University of New Hampshire

University of New Hampshire Scholars' Repository

NHAES Bulletin

New Hampshire Agricultural Experiment Station

6-1-1919

Inspection of commercial feeding stuffs, Bulletin, no. 191

Smith, T. O.

New Hampshire Agricultural Experiment Station

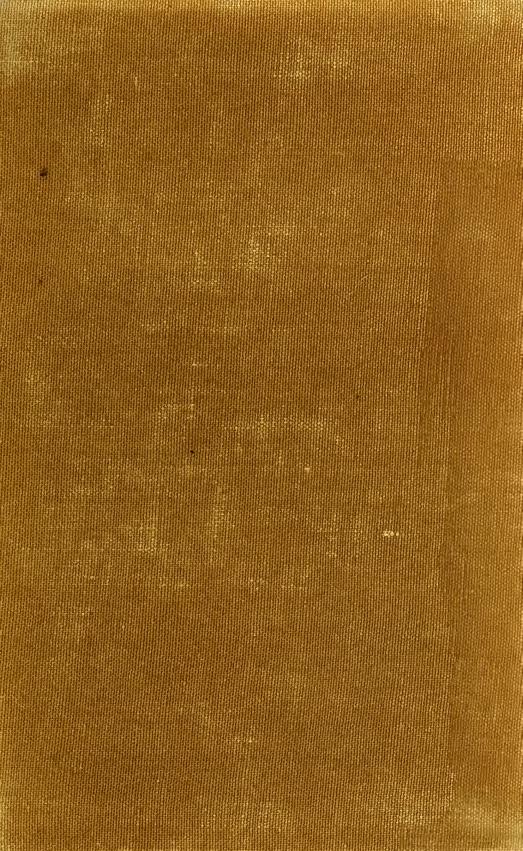
Follow this and additional works at: https://scholars.unh.edu/agbulletin

Recommended Citation

Smith, T. O. and New Hampshire Agricultural Experiment Station, "Inspection of commercial feeding stuffs, Bulletin, no. 191" (1919). *NHAES Bulletin*. 154.

https://scholars.unh.edu/agbulletin/154

This Text is brought to you for free and open access by the New Hampshire Agricultural Experiment Station at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in NHAES Bulletin by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact nicole.hentz@unh.edu.



KAtra 199-208 11. - 285. 4/0/42

192 - 30th Ann. Rpt. 1918

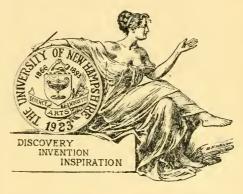
198 - 31/32 Ann. Rpts 1919/1920

203 - 33d Ann. Rpt 1921

208 - 34th Ann. Rpt. 1922

1922 4/10/42

UNIVERSITY OF NEWHAMPSHIRE



EXPERIMENT STATION LIBRARY

CLASS 639.73 NUMBER N 53 179-208
ACCESSION H 79 9 6 3 ACCESSION 4798

NEW HAMPSHIRE AGRICULTURAL EXPERIMENT STATION

DEPARTMENT OF CHEMISTRY

Inspection of Commercial Feeding Stuffs

MADE FOR THE STATE DEPARTMENT OF AGRICULTURE



BY T. O. SMITH

NEW HAMPSHIRE COLLEGE

OF

AGRICULTURE AND THE MECHANIC ARTS

DURHAM, N. H.



INSPECTION OF COMMERCIAL FEEDING-STUFFS

The Feeding Stuffs Law.

An Act to Regulate the Sale of Concentrated Commercial Feeding Stuffs enacted by the New Hampshire legislature of 1901 and amended by the legislature of 1915 authorizes the Commissioner of Agriculture, Mr. Andrew L. Felker, to direct an annual collection of samples of Commercial Feeding Stuffs offered for sale in the State and to have these samples analyzed at the New Hampshire Agricultural Experiment Station.

A copy of this law follows:-

STATE OF NEW HAMPSHIRE

CHAPTER 35, SESSION LAWS OF 1901, AS AMENDED BY CHAPTER 195, SESSION LAWS OF 1911, AND CHAPTER 174, SESSION LAWS OF 1915.

An Act to Regulate the Sale of Concentrated Commercial Feeding-Stuffs.

Section 1. Every manufacturer, company, or person, who shall sell, offer or expose for sale or for distribution in this State any concentrated commercial feeding-stuff used for feeding farm live-stock, shall furnish with each car or other amount shipped in bulk and shall affix to every package of such feeding-stuff, in a conspicuous place on the outside thereof, a plainly printed statement clearly and truly certifying the number of net pounds in the package sold or offered for sale; the name or trademark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business, and a chemical analysis stating the minimum percentages only which it contains of crude protein (allowing one per centum of nitrogen to equal six and one-fourth per centum of protein), the minimum percentage only of carbo-hydrates, the minimum percentage only of crude fat, and the maximum percentage only of crude fibre, each constituent to be determined by the methods prescribed by the Association of Official Agricultural Chemists. And shall state in bold type upon the container or a tag attached thereto, if a compounded feed, the names of the several ingredients therein contained. Whenever any feeding-stuff is sold at retail, in bulk, or in packages belonging to the purchaser, the agent or dealer, upon request of the purchaser, shall furnish to him the certified statement named in this section.

- SECT. 2 The term "concentrated commercial feeding-stuffs," as used in this act, shall include linseed meals, cottonseed meals, pea meals, cocoanut meals, gluten meals, gluten feeds, maize feeds, starch feeds, sugar feeds, dried brewer's grains, malt sprouts, hominy feeds, cerealine feeds, rice meals, oat feeds, corn and oat chops, wheat, rye, and buckwheat bran and middlings, ground beef, or fish scraps, mixed feeds and all other materials of similar nature; but shall not include hay, straw, and whole seed, nor the unmixed meals made directly from the entire grains of wheat, rye, barley, oats, Indian corn, broom corn, and buckwheat.
- SECT. 3. Before any manufacturer, company or person shall sell or offer for sale in this state any concentrated commercial feeding-stuffs, he or they shall, for each and every feeding-stuff bearing a distinguishing name or trademark, file annually during the month of December with the commissioner of agriculture a certified copy of the statement specified in the preceding sections, said certified copy to be accompanied, when the commissioner shall so request, by a sealed glass jar or bottle containing at least one pound of the feeding-stuff to be sold or offered for sale, and the company or person furnishing said sample shall thereupon make affidavit that said sample corresponds within reasonable limits to the feeding-stuff which it represents in the percentage of protein, carbohydrates, fat and crude fibre which it contains.
- SECT. 4. Each manufacturer, importer, agent, or seller of any concentrated commercial feeding-stuffs, shall pay annually during the month of December to the commissioner of agriculture an analysis fee of fifteen dollars for each brand offered for sale within the state. Whenever a manufacturer, importer, agent, or seller of concentrated commercial feeding-stuff desires at any time to sell such material and has not paid the analysis fee therefor in the preceding month of December, as required by this section, he shall pay the analysis fee prescribed herein before making any such sale. The amount of analysis fees received by said secretary pursuant to the provisions of this section shall be paid by him to the treasurer of the State of New Hampshire. The treasurer of the State of New Hampshire shall pay from such amount when duly approved the moneys required for the expense

incurred in making the inspection required by this act and enforcing the provisions thereof. The commissioner of agriculture shall report annually to the governor and council the amount received pursuant to this act and the expense incurred for salaries, laboratory expenses, chemical supplies, traveling expenses, printing, and other necessary matters. Whenever the manufacturer, importer, or shipper of concentrated commercial feeding-stuffs shall have filed the statement required by Section 1 of this act and paid the analysis fee as prescribed in this section, no agent or seller of such manufacturer, importer, or shipper shall be required to file such statement or pay such fee.

SECT. 5. The commissioner of agriculture shall annually cause to be analyzed at the New Hampshire College Agricultural Experiment Station at least one sample, to be taken in the manuer hereinafter prescribed, of every concentrated commercial feeding-stuff sold or offered for sale under the provisions of this act. Said commissioner shall cause a sample to be taken not exceeding two pounds in weight, for such analysis, from any lot or package of such commercial feeding-stuff which may be in the possession of any manufacturer, importer, agent, or seller in this State. Said sample shall be drawn in the presence of the parties in interest, or their representatives, and taken from a parcel or a number of packages, which shall not be less than ten per cent. of the whole lot sampled, and shall be thoroughly mixed, and then divided into two equal samples and placed in glass viols and carefully sealed, and a label placed on each stating the name of the party from whose stock the sample was drawn and the time and place of drawing, and said label shall also be signed by the person taking the sample and by the party or parties in interest, or their representatives, at the drawing and sealing of said samples. One of said duplicate samples shall be retained by the commissioner and the other by the party whose stock was sampled. and the sample or samples retained by the commissioner shall be for comparison with the certified statement named in section 3 of this act. The result of the analysis of the sample or samples so procured, together with such additional information as circumstances advise, shall be promptly published in reports of bulletins by the commissioner of agriculture or by the New Hampshire College Agricultural Experiment Station, as the governor and council may determine.

SECT. 6. Any manufacturer, importer, or person who shall sell, offer, or expose for sale or for distribution in this state any concentrated commercial feeding-stuff, without complying with the requirements of this act, or any feeding-stuff which contains substantially a smaller percentage of the constituents than are certified to be contained, shall, on conviction in a court of com-

petent jurisdiction, be fined not more than one hundred dollars for the first offense, and not more than two hundred dollars for each subsequent offense.

- SECT. 7. Any person who shall adulterate any kind of meal or ground grain with milling or manufacturing offals, or any other substance whatever, for the purpose of sale, unless the true composition, mixture, or adulteration thereof is plainly marked or indicated upon the package containing the same or in which it is offered for sale; or any person who knowingly sells, or offers for sale, any meal or ground grain which has been so adulterated unless the true composition, mixture, or adulteration is plainly marked or indicated upon the package containing the same, or in which it is offered for sale, shall be fined not less than twenty-five or more than one hundred dollars for each offense.
- SECT. 8. Whenever said commissioner becomes cognizant of the violation of any of the provisions of this act he shall prosecute the party or parties thus reported, but it shall be the duty of said commissioner, upon thus ascertaining any violation of this act to forthwith notify the manufacturer, importer, or dealer in writing, and give him not less than thirty days thereafter in which to comply with the requirements of this law; but there shall be no prosecution in relation to the quality of any concentrated commercial feeding-stuff if the same shall be found substantially equivalent to the certified statement named in section three of this article.
 - Sect. 9. This act shall take effect upon its passage.

Objects of the Law.

