November 18, 2010

NIH SPECIFICATION 51

DRY FEED FOR RODENTS
(23.9% Protein, 5.1% Crude Fiber, 5% Fat)

1. SCOPE

1.1 This specification is for a commercially available closed formula pelleted ration for rodents which is void of any additives that are known to contain antibiotics or estrogen activity. The diet provides constant level of nutrients taking into account the natural variation in natural ingredients. The actual set of ingredients does not change.

2. APPLICABLE DOCUMENTS

2.1 Specifications and Standards - The following specifications and standards, of the issue in effect on date of invitation-for-bids or request for proposal, form a part of this specification to the extent specified herein.

National Institutes of Health Standards:

NIH STD. 1 - Animal Feed processing and Mill Sanitation Standard

NIH STD. 5 - For Nutrient and Chemical Contaminant Analyses of Laboratory Animal Diets

(Copies of NIH Specifications and Standards required by suppliers in connections with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer).

3. REQUIREMENTS

3.1 Material - Material shall be as specified herein:

3.1.1 Ingredients - The ingredients used in the formulation of the product covered by this specification must be selected from the following list. **A specification sheet including the ingredient composition and expected nutrient concentrations shall be provided to the NIH at the time of solicitation.**

(see ingredients on next page)

Ingredients

Corn (yellow),ground
Dehulled soybean meal
Beet pulp,dried
Fish meal
Oats, ground
Brewers yeast,dried
Cane molasses
Alfalfa meal, dehydrated
Whey (dried)
Wheat germ
Porcine fat, preserved with BHA
Porcine meat meal
Wheat middlings
Salt
Calcium carbonate
DL-methionine
Choline chloride
Cholcalciferol
Vitamin A acetate
Folic acid
Menadione dimethylpyrimidinol bisulfite
Pyridoxine hydrochloride
Thiamine mononitrate
Nicotinic acid
Calcium pantothenate
dl-alpha-tocopheryl acetate
Vitamin B_{12} supplement
Riboflavin
Ferrous sulfate
Manganous oxide
Zinc oxide
Ferrous carbonate
Copper sulfate
Zinc sulfate
Calcium iodate
Cobalt carbonate
Sodium selenite

The manufacturer shall determine the amount of each ingredient used in the formulation of this ration that will insure the nutrient content specified in Section 3.1.2 and will be a palatable ration for rodents maintained under laboratory conditions where their physical activity is limited.

3.1.2 Based on the latest ingredient analysis information the finished product at the time of manufacture shall conform to the following calculated standards. Since nutrient composition of natural ingredients varies, analysis will differ accordingly.

Nutrient	Concentration(%)
Crude protein (not less than)	23.90
Crude fat (not less than)	5.00
Linoleic acid	1.22
Crude fiber (not more than)	5.10
Ash (not more than)	7.00

Amino acids (% of total diet)	Concentration(%)
Arginine	1.41
Glycine	1.21
Lysine	1.41
Methionine	0.67
Tryptophan	0.29
Cystine	0.31
Histidine	0.57
Leucine	1.83
Isoleucine	1.14
Phenylalanine	1.04
Threonine	0.91
Valine	1.17
Serine	1.19
Tyrosine	0.71
Aspartic acid	2.81
Glutamic acid	4.37
Alanine	1.43
Proline	1.49
Taurine	0.02

Minerals		Concentration
Calcium	(%)	.95
Phosphorus	(%)	.66
Potassium	(%)	1.18
Magnesium	(%)	.21
Sodium	(%)	.40
Chlorine	(%)	.67
Iron	(PPM)	270
Zinc	"	79
Manganese	"	70
Copper	"	13
Cobalt	"	.90
Iodine	"	1.00
Selenium	"	.30
Chromium	"	1.20

Vitamins		Concentration
Thiamin	PPM	16.0
Riboflavin	"	4.5
Niacin	"	120.0
Pantothenic Acid	"	24.0
Choline	"	2250.0
Folic Acid	"	7.1
Pyridoxine	"	6.0
Biotin	"	0.3
B-12	Mcg/Kg	50.0
Vitamin A	IU/gm	15.0
Vitamin D	IU/gm	4.5
Alpha-Tocopherol	PPM	42.0
Vitamin K	PPM	1.3

3.1.3 Proximate Analysis - Analysis for nutrient content of both ingredients and the finished product shall be conducted in accordance with the procedures of the Association of Official Agricultural Chemists (most recent issue). All nutrients contents shall be expressed as a percentage by weight on air-dry basis.

