

January 22, 2021

NIH SPECIFICATION 53GD

DRY AUTOCLAVABLE BREEDER FEED FOR RODENTS
(21.5% Protein, 3.5% Crude Fiber, 9% Fat)

1. SCOPE

1.1 This specification is for a commercially available closed formula pelleted autoclavable breeder 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.**

Ingredients

Corn (yellow),ground
Wheat middlings
Dehulled soybean meal
Wheat germ
Fish meal
Ground wheat
Porcine fat, preserved with BHA
Brewers yeast,dried
Soybean oil
Beet pulp,dried
Oats, ground
Salt
Calcium carbonate
DL-methionine
Choline chloride
Cholcalciferol
Vitamin A acetate
Silicon dioxide
Folic acid
Menadione dimethylpyrimidinol bisulfite
Pyridoxine hydrochloride
Thiamine mononitrate
Nicotinic acid
Calcium pantothenate
dl-alpha-tocopheryl acetate
Biotin
Vitamin B₁₂ supplement
Riboflavin
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)	21.50
Crude fat (not less than)	3.50
Linoleic acid	2.52
Crude fiber (not more than)	3.50
Ash (not more than)	5.50

Amino acids (% of total diet)	Concentration(%)
Arginine	1.23
Glycine	0.98
Lysine	1.19
Methionine	0.69
Tryptophan	0.25
Cystine	0.29
Histidine	0.52
Leucine	1.55
Isoleucine	0.92
Phenylalanine	0.87
Threonine	0.77
Valine	1.00
Serine	0.90
Tyrosine	0.58
Aspartic acid	1.89
Glutamic acid	4.06
Alanine	1.16
Proline	1.45
Taurine	0.03

Mineral	Concentration
Calcium(%)	.81
Phosphorus(%)	.78
Potassium(%)	.78
Magnesium(%)	.21
Sodium(%)	.26
Chlorine(%)	.42
Iron(PPM)	220

Mineral (cont)		Concentration
Zinc	ppm	140
Manganese	"	130
Copper	"	17
Cobalt	"	.52
Iodine	"	1.60
Selenium	"	.35
Chromium	"	.53

Vitamins		Concentration
Thiamin	ppm	86.0
Riboflavin	"	8.0
Niacin	"	89.0
Pantothenic Acid	"	22.0
Choline	"	2250.0
Folic Acid	"	3.0
Pyridoxine	"	15.0
Biotin	"	0.3
Vit B-12	Mcg/Kg	51.0
Vitamin A	IU/gm	30.0
Vitamin D	IU/gm	3.3
Alpha-Tocopherol	PPM	59.0
Vitamin K	PPM	3.2

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 shall be furnished in the form, as specified: Standard oval 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 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.

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

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection - 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 laminated autoclavable paper bags. 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 withstand autoclaving and insure the delivery of uncontaminated animal feed at the National Institutes of Health.