The principal objects of this law are:-

- 1. To protect the purchasers of feeding stuffs against the adulterated, misbranded, and inferior feeds of the unscrupulous manufacturer.
- 2. To protect the honest manufacturer and seller of good quality feeding stuffs against the unfair competition of the dishonest manufacturer and seller of inferior feeds.
- 3. To furnish purchasers with information which will enable them to distinguish between good quality and poor quality feeding stuffs, between reliable and unreliable manufacturers, agents and dealers, and to promote the intelligent and economical purchase and use of feeds.

The Sliding-Scale or Double Guarantee.

There is one provision of this law still being violated by a few manufacturers which can no longer be tolerated; namely,

the use of the double or sliding-scale guarantee. The law definitely states that the minimum percentage only of protein, fat and carbohydrates shall be printed in the guarantee. When a manufacturer prints a guarantee, for example, of 35-50% protein—a spread of 15%—knowing that this particular brand will probably fall below the minimum guarantee of 35% in as many samples as it will analyze as much as three per cent above 35%, he is attempting to deceive the consumer by making it appear that he may get 50% protein where he has hardly a chance of getting more than 38% and may not even get 35%. The purpose of the law requiring the minimum guarantee only is to prevent such deception; and the sale of any feed as represented to contain more than its minimum guarantee is fraudulent and illegal.

The Misleading Brand Name.

Another deception of a few manufacturers, particularly the manufacturers of proprietary or compounded feeds which the consumer is warned to guard against is the misleading brand name of the feed. In buying feeds the purchaser should consider the percentage of protein, the percentage of fat and the percentage of total carbohydrates, less the percentage of crude fiber, in connection with the price of the feed per ton or per hundred pounds. An examination of the brand names and the analyses in the following pages will show several attempts at deception by the manufacturer by giving to a feed low in protein and fat a name indicating that it has unusual feeding value.

The Inspector, Mr. Eugene D. Sanborn, visited nearly every town in the State and collected samples of 306 different brands. These samples were analyzed with the assistance of Mr. P. Bruce Place. The following classification, alphabetically arranged, is the one under which the respective feeds were offered for sale

by the dealers.

Alfalfa Meals.

Two samples of alfalfa meal were analyzed. These feeds average to contain 15.34% protein, 1.81% fat, and to retail at \$2.46 per one hundred pounds. One hundred per cent of these feeds equalled or exceeded the manufacturer's guarantee in both protein and fat.

Barley Feeds.

Seven samples of barley feeds were analyzed. These feeds averaged to contain 10.30% protein, 2.77% fat, and to retail at \$2.80 per one hundred pounds. Eighty-six per cent of these feeds equalled or exceeded the manufacturer's guarantee in both protein and fat.

Beet Pulps.

Three samples of beet pulps were analyzed. These feeds averaged to contain 8.66% protein, 0.35% fat, and to retail at \$2.81 per one hundred pounds. One hundred per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and thirty-three per cent his fat guarantee.

Calf Meals.

Four samples of calf meals were analyzed. These feeds averaged to contain 24.85% protein, 5.99% fat, and to retail at \$5.22 one hundred pounds. Fifty per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and seventy-five per cent his fat guarantee.

Compounded Feeds.

Forty-five samples of compounded feeds were analyzed. These feeds averaged to contain 10.85% protein, 4.41% fat, and to retail at \$3.07 per one hundred pounds. Sixty-six per cent of these feeds equalled or exceeded the manufacturer's guarantee in both protein and fat.

Cottonseed Meals.

Twenty-three samples of cottonseed meals were analyzed. These feeds averaged to contain 33.14% protein, 6.17% fat, and retail at \$3.37 per one hundred pounds. Sixty-five per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and ninety-six per cent his fat guarantee.

Dairy Feeds.

Twenty-five samples of dairy feeds were analyzed. These feeds averaged to contain 22.13% protein, 5.43% fat, and to retail at \$3.37 per one hundred pounds. Sixty-five per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and ninety-two per cent his fat guarantee.

Distillers' Grains.

Two samples of distillers' grains were analyzed. These feeds averaged to contain 15.94% protein, 6.08% fat, and to retail at \$2.80 per one hundred pounds. Fifty per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and one hundred per cent his fat guarantee.

Flaxseed Meals.

Eight samples of flaxseed meals were analyzed. These feeds averaged to contain 34.52% protein, 6.91% fat, and to retail at \$3.35 per hundred pounds. One hundred per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and eighty-eight per cent his fat guarantee.

Gluten Feeds.

Eight samples of gluten feeds were analyzed. These feeds averaged to contain 23.90% protein, 3.39% fat, and to retail at \$3.31 per one hundred pounds. Twelve per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and eighty-eight per cent his fat guarantee. The fact that so large a per cent of this year's gluten feeds failed to meet the manufacturer's guarantee is doubtless due to the inferior quality of the 1917 corn crop.

Hominy Feeds.

Nine samples of hominy feeds were analyzed. These feeds averaged to contain 10.19% protein, 5.84% fat, and to retail at \$3.22 per one hundred pounds, Eighty-nine per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and seventy-eight per cent his fat guarantee.

Molasses Feeds.

Ten samples of molasses feeds were analyzed. These feeds averaged to contain 13.49% protein, 4.77% fat, and to retail at \$3.00 per one hundred pounds. Ninety per cent of these feeds equalled or exceeded the manufacturer's guarantee both of protein and fat.

Peanut Feeds.

Three samples of peanut feeds were analyzed. These feeds averaged to contain 30.76% protein, 7.42% fat, and to retail at \$3.15 per one hundred pounds. Thirty-three per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and one hundred per cent of his fat guarantee.

Poultry Feeds.

Thirty-nine samples of poultry feeds were analyzed. These feeds averaged to contain 22.70% protein, 6.36% fat, and to retail at \$4.72 per one hundred pounds. Forty-nine per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and 95 per cent his fat guarantee.

Rye Feeds.

Five samples of rye feeds were analyzed. These feeds averaged to contain 15.59% protein, 3.52% fat, and to retail at \$2.90 per one hundred pounds. Eighty per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and one hundred per cent his fat guarantee.

Wheat Feeds.

One hundred and five samples of wheat feeds were analyzed. These feeds averaged to contain 15.88% protein, 4.68% fat and to retail at \$2.84 per one hundred pounds. Eighty-eight per cent of these feeds equalled or exceeded the manufacturer's protein guarantee and ninety-three per cent his fat guarantee.

Analyses of Commercial Feeding Stuffs.

Certified by manufacturer to contain	Ground alfalfa hay.	Pure alfalfa hay.			With ground screenings not exceeding mill run.	Barley bran, shorts and flour middlings, with ground screenings not exceeding mill	Ground barley sereenings not exceeding mill run, barley hulls, barley bran, barley middlings	nndanngs. Bran, shorts, low grade flour and pulver- ized screenings.	
Crude Fiber	35.00	29.50		25.00	28.00	28.00	20.00	22.00	15.00
Moisture	8.80	10.30		10.50	9.90	9.30	10.40	11.50	10.90
ЧsА	10.83	9.17		7.18	6.51	6.37	5.99	6.50	3.58
Carbohy-drates	35.00	62.11		74.99	69.33	50.00	50.00	70.50	60.00
1sA	1.00	1.40		1.50	1.00	1.00	3.18	3.00	2.00
Protein	Guar. 12.00 Found 14.59	Guar. 16.00 Found 16.10		Guar. 5.00 Found 5.74	Guar. 6.00 Found 11.43	Guar. 6.00 Found 11.26	Guar. 8.00 Found 10.91	Guar. 8.00 Found 7.97	Guar. 10.00 Found 13.10
Brand Name and Name and Address of Manufacturer.		Wichitt, Kansas. "Red Star Brand Alfalfa Mcal" Somers & Company. San Francisco, Cal.	BARLEY FEEDS	Company,		ed"	1 Feed"		"Barley Middlings" Washburn-Crosby Company,

.0	T	N. II. LA	LLKII	HENI S	TATION	լոատ	51111 191
Certified by manufacturer to contain			Composed only of sugar beets dried after extraction of sugar.		Locust bran meal, unpressed flaxseed, wheat flour, blood flour, barley and malt sprout meal, ground beans and peas, rice polish, old process oil meal, cocoa shell meal, cocoant meal, recleaned cottonseed meal, fengreek, dried milk, anise and salt.	Blood flour, linseed meal, hominy feed, and wheat flour.	Oat meal, wheat meal, ground flaxseed, milk albumen and ½ of 1 per cent salt, bicarbonate of soda, old process oil meal, blood meal.
Crude Telber	10.00	20.00	20.00	20.00	6.75	3.50	4.00
Moisture	12.40	12.90	11.30	8.70	11.50	11.30	8.90
daA	3.53	2.87	2.50	5.95	6.36	4.01	3.66
Carbohy-	69.92	60.00	58.00 76.54	58.00	53.00	48.15	54.00
ग्रहस	2.00	0.50	0.50	0.50	5.00	4.23	8.00
Protein	10.00	8.00 d 8.28	8.00	8.00 d 8.89	24.00	33.00	18.00
	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar	Guar. Found	Guar. Found
Brand Name and Name and Address of Manufacturer.	"Ground Whole Barley" Washburn Mills, Minneapolis, Minn.	BEET PULPS "Dried Beet Pulp" Max Hollelet Co.	"Dried Beet Pulp" Larrowe Milling Co.,	"Dried Beet Pulp". Owosso Sugar Company	"Blatchford Calf Meal" Guar. Blatchford Calf Meal Factory, Found Waukegan, III.	"Purina Calf Chow" Purina Mills,	"Schumacher Calf Meal" Quaker Oats Company,

June,	1717	120	SIECTIO	N OF F	EEDING S	TUFFS		11
Ground flaxseed, wheat flour, locust bean meal, recleaned cottonseed meal, blood flour, beans and lentils, cocoashell meal, hominy feed, fenugreek, anise and salt.	Wheat middlings, wheat bran, hominy	Corn, wheat bran, wheat middlings, hominy meal, oat feed, oat hulls, oat middlings and salt.	Either white or yellow shelled corn, barley, oat shorts, oat hulls, oat middlings and salt.	Corn germ meal, corn feed meal, hominy meal, corn gluten feed, oat shorts, oat middlings, oat hulls and salt.	One-half wheat middlings, one-third corn bran, corn meal, balance wheat bran and ground cleaned wheat screenings not ex- ceeding mill run.	Ground corn, hominy feed, wheat middling, ground barley, oat meal, by-products, oat shorts, oat middlings, oat hulls, cotton seed meal, ½ to 1 per cent salt.	Ground corn, hominy feed, wheat middlings, ground barley, oat middlings, oat hulls, oat meal, mill by-products, oil meal, \$\frac{1}{2}\$ to 1 per cent salt.	Fine white hominy oat by-products, oat middlings, oat hulls, oat shorts, 15 to 1 per cent salt.
6.00	7.00	5.96	10.00	9.00	8.50	8.90	12.00	10.00
5.16 11.50		12.90	9.90	9.30	11.20	7.10	9.30	9.50
5.16		5.88	5.27	5.64	4.26	3.95	4.35	4.23
54.05	;	64.05	71.54	50.00	59.00	72.57	50.00	72.04
5.00	5.00	3.50	4.00	3.50	4.50	3.50	4.00	8.00
25.00 24.66		12.84 9.00 7.79	8.50	10.00	11.50	Guar. 10.00 Found 11.08	12.00	8.54
Guar. Found	Guar.	Found Found Guar.	 Guar. Found	Guar. Found 	Guar. Found	Guar.	Guar.	Guar.
"Ryde's Cream Calf Meal" Guar. Ryde's & Company, Chicago, Ill.	COMPOUNDED FEEDS. "Acme Farm Feed"	Acme-Evans Company,	"Portage Stock Feed" Guar. Akron Feed & Milling Co., Found	"Amco Stock Feed"	"Ohio Farm Feed"	"Armour's Stock Feed"	"Armour's Stock Feed" Guar. Armour Grain Company, Found Chicago, III.	"Pennant Brand Stock Feed" Guar. E. H. Bailey & Co., Found Swanton, Vt.

