradiated)

**GUARANTEED ANALYSIS**

Crude protein not less than	20.0%
Crude fat not less than	4.5%
Crude fiber not more than	4.0%

**INGREDIENTS**

Ground wheat, wheat middlings, corn gluten meal, ground corn, wheat germ, cane molasses, dried beet pulp, soybean oil, calcium carbonate, dicalcium phosphate, monocalcium phosphate, L-lysine, dehulled soybean meal, salt, DL-methionine, dried whey, choline chloride, menadione dimethylpyrimidinol bisulfite, L-tryptophan, pyridoxine hydrochloride, chromium potassium sulfate, potassium chloride, tocopherols, cholecalciferol, vitamin A acetate, magnesium oxide, biotin, dl-alpha tocopheryl acetate, folic acid, thiamin mononitrate, vitamin B<sub>12</sub> supplement, calcium pantothenate, nicotinic acid, riboflavin, zinc oxide, manganese 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 COMPOSITION<sup>1</sup>**

**Nutrients<sup>2</sup>**

<b>Protein, %</b>	<b>20.0</b>
Arginine, %	0.79
Cystine, %	0.31
Glycine, %	0.60
Histidine, %	0.40
Isoleucine, %	0.83
Leucine, %	2.17
Lysine, %	1.00
Methionine, %	0.66
Phenylalanine, %	0.99
Tyrosine, %	0.71
Threonine, %	0.62
Tryptophan, %	0.24
Valine, %	0.86
Serine, %	0.93
Aspartic Acid, %	1.19
Glutamic Acid, %	4.85
Alanine, %	1.23
Proline, %	1.92
Taurine, %	0.00

<b>Fat (ether extract), %</b>	<b>5.0</b>
<b>Fat (acid hydrolysis), %</b>	<b>5.5</b>
Cholesterol, ppm	0.00
Linoleic Acid, %	2.70
Linolenic Acid, %	0.28
Arachidonic Acid, %	0.00
Omega-3 Fatty Acids, %	0.30
Total Saturated Fatty Acids, %	0.86
Total Monounsaturated Fatty Acids, %	1.08

<b>Fiber (Crude), %</b>	<b>3.8</b>
Neutral Detergent Fiber <sup>3</sup> , %	17.0
Acid Detergent Fiber <sup>4</sup> , %	5.5

**Nitrogen-Free Extract (by difference), %**

<b>Starch, %</b>	<b>32.9</b>
Glucose, %	0.11
Fructose, %	0.10
Sucrose, %	2.48
Lactose, %	0.15
<b>Total Digestible Nutrients, %</b>	<b>77.4</b>
<b>Gross Energy, kcal/gm</b>	<b>4.12</b>
<b>Physiological Fuel Value<sup>5</sup>, kcal/gm</b>	<b>3.47</b>
<b>Metabolizable Energy, kcal/gm</b>	<b>3.23</b>

**Minerals**

<b>Ash, %</b>	<b>5.4</b>
Calcium, %	0.87
Phosphorus, %	0.60
Phosphorus (non-phytate), %	0.32
Potassium, %	0.64
Magnesium, %	0.20

Sulfur, %	0.24
Sodium, %	0.25
Chlorine, %	0.58
Fluorine, ppm	15
Iron, ppm	220
Zinc, ppm	130
Manganese, ppm	130
Copper, ppm	17
Cobalt, ppm	0.63
Iodine, ppm	1.5
Chromium, ppm	1.3
Selenium, ppm	0.34

**Vitamins**

Carotene, ppm	2.2
Vitamin K (as menadione), ppm	4.0
Thiamin Hydrochloride, ppm	12
Riboflavin, ppm	7.0
Niacin, ppm	94
Pantothenic Acid, ppm	18
Choline Chloride, ppm	2000
Folic Acid, ppm	2.5
Pyridoxine, ppm	10
Biotin, ppm	0.30
B <sub>12</sub> , mcg/kg	51
Vitamin A, IU/gm	15
Vitamin D <sub>3</sub> (added), IU/gm	2.2
Vitamin E, IU/kg	70
Ascorbic Acid, mg/gm	—

**Calories provided by:**

Protein, %	23.035
Fat (ether extract), %	12.886
Carbohydrates, %	64.078

**\*Product Code**

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.
2. Nutrients expressed as percent of ration except where otherwise indicated. Moisture content is assumed to be 10.0% for the purpose of calculations.
3. NDF = approximately cellulose, hemicellulose and lignin.
4. ADF = approximately cellulose and lignin.
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.