

Connecticut Agricultural Experiment Station
New Haven, Connecticut

REPORT ON INSPECTION
OF
COMMERCIAL FEEDING STUFFS
1924

E. M. BAILEY

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CONNECTICUT AGRICULTURAL EXPERIMENT STATION

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March, 1925.

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THE NEW LAW RELATING TO FEEDING STUFFS.

A law relating to Concentrated Commercial Feeding Stuffs was passed by the General Assembly, session of 1925, and is now in force. Rules and regulations for enforcement of the law will be issued, as provided in the act, but the essential provisions as they differ from the old law may be here noted. Copies of the law may be obtained from this Station upon request.

"Concentrated Commercial Feeding Stuffs" defined. Section 1 of the law defines the term "concentrated commercial feeding stuffs" in substantially the same way that it is defined in the old law; and with the same exemptions. Scratch grains are classed as concentrated feeds.

Labelling. Section 2 defines how concentrated commercial feeding stuffs shall be labelled. The label must declare (1) the number of net pounds of feed in the package; (2) the name, brand or trade mark under which the article is sold; (3) the name and address of the manufacturer or importer; (4) a statement of the minimum percentages of (a) crude protein, (b) crude fat, and (c) the maximum percentage of crude fiber; and (5) in case of feeds composed of two or more ingredients, the name of each ingredient contained therein.

Registration and registration fee. Section 3 requires the annual registration of concentrated commercial feeding stuffs and a registration fee of fifteen dollars (\$15.00) for each brand. Registration is to be made with the Connecticut Agricultural Experiment Station on or before September 1, 1925, and annually thereafter.

Duties of Manufacturers. Manufacturers, jobbers or individuals shipping feeds into Connecticut will be expected to register their brands and pay the necessary fees thereon. Connecticut dealers should assure themselves that the brands they handle are properly registered. In case the manufacturer or jobber outside the State neglects or refuses to register, the dealer who handles such feeds will be held responsible for such registration and registration fee.

Dealers within the State who mix their own brands are responsible for the registration and proper labelling thereof.

Cottonseed Meal. Cottonseed meal registered as required by the fertilizer law is not exempt from registration also under the feed law if sold for feeding purposes.

Meaning of "Brand". It is held that a distinct brand name or a distinct guaranty constitutes a distinct brand.

Affixing Tags. The use of wire or any metal in affixing tags is prohibited by law.

Commercial Feeding Stuffs.

E. M. BAILEY.*

RÔLE OF THE NUTRIENTS.

Water. Air dry feeding stuffs, whether concentrates or roughage, still contain some moisture which cannot be seen or felt. The amount of such moisture averages not far from ten per cent. While not a nutrient in the ordinary sense, water is essential to the animal; but since it is obtained in abundance from sources other than the feed, its presence therein is not of importance. Excessive amounts, however, jeopardize the keeping qualities of a feed and automatically reduce the percentage of the more desirable ingredients.

Ash. The importance of mineral constituents in feeds is emphasized by the fact that animals fed upon rations deprived largely or entirely of ash constituents generally die sooner than animals which have been given no food at all. Given stock mineral matter in addition to that obtained in the daily ration is an old and familiar practice among experienced stockmen who have long "salted their cattle" with common salt (sodium chloride), the commercial grades of which contain small and varying amounts of other minerals, such as calcium, magnesium, iron and phosphorus and sulphur. Recent studies in nutrition have shown some of the specific needs which minerals satisfy in the vital processes. Thus big neck in calves, colts and lambs, and hairlessness in pigs are now attributed to iodine deficiency in the feed; and defective skeletal formation in growing animals is due either to a lack of calcium and phosphorus or to an absence of the necessary agency to make the proper utilization of these minerals possible, for it has been shown that without what has been called the fourth, or antirachitic, vitamine which is present in cod liver oil and in green plant tissues, calcium and phosphorus cannot be properly assimilated.

Protein. This nutrient group is estimated by determining the amount of nitrogen which a feed contains and multiplying that amount by the factor 6.25 on the assumption that proteins uniformly contain 16 per cent. of nitrogen. While this method of estimation is not strictly accurate it is as close an approximation as it is generally possible or practicable to get. From protein the body repairs waste, builds new tissue and, to a lesser extent, derives heat and energy. It was formerly thought that all proteins were adequate for all these processes, but it is a comparatively

*Analyses are chiefly by Messrs. Nolan and Mathis; inspection and sampling by Mr. Churchill; and compilation largely by Miss Bacon.

recent contribution to our knowledge that they are not. Protein is a complex substance made up of nineteen separate parts called amino acids. Proteins which contain some of all the various amino acids are called "complete" proteins; those in which one or more amino acids are lacking are called "incomplete". Undoubtedly all these separate parts play some rôle in vital processes; more particularly we know that tryptophane and lysine are essential to a normal rate of growth. The proteins of cereal grains are relatively low in the two amino acids just mentioned while proteins of animal origin, such as milk, meat, and eggs, are rich in these two substances; thus the logic of supplementing grain rations with skimmed milk or tankage is apparent. Grain mixtures alone may suffice if fed in sufficient quantity but it may happen that the energy requirements of the animal will become satisfied by non-protein constituents of the ration and its appetite fail before enough of the necessary amino acids has been acquired.

Knowledge of digestible nutrients and nutritive rations are not the final criteria by which rations are to be adjusted. The right kind and quality of protein must be supplied.

Crude Fiber. By this term is meant the coarser and more woody tissue characteristic of all forms of roughage and present in the outer coats of cereal and other fodder grains. It belongs to the carbohydrate group and is, in part, digested by ruminant animals. Its chief value lies in its mechanical effect in the intestinal tract.

Nitrogen-free Extract. In this class are included the relatively more digestible carbohydrates of the starch and sugar types. Their principal rôle in nutrition is to supply heat and energy, but they have also the power of sparing protein, by which is meant that when fed together with protein they reduce the amount of the latter food required. An excess of this carbohydrate group over the immediate needs of the body can be transformed into fat and stored in the body tissue.

The term "carbohydrate" as applied to a feeding stuff properly means "crude fiber" and "nitrogen-free extract" combined. Nitrogen-free extract is obtained by deducting from 100 per cent. the sum of the percentages of moisture, ash, protein, fiber and fat (ether extract).

Fat (Ether Extract). Fats, like the carbohydrates, furnish energy to the body and like them also, but to a lesser extent, spare protein. As energy producers their value is 2.25 times greater than that of either carbohydrate or protein. This ether-soluble material is in all cases crude fat, by which we understand that non-fatty substances like chlorophyll and coloring matter may be included therein.

Accessory Nutritive Factors. In this class are included the vitamins. There is not likely to be a deficiency of the vitamins A, B and C in rations of domestic animals; and they will not lack

the antirachitic vitamine if green fodder or properly cured leguminous hay is supplied. The beneficial influence of sunlight upon the growth and development of animals has also been strikingly demonstrated, and it may be classed with the vitamines as an accessory nutritive factor.

DIGESTIBLE NUTRIENTS.

Coefficients of digestibility for some common commercial concentrates are given in the following table.