12		N. H.	EXPERI.	MENT STAT	.101	[Dull	enn 191
Certified by manufacturer to contain	Ground corn, oat and barley, wheat middings, hominy feed, oat shorts, oat middings, oat hulls, linseed meal, corn gluten feed.	Ground corn and oats, hominy feed, oat shorts, oat middlings, oat hulls, 1/2 to 1 per cent of salt.	Ground corn, oats and barley, wheat middings, corn gluten feed, hominy feed, oat shorts, oat middlings, oat hulls, salt.	Ground oats, hominy feed, corn feed meal, oat meal, mill by-product, oat middlings, oat shorts, oat hulls, wheat bran with screenings not exceeding mill run, linseed meal and pure Old Process cocoanut meal.	Ground oats, ground hominy meal, ground corn, ground barley, oat meal, mill byproducts, oat middlings, oat shorts. oat hulls, ½ to 1 per cent salt.	Oat feed, oatmeal by products, oat shorts, oat middlings, oat hulls, hominy or corn meal, salt.	Ground barley, ground oats, ground hominy meal, ground corn, oatmeal, mill byproducts, oat middlings, oat shorts, oat hulls, 1/2 of one per cent salt.
Crude Fiber	11.00	9.00	13.00	15.00	10.00	16.00	9.50
ərursioM	8.00	9.5	7.80	7.70	09.6	8.80	8.20
ńsА	3.81	4.81	4.44	5.09	4.36	5.07	3.40
Carbohy-drates	60.00	64.00	60.00	70.34	72.27	74.19	60.00
1s4	4.34	4.84	4.54	5.03	4.96	3.00	5.89
Protein	10.00	9.00	10.00	10.00	9.00	6.00	9.00
	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
Brand Name and Name and Address of Manufacturer.	"Buffecco Horse Feed" Buffalo Cercal Company, Buffalo, N. Y.	"Buffeeco Steam Cooked Feed" Guar. Buffalo Cereal Company, Found	"Buffeco Stock Feed" Guar. Buffalo Cereal Company, Found	"Clover Leaf Stock Feed" Guar. Clover Leaf Milling Co., Pound Buffalo, N. Y.	"Cowee's Stock Feed" E. A. Cowee Company, Worcester, Mass.	"Charlestock Feed" Charles N. Cox Company, Boston, Mass.	"Wirthmore Stock Feed" Guar. Charles N. Cox Company, Found Boston, Mass.

June	, 1919]	I	NSPEC	TION	OF FE	EDING	STUFFS		13
White corn meal, oat feed, oil meal, salt.	Middlings, gluten, alfalfa meal, peanut feed, grain cleanings, cocoanut meal, corn, linseed and hominy meals, Red Dog and tankage.	Ground oats, corn meal, wheat, middlings, oat feed, hominy feed.	Linseed oil meal, ground corn bran, corn feed meal, alfalfa meal, corn screenings, wheat, oats, barley, Kafir corn and salt.		Corn feed meal, oat middlings, oat shorts, oat hulls, wheat middlings, bran, corn gluten feed, barley feed.	Ground corn, ground oats, hominy feed oat hulls, oat shorts, and salt.	Wheat middlings, cottonseed meal, oat hulls, oat sprouts, corn gluten feed, ground corn, ground oats, ground grain screenings, molasses, by-products, salt.	Ground corn, hominy feed, linseed oil meal, ground oats, oat shorts, oat hulls, molasses, wheat middlings, 1% of 1 per cent salt.	Corn feed meal, wheat bran and middlings hominy meal, oat middlings and salt.
12.00	8.00	10.00	12.50	14.00	9.00	9.00	15.00	10.00	13.00
12.00	10.80	10.20	9.80	9.60	10.30	10.80	9.6	10.60	8.10
5.84	6.88	4.32	4.84	3.58	3.56	4.52	5.69	5.01	4.15
70.30	62.34	63.00	50.00	55.00	50.00	61.00	66.77	70.27	58.00
3.05	5.00	3.81	3.00	5.00	3.25	3.63	3.83	4.00	3.25
9.00	17.00	9.00	12.50	9.00	10.00	9.00	14.00	9.00	8.50
Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar.	Guar. Found	Guar. Found
"Nu-Life Stock Feed"	W. H. C. Pig Feed" Cunningham Grain Co., Malden, Mass.	"Cushing Stock Feed"	Fitchburg, Mass. "Rival Hog Feed" Albert Dickinson Company,	"Grandin's Stock Feed"	Jamestown, N. Y. "Pioneer Stock Feed" Guar. Hales & Edwards Company, Found Chicago, Ill.	"Haskell's Stock Feed"	"Algrane Milk Feed" H-O Co's. Mills,	"New England Stock Feed" H-O Co's. Mills,	"Hopkin's Fancy Stock Feed" E. C. & H. L. Hopkins,

Certified by manufacturer to contain	Corn, corn feed meal, wheat middlings, wheat bran, gluten feed, hominy meal, oat hulls, oat shorts, oat middlings and salt.	Corn, corn feed meal, wheat bran, and middlings, hominy meal, oat feed, oat hulls, oat middlings and salt.	Hominy feed, wheat middlings, cottonseed meal, ground corn meal from shelled corn, oat middlings, oat hulls, oat shorts, cottonseed hull bran, salt,	Shelled and ear corn, oat middlings, oat hulls, oat shorts, cottonseed meal, salt.	Wheat bran with ground screenings not exceeding mill run.	Ground corn, corn bran, ground eats, oat middlings, oat hulls and gluten feed.	Cocoanut oil meal, velvet bean meal, peanut oil feed, rice bran, old process linsed oil meal, alfalfa meal, hominy meal, oat hulls, oat middlings, oat shorts, fish meat, bone corn meal, wheat middlings, salt, calcium carbonate.	
Crude Tedi T	13.00	10.00	15.00	13.00	16.99	8.50	13.00	
Moisture	10.30	10.90	9.80	7.80	10.80	11.30	11.20	
haA	4.71	5.26	6.24	3.65	5.69	4.10	11.32	
Carbohy-drates	60.00	60.00	67.00	60.00	80.69	72.41	30.00	
†s4	3.12	3.50	3.00	3.50	3.00	3.00	6.00	
Trotein Protein	10.00	8.50	11.00	8.59	12.00	9.50	18.09	
	Guar. Found	Guar. Found	Guar. Found	Guar.	Guar. Found	Guar. Found	Guar. Found	
Brand Name and Name and Address of Manufacturer.	"Hopkin's Fancy Stock Feed" E. C. & H. L. Hopkins, Greenfield, N. H.	"Hopkin's Fancy Stock Feed" E. C. & H. L. Hopkins, Greenfield, N. H.	"Lucky Strike Stock Feed" Illinois Feed Mills, St. Louis, Mo.	"Regal Stock Feed" Imperial Grain & Milling Co.,	Toledo, Ohio. "Holstein Feed" Indiana Milling Company,	Terre Haute, Ind. "Brook's Fancy Corn & Oats Stock Feed" A. H. McLeod Milling Company,	St. Johnsbury, Vt. "Go To it Hog Ration" Park & Pollard Company, Boston, Mass.	

	,					
Ground corn, hominy feed, oat hulls, oat middlings, oat shorts.	Wheat middlings, corn meal, hominy feed, brewers' dried grains, oat meal, mill byproducts, oat shorts, oat hulls, oat middlings, and 1 per cent salt.	Ground corn, hominy feed, yellow hominy feed, ground barley, wheat middlings with ground screenings not exceeding mill run, cotton seed meal, ground puffed rice, ground puffed wheat, oat meal, mill byproducts, oat middlings, oat hulls, oat shorts, ¼ of 1 per cent salt, calcium phosphate, linseed meal.	Ground corn, hominy feed, corn feed meal, by-products from hominy and corn meal by degermination process with partial extraction of oil, oat meal by-products, oat middlings, oat hulls, oat shorts, ½ of 1 per cent salt.	Hominy feed, corn feed meal, molasses, alfalfa, digester tankage, charcoal and 1 per cent salt.	Hominy feed, wheat middlings, cotton- seed meal, ground corn meal from shelled corn, oat meal, mill by-products and salt.	Wheat bran, rye middlings with ground screenings not exceeding mill run and rye graham flour.
12.00	12.75	11.14	12.00	9.00	15.00	9.00
9.50	7.30	4.	10.60	12.70	9.30	12.20
6.33	5.77	6.49	3.87	7.00	7.58	4.70
50.00	70.92	52.00 67.94	62.00	62.00	61.00	50.00
1.50	4.93	3.25	3.00	3.02	3.00	3.61
9.00	10.00	10.00	8.00	7.84	12.00	Guar. 13.00 Found 13.54
Guar.	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	
"Stock Feed" Guar. Fark & Pollard Company Found	Boston, Mass. "Towa Stock Feed" Guar. Purity Oats Company, of Davenport, Found	"Schumacher (F. S.) Feed"	"Victor Feed" Guar. Quaker Oats Company, Found	"Purina Pig Chow" Ralston Purina Company, St. Louis, Mo.	"Star Stock Feed"	"Wargrade Mixed Feed"St. Albans Grain Company,