3.1.4 Ingredients Standards - Ingredients used in the manufacture of this ration will not be contaminated with any more than 3% of foreign materials such as other grains, weed, seeds, chaff, etc. Manufacturers may be required to provide a significant amount of data to show an effective ingredient quality control program is being followed.

3.2 Form - The finished product(extruded biscuits) shall be furnished in the form, as specified: Standard pellets- 10mm x 16mm 25mm(3/8"x5/8"x1")

3.3 Nutrient and Chemical contaminant Assays - The product covered by this Specification is subject to nutrient and chemical contaminant analyses assays in accordance with the latest issue of National Institutes of Health Standard No. 5. All assays shall be conducted by an independent laboratory under National Institutes of Health contract.

3.3.1 Product Sample - The feed manufacturing contractor shall be responsible for collecting representative samples (approximately 2 kg) from each production batch. For the purposes of this Specification, a "batch" shall be defined as one continuous production run which may or may not consist of several small batches. In those instances where more than one batch is required to make up a production run for one shipment, samples for testing shall be made up using an equal portion of each of the small

batches and one (1) sample will be sufficient for that production run or shipment. The minimum number of feed bags sampled shall be calculated by using the square root of the total number of bags of feed per production batch. The samples shall be shipped within 24 hours after the manufacturing process is completed as designated at the time the feed contract is awarded. Each sample shall be identified as to the name of manufacturer, manufacturer. No coding of these items will be allowed.

3.3.2 Samples Analyses - A laboratory receiving the samples will be under NIH Contract to analyze them for compliance with section 3.1.2 of this Specification. If nutrient concentrations in these samples are not consistent with the requirements specified in Section 3.1.2 of this specification, the batch of feed from which the sample was obtained may be rejected and returned to the manufacturer at no cost to the Government. Analyses will also be made for concentrations of chlorinated hydrocarbon pesticides, polychlorinated biphenyls, organophosphate pesticides, lead, arsenic, cadmium, mercury, mycotoxins and nitrates.

3.3.3 Estrogen Content and Feed Additives - The product shall contain no antibiotics or estrogen additives of any kind. Award of the contract is contingent on an inspection by NIH personnel to determine if the contractor has established a program designed to prevent estrogen contamination of the product during manufacture and/or warehousing. Additional unannounced inspections may be made during the term of the contract to ascertain if the program is implemented at all times. The NIH reserves the right to assay any batch of product manufactured under this Specification for estrogen activity. If at any time the estrogen activity in a batch of product is found to exceed 4 ppb, the batch shall be taken back and replaced by the contractor at no expense to the National Institutes of Health.

3.4 Processing Restrictions - All milling and warehousing conditions and/or restrictions as specified in the latest issue of National Institutes of Health Standard No. 1 apply to the feed covered by this Specification

3.5 Certification of Processing - The successful bidder shall carry through without operational delay the milling or manufacturing process which shall be completed not more than thirty (30) days prior to delivery of the product.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection - Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in Specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

5. PREPARATION FOR DELIVERY

5.1 Packaging - The finished product shall be packaged into commercially acceptable 3 ply laminated paper bags, 22 -25 pounds per bag. Bags shall be of a quality that will prevent the bleeding of fat to the outside of the bag under all weather conditions. The bags shall be closed in a manner that will insure the delivery of uncontaminated animal feed at the National Institutes of Health.

6. NOTES

6.2 Ordering Data

a. Name of diet, Item number, and date of this Specification.
b. Quantity required.