TABLE I. COEFFICIENTS OF DIGESTIBILITY OF FEEDING STUFFS¹

Feed.	Average dry matter, lbs. per hundred.	Coefficient of digestibility.			
		Protein.	Fiber.	Nitrogen free extract.	Fat.
Cottonseed Meal.....	92.2	84	37	75	95
Cottonseed Feed.....	91.7	58	45	61	90
Linseed Meal (Old Process).....	90.9	89	57	78	89
Wheat Bran.....	89.9	78	31	72	68
Wheat Middlings.....	89.6	77	30	78	88
Wheat Feed.....	89.9	77	36	76	87
Rye Feed.....	88.5	80	..	88	90
Buckwheat Middlings.....	88.0	87	32	86	83
Oat Feed.....	93.5	75	42	46	78
Oat Middlings.....	93.1	80	49	85	93
Corn Gluten Feed.....	91.3	85	76	88	85
Corn Gluten Meal.....	90.9	85	55	90	93
Hominy Feed.....	89.9	66	76	90	91
Brewers' Grains.....	92.5	81	49	57	89
Dried Beet Pulp.....	91.8	52	83	83	..

CLASSIFICATION OF SAMPLES.

Commercial feeding stuffs and other fodder materials examined during the past year may be summarized as follows:

Official samples drawn by the Station agent.....	200
Samples submitted by purchasers or drawn by the Station agent upon request.....	63
Samples examined in connection with experimental work at the Storrs Station.....	91
Total.....	354

INSPECTION OF 1924.

Two hundred official samples were drawn by the Station agent during November and December, 1924. These samples and those

¹ Henry and Morrison: Feeds and Feeding, 18th Ed.

submitted by, or at the request of, purchasers are discussed in this report.

Samples secured for inspection purposes may be classified as follows:

Cottonseed Products.....	8	Proprietary Horse Feeds.	3
Linseed Products.....	6	“ Stock “ ..	21
Wheat Products.....	38	“ Dairy. “ ..	37
Rye Products.....	1	“ Hog “ ..	1
Maize Products.....	17	“ Poultry “ ..	38
Brewers' and Distillers' Products.....	4	Beef Scrap.....	20
Dried Beet Pulp.....	6	Total.....	200

REMARKS ON ANALYSES.

(Analyses in Table II, pages 505-526.)

Definitions of feeding stuffs here quoted are those adopted by the Association of Feed Control Officials.

COTTONSEED MEAL.

41.12 Per cent. Protein Cottonseed Meal, Choice Quality, must be finely ground, not necessarily bolted, perfectly sound and sweet in odor, yellow, free from excess of lint, and must contain at least 41.12 per cent. crude protein, equivalent to 8 per cent. of ammonia.

Cottonseed meal not fulfilling the above requirements as to color, odor, or texture, shall be branded Off Quality.

38.56 Per cent. Protein Cottonseed Meal, Prime Quality, must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color, yellow, not brown or reddish, free from excess of lint, and must contain at least 38.56 per cent. crude protein, equivalent to 7.5 per cent. of ammonia.

Cottonseed meal not fulfilling the above requirements as to color, odor or texture, shall be branded Off Quality.

36 Per Cent. Protein Cottonseed Meal, Good Quality, must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color, free from excess lint and must contain at least 36 per cent. crude protein, equivalent to 7 per cent. of ammonia.

Cottonseed Meal not fulfilling the above requirements as to color, odor or texture, shall be branded Off Quality.

Seven samples were examined two of which viz., Dixie, **778**, and Neal's Choice, **749**, were deficient by large amounts. Dixie, guaranteed 41.12 per cent. of protein and not over 10 per cent. of fiber was found to contain 33.75 per cent. of protein and 13.88 per cent. of fiber. Analysis of the duplicate which was left with the dealer by our agent, No. **1419**, showed 34.88 per cent. of protein. In the case of Neal's Choice, **749**, the guaranty called for 43 per cent. protein and not more than 10 per cent. of fiber whereas 34.38 per cent. of protein and 13.93 per cent. of fiber were found. This stock was resampled, No. **1361**, and showed a protein content of 33.88 per cent. These deficiencies are unusual; the products were, in fact, cottonseed feeds.

The other samples met the guaranties in all respects.

COTTONSEED FEED.

Cottonseed Feed is a mixture of cottonseed meal and cottonseed hulls containing less than 36 per cent. protein.

One sample, Danish, 728, fully met the guaranty.

LINSEED MEAL.

Linseed Cake or *Meal* is oil cake or meal made from flaxseed, provided that the final product shall contain less than 6 per cent. of weed seeds and other foreign materials, and provided further that no portion of the stated 6 per cent. of weed seeds and other foreign materials shall be deliberately added.

Old Process Oil Meal, *Old Process Linseed Meal* is oil meal as defined or linseed meal as defined produced by crushing, cooking and hydraulic pressure.

The six samples examined substantially met or exceeded the guaranties in all respects. The average protein content was 32.57 per cent. which is a little higher than was found a year ago. The prices quoted ranged from \$53.00 to \$60.00 and averaged \$57.67.

WHEAT BRAN.

Wheat Bran is the coarse outer covering of the wheat kernel as separated from cleaned and scoured wheat in the usual process of commercial milling.

Eleven samples were examined all of which satisfied the guaranties for protein and for fat. Fiber guaranties, where given, were not exceeded. The average protein found, 15.71 per cent., exceeded the average guaranteed by about 1.5 per cent., and the average fat content, 5.27 per cent. exceeded the average guaranty by about the same amount.

WHEAT MIDLINGS.

Standard Middlings consists mostly of fine particles of bran, germ and very little of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual commercial process of milling and shall not contain more than 9.5 per cent. crude fiber.

Flour Middlings shall consist of standard middlings and red dog flour combined in the proportion obtained in the usual process of milling and shall not contain more than 6.0 per cent. crude fiber.

Red Dog Flour consists of a mixture of low-grade flour, fine particles of bran and the fibrous offal from the "tail of the mill" and shall not contain more than 4.0 per cent. crude fiber.

Brown Shorts (*Red Shorts*) consists mostly of the fine particles of bran, germ and very little of the fibrous offal obtained from the "tail of the mill". This product must be obtained in the usual commercial process of milling.

Gray Shorts (*Gray Middlings* or *Total Shorts*) consists of the fine particles of the outer bran, the inner bran or bee-wing bran, the germ and the offal or fibrous materials obtained from the "tail of the mill". This product must be obtained in the usual process of commercial milling.

White Shorts or *White Middlings* consists of a small portion of the fine bran particles and the germ and a large portion of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual process of flour milling.

Sixteen samples were analyzed and all conformed to the guaranties for protein and for fat; fiber guaranties, so far as given, were not exceeded. The fiber content found did not reach 8 per cent. in any case and the average of all samples was but slightly over 6 per cent. The average protein found, 17.1 per cent., exceeds the average guaranty by 1.5 per cent. and the average fat found, 5.50 per cent., exceeded the guaranty by about 1 per cent. The average price quoted was \$37.18.

MIXED FEED.

Wheat Mixed Feed (Mill Run Wheat Feed) consists of pure wheat bran and the gray or total shorts or flour middlings combined in the proportions obtained in the usual process of commercial millings.

Of eleven samples of mixed feed no single sample exceeded 8.50 per cent. of fiber while the average for all was 7.23 per cent. The tentative limit of fiber in mixed feed is 8.50 per cent. Protein found exceeded that guaranteed in all cases and there were no deficiencies in fat. The average of prices quoted was \$43.55.

RYE PRODUCTS.

Rye Middlings or *Rye Feed* is the by-product obtained from the manufacture of ordinary "100 per cent." rye flour from cleaned and scoured rye grain.