0									
Certified by manufacturer to contain	Meat meal, wheat middlings, hominy, torn meal, cocoanut meal, linseed meal, corn feed meal ½ of 1 per cent salt.	Meat meal, peanut feed, wheat middlings, wheat bran, linseed meal, ground hominy, ground alfalfa, $\frac{1}{N}$ of 1 per cent salt.	Oat feed, yellow corn meal.	White or yellow corn, oats, corn meal, mill by-products, oat meal by-products,	and 1/5 of 1 per cent salt.	Ground oats, kiln dried hominy feed, corn feed meal, wheat feed, linseed meal, pure oat feed, not over ½ of 1 per cent salt.			
Spunde TadiH	7.00	16.00	10.50	9.00	10.00	8.00			15.00
ParutsioM	10.80	11.20	8.30	09.6	08.6	8.10		7.90	09.6
чsА	8.35	8.39	3.57	3.94	2.53	4.53		5.52	5.85
Carbohy-	55.79	45.00 58.59	66.00	73.18	50.00	72.95		43.89	26.00
Fat	6.00	5.00	3.35	3.86	5.00	5.00		6.83	6.00
Protein	17.00	18.00	8.20	9.00	8.00	12.00		35.86	36.00
	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found		Guar. Found	Guar. Found
Brand Name and Name and Address of Manufacturer.	"Wirthmore Hog Feed" St. Albans Grain Company, St. Albans, Vt.	"Wirthmore Pig Feed"	"Stratton & Co's. Stock Feed (24)" Stratton & Co,	"Camp's Surprise Chop Feed" Toledo Grain & Milling Co.	"Corn Feed Meal" Washburn-Crosby Company,	Mumeapolis, Minn. "Blue Seal Stock Feed" H. K. Webster Company, Lawrence, Mass.	COTTONSEED MEALS	"Cotton Meal" Americus Oil Company,	"Bartle Brand Good Cottonseed Feed Meal" Cuar. W. P. Battle & Co.,

2, 011	,	~ ,										
Cottonseed meal and cottonseed hulls.	Cottonseed meal and cottonseed hulls.		Decorticated cottonseed.		Cottonseed Meal	Cottonseed.	Cottonseed meal and delinted cottonseed hulls.	Pressed cottonseed	Cottonseed meal and cottonseed hulls.	Cottonseed meal and cottonseed hulls.	Decorticated cottonseed.	Cottonseed meal and hulls.
14.00	27.00	14.00	10.00	16.00	14.00	14.00	28.00	15.00	14.00	14.00	15.00	27.00
9.50	10.20	7.00	8.50	9.10	7.50	7.00	9.60	8.30	8.50	9.70	9.30	9.60
6.27	4.09	6.03	7.00	6.60	5.60	6.26	4.11	5.78	5.96	6.53	6.32	4.49
30.00	38.00	30.00	38.33	43.29	30.00	30.00	35.00	25.00	22.00	27.00	20.00	61.28
5.00	3.50	5.00	6.00	6.00	5.50	5.00	3.95	5.00	5.00	5.00	5.00	3.50
36.00	20.00	36.00	38.50	36.00	36.00	36.00	20.00	36.00	36.00 36.01	36.00	36.00 35.20	20.00
Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar.	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
"Jay Brand Cottonseed Feed" F. W. Brode & Co.,	Memphis, Tenn. "Buco Cottonseed Feed" Buckeye Cotton Oil Co.	"Buckeye Good Cottonseed Meal" Buckeye Cotton Oil Co.	"Clover Leaf Mills Cottonseed Meal" Clover Leaf Milling Co.,	"St. Clair Brand Cottonseed Meal" East St. Louis Cotton Oil Co	"Gilt-Edge Cottonseed Meal" Empire Cotton Oil Co.,	"Farmer's Cottonseed Meal" Farmer's Cotton Oil and Trading Co	"77 Cottonseed Feed" "47 Cottonseed Feed" Humphrey-Godwin Company,	"Danish Brand Cottonseed Meal"	Memphis, Tenn. "Holstein Brand Cottonseed Feed" Lanier Bros.	"Economy Cottonseed Feed" Lyle & Lyle,	Huntsville, Ala. "Tip-Top Good Cottonseed Meal" Meridian Grain & Elevator Co	Meridian, Miss. "Globe Brand Cottonseed Feed" C. L. Montgomery & Co.,

Certified by manufacturer to contain	Pressed cottonseed.	Cottonseed meal, ground cottonseed hulls.				Upland cottonseed only.	Cottonseed meal and cottonseed hulls.		Gluten feed, corn germ meal, cottonseed meal, cocoanut oil meal, wheat bran, hominy feed, oat shorts and oat middlings.
Crude Tedia	14.00	27.00	15.00	15.00	15.00	14.00	25.00	14.00	14.00
Moisture	9.40	10.80	6.50	8.00	9.50	8.40	11.60	8.50	8.20
hsА	5.43	3.99	5.59	5.87	6.14	60.9	4.48	5.34	7.38
Carbohy- drates	24.00	40.00	44.58	45.00	25.00	27.00	35.00	27.00	55.41
Fat	6.00	3.00	5.00	7.00	5.00	5.50	3.00	5.50	5.00
піэтотЧ	Guar. 36.00 Found 40.24	Guar. 20.00 Found 20.89	Guar. 36.00 Found 36.91	Guar. 33.50 Found 36.21	Guar. 36.00 Found 33.71	Guar. 36.00 Found 41.51	Guar. 20.56 Found 21.33	Guar. 36.00 Found 35.64	Guar. 22.00 Found 23.52
Brand Name and Name and Address of Manufacturer.	"Star Brand Cottonseed Feed"		ed Meal"	"Soper's Cottonseed Feed" J. E. Soper Company,	"Cottonseed Meal"	St. Albans, Vt. "Good Cottonseed Meal"	Atlanta, Ga. "Columbia Cotton Feed"	Montgomery, Ala. "Surety Brand Cottonseed Meal" Union Seed & Fertilizer Co.,	"Armour's Dairy Feed" Armour Grain Company,

June,	1919]	INSPECTIO	N OF FEE	EDING STU	FFS		19
Ground corn, wheat bran, middlings, hominy feed, corn gluten feed, cottonseed meal, oat shorts, oat middlings, oat hulls and salt.	Linseed meal, cottonseed meal, corn gluten feed, corn germ meal, copra meal, (cocoanut oil meal) hominy meal, oat meal, mill by-products, oat meal middlings, oat hulls, oat shorts and salt.	Corn, distillers' grains, cottonseed meal, linseed meal, hominy meal, gluten feed, corn starch by-products with corn bran, barley feed, copra meal, cocoanut oil meal, wheat bran, brewers' grains and salt.	Cottonseed meal, cleaned, ground and bolted grain screenings, cocoa shell meal, ground and bolted clipped oats by-products, molasses and 1/2 of 1 per cent salt.	Cottonseed meal, pure old process cocoanut meal, linseed meal, brewers' dried grains, ground and bolted clipped oats, byproducts, cleaned, ground and bolted grain screenings, molasses and salt.	Ground oats, bran middlings, linseed meal, gluten feed, cottonseed meal.	Bran, corn feed meal, alfalfa meal, cottonseed meal, gluten, oil meal, peanut meal, small per cent of salt.	Distillery dried grains, cottonseed meal, peanut meal, brewers' dried grains, hominy feed and oat feed, oat hulls, oat shorts. oat middlings.
12.00	12.00	9.21	15.00	12.00	9.00	12.00	20.09
11.50	7.70	9.50	13.60	10.30	10.70	10.90	8.00
5.89	6.03	68.9	8.84	6.81	3.86	7.28	3.26
59.63	50.00	50.00	50.00	50.00	50.00	57.85	59.00
4.00	4.29	5.50	3.50	5.00	4.44	4.18	8.56
18.00	21.00	26.00	13.50	20.00	22.00	22.00 19.79	25.00 24.17
Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
"Bufceco Creamery Feed"	"Triangle Dairy Feed" Guar. "Chapin & Company, Found Hammond, Ind.	"Unicorn Dairy Ration" Guar. Chapin & Company, Found Hammond, Ind.	"Cloverleaf Dairy Feed" Guar. Cloverleaf Milling Company, Found Buffalo, N. Y.	"Peerless Milk Ration" Guar. Cloverleaf Milling Company, Found Buffalo, N. Y.	"Dairy Ration" E. A. Cowee Company,	"Nu-Life Dairy Feed" Fred L. Cressey, Boston, Mass.	"Crosby's 1918 Dairy Ration" Guar. E. Crosby & Company, Found Brattleboro, Vt.

Certified by manufacturer to contain	Distillery dried grains, cottonseed meal, oil meal, malt sprouts, wheat bran, wheat middlings, hominy feed and ½ of 1 percent salt.	Corn gluten feed, brewer's dried grains, wheat bran, wheat middlings, cottonseed meal, linseed meal, hominy feed ½ of 1 per cent salt.	Linseed oil meal, cottonseed meal, gluten feed, distillers' dried grains, brewers' dried grains, hominy feed meal, malt sprouts, wheat bran, wheat middlings and salt.	Linseed oil meal, cottonseed meal, coarse gluten feed, rice bran, wheat bran, wheat middlines, alfalfa meal, hominy feed, corn feed meal, wheat bran with palm oil, red dog flour small per cent salt.	Linseed oil meal, cottonseed meal, corn giuten feed, wheat bran, hominy feed, wheat middlings, ¾ of 1 per cent salt. Bran and middlings may contain ground screenings not exceeding mill run.	Cottenseed meal, corn gluten feed, corn feed meal, old process linseed oil meal, dried beet pulp, standard wheat bran, standard wheat middlings, ¾ of 1 per cent salt.
Crude Tedi ^H	9.00	11.00	13.00	13.50	12.00	14.00
arutsioM	08.6	8.90	8.80	8.80	10.70	11.30
hsА	2.67	4.86	4.37	6.18	5.32	3.00
Carbohy- drates	59.00	50.00	50.00	50.00	48.00	50.00
Fat	7.00	5.50	4.00	5.00	5.64	3.00
Protein	Guar. 25.00 Found 25.31	Guar. 24.00 Found 24.03	Guar. 22.50 Found 22.96	Guar. 22.00 Found 23.39	Guar. 21.00 Found 21.07	Guar. 20.00 Found 20.03
Brand Name and Name and Address of Manufacturer.	"Crosby's Ready Ration" E. Crosby & Company, Brattleboro, Vt.	"Dickinson's Dairy Feed" Albert Dickinson Company,	"Grandin's Milk Maker" D. H. Grandin Miling Co., Jamestown, N. Y.	"Grandin's Twin Six Dairy Feed" D. H. Grandin Milling Co.,	"Larrowe's Big (6) Six Dairy Feed" Larrowe Milling Co.,	"Larro Feed" Larrowe Milling Co.,

