

January 19, 2021

NIH SPECIFICATION 90GD

DRY FEED FOR NEW WORLD NONHUMAN PRIMATES  
(20.1% Protein, 3.5% Crude Fiber, 9.5% Fat)

1. SCOPE

1.1 This specification is for a commercially available closed formula extruded ration for nonhuman primates which is void of any additives that are known to contain antibiotics or estrogen activity.

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

Dehulled soybean meal  
Wheat middlings  
Wheat, ground  
Corn (yellow),ground  
Corn gluten meal (feed)  
Whey (dried)  
Porcine animal fat, preserved with BHA  
Beet pulp,dried  
Dried egg product  
Wheat germ  
Soybean oil  
Calcium carbonate  
Wheat bran  
Sucrose  
Fish meal  
Casein  
Brewers yeast,dried  
Alfalfa meal, dehydrated  
Salt  
Dicalcium phosphate  
Monocalcium phosphate  
Ferrous sulfate  
L-ascorbyl-2-polyphosphate  
Pyridoxine hydrochloride  
Menadione dimethylpyrimidinol bisulfite  
Cholcalciferol  
Vitamin A acetate  
Choline chloride  
Ferrous carbonate  
Calcium pantothenate  
DL-methionine  
Thiamine mononitrate  
dl-alpha-tocopheryl acetate  
Nicotinic acid  
Cyanocobalamin  
Riboflavin  
Folic acid  
Biotin  
Zinc oxide  
Manganous 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 nonhuman primates 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)	20.10
Crude fat (not less than)	9.50
Linoleic acid	3.12
Crude fiber (not more than)	3.50
Ash (not more than)	5.60

Amino acids (% of total diet)	Concentration(%)
Arginine	0.96
Glycine	0.58
Lysine	1.07
Methionine	0.48
Tryptophan	0.21
Cystine	0.29
Histidine	0.50
Leucine	1.96
Isoleucine	1.01
Phenylalanine	0.99
Threonine	0.80
Valine	1.15
Tyrosine	0.73
Histidine	0.50
Aspartic acid	1.66
Glutamic acid	3.98
Alanine	1.14

Minerals		Concentration
Calcium	(%)	1.03
Phosphorus	(%)	.60
Potassium	(%)	.63
Magnesium	(%)	.16
Sodium	(%)	.27
Chlorine	(%)	.44
Iron	(PPM)	370
Zinc	"	150

Manganese	"	130
Copper	"	21
Cobalt	"	.70
Iodine	"	1.90
Selenium	"	.30

Vitamins Concentration

Thiamin	PPM	17.0
Riboflavin	"	9.5
Niacin	"	110.0
Pantothenic Acid	"	63.0
Choline	"	1800.0
Folic Acid	"	41.0
Pyridoxine	"	14.0
Biotin	"	0.32
B-12	Mcg/Kg	32.0
Vitamin A	IU/gm	20.0
Vitamin D	IU/gm	6.7
Alpha-Tocopherol	PPM	110.0
Vitamin K	PPM	3.3
Vitamin C*	PPM	500.0

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 biscuits- 6mm x 6mm 25 mm (1/4" x 1/4" x 1")

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 - 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. 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.