The single sample examined fully met the guaranty.

CORN GLUTEN FEED.

Corn Gluten Feed is that portion of commercial shelled corn that remains after the separation of the larger part of the starch and the germs by the processes employed in the manufacture of cornstarch and glucose. It may or may not contain corn solubles.

The four samples analyzed fully satisfied their guaranties. The average protein found, 25.11 per cent., exceeded the average guaranty by about 2 per cent. The average of prices quoted was \$50.25.

CORN GLUTEN MEAL.

Corn Gluten Meal is that part of commercial shelled corn that remains after the separation of the larger part of the starch, the germ and the bran, by the processes employed in the manufacture of cornstarch and glucose. It may or may not contain corn solubles.

One sample was examined. It showed a slight protein deficiency (0.31 per cent.), but the guaranty for fat was exceeded.

HOMINY FEED.

Hominy Feed, Hominy Meal or *Hominy Chop* is the kiln-dried mixture of the mill run bran coating, the mill run germ, with or without a partial

extraction of the oil and a part of the starchy portion of the white corn kernel obtained in the manufacture of hominy, hominy grits and corn meal by the degerminating process.

Twelve samples were examined all of which met or exceeded their guaranties for protein and fat and none of which exceeded the limits for fiber. The average of prices quoted was \$50.75.

BREWERS' AND DISTILLERS' PRODUCTS.

Brewers' Dried Grains are the properly dried residue from cereals obtained in the manufacture of beer.

Distillers' Dried Grains are the dried residue from cereals obtained in the manufacture of alcohol and distilled liquors. The product shall bear the designation indicating the cereal predominating.

Four products of this class were examined and all met or exceeded their guaranties.

DRIED BEET PULP.

Dried Beet Pulp is the dried residue from sugar beets which have been cleaned and freed from crowns, leaves and sand, and which have been extracted in the process of manufacturing sugar.

Three samples conformed substantially to the guaranties. The other three, two of which were imported stock, bore no statement of composition. The average of prices quoted was \$46.17.

PROPRIETARY MIXED FEEDS.

Horse Feed.

Three samples of horse feeds were analysed all of which conformed to their guaranties.

Dairy Feed.

In this group are included those feeds sold as dairy feeds and dairy rations. Their protein content generally varies between 20 and 25 per cent. with the extreme variation of about 17 to 27 per cent. Fat is guaranteed at from 4 to 6 per cent. and the maximum for fiber is about 10 per cent. The averages for 29 samples examined were protein 22.6, fiber 8.7, and fat 5.4 per cent. Prices quoted varied generally between \$50 and \$55, range for the extremes being \$42 to \$59 with an average of about \$52.

Of the 29 samples there were only four deficiencies in protein which exceeded 1 per cent.; only three deficiencies in fat were greater than 0.25 per cent. and only one exceeded 0.50 per cent.; and there were no significant excesses of fiber. The protein guaranty of Notheration Dairy Ration, 754, has been revised in view of the deficiency found.

Stock Feed.

Feeds of this class contain from 8 to 12 per cent. of protein. The average protein found in the 19 samples examined was about 10 per cent. No deficiencies in protein were found. There was one excess of fiber and four fat deficiencies, three of which were more than 0.5 per cent. In all nineteen samples were analyzed. The formula for Nobotheration Stock Feed, **762**, we are advised has been changed to meet the fat deficiency shown. New tags were furnished the dealer by the manufacturers of Pennant Stock Feed to revise the fat guaranty.

Hog Feed and Calf Feed.

One hog feed and two calf feeds were analyzed. All substantially met their guaranties.

Poultry Feeds.

Fifty-eight samples of poultry feeds, twenty of which were meat scraps, were analyzed. Of the poultry feeds there were only three shortages in protein and only one, **845**, which exceeded 1 per cent. Fiber guaranties so far as they were given, were exceeded in only one sample and there were no deficiencies in fat.

Among the samples of beef scrap there were three deficiencies in protein only two of which, **871** and **852**, were considerable. There were no shortages in fat; generally the guaranty for fat was largely exceeded.

SUMMARY OF DEFICIENCIES.

In Table III are summarized deficiencies as shown by the inspection this year. Shortages in protein of less than one per cent. and in fat of less than one-fourth of one per cent., and excesses in fiber of less than one per cent. are not included. It shows that of the two hundred samples examined eighteen, or 9 per cent., have failed to meet guaranties in one or more particulars. The law prohibiting the use of wire in affixing tags has been violated in three instances.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Extract (Crude fat)
OIL SEED PRODUCTS.								
<i>Cottonseed Meal.</i>								
737	Paramount, Ashcraft-Wilkinson Co., Atlanta, Ga.	Hazardville: Amos D. Bridges Sons.	6.50	5.79	36.00	12.95	30.56	8.20
868 ¹	Steerboy, S. P. Davis, Little Rock, Ark.	Guaranty	5.95	7.52	43.25	5.88	29.10	8.30
775	Bull, Humphreys-Godwin Co., Memphis, Tenn.	Guaranty	5.55	5.39	44.88	9.60	27.55	6.00
778	Dixie, Humphreys-Godwin Co., Memphis, Tenn.	Guaranty	6.70	5.89	33.75	13.88	33.00	6.78
821	Lovitt, L. B. Lovitt & Co., Memphis, Tenn.	Norwich: Yantic Grain & Products Co.	6.20	6.15	41.19	9.98	27.78	8.70
749	"Neal's Choice," L. B. Lovitt & Co., Memphis, Tenn.	Guaranty	7.48	5.47	34.38	13.93	32.69	6.05
713	"Thirty Six Brand," L. B. Lovitt & Co., Memphis, Tenn.	Guaranty	6.83	5.72	37.00	12.55	31.05	6.85
		Plantville: C. A. Cowles			36.00	14.00		5.00
		Guaranty			40.45	11.14		5.50
		Average of guaranty	6.46	5.99	38.64	11.30	30.19	7.42
		Average of analyses			32.5	4.2	22.7	7.0
728	Danish, Humphreys-Godwin Co., Memphis, Tenn.	Thompsonville: Geo. S. Phelps.	8.18	6.14	37.00	12.85	29.48	6.35
		Guaranty			36.00	15.00		5.00

¹ Wire tags.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Extract (Crude fat)
OIL SEED PRODUCTS—Concluded.								
<i>Linseed Meal, Old Process.</i>								
710	Alinco. American Linseed Co., N.Y.	Plantsville: C. A. Cowles.	7.58	6.08	31.44	7.90	38.55	8.45
		Guaranty.	.....	.....	32.00	.....	.....	5.00
739	Amco. American Milling Co., Peoria, Ill.	Hazardville: Amos D. Bridges' Sons.	9.80	5.64	31.25	9.20	37.61	6.50
		Guaranty.	.....	.....	30.00	.....	.....	5.00
872	Pure. Archer-Daniels Midland Co., Minneapolis, Minn.	New Milford: Geo. E. Ackley Co.	9.15	4.72	35.50	7.73	36.57	6.33
		Guaranty.	.....	.....	34.00	.....	.....	6.00
884	Pure. Kellogg & Miller, Amsterdam, N. Y.	Waterbury: Spencer Grain Co.	7.65	5.67	31.63	7.55	40.40	7.10
		Guaranty.	.....	.....	32.00	.....	.....	4.70
724	Kelloggs. Spencer Kellogg Co., Buffalo, N. Y.	Thompsonville: Geo. S. Phelps	8.70	5.26	34.94	8.23	36.52	6.35
		Guaranty.	.....	.....	34.00	.....	.....	5.00
822	Argentine. Mann Bros. Co., Buffalo, N. Y.	Granby: E. H. Rollins.	9.85	5.74	30.63	7.70	39.13	6.95
		Guaranty.	.....	.....	31.00	.....	.....	6.00
		Average guaranty.	.....	.....	32.17	10.00	.....	5.28
		Average of analyses.	8.79	5.52	32.57	8.05	38.12	6.95
		Average digestible.	.....	.....	29.0	4.6	29.7	6.2
WHEAT PRODUCTS.								
<i>Wheat Bran.</i>								
722	Dominion Flour Mills Co., Montreal, Canada.	New Britain: Stanley Svea Grain & Coal Co. Guaranty.	9.13	5.70	16.00	9.10	54.59	5.48
			.....	.....	15.00	.....	.....	3.50

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Extract (Starch, gum, etc.)	Ether Extract (Crude fat)
WHEAT PRODUCTS—Continued.								
<i>Wheat Bran—Concluded.</i>								
817 ²	Wm. Hamilton & Son, Inc., Honeoye Falls, N. Y.	Derby: Peterson-Hendee Co. Guaranty	9.63	6.29	15.00	8.25	56.45	4.38
708 ²	Choice, Hecker-Jones-Jewell Milling Co., New York City	Plantsville: C. A. Cowles. Guaranty	9.30	6.42	15.06	9.70	54.12	2.90
794	Lakewood's, Lake of the Woods Milling Co., Montreal, Canada	Willimantic: Boston Grain Co. Guaranty	8.90	5.68	14.38	10.60	54.99	3.50
699	Niagara, Niagara Falls Milling Co., Niagara Falls, N. Y.	Meriden: H. Grulick. Guaranty	9.78	6.54	16.25	9.50	52.55	5.38
800	Northwestern Consolidated Milling Co., Minneapolis, Minn.	Stafford Springs: Stafford Granary Guaranty	9.85	6.26	16.13	9.20	53.53	5.03
702 ²	Pillsbury's, Pillsbury Flour Mills, Buffalo, N. Y.	West Cheshire: G. W. Thorpe. Guaranty	10.00	6.21	15.38	10.15	52.63	4.00
764	Golden Loaf, Tennant & Hoyt Co., Lake City, Minn.	Yantic: Yantic Grain & Products Co. Guaranty	9.65	5.64	15.88	8.55	55.00	5.28
854	Eagle, Vannatter & Ham, Ltd., Toronto, Canada	Branford: S. V. Osborn. Guaranty	8.83	5.75	15.81	8.93	54.95	5.73
736 ²	Gold Medal, Washburn-Crosby Co., Minneapolis, Minn.	Hazardville: Amos D. Bridges' Sons. Guaranty	10.10	5.86	15.88	8.78	54.05	5.33
741 ²	The Wilson Flour Mills, Wilson, Kansas	Rockville: Rockville Grain & Coal Co. Guaranty	9.30	6.81	17.00	10.08	51.91	4.90
		Average guaranty			14.50	11.00		3.50
		Average of analyses			14.16	11.90		3.67
		Average digestible	9.50	6.11	15.71	9.35	54.06	5.27
					12.3	2.9	38.9	3.6

² With screenings.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred						
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Extract (Crude fat)	
WHEAT PRODUCTS—Continued.									
<i>Wheat Middlings.</i>									
753	Central Milling Co., Wilson, N. Y.	New London: P. Schwartz Co.	9.95	3.58	17.75	4.68	58.29	5.75	
748	Dominion Flour Mills, Montreal, Can- ada.	Guaranty	15.00					3.50	
712 ²	The Fairchild Milling Co., Cleveland, Ohio.	Guilford: Fred C. Morse	9.63	4.33	17.56	6.95	55.20	6.33	
694	Jas. Goldie Co., Ltd., Toronto, Ontario	Guaranty	16.00					5.00	
863 ²	H. Hecker-Jones-Jewell Milling Co., New York City	Plantsville: C. A. Cowles	10.95	3.14	15.63	4.48	61.55	4.25	
833	Lakewood's, Lake of the Woods Milling Co., Montreal, Canada.	Guaranty	15.00					3.50	
795 ²	Rex, Maple Leaf Milling Co., Toronto, Canada.	Wallingford: A. E. Hall	10.58	4.60	17.50	7.53	53.69	6.10	
816 ²	Niagara, Niagara Falls Milling Co., Niagara Falls, N. Y.	Guaranty	17.00					6.00	
745 ²	Ogilvie Flour Mills, Fort William, Canada.	Waterbury: Spencer Grain Co.	9.65	4.96	16.38	7.60	56.41	5.00	
686 ²	Pillsbury's, Pillsbury Flour Mills, Buf- falo, N. Y.	Guaranty	14.00					5.00	
		Southern: C. Buckingham & Co.	10.88	3.97	16.88	5.65	56.72	5.90	
		Guaranty	16.00					5.00	
		Willimantic: Willimantic Grain Co.	8.78	4.25	17.38	6.90	56.96	5.73	
		Guaranty	16.00					5.00	
		Derby: Peterson-Hendee Co.	9.80	5.32	17.75	7.10	54.35	5.68	
		Guaranty	15.50					4.00	
		Rockville: Rockville Grain & Coal Co.	8.48	3.56	17.00	7.08	58.68	5.20	
		Guaranty	15.00					4.00	
		Hamden: I. W. Beers	11.05	3.05	17.25	3.50	60.25	4.90	
		Guaranty	15.00					4.00	

² With screenings.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Ex- tract (Crude fat)
WHEAT PRODUCTS—Continued.								
<i>Wheat Middlings—Concluded.</i>								
865	Pillsbury's XXX Daisy. Pillsbury Mills, Minneapolis, Minn.	Danbury: H. E. Meeker.	10.35	2.39	17.69	1.40	63.77	4.40
752 ²	Bell Cow. Quaker Oats Co., Saskatoon, Canada.	New London: P. Schwartz Co.	10.65	4.24	17.38	6.10	55.38	6.25
811	Red Wing. Red Wing Milling Co., Red Wing, Minn.	Middletown: Meech & Stoddard, Inc.	8.85	5.16	17.38	7.70	55.46	5.45
819 ²	Black Hawk. Robin Hood Mills, Calgary, Canada.	Ansonia: Ansonia Flour & Grain Co.	8.80	4.09	17.00	7.10	57.56	5.10
750 ²	Gold Medal. Washburn-Crosby Co., Minneapolis, Minn.	New London: New London Grain Co.	10.45	4.77	16.56	7.25	55.07	5.90
799 ²	Pioneer. Western Canada Flour Mills, Winnipeg, Canada.	So. Coenury: E. W. Latimer.	10.50	4.03	17.19	6.08	56.50	5.70
		Guaranty.			16.00			4.50
		Average guaranty.	9.96	4.09	17.14	8.38	57.24	5.50
		Average of analyses.				13.2	44.6	4.8
		Average digestible.						
866	Wheat Feed (Mixed Feed) Wingold. Bay State Milling Co., Winona, Minn.	Danbury: F. C. Benjamin.	10.40	4.54	17.13	5.55	57.45	4.93
744	Boston. Duluth Superior Milling Co., Duluth, Minn.	Rockville: Rockville Grain & Coal Co.	8.48	5.27	16.50	8.40	55.62	4.10
788	Durum. Duluth Superior Milling Co., Duluth, Minn.	Putnam: F. M. Cole.	8.38	4.48	16.75	8.50	56.61	5.28
		Guaranty.			15.00			5.00

² With screenings.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Extract (Crude fat)
WHEAT PRODUCTS—Concluded.								
882	Wheat Feed (Mixed Feed)—Concluded. Boston, Duluth Superior Milling Co., Duluth, Minn.	Bloomfield: Bloomfield Farmers' Exchg. Guaranty	9.65	5.23	16.00	7.95	55.69	5.48
707	Gold Mine, H. H. King Flour Mills, Minneapolis, Minn.	Plainville: C. A. Cowles Guaranty	8.98	5.05	16.25	7.85	56.29	5.58
805	Redwing, Meech & Stoddard, Middle- town, Conn.	Hartford: Meech Grain Co. Guaranty	9.30	5.14	16.75	7.68	55.70	5.43
826	Pennant Quality, National Milling Co., Toledo, Ohio.	Farmington: Winchell Smith Grist Mill Guaranty	8.38	3.97	16.38	7.13	58.54	5.60
823 ²	Pillsbury's, Pillsbury Mills, Minne- apolis, Minn.	Granby: E. H. Rollins Guaranty	10.10	4.17	17.88	5.90	57.17	3.75
733	Occident, Russell Miller Milling Co., Minneapolis, Minn.	Suffield: Spencer Bros. Guaranty	9.78	5.09	16.69	7.25	55.29	5.90
786 ²	Dakota, State Mill & Elevator Co., Grand Forks, No. Dakota	Danielson: Dayville Grain & Coal Co. Guaranty	7.78	5.13	16.31	8.03	56.87	5.88
874 ²	Gold Medal, Washburn-Crosby Co., Minneapolis, Minn.	Torrington: F. L. Wadhams & Sons Guaranty	10.35	4.25	15.38	5.33	60.31	4.38
		Average guaranty			16.00			4.00
		Average of analyses	9.23	4.76	16.55	7.23	56.87	5.36
		Average digestible			12.7	2.6	43.2	4.7

² With screenings.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Extract (Crude fat)
RYE PRODUCTS.								
810 ²	Feed. Boutwell Milling & Grain Co., Troy, N. Y.	Middletown: Meech & Stoddard, Inc. Guaranty	10.85	3.69	14.38	4.45	63.43	3.20 3.00
MAIZE PRODUCTS.								
<i>Corn Gluten Feed.</i>								
880	American Maize Products Co., New York City	Bloomfield: Bloomfield Farmers' Exchg. Guaranty	7.90	4.18	24.50	6.33	54.44	2.65 1.50
855	Buffalo. Corn Products Refining Co., New York City	Branford: S. V. Osborn Guaranty	9.25	5.32	24.50	6.35	51.48	3.10 2.00
751	Douglas. Penick & Ford Ltd., Cedar Rapids, Iowa	New London: P. Schwartz Co. Guaranty	8.15	7.07	28.13	7.43	46.24	2.98 1.00
704	Staley's. A. E. Staley Mfg. Co., Deca- tur, Ill.	West Cheshire: G. W. Thorpe Guaranty	8.38	4.44	23.31	6.58	54.29	3.00 1.00
		Average guaranty			23.00			1.38
		Average of analyses	8.42	5.25	25.11	6.67	51.62	2.93
		Average digestible			21.3	5.1	45.4	2.5
777	<i>Corn Gluten Meal.</i> Diamond. Corn Products Refining Co., New York City	Norwich: Yantic Grain & Products Co. Guaranty	7.93	1.35	39.69	2.98	44.85	3.20 1.00

² With screenings.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, Gum, etc.)	Ether Extract (Crude fat)
MAIZE PRODUCTS—Continued.								
<i>Hominy Feed.</i>								
757	Aunt Jemima Mills Co., St. Joseph, Mo.	Mystic: Yantic Grain Co.	9.70	2.62	11.13	5.15	60.37	11.03
721	Paragon. C. M. Cox, Boston, Mass.	Bristol: Bristol Grain & Supply Co.	9.30	3.45	11.13	4.68	63.84	7.60
884	Ideal. Elevator Milling Co., Springfield, Mass.	Guaranty.	8.78	3.25	11.88	4.88	62.73	8.48
837	Emco, Evans Milling Co., Indianapolis, Ind.	Seymour: Seymour Grain & Coal Co.	10.13	2.57	11.00	3.85	66.15	7.30
695	B.C. Kellogg Company, Battle Creek, Mich.	Guaranty.	9.73	2.66	11.25	4.70	64.58	7.08
783	Sonny South. Louisville Milling Co., Louisville, Ky.	Wallingford: A. E. Hall.	8.13	2.53	11.06	4.68	65.65	7.95
742	Bufeco. Maple Flake Mills, Chicago, Ill.	Moosup: T. E. Main & Sons Co.	10.05	2.58	11.00	3.63	67.59	5.15
720	Choice Steam Cooked. Miner-Hillard Milling Co., Wilkes-Barre, Pa.	Rockville: Rockville Grain & Coal Co.	9.25	2.36	10.50	4.05	69.36	4.48
779	Mystic. Mystic Mills, Sioux City, Iowa	Bristol: Bristol Grain & Supply Co.	9.05	2.22	10.94	4.60	66.36	6.83
701 ¹	The Patent Cereals Co., Geneva, N. Y.	Norwich: Yantic Grain & Products Co. Guaranty. Meriden: H. Grulich.	10.35	2.68	11.00	5.00	65.54	5.73
		Guaranty.	10.00	2.68	11.00	5.00	65.54	5.73

¹ Wire tags.

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Extract (Crude fat)
MAIZE PRODUCTS—Concluded.								
688	<i>Hominy Feed—Concluded.</i> Burt's. Postum Cereal Co., Inc., Battle Creek, Mich.		10.40	2.57	11.25	4.08	65.42	6.28
725	Yellow. Quaker Oats Co., Chicago, Ill.		9.20	2.34	10.63	4.28	68.12	5.43
					10.50			5.00
					9.92	5.78		5.42
			9.51	2.65	11.06	4.44	65.48	6.86
					7.3	3.4	58.9	6.2
BREWERS' AND DISTILLERS' PRODUCTS.								
867	Dried Brewers' Grains. Atlantic Ex- port Co., New York City.		5.40	3.49	25.00	13.33	45.28	7.50
781	Corn Distillers' Grain. Canada Indus- trial Alcohol Co., Corbyville, Ont.		3.18	2.67	31.31	10.48	41.51	10.85
738	Brewers' Dried Grains. St. Albans Grain Co., St. Albans, Vt.		6.70	3.56	23.19	13.10	45.95	7.50
714	Ricomalt. Waterloo Distilling Co., Waterloo, N. Y.		4.20	3.60	31.00	9.68	39.59	11.93
					28.00			10.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Ether Extract (Crude fat)
	DRIED BEET PULP.							
842	Dutch Dried. Chr. de Vries, Rotterdam	Stamford: Francis H. Leggett & Co.	6.88	4.74	7.75	17.73	61.92	0.98
698	The Larrowe Milling Co., Detroit, Mich.	Wallingford: A. E. Hall	10.40	2.74	8.25	17.63	60.18	0.80
877	Martiners Grain Co., New York City	Guaranty	7.05	3.35	8.00	20.00	...	0.50
		Winsted: E. Manchester & Sons.	7.05	3.35	8.94	18.20	61.48	0.98
719	Michigan Sugar Co., Saginaw, Mich.	Guaranty	6.43	3.04	8.38	18.95	62.50	0.70
		Plainville: W. S. Eaton	6.43	3.04	8.00	20.00	...	0.50
771	The Scholl Co., Newark, N. J.	Guaranty	7.10	3.53	9.13	20.25	58.84	1.15
		Colchester: Meech & Brown Grain Co.	7.10	3.53	9.13	20.25	58.84	1.15
692	Manufacturer Unknown.	Guaranty	8.58	3.22	7.00	20.00	...	0.25
		North Haven: W. L. Thorpe	8.58	3.22	9.13	19.78	57.79	1.50
		Guaranty	...	...	...	...	...	...
		Average guaranty	7.74	3.44	7.67	20.00	...	0.42
		Average of analyses	7.74	3.44	8.60	18.76	60.44	1.02
		Average digestible	...	...	4.5	15.6	50.2	...
	PROPRIETARY MIXED FEEDS.							
	<i>Horse Feed.</i>							
808	Diamond. Dwight Hamlin, Pittsburgh, Pa.	Hartford: Meech Grain Co.	7.50	5.56	8.88	9.00	65.43	3.63
		Guaranty	...	...	9.00	...	...	1.50