June, 121	~ J	11151120110	01 1222	1110 01011	<u> </u>
Brewers' dried grains, old process oil meal, cottonseed meal, corn gluten feed, hominy feed, cocoanut meal, wheat bran, wheat middlings, barley middlings, ¾ of 1 per cent salt.	Oil meal, cottonseed meal, bran, corn meal, alfalfa meal.	Linsced oil meal, cottonseed meal, wheat bran with mill run of screenings, corn gluten feed, cocoant oil meal, pea meal, corn distiller grains, brewers' dried grains, ground barley, wheat middlings, homing meal, corn germ meal, buckwheat middlings,	Cottonseed meal, linseed oil meal, (old process), gluten feed from corn, hominy feed, ground alfalfa, molasses and 1 per cent salt.	Cottonsecd meal, corn distillers' grains, corn gluten feed, old process, linseed oil meal, hominy feed, yellow hominy feed, white wheat middlings and wheat bran with ground screenings not exceeding mill run, con the core of the control of the con	hulls. Cottonseed meal, linseed meal, bran. distillers' grains, gluten feed, copra meal, barley mill run screenings, oat feed, oat middlings, oat shorts, oat hulls, I per cent salt.
10.54	20.00 18.25	14.00	12.00	10.00	14.00
6.52 10.60 12.00	9.80	9.40	10.30	9.50	10.10
6.52	6.82	5.73	6.25	5.12	6.35
54.72	37.00 58.63	53.18	53.00	59.54	56.31
5.00	3.00	5.00	4.80	5.33	4.91
24.00	24.00	24.00	Guar. 24.00 Found 22.68	Guar. 21.00 Found 20.51	22.00
Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
"Bull Brand Dairy Ration"	"Beauty Dairy Feed" Guar. 24.00 Onaha Alfalfa Milling Co., Found 21.42	"Stevens 44 Dairy Ration" Guar. 24.00 Park & Pollard Company, Found 24.34 Boston, Mass.	"Purina Cow Chow Feed" Guar. 24.00 Purina Mills, Found 22.68	"Big Q Dairy Ration" Guar. Quaker Oats Company, Chicago, III.	"Paragon Dairy Feed"

22		N. H. EXI	PERIMENT	STATION	[Bullet	in 191
Certified by manufacturer to contain	Choise cottonsced meal, linseed, gluten feed, distillers' grains, choice math sprouts, hominy or corn meal, not over 34 of 1 per cent salt.	Dried brewers' grains, malt sprouts, corn, gluten, linseed meal, wheat bran, mill run screenings, cottonseed meal, ground cottenseed meal and salt.	Old process linseed oil meal, corn, distillers' grains, dried brewers' grains, corn gluten meal, cottonseed meal, wheat bran, wheat middlings, cane molasses and salt.	Fourex, distillers' dried grains, choice cottonseed meat, old process linseed meat, white wheat middlings, winter wheat bran, gluten feed, brewers' dried grains, barley malt sprouts, ½ of 1 per cent salt.	Barley malt, rye malt, malt sprouts, corn.	Dried yeast grains from corn, barley malt, out malt and sprouts.
Crude	9.50	15.00	11.00	8.94	22.00	21.00
ərutsioM	10.40	8.30	9.30	8.50	7.90	9.00
ńsА	5.56	5.85	5.36	5.96	2.62	3.28
Carbohy-	56.11	43.00 58.50	55.52	50.00	68.84	63.41
Fat	5.00	4.50	3.50	5.85	5.00	7.00
Trotein T	Guar. 25.00 Found 22.77	Guar. 20.00 Found 22.56	Guar. 23.00 Found 24.92	Guar. 24.00 Found 24.34	Guar. 16.00 Found 15.55	Guar. 16.00
Brand Name and Name and Address of Manufacturer.	"Wirthmore Balanced Ration for Milch Cows" St. Albans Grain Company, St. Albans, Vt.	"Syraeuse Milk Ration" Syracuse Milling Company, Syracuse, N. Y.	"Ti-o-ga Dairy Feed (Red Brand)" Tioga Mill & Elevator Co.,	"Union Grains, Biles Ready Ration" Ubico Milling Company,	"Corby Dried Grains" "Corby Company, Washington, D. C.	"Fleichmann's Dried Grains" Fleischmann Company,

	8.00	8.00	10.00	10.00	9.50	9.50	10.00	10.00	8.00	8.00	8.50	8.50
	11.70	9.00	10.00	10.20	10.00	9.20	9.90	8.70	10.00	12.60	9.80	10.70
	6.20	5.69	5.18	5.48	6.34	5.53	6.30	6.09	2.43	3.12	2.99	4.39
	40.48	44.62	41.06	43.59	42.31	43.98	41.66	45.31	64.51	52.00	60.74	57.29
	5.00	5.00 6.14	6.00	8.00	5.00	5.50	5.00	5.00	3.45	3.00	1.00	1.00
	34.00	34.00	33.00	33.00 33.66	32.00 33.85	30.00	33.00	33.00	23.00	23.00	23.00	23.00
	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
FLAXSEED MEALS	"Hypro Pure Old Process Linsecd Meal" American Linseed Company,	"Old Process Oil Meal" American Linseed Company,	"Pure Old Process Ground Oil Cake" Archer-Daniels Linseed Co.,	"Linseed Meal" Economic Feed Company,	"Old Process Ground Linseed Cake" Midland Linseed Products Co.,	"Old Process Ground Linseed Cake" (Argentine Brand)" Midland Linseed Products Co.	"Kellogg's Pure Old Process Oil Meal" Spencer Kellogg & Sons,	"Pure Old Process Oil Meal" Spencer Kellogg & Sons,	"Cream of Corn Gluten Feed" American Maize Products Co.,	New York City. "Clinton Corn Gluten Feed"	ng H	New York City. "Buffalo Corn Gluten Feed" Corn Products Refining Co.,

Certified by manufacturer to contain		Corn Gluten meal.	Corn Gluten feed.	Corn Starch by-products with corn bran.	Corn bran, corn gluten, corn soluble.		White corn only.	Made from corn.			White corn.
Srude Todif	H	4.00	8.50	8.00	12.00		7.00	00.9	4.00	7.00	5.00
Pautsio	I	10.50	11.40	7.60	9.50	_	6.20	10.90	9.10	7.60	10.20
ųs	√	2.48	4,54	2.51	1.78	_	2.21	2.87	2.50	2.98	2.60
arbohy-	0	38.00	59.65	63.52	50.00		75.53	71.07	65.00	60.00	71.77
je,	H.	1.00	1.00	3.00	3.73		6.00	5.00	5.00	7.50	5.40
niətor	ď	Guar. 40.00 Found 41.61	Guar. 23.00 Found 22.82	Guar. 25.00 Found 21.01	Guar. 20.00 Found 19.88		Guar. 10.00 Found 10.03	Guar. 10.00 Found 10.03	Guar. 10.00 Found 10.16	Guar. 9.50 Found 10.29	Guar. 10.00 Found 10.03
Brand Name and Name and Address of Manufacturer.		en Meal"	Feed"			HOMINY FEEDS	feed"	d. ominy Feed" miny Co.,	eed"	Meal"	Boston, Mass. "Badger Hominy Feed"

Jur	ie, 191	[9]	INS	PEC	TION	OF F	FEEDIN	NG ST	UFFS			25
			White corn.			Wheat bran, middlings, rye graham with mill run of screenings.	Wheat bran with screenings not exceeding mill run and corn meal.	Ground oats and corn.	Re-ground oat feed composed of oat hulls and oat shorts.		Ground velvet beans and pods.	
3.00	7.59		5.00		24.00	7.00	11.00		35.00	12.00	13.00	10.00
10.30	10.90	10.50	12.20		9.10	12.70	14.20	13.30	5.00	9.10	11.80	9.80
2.24	2.28	3.82	2.78		7.28	4.43	4.79	2.72	6.82	3.06	4.19	2.53
74.15	70.35	68.84	67.31		74.39	63.71	63.42	69.59	82.36	66.32	45.00	50.00
3.98	5.00	5.82	6.00		2.50	3.87	4.00	3.45	1.25	10.00	4.00	5.00
9.33	9.50 10.38	11.02	10.00		5.90	15.29	13.00	10.94	3.50	10.00	17.00	8.00
Guar.	Guar. Found	Guar. Found	Guar. Found		Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
"Hominy Feed" Milling Co.	Wulkes-Barre, Fa. "Mystic Hominy Feed" Mystic Milling Company, Sioux City, Iowa.	"Hominy Feed" Patent Cereals Company,	"Burt's Hominy Feed" Postum Cereal Company,	MISCELLANEOUS FEEDS	"Oat Feed" H. L. Buss Company,	boston, Mass. "Clinton Mixed Feed"	Malden, Mass. "Wheat Bran with Corn Meal"	Malden, Mass. "Provender" J. Cushing & Company,	"Oat Feed" North Illinois Cereal Co.	Lockport, III. "White Corn Mill Feed" Russell-Miller Milling Co.	Minneapolis, Minn. "Jesco" Velvet Bean Feed	"Corn Feed Mass. Washburn-Crosby Company, Found Buffalo, N. Y

Certified by manufacturer to contain	Molasses, alfalfa, rolled oats, and salt. Corn germ meal, molasses, corn feed meal, peanut oil meal, alfalfa meal, blood flour, palm kernel meal, calcium carbonate and salt.	Cottonseed meal, molasses, ground clipped oats by-products, salt, cleaned ground grain screenings. Oats, cracked corn, ground alfalfa, molasses and salt.	Cottonseed meal, ground clipped oats, salt, molasses, ground cleaned screenings. Cottonseed meal, molasses, ground clean grain screenings, linseed oil meal and bran.	Oats, kiln dried clean alfalfa flour, molasses and salt.
Crude Tibdi	12.00 11.90 14.00 5.83	14.00 13.63 15.00 14.68	15.00 11.29 15.00 9.43	8.00 10.53 16.00 12.66
SintsioM	11.90	12.80	10.60	12.70
haA	4.76	9.56	6.86	8.21
Carbohy-drates	50.00 68.86 45.00 56.74	55.00 59.20 65.00 62.44	58.00 61.28 45.00 55.28	67.00 67.83 47.50 57.31
16A	3.00 4.01 7.28	3.00 2.83	4.50 5.80 5.00 5.48	3.20 5.47 4.50 4.89
Protein	10.00 10.47 18.00 17.13	12.50 12.50 9.00 11.78	15.00 15.46 20.00 20.10	9.70 9.73 16.00 16.69
	Guar. Found Guar. Found	Guar. Found Guar.	Guar. Found Guar. Found	Guar. Found Guar. Found
Brand Name and Name and Address of Manufacturer.	MOLASSES FEEDS "Kick-A-Poo Horse Feed" American Milling Company, Peoria, III. "Sucrene Hog Meal" American Milling Company,	"International Climax Dairy Feed" International Sugar Feed Co., Minneapolis, Minn. "International Dan Patch Horse Feed" International Sugar Feed Co.,	"International Special Dairy Feed" International Sugar Feed Co., Minneapolis, Minn. "International Ready Ration" International Sugar Feed Co., International Sugar Feed Co.,	"Purina O-Moline Feed" Purina Mills, St. Louis, Mo. "Quaker Dairy Feed with Molasses" Quaker Oats Company, Chicago, III