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Extract (Starch, gum, etc.)	Ether Extract (Crude fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Horse Feed—Concluded.</i>								
807	Imperial Steam Cooked, Imperial Grain & Milling Co., Toledo, Ohio.	Harford: Meech Grain Co.	8.98	2.47	9.88	5.83	67.99	4.85
726	Schumacher Sugared Feed, Quaker Oats Co., Chicago, Ill.	Thompsonville: Geo. S. Phelps.	9.15	5.20	10.19	10.63	60.68	4.15
		Guaranty			10.00			3.25
		Average guaranty	8.54	4.41	9.50	8.49	64.70	2.92
		Average of analyses			9.65			4.21
802	<i>Dairy Feed.</i> Advanced Registry, Arcady Farms Milling Co., Chicago, Ill.	Stafford Springs: Dennis Grain Mill.	8.08	4.88	25.56	9.70	45.73	6.05
803	Peerless, Arcady Farms Milling Co., Chicago, Ill.	Guaranty			25.00			5.00
801	Wonder Dairy Feed, Arcady Farms Milling Co., Chicago, Ill.	Stafford Springs: Dennis Grain Mill.	7.35	7.16	21.25	12.45	46.46	5.33
		Guaranty			20.00			4.00
735	Success Dairy Ration, Amos D. Bridges' Sons, Hazardville, Conn.	Stafford Springs: Dennis Grain Mill.	8.63	5.38	24.25	9.65	46.84	5.25
754	Nobotheration Dairy Ration, C. W. Campbell Co., Westerly, R. I.	Guaranty			24.00			5.00
705	Unicorn Dairy Ration, Chapin & Co., Chicago, Ill.	Hazardville: Amos D. Bridges' Sons.	8.90	4.44	21.38	8.70	51.15	5.43
		Guaranty			20.00			5.20
		Mystic: J. L. Manning.	9.95	4.17	20.44	5.90	54.76	4.78
		Guaranty			22.00			5.00
		West Cheshire: G. W. Thorpe.	8.05	6.31	24.25	8.58	46.93	5.88
		Guaranty			24.00	10.00		5.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, rum, etc.)	Ether Extract (Crude fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Dairy Feed—Continued.</i>								
706	Dairy Ration. C. A. Cowles, Plantsville, Conn.	Plantsville: C. A. Cowles	8.13	6.35	27.13	8.33	43.58	6.48
691	Wirthmore Balanced Ration. C. M. Cox Co., Boston, Mass.	North Haven: W. L. Thorpe.	9.25	6.39	25.38	8.90	43.85	5.00
785	Wirthmore Dairy Feed. C. M. Cox Co., Boston, Mass.	Danielson: Quinebaug Mills	8.85	4.05	22.25	7.00	54.07	5.50
847	Basic Dairy Ration. R. G. Davis & Sons, New Haven, Conn.	Guaranty	20.00					5.00
873	Litchfield Dairy Ration. R. G. Davis & Sons, New Haven, Conn.	Glenbrook: Davis-Scofield Co.	9.98	5.83	20.00	7.68	51.68	4.83
730	Fulpal Dairy Ration. Eastern States Farmers' Exchange, Springfield, Mass.	Torrington: Litchfield Coop. Assoc.	8.93	5.98	20.06	8.23	51.85	4.95
729	Milkmore Dairy Ration. Eastern States Farmers' Exchange, Springfield, Mass.	Guaranty	20.00					5.00
709	Elmore Milk Grains. Elmore Milling Co., Oneonta, N. Y.	West Suffield: Hugh E. Stratton.	9.28	7.20	21.00	9.23	48.06	5.23
697	Lancaster 20% Dairy Feed. John W. Eshelman & Sons, Lancaster, Pa.	Guaranty	20.00					4.00
787	Advance Dairy Feed. Grain Marketing Co., Chicago, Ill.	West Suffield: Hugh E. Stratton.	9.08	6.05	24.88	8.73	45.13	6.13
		Guaranty	24.00			9.00		4.00
		Plantsville: C. A. Cowles	8.10	6.35	25.56	8.40	46.06	5.53
		Guaranty	25.00			11.00		6.00
		Wallingford: A. E. Hall	9.93	6.75	19.25	10.40	49.54	4.13
		Guaranty	20.00					4.00
		Danielson: Dayville Grain & Coal Co.	8.98	7.93	17.31	10.05	49.53	6.20
		Guaranty	16.00					5.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Extract (Starch, gum, etc.)	Ether Extract (Crude fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Dairy Feed—Continued.</i>								
774	Grandin's 24% Balanced Dairy Ration. D. H. Grandin Mill Co., Jamestown, N. Y.	Norwich: Norwich Grain Co. Guaranty	8.63	5.25	23.00	8.23	49.81	5.08 5.00
796	Grandin's Twin Six Dairy Feed. D. H. Grandin's Mill Co., Jamestown, N. Y.	Willimantic: Willimantic Grain Co. Guaranty	9.08	5.82	21.75	7.68	50.57	5.10 5.00
839	Algrane Milk Feed. The H-O Cereal Co., Inc., Buffalo, N. Y.	So. Norwich: Roodner Feed Co. Guaranty	8.58	5.57	17.13	10.88	54.01	3.83 4.00
746	Beatsall Milk Grains. Kasco Mills, Waverly, N. Y.	Guilford: Fred C. Morse Guaranty	8.85	6.16	24.38	8.03	47.03	5.55 4.50
747	Kasco Mormilk Dairy Ration. Kasco Mills, Waverly, N. Y.	Guilford: Fred C. Morse Guaranty	8.40	5.40	27.06	8.18	44.98	5.98 5.00
711	Larro Feed Ready Ration. Larro Milling Co., Detroit, Mich.	Plantsville: C. A. Cowles Guaranty	8.63	5.76	21.00	10.98	49.08	4.55 4.00
838	Nabob Dairy Feed. Francis H. Leggett & Co., Stamford, Conn.	Norwalk: Francis H. Leggett & Co. Guaranty	8.85	8.09	19.56	9.55	49.60	4.35 4.00
875	Red Star Dairy Feed. E. Manchester & Sons, Winsted, Conn.	Winsted: E. Manchester & Sons. Guaranty	8.10	5.70	22.75	7.03	49.87	6.55 4.00
743	Bull Brand Dairy Ration. Maritime Milling Co., Buffalo, N. Y.	Rockville: Rockville Grain & Coal Co. Guaranty	9.23	6.53	22.50	10.48	45.01	6.25 6.00
768	Red Wing Junior Dairy Ration. Meech & Stoddard, Inc., Middletown, Conn.	Colchester: Meech & Brown Grain Co. Guaranty	8.18	5.47	19.25	7.75	53.92	5.43 5.00
769	Red Wing Special Dairy Ration. Meech & Stoddard, Inc., Middletown, Conn.	Colchester: Meech & Brown Grain Co. Guaranty	7.90	4.84	23.38	7.75	49.73	6.40 6.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					Ether Extract (Crude fat)
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	
PROPRIETARY MIXED FEEDS—Cont.								
<i>Dairy Feed—Concluded.</i>								
789	Oswego 20% Dairy Feed. Ontario Milling Co., Oswego, N. Y.	Putnam: Bosworth Bros.	7.70	5.52	20.13	10.98	50.09	5.58
766	Uncle John's 24% Cream Pot Ration. Ontario Milling Co., Oswego, N. Y.	Guaranty.	8.05	5.80	21.63	7.45	51.14	5.00
862	Stevens 44 Sweetened Dairy Ration. Park & Pollard Co., Boston, Mass.	Colchester: David Shea.	8.85	7.68	23.38	7.83	47.33	5.50
687	Pillsbury's 24% Dairy Feed. Pillsbury Flour Mills Co., Minneapolis, Minn.	Waterbury: Spencer Grain Co.	9.50	7.68	22.81	8.70	45.71	5.60
827	Burt's Dairy Feed. Postum Cereal Co., Battle Creek, Mich.	Guaranty.	7.70	4.58	24.06	6.85	51.78	5.03
814	Purina 24% Cow Chow Feed. Ralston Purina Co., St. Louis, Mo.	Farmington: Winchell Smith Grist Mill	9.73	6.12	25.94	10.68	42.65	4.88
834	Red Brand Dairy Feed. Tioga Mill & Elevator Co., Waverly, N. Y.	Guaranty.	8.98	7.00	25.69	8.13	44.42	4.30
825	Mill Streams Boomerang Dairy Feed. Winchell Smith Grist Mill, Farmington, Conn.	Middletown: H. G. Wadhams.	8.98	5.53	24.19	6.03	49.54	5.73
758	Big Y Dairy Ration. Yantic Grain & Products Co., Norwich, Conn.	Guaranty.	9.03	4.35	26.63	7.28	47.31	5.40
759	Uncas Dairy Feed. Yantic Grain & Products Co., Norwich, Conn.	Mystic: Yantic Grain Co.	8.43	5.18	20.00	8.65	51.81	5.93
		Guaranty.			20.00			5.00
		Average guaranty.			22.22	10.38		4.86
		Average of analyses.	8.73	5.93	22.60	8.68	48.65	5.41