June,	1919]		INS	PECTI	ON OF	FEE	DING	STUF	FS		27
Cottonseed meal, ground grain screenings oat meal mill by-products, oat middlings, oat shorts, A. of 1 per cent, calcium phosphate, palm kernel oil meal.	· ·		Pressed peanut kernels and hulls.	Whole nuts with oil extracted.	Ground pressed peanuts, the entire peanut less the oil extracted.		Corn feed meal, alfalfa meal, meat scraps, wheat bran, linseed meal, dried buttermilk, calcium carbonate and salt.		٠		Meat scraps, fish scraps, wheat bran, alfalfa meal, corn feed meal, cottonseed meal, cocoa shells, bone meal, oat products, limetone, salt.
16.00	5.00		25.00	29.00	25.00		12.00				8.00
11.40	18.00		9.30	7.70	10.40		11.50	7.40	4.60	6.90	8.50
8.98	5.91		4.14	4.02	7.50		7.55	41.22	55.97	38.57	10.63
58.44	70.08		40.00	22.84	40.00		50.00				48.00
4.50	0.60		7.00	5.50	6.00		3.50	8.00	10.00	10.00	5.00
Guar. 16.00	Guar. 4.60 Found 4.61		Guar. 33.00 Found 32.75	Guar. 31.25 Found 33.50	Guar. 28 .00 Found 26.03		Guar. 18,00 Found 16,69	Guar. 30.00 Found 32.28	Guar. 30.00 Found 25.83	Found 45.00 Found 33.85	Guar. 20.00 Found 20.23
"Quaker Dairy Feed with Molasses"	"Xtra Vim Feed"	PEANUT FEEDS	nut Feed"	feal Feed"	Abbeville, Ala. "Primo Unhulled Peanut Oil Feed" Suffolk Oil Mill, Suffolk, Va.	POULTRY FEEDS		ompany,	ie Meal, (Star Brand)"	Scraps"	"Blatchford's Calf Meal Co." Waukegan, III.

0	N. 11. L	ZI EK	IMENI S.	IAHON		Dunei	111 171
Certified by manufacturer to contain	Blatchford's calf meal, locus bran meal, unpressed flaxseed, wheat flour, blood flour, ground beans and peas, rice polish, old process oil meal, cocoa shell meal. cocoanut meal, foenugreek, dried milk, anise and salt, bone, corn and oat meal, wheat middlings, beef scraps, fish powdered limestone.	Meat scraps.	Ground corn, oats, wheat, and kaffir corn, wheat bran, wheat middlings, linseed meal, alfalfa meal, oat middlings, meat and bone scraps, ½ of 1 per cent salt.	Ground corn, wheat bran and middlings, hominy feed, corn gluten feed, oat middlings, and rolled oats.	Cooked meat, and bone scraps, animal products.	Beef scraps, bran, oil meal, corn feed meal, alfalfa meal, gluten, cottonseed meal, wheat middlings, ground oats, salt.	Wheat bran, wheat middlings, alfalfa meal, ground corn, linseed oil meal, meat scraps, salt ½ of 1 per cent.
Srude TadiA	6.73		8.00	5.00		8.00	8.09
PrutsioM	10.50	8.10	12.30	10.40	6.20	10.80	9.60
hгА	10.22	32.09	6.37	2.95	41.58	10.77	6.77
Carbohy-	52.00		49.00	65.42		57.64	59.41
Fat	4.00	15.00	5.00	5.42	8.00	4.00	3.00
nistorA	Guar. 20.00 Found 20.71	Guar. 50.00 Found 37.74	Guar. 20.00 Found 18.61	Guar. 15.00 Found 15.81	Guar. 35.00 Found 32.89	Guar. 20.00 Found 16.20	Guar. 15.00 Found 18.88
Brand Name and Name and Address of Manufacturer.	"Blatchford Milk Mash" Blatchford's Calf Meal Co., Waukegan, Ill.	"Breck's Ground Beef Scraps" Joseph Breck & Sons,	Mash" mpany,	"Buffeco Poultry Mash"Buffalo Cereal Company,	/ Feed"	"Nu-Life Dry Mash" Guar. Fred L. Cressey, Feyund Boston, Mass.	"Globe Egg Mash" Albert Dickinson Co.,

Dried meat and bone.		Pure ground fish scraps, meat and bone meal, yellow and white corn, wheat cockle, barley, winter rape, flax, oat sprouts, mustard, salt.		Wheat, cracked corn, kafir corn, barley, oats, wild buckwheat, sun flower seed, not over 4 per cent grit, 4 per cent shell.	Dried buttermilk, linseed oil meal, corn feed meal, meat scraps, wheat bran, wheat middlings, ground oats, alfalfa meal, not over 5 per cent salt.	Wheat, cracked corn, barley, oats, sun-flower seed, buckwheat, not over 3 per cent grit, 3 per cent shell.	Cooked meat and bone scraps, animal products.	Ground corn, corn gluten feed, wheat middlings, oat middlings, wheat bran, hominy feed, rolled oats, ground peas, ground grain screenings, molasses.	Alfalfa meal, corn feed meal, wheat meal, ground corn meal, wheat bran, meat scraps, linseed oil cake, ½ of 1 per cent salt.
		5.50		3.86	8.48	2.72		9.00	8.43
7.90	10.00	9.50		12.20	10.10	12.10	8.30	11.20	10.70
41.91 7.90	35.73	24.94		3.79	9.87	6.18	36.11	3.55	7.60
				60.00	45.00	60.00		62.48	62.29
12.00	10.00	3.00	_	2.00	5.01	2.00	12.00	4.50	2.50
35.00 27.98	35.00	12.00		9.00	15.00	9.00	45.00	17.00	11.00
Guar. Found	Guar. Found	Guar. Found		Guar.	Guar. Found	Guar. Found	Guar. 45.00 Found 34.24	Guar. 17.00 Found 18.09	Guar. Found
"Dow's Favorite Poultry Mash" Guar. 35.00 John C. Dow Company, Found 27.98	"Screened Meat Tankage for Poultry and Swine". John C. Dow Company,	"Greene's Growing Feed" Guar. 12.00 Greene Growing Feed Co. Found 14.15 Marblehead, Mass.		"Morning Glory Scratch Feed"	"Red Comb Mash Feed" Guar. Hales & Edwards Company, Found Chicago, III.	"Red Comb Poultry Feed" Hales & Edwards Company,	"Hinckley Poultry Feed" Hinckley Rendering Company, Somerville, Mass.	H-O Company's Poultry Feed" H-O Co's. Mills, Buffalo, N. Y.	"Dirigo Egg Mash" Guar. 11.00 Oscar Holway Company, Found 15.29 Auburn, Maine.

Certified by manufacturer to contain	Wheat bran, wheat middlings, alfalfa meal, corn bran, corn feed meal, linseed oil cake, meat scraps, salt ½ of 1 per cent.	Cooked meat and bone scraps.	Wheat and wheat by-products, corn and corn, by-products, gluten feed, alfalfa meal, barley meal, oil meal, beef scraps, a small amount of salt.	Cooked meal and bone scraps, animal products.	Ground corn, wheat, barley, oats, meat, bone, alfalfa, kafir corn, wheat bran with null run of screenings, wheat middings, buckwheat, beet-pulp, calcium carbonate, salt.	Ground wheat bran with run of screenings, wheat middlings, corn, wheat, oats, barley, kafir corn, buckwheat, alfalfa, beet pulp, calcium carbonate and salt.	Cooked meat and bone scraps, animal products.	Corn feed meal, wheat meal, kafir meal, alfalfa meal, linseed meal, wheat bran, wheat middlings, meat scraps, oyster shells.
Spurde Tadi¶	10.00		7.00		8.00	12.00		5.32
Moisture	9.70	8.50	11.60	09.9	12.80	11.70	8.30	10.80
dгА	7.72	39.59	6.71	32.97	5.51	2.56	38.41	9.32
Carbohy-	55.00		60.00		50.00	40.00		45.00
Fa4	3.00	10.00	3.70	12.00	1.50	1.50	10.50	3.50
Protein	Guar. 15.00 Found 19.66	40.00	11.00	50.00	10.00	18.00	50.00	17.00
	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
Brand Name and Name and Address of Manufacturer.	"Egg Mash" E. C. & H. L. Hopkins, Greenfield, N. H.	"Marsh's Pure Ground Poultry Scraps" George E. Marsh Company,	Lynn, Mass. "Poultry Mash" McQuesten & Lewis, Manchester, N. H.	"Manchester Poultry Feed"	Manchester, N. H. "Growing Feed" Park & Pollard Company, Boston, Mass.	"Lay-or-Bust Dry Mash" Park & Pollard Company, Boston, Mass.	"Portland Poultry Food"	Portland, Maine. "Prairie State Poultry Mash" Guar. Prairie State Milling Co. Found Chicago, III.