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Biter Extract (Crude Fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Stock Feed—Concluded.</i>								
835	Nabob Stock Feed. Francis H. Leggett & Co., Norwalk, Conn.	Norwalk: Francis H. Leggett & Co.	9.10	4.40	10.38	11.75	61.79	2.58
770	Red Wing Stock Feed. Meech & Stoddard Co., Middletown, Conn.	Colchester: Meech & Brown Grain Co.	7.95	3.71	10.25	10.03	63.51	4.55
727	Fidelity Stock Feed. Nowak Milling Corp., Buffalo, N. Y.	Thompsonville: Geo. S. Phelps	7.98	5.06	8.56	11.93	63.02	3.45
791	Park & Pollard Co. Stock Feed. Park & Pollard Co., Boston, Mass.	Putnam: Bosworth Bros.	8.73	7.21	9.94	7.25	61.74	5.13
853	Burt's Stock Feed. Postum Cereal Co., Inc., Battle Creek, Mich.	Guaranty	9.10	3.90	9.44	8.03	64.60	4.93
830	Schumacker Feed. Quaker Oats Co., Chicago, Ill.	Strafford: Z. C. Ingersoll	7.98	4.74	10.75	10.88	62.05	3.60
831	White Star Stock Feed. Quaker Oats Co., Chicago, Ill.	Bridgeport: Samp Mortar Mills.	8.65	4.27	8.13	12.63	63.29	3.25
718	Syracuse Stock Feed. Syracuse Milling Co., Syracuse, N. Y.	Plainville: W. S. Eaton	9.13	4.44	9.13	11.23	62.72	3.35
793	Red Tag Big Y Stock Feed. Yantic Grain & Products Co., Norwich, Conn.	Guaranty	8.10	4.35	12.00	10.45	59.92	5.18
		Average guaranty.			9.16	11.70		3.80
		Average of analyses.	8.34	4.48	10.11	10.63	62.10	4.34

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, Gum, etc.)	Ether Extract (Crude fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Hog Feed, Etc.</i>								
700	Purina Pig Chow. Purina Mills, St. Louis, Mo.	Meriden: H. Grulich.	9.83	8.56	21.50	7.05	48.13	4.93
815	Purina Calf Chow. Purina Mills, St. Louis, Mo.	Middletown: H. G. Wadhams.	9.93	3.88	26.69	3.18	52.02	3.20
809	Blatchford's Calf Meal. Blatchford Calf Meal Co., Waukegan, Ill.	Guaranty.	10.05	6.38	24.38	5.85	47.81	3.20
		Guaranty.			24.00			5.53
		Guaranty.						5.00
<i>Poultry Feed.</i>								
846	Buttermilk Laying Mash. Basic Feeds Co., Lockport, Ill.	Stamford: W. L. Crabb.	8.18	5.25	21.13	4.98	54.73	5.73
792	Parex Dry Mash. Bosworth Bros., Putnam, Conn.	Guaranty.	8.85	5.98	18.94	6.28	54.37	5.00
832	Buckingham's Dry Mash. C. Buckingham & Co., Southport, Conn.	Guaranty.	9.48	7.35	20.00	4.55	52.92	5.58
760	Ego Dry Mash. C. W. Campbell Co., Westerly, R. I.	Guaranty.	8.48	8.41	22.25	7.83	47.10	4.50
765	Fortune Egg Mash with Buttermilk. Coles Co., Middletown, Conn.	Guaranty.	7.58	11.07	21.31	5.68	49.01	5.00
878	Laying Mash. C. A. Cowles, Plantsville, Conn.	Colchester: David Shea.	8.10	9.34	17.63	6.78	53.12	2.00
879	Cowles' Meato Mash. C. A. Cowles, Plantsville, Conn.	Guaranty.	8.98	4.87	22.00	5.48	53.59	3.50
		Guaranty.			22.00			5.03
		Guaranty.						4.00
		Guaranty.						5.08
		Guaranty.						5.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, Gum, etc.)	Biber Extract (Crude fat)
PROPRIETARY MIXED FEEDS— <i>Cont.</i>								
<i>Hog Feed, Etc.</i>								
700	Purina Pig Chow. Purina Mills, St. Louis, Mo.	Meriden: H. Grulich.	9.83	8.56	21.50	7.05	48.13	4.93
815	Purina Calf Chow. Purina Mills, St. Louis, Mo.	Middletown: H. G. Wadhams.	9.93	3.88	26.69	3.18	52.02	4.30
809	Blatchford's Calf Meal. Blatchford Calf Meal Co., Waukegan, Ill.	Middletown: Meech & Stoddard, Inc.	10.05	6.38	24.38	5.85	47.81	5.53
		Guaranty			24.00			5.00
<i>Poultry Feed.</i>								
846	Buttermilk Laying Mash. Basic Feeds Co., Lockport, Ill.	Stamford: W. L. Crabb.	8.18	5.25	21.13	4.98	54.73	5.73
792	Parex Dry Mash. Bosworth Bros., Putnam, Conn.	Guaranty	8.85	5.98	18.94	6.28	54.37	5.58
832	Buckingham's Dry Mash. C. Buckingham & Co., Southport, Conn.	Guaranty	9.48	7.35	20.00	4.55	52.92	4.50
760	Ego Dry Mash. C. W. Campbell Co., Westerly, R. I.	Southport: C. Buckingham & Co.	8.48	8.41	22.25	7.83	47.10	5.93
765	Fortune Egg Mash with Buttermilk Laying Mash. C. A. Cowles, Plantsville, Conn.	Westerly: C. W. Campbell Co.	7.58	11.07	21.31	5.68	49.01	5.35
878	Cowles' Meato Mash. C. A. Cowles, Plantsville, Conn.	Colchester: David Shea.	8.10	9.34	17.63	6.78	53.12	5.03
879	Plantsville, Conn.	Guaranty	8.98	4.87	22.00	5.48	53.59	5.08
		Plantsville: C. A. Cowles.			22.00			5.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Berher Extract (Crude fat)
PROPRIETARY MIXED FEEDS— <i>Cont.</i>								
<i>Poultry Feed—Continued.</i>								
703	Wirthmore Buttermilk Mash Feed.		8.43	12.34	21.75	6.03	45.05	6.40
	C. M. Cox Co., Boston, Mass.				20.00			4.00
861	C-B Mash. The Crittenden Benham Co., New Haven, Conn.		7.30	11.41	18.94	6.05	49.65	6.65
836	Crosby's Growing Feed. Crosby Milling Co., Brattleboro, Vt.		9.88	8.42	18.75	4.83	52.97	5.15
849	Davis Buttermilk Mash Feed. R. G. Davis & Sons, New Haven, Conn.		8.90	6.89	18.25	6.13	54.00	4.50
731	Egg Mash, Open Formula. Eastern States Farmers' Exchange, Springfield, Mass.		9.60	5.71	19.88	5.43	53.95	5.43
840	Eshelman's Laying Mash. John W. Eshelman & Sons, Lancaster, Pa.		9.28	9.05	21.75	5.18	48.19	6.55
881	Flory's Superior Egg Mash. Flory Milling Co., Bangor, Penn.		8.63	9.69	20.88	7.88	47.57	5.35
773	Grandin's Poultry Dry Mash with Buttermilk. D. H. Grandin's Mill Co., Jamestown, N. Y.		8.50	12.25	20.56	5.43	48.01	5.25
723	Red Comb Egg Mash. Hales & Hunter Co., Chicago, Ill.		8.80	8.45	20.06	4.83	52.21	5.65
841	Premier Laying Mash. Francis H. Leggett & Co., Stamford, Conn.		9.70	7.47	22.06	5.00	49.19	6.58
876	Storrs Egg Mash. E. Manchester & Sons, Winsted, Conn.		7.85	9.03	19.63	5.23	51.91	6.35
					18.00			4.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, Gum, etc.)	Ether Extract (Crude fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Poultry Feed—Continued.</i>								
845	Armour's Cak-Cak Laying Mash. Maple Flake Mills, Chicago, Ill.	Stamford: W. L. Crabb	9.75	8.61	18.75	3.50	54.99	4.40
844	Iroquois Laying Mash. Maple Flake Mills, Chicago, Ill.	Guaranty	8.63	8.50	20.56	6.43	49.08	3.00
843	Bull Brand Laying Mash. Maritime Milling Co., Buffalo, N. Y.	Stamford: W. L. Crabb	8.88	8.75	20.63	7.03	48.71	6.00
806	Red Wing Dry Mash. Meech & Stoddard, Inc., Middletown, Conn.	Guaranty	8.40	8.46	18.75	6.40	52.49	5.50
856	Bonnie Booster with Buttermilk. Park & Pollard Co., Boston, Mass.	Hartford: Meech Grain Co.	9.93	5.38	15.25	2.93	63.23	3.28
818	Lay or Bust Dry Mash. Park & Pollard Co., Boston, Mass.	New Haven: R. G. Davis & Sons	9.73	6.74	18.13	5.38	55.49	3.00
885	Platco Laying Mash. Frank S. Platt Co., New Haven, Conn.	Guaranty	7.78	10.22	20.75	6.68	48.84	1.50
858	Pratt's Baby Chick Food. Pratt Food Co., Philadelphia, Pa.	New Haven: Frank S. Platt Co.	8.70	8.54	13.00	2.55	63.16	5.73
860	Purina Chicken Chowder. Purina Mills, St. Louis, Mo.	New Haven: R. G. Davis & Sons	8.45	8.22	20.06	6.23	52.11	3.50
857	Ful-O-Pep Chick Starter. Quaker Oats Co., Chicago, Ill.	New Haven: The Crittenden Benham Co.	7.75	8.76	17.38	4.90	55.01	4.00
859	Ful-O-Pep Egg Mash. Quaker Oats Co., Chicago, Ill.	Guaranty	7.73	9.23	20.44	6.98	49.89	5.00
		New Haven: R. G. Davis & Sons			20.00			5.73
		Guaranty						4.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Extract (Starch, gum, etc.)	Ether Extract (Crude fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Poultry Feed—Continued.</i>								
829	Quisenberry Quality "Big 4" Mash. Quisenberry Feed Mfg. Co., Buffalo, N. Y.	<i>Farmington:</i> Winchell Smith Grist Mill Guaranty	8.88	6.19	17.88	8.15	54.27	4.63
828	Quisenberry Quality Buttermilk Lay- ing Mash. Quisenberry Feed Mfg. Co., Buffalo, N. Y.	<i>Farmington:</i> Winchell Smith Grist Mill Guaranty	9.70	6.34	19.88	5.63	53.80	4.65
689	Vitality Egg Mash. Rosenbaum Bros., Chicago, Ill.	<i>Hamden:</i> I. W. Beers Guaranty	9.40	9.30	20.56	5.65	49.54	5.55
883	S. G. Home Made Milk Mash. The Seymour Grain & Coal Co., Sey- mour, Conn.	<i>Seymour:</i> Seymour Grain & Coal Co. Guaranty	8.90	7.49	18.06	6.58	53.69	5.28
824	Mill Streams Lightnin Laying Mash. Winchell Smith Grist Mill, Farming- ton, Conn.	<i>Farmington:</i> Winchell Smith Grist Mill Guaranty	9.80	8.86	19.75	5.68	51.31	4.60
716	Syracold Egg Mash. Syracuse Milling Co., Syracuse, N. Y.	<i>Plainville:</i> W. S. Eaton Guaranty	8.65	7.73	19.94	7.05	51.56	5.07
820	Syracold Egg Mash. Syracuse Milling Co., Syracuse