June, 1919]	INSPECTIO	ON OF FEEDI	NG STUFFS		31
Oat middlings, cooked wheat, wheat middlings, bone meal, shell meal, corn meal, black pepper, rape, millet. Wheat middlings, wheat bran, corn meal, salt, alfalfa meal, linseed meal.	Ground meat, wheat, oat meal, wheat middlings, milo maize, buckwheat, corn meal, barley, oat middlings, millet, gluten feed, kafir corn, alfalfa meal, hominy feed, wheat bran, oat germ meal, phosphate salt, calcium carbonate and charcoal.	Meat scraps, fish meal, oat meal, alfalfa meal, wheat with ground screenings not exceeding mill run, bone meal, cottonsed meal, yellow hominy feed, hominy feed, corn gluten feed, ground grain screenings.	Meat scrap, fish meal, wheat bran with ground screenings not exceeding mill run, alfalfa meal, yellow hominy feed, corn feed meal, by-products of hominy and corn meal, corn gluten feed, ground grain screenings, bone meal, cottonseed meal.	Prepared from wholesome food fish as cod, haddock, and pollock.	Ground oats, ground barley, ground corn, gluten feed, hominy bran, wheat middlings, beet pulp, unground crimped oats, choice fine ground beef scraps, fish meal, buckwheat, about 34 of 1 per cent salt.
3.80 2.81 2.81 9.00	8.99	10.00	9.10		8.50
9.30	8.00	8.50	9.70	7.00	9.10
9.92	10.48	8.41	8.72	40.36	13.48
69.00 65.27 58.00 60.80	60.81	49.00	49.00		50.00
3.50	4.00	5.98	5.59	2.00	5.17
11.50	Guar. 15.00 Found 16.25	20.00	20.00	50.00	20.00
Guar. 11.50 Found 11.96 Guar. 18.00		Guar. Found -	Guar. 20.00	Guar. Found	Guar.
	Furna Auns, Mo. "Toun Boy Poultry Mash." Purity Oats Company, Davenport, Iowa.	"Full-O-Pep Dry Mash" Guar. Quaker Oats Company, Found Chicago, III.	"Schumacher Poultry Mash" "Quaker Dairy Feed with Molasses"	"Chic Chuk Poultry Food" Guar. Russia Cement Company, Found	Feed"

Certified by manufacturer to contain	With scraps, ground wheat, corn, oats, barley, peas, milo maize, beet pulp, wheat middlings, salt and choice fine beef scrap.	Wheat feed, corn meal, gluten feed, rolled oats, beef scraps beet pulp, oil meal, and Han-e-ta hone composed of physion-	ic acid, silica, lime and soda.			Rye bran, rye middlings and all the screenings that may be in rye grain.		With ground screenings not exceeding mill run.	
Stude Tedia	4.50	10.00			00.9	00.9	5.50	00.6	5.00
Moisture	11.80	8.60	7.70		10.20	12.70	10.00	10.90	09.6
hгА	11.33	8.15	45.48		4.37	4.80	5.43	4.55	4.32
Carbohy- drates	50.00	55.00			63.00	64.25	65.35	56.00	50.00
Fat	4.50	5.08	12.00		3.40	3.00	3.00	3.50	3.62
Protein	Guar. 15.00 Found 14.76	Guar. 20.00 Found 16.43	Guar. 35.00 Found 34.65		Guar. 16.00 Found 16.60	Guar. 13,50 Found 15,03	Guar. 16.50 Found 15.54	Guar 15.50 Found 15.73	Guar. 14.00 Found 15.08
Brand Name and Name and Address of Manufacturer.	"Wirthmore Growing Feed"	"Bluc Seal Dry Mash" H. K. Webster Company, Lawrence, Mass.	"Meat & Bone Poultry Scraps" Whitman & Pratt Rendering Co Boston, Mass	RYE FEEDS	"Rye Middlings" Bay State Milling Company,	"Boutwell Rye Feed" Boutwell Milling & Grain Co.	"Rye Feed" Duluth-Superior Milling Co.,	"Rye Middlings" Pillsbury Mills.	"Pure Ryc Middings" Washburn-Crosby Company,

٠	june,	17	17.	ı		111	21	EC	11,	OIN		1.	P.	LIST	,11	N G	ى	1 (TT	3						0.
		Pure wheat.		Wheat bran with ground screenings not	exceeding mill run.	Wheat middlings with ground screenings	not exceeding mill run.	Mill run and screenings.	0				Coft mintor mboot	cor which wheat.			cceumg min run.	Free from screenings.		Guaranteed free from screenings			Wheat standard middlings with ground screenings not exceeding mill run.	0		
	7.50	9.50		12.50		5.50		8.50		0	8.00		10 00	9,35	11	11.00		12.00		12.00		000	10.00		10.00	
	10.50		12.60		11.10		11.00		10.40		11 70	0/:11		11.10		10 40			13.40		12.20		9.80		11.40	
	5.18		7.39		7.84	1	5.08		5.84		6 13	2+.0		7.06		7 48			6.07		7.13		5.19		7.20	
_	62.69	52.00	61.59	51.00	63.12	58.00	65.29		63.36	00	54.00	07.70	49.00	63.50	62 00 1	61.67		63.80	61.34	63.00	62.29		63.42		61.65	
	5.60	4.00	3.31	4.00	3.53	5.00	4.22	3.50	3.75	,	5.00		3.75	3.89	77	4.99	`	3.50	4.48	3.50	4.37	2	5.95		3.50	
	15.60	14.50	15.11	13.00	14.41	15.00	14.45	16.00	16.65	14 50	14.50	11.00	15.00	14.45	17 50	15.46	-	15.00	14.71	15.00	14.01	- C	15.64		14.75	_
	Guar. Found	Guar.	Found	Guar.	round	Guar.	T.Onlin	Guar.	Found	Guar	Found		Guar.	Found	Guar	Found				Guar.	Found		Found			
WHEAT FEEDS	"Mulae Fancy Middlings" Aberdeen Mill Company,	"Trojan Bran"	Allen & Wheeler Co.,	"Bran"	Springfield, Ohio.		Springfield, Ohio.	"Wheat Mixed Feed"	Atchison Flour Mills Co.	"Atlas Flour Middlings"	Atlas Flour Mills,	Milwaukee, Wis.	"Bailey Fancy Feed"	E. W. Bailey & Co., Found		Barber Milling Company, Found	Minneapolis, Minn.	"Bay State Coarse Bran" Guar.	Bay State Milling Company,	"Winona Coarse Wheat Bran"	Company,	Winona, Minn.	Big Diamond Mills Co.,	Minneapolis, Minn.	"(Wheat Bran". Guar. Black Brothers, Found	

		N.	H. E2	XPERI.	MENT	STAT	TON	L	Bulle	etin 191
Certified by manufacturer to contain	Pure bran and middlings from country run wheat.	With ground screenings from wheat not exceeding mill run.		Winter wheat,	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	Selected Bran, Standard Middlings, Red Dog.	Wheat middlings and rye middlings with mill run of screenings.		Wheat bran and middlings, low-grade flour with ground screenings.
Crude	9.10	8.30	14.00	7.00	13.00	11.00	9.00	7.00		00.6
Moisture	10.70	11.20	13.30	10.10	12.20	10.00	11.60	9.50	13.50	11.20
цsЪ	7.08	4.22	7.07	4.95	6.32	5.00	4.84	4.85	6.26	5.46
Carbohy-	61.61	62.00	60.55	65.47	62.41	62.56	63.10	65.51	58.95	61.88
TaA	4.40	5.00	3.00	4.28	4.00	4.00	3.77	4.00	5.39	5.35
Protein	Guar. 16.00 Found 16.51	Guar. 16.50 Found 16.52	Guar. 14.00 Found 15.46	Guar. 15.00 Found 15.20	Guar. 13.00 Found 14.15	Guar. 14.00 Found 16.69	Guar. 16.00 Found 16.69	Guar. 16.00 Found 16.03	Guar. Found 15.90	Guar. 16.00 Found 16.11
Brand Name and Name and Address of Manufacturer.	"Blish's Bulls Eye Mixed Feed" Blish Milling Company, Seymour. Ind.	"Onward Middlings" A. H. Brown & Bros, Boston Mass	"Wheat Bran and Screenings". The Butte & White Swan Mills, Kansas City Neb	"Purity Middlings" Capital Milling Company, Columbus, Ohio	"Jersey Wheat Bran" Century Milling Company, Minneabolis, Minn.	rd Middlings,		Company,	Jy,	ling Co.,

June,	191	.9]	IN	SPEC	ΓΙΟΝ	OF FE	EEDIN	G STU	JFFS			35
Wheat bran, with ground sereenings not exceedings mill run.		With ground screenings not exceeding mill run.	Wheat with ground screenings not exceeding mill run.	Spring wheat with ground screenings not exceeding mill run.	Pure wheat with ground screenings not exceeding mill run.	Spring wheat with ground screenings not execeding mill run.	With screenings not exceeding mill run.	Wheat bran and middlings with screenings not exceeding mill run.				
11.00	3.10	8.10	11.00	9.00	12.00	8.50	14.00	10.00	11.00	13.50	00.6	10.00
11.60	9.50	11.30	10.10	09.6	13.90	11.00	12.40	10.80	11.80	9.70	10.90	10.40
6.12	2.91	5.63	6.37	5.47	6.97	4.35	7.47	5.39	6.55	6.33	6.35	4.39
61.77	65.36	61.21	53.00	63.12	60.42	53.00	51.00	52.00	52.00	65.91	60.35	63.99
3.75	5.28	4.70	4.00	4.00	3.00	5.25	3.50	3.50	3.00	3.12	4.00	4.53
	16.50	16.50	14.00	15.00	14.00	13.50	Guar13.00 Found 16.43	14.00	14.00	13.00	15.00 1 17.43	15.00
Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar.
heat Bran"	illing Co.,	gs"	Co.,	ly,	Bran"		npany,		d"	oany,		"Gumbus, Ohio. "Gwinn's Middlings with Screenings" Guar. Gwinn Milling Company, Found Columbus, Ohio.

Certified by manufacturer to contain	With trace of screenings.	Pure Wheat.	Mill run of screenings.	Wheat bran and middlings run together.	Pure wheat bran and middlings run to-gether with ground screenings not exceeding mill run.	Wheat bran, wheat shorts, mill run screenings not to exceed 8 per cent.	Pure wheat product.			
Crude Tiber	12.50	00.9	10.00	9.00	8.00	8.50	11.50	12.40	10.50	8.00
SintsioM	12.50	9.30	11.20	6.30	11.80	11,80	12.90	11.50	11.80	11.70
hгА	7.23	4.62	5.99	7.06	6.14	5.23	6.93	6.24	7.03	6.38
Carbohy-drates	53.00	54.75	53.50	54.00	55.00	53.00	59.66	60.78	52.00	50.00
Fat	3.00	5.00	4.75	4.38	4.49	4.00	3.65	4.40	4.25	4.00
nistor4	Guar. 14.00 Found 14.85	Guar. 16.25 Found 19.05	Guar. 16.00 Found 16.60	Guar. 15.00 Found 15.81	Guar. 15.00 Found 18.00	Guar. 16.00 Found 15.85	Guar. 15.50 Found 16.86	Guar. 17.00 Found 16.38	Guar. 14.00 Found 15.03	Guar. 16.00 Found 16.03
Brand Name and Name and Address of Manufacturer.	"Choice Wheat Bran" Hecker-Jones-Jewell Milling Co., F	I Milling Co.,	s" I Milling Co.,		"Kehlor's Mill Feed" Kehlor Flour Mills Co., St. Louis, Mo.	poration,	ills Co.	ınd. npany,	s. 1 Ground Screenings"	"Brooks' Fancy Mixed Feed" Guar. A. H. McLeod Milling Co. St. Johnsbury, Vt.

Jur	ie, 19	19]	II	NSPECTI	ON O	F FEE	DING	STUI	FFS		
Pure spring wheat.	Wheat bran with ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	Choice Wheat.	Pure wheat products, red dog wheat flour.		With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.		Pare Wheat bran.	Mill run of wheat, shorts and ground wheat screenings not exceeding 8 per cent.
7.00	13.90	09.60	15.50	13.00	3.00	11.00	11.00	5.00	11.00	11.00	8.00
4.83 11.60	12.8	9.10	12.00	11.20	11.70	12.40	11.00	10.60	10.70	12.30	9.40
4.83	6.33	5.35	6.44	5.90	3.74	7.10	5.80	5.98	5.63	7.60	5.22
62.51	61.62	64.98	63.78	63 3)	60.00	50.00	53.00	57.00	50.00	50.00	52.00
4.46	3.70	4.70	3.00	3.00	4.00	4.08	4.50	4.50	5.78	3.50	3.50
14.00 16.60	13.80	15.75	13.00	12.00	16.50	14.00	15.00	15.50	14.50	14,50 16.86	15.00
Guar Found	Guar. Found	Guar. Found	Guar. Found	Guar Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
"Middlings" Millbourne Mills,	"Montco Bran" Montan Flour Mills Co.	"Monteo Wheat Middlings" Montana Flour Mills Co.	Great Falls, Mont. "Seal of Minnesota Wheat Bran" New Prague Flouring Mill Co.	"Bran" New Frague, Minn. Niagara Falls Milling Co., Niagara Falls, N. Y.	XXX "Comet Middlings" Guar. Northwestern Milling Co., Found	"Pure Wheat Bran" Northwestern Consolidated Milling Co.	"Standard Middlings"	"Wheat Flour Middlings" Northwestern Consolidated Milling Co.,	"Wheat Middlings (N)"	"Minneapolis, Minn. " 'Omar' Pure Wheat Bran" Guar. Omaha Flour Mils Co. Found	Omaha, Neb. " 'Omar' Wheat Shorts" Guar. Omaha Flour Mills Co., Found

00		14. 11.	LAI	LICI IVI	DIVI .	OIMIN	J14	Ĺï	Junct	111 121
Certified by manufacturer to contain		Pure wheat,	Wheat bran with ground screenings.	Wheat middlings with ground screenings not exceeding mill run.	With screenings not exceeding mill run.	Winter wheat.	Pure wheat.	Wheat bran, flour middlings and ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	Wheat bran, flour middlings, and ground screenings not exceeding mill run.
Orude Tedi ^H	9.00	.4.00	13.00	11.00	11.00	10.50	5.00	8.00	9.00	10.00
Moisture	13.20	9.90	11.10	11.40	11.40	13 00	10.60	11.70	12.20	14.40
daA	5.53	5.71	6.16	5.09	6.43	92.9	5.27	5.57	5.72	7.00
Carbohy- drates	49.00	60.00	50.00	52.00 62.49	58.00	50.00	59.00	53.75	52.50	55.00
1s4	3.50	4.00	4.00	4.00	3.00	3.00	5.39	3.50	3.00	4.00
nietor4	16.00 17.21	16.00	13.00	14.00	15.00	13.00	14.00	16.00	15.50	15.00
,	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	 Guar. Found	Guar. Found
Brand Name and Name and Address of Manufacturer.	"Mixed Feed" Cutawa Milling Company, Cottawa Milling Company, Cottawa, Kan.	"Pillsbury's XX Daisy Pure Wheat Middlings" Pillsbury Miling Co.,	"Pillsbury's Wheat Bran" Pillsbury Milling Co.	"Pillsbury's Wheat Standard B-Middlings" Pillsbury Milling Co.	Wheat Bran (P)" Geo. P. Plant Milling Co,	St. Louis, Mo. "Quaker City Bran" Quaker City Flour Mills Co.,	Philadelphia, Pa. "Quaker City Middlings" Quaker City Flour Mills Co.,	Philadelphia, Pa. "Royal Mixed Feed" Royal Milling Company,	Great Falls, Mont. "Royal Wheat Bran" Royal Milling Company,	Great Falls, Mont. "Royal Wheat Mixed Feed" Royal Milling Company, Great Falls, Mont.

June, 1919	9] IN	SPECT	ION (OF FE	EDIN	G STU	FFS		
Wheat only.	With ground screenings not exceeding uill run.	Wheat middlings, Red Dog flour, less than mill run of screenings.	Wheat Bran, Red Dog flour, less than mill run of screenings.	Bran and middlings with screening not exceeding mill run.	With ground screenings not exceeding mill run.	With mill run screenings.	Spring wheat, wheat screenings, wheat bran with ground wheat screenings.	Pure winter wheat, wheat bran, wheat middlings,	With ground serecaings not exceeding mill run.
7.00	7.00	8.00	8.00	8.00	10.00	10.00	12.00	8.00	10.50
9.80	13.30	9.90	10.50	14.30	13.10	11.30	14.40	13.00	12.80
4.75	8.29	5.18	5.22	09.9	7.18	7.00	5.83	5.26	6.12
54.00 62.28 61.16	56.89 50.00 62.35	50.00	50.00	55.00	60.84	50.00	60.92	62.39	52.00
4.50 6.04 4.00 4.07	5.09	4.00	4.50	4.00	4.00	4.00	4.54	4.00	5.73
15.00 17.13 13.00 14.41	14.00 16.43 15.50 15.55	14.50	15.00	14.50	15.00	16.00	14.00	15.00	15.00
Guar. Found Guar. Found	Guar. Found Guar. Found	Guar. Found	Guar. 15.00 Found 15.00	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar.
"Wheat Occident Feed" Guar. Russell-Miller Milling Co., Found Minneapolis, Minn. Guar. Sent Logan Milling Co., Guar.	"Sheldon Shorts" Scott Logan Milling Co., Skeldon, Iowa. "Wheat Standard Middlings" Shane Bros. & Wilson Co.,	"Wirthmore Middlings" St. Albans Grain Company,	"Wirthmore Wheat Feed" Guar. St. Albans Grain Company, Found	"Mixed Feed" Standard-Tilton Milling Co.,	"Star Wheat Bran" Star & Creent Milling Co.,	"Monarch Fancy Wheat Feed" F. W. Stock & Sons,	"Bran" David Stott, Flour Mills, Inc.	"Stott's Honest Mixed Feed" David Stott, Flour Mills, Inc.,	ndard Middlings" Co.,

Certified by manufacturer to contain	Screenings not exceeding mill run.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	Wheat bran and middlings with ground screenings not exceeding mill run.	Ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.
Srude Tibdi A	9.12	14.00	14.00	14.00	14.00	11.00	9.00	15.00	10.00	10.00
Sinstante	12.40	12.00	13.10	12.40	13.90	10.40	10.90	12.80	10.90	11.20
цs A	5.80	3.60	7.37	6.31	5.96	00.9	5.12	7.01	5.60	6.72
Carbohy-drates	62.15	63.47	59.94	58.90	59.97	50.00	63.09	63.02	48.00	53.31
Fat	4.92	4.00	4.00	4.83	4.00	4.50	4.50	4.00	5.15	4.50
Protein	15.87	13.00 16.86	13.00	13.00	13.00	14.00	15.50	14.60	17.50	15.00
. , , , ,	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found
Brand Name and Name and Address of Manufacturer.	"Stratton & Co.'s Mixed Feed" Stratton & Co.,	"Angelus Fancer Flour Middlings" Thompson Milling Company,	"Angelus Wheat Bran" Thompson Milling Company,	"Angelus Wheat Middlings" Thompson Milling Company,	"Angelus Wheat Mixed Feed" Thompson Milling Company,	"T. & C. Mixed Feed" Thornton & C. Mixed Thornton & C. Milling Co.	"Rowena Wheat Middlings" Valley City Milling Co.,	"Victor Bran" Victor Milling Company,	"Victor Middlings" Victor Milling Company,	"Victor Spring Wheat Mixed Feed" Victor Milling Company,

Jun	e, 19.	19]	IN	SPEC	TION	OF FI	EEDING	STUI	FFS		
Soft winter wheat, with ground screenings not exceeding mill run.	Soft winter wheat with ground screenings not exceeding mill run.	Soft winter wheat with ground screenings not exceeding mill run.	Bran, middlings, ship stuff from winter wheat.	Wheat bran with ground screenings not exceeding mill run,	•	Pure hard wheat.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.	With ground screenings not exceeding mill run.		Wheat bran and sereenings not to exceed 8 per cent screenings.
11.00	10.00	10.00	10.00	13.00	4.00	4.00	0.11.00	16.90	10.40	11.00	11.00
12.60	12.40	12.00	11.50	10.30	10.88	9.30	9.10	10.30	9.50	10.90	10.00
6.48	6.17	5.91	6.49	68.9	6.88	2.99	4.94	4.45	4.85	7.16	7.00
62.06	60.72	63.94	50.00	50.00	60.00	60.00	52.00	67.03	65.25	50.00	62.24
3.50	3.50	3.50	4.20	4.00	4.00	4.74	4.00	5.40	5.42	3.50	3.50
14.00	14.50	14.50	15.00	13.00	14.00	16.00	Guar, 14.00 Found 18.46	Guar. 13.00 Found 12.75	15.30	15.00	14.50
Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	Guar. Found	 Guar. Found	Guar.	Guar. Found	Guar. Found	Guar. Found
"Crescent Bran" Voigt Milling Company,	"Crescent Middlings" Voigt Milling Company, Grand Rapids Mich	"Voigt's Pure Winter Wheat Cow Feed" Voigt Milling Company,	"Mill Run Bran Mixed Feed" Waggoner-Gates Milling Co.,	"Washburn Crosby' Co's. Wheat Bran" Washburn-Crosby Company,	"Arlington Flour (Red Dog)" Washburor Crosby Company,	"Adrian Red Dog Flour" Washburn Croshy Company,	"Washburn Crosby Wheat Standard" Middlings" Washburn Crosby Company,	"Wheat Bran" Webster Mill Company,	"Mixed Feed" Webster Mill Company,	"Star Winter Wheat Bran and Screenings" Western Kar Mill Company,	"Bran" Wilson Flour Mills, Wilson, Kansas.

Certified by manufacturer to contain	Wheat bran and screenings not to exceed 8 per cent screenings.					
Crude Fiber	11.00	00.9	10.00	6.50	13.00	
Moisture	12.00	10.80	12.60	11.60	11.10	
цs A	6.29	5.00	5.51	3.86	4.93	
Carbohy- drates	61.07	62.20	61.23	55.00	50.00	
fat	3.50	4.50	4.50	5.50	5.50	
Protein	Guar. 15.00 Found 16.95	Guar. 16.50 Found 16.64	Guar. 15.00 Found 15.06	Guar. 15.50 Found 16.43	Guar. 12.00 Found 15.03	
Brand Name and Name and Address of Manufacturer.	"Wheat Bran" Wilson Flour Mills,	White Middlings" Wisconsin Milling Company,	"Middlings" E. S. Woodworth & Co., Minneanolis Minn	diddlings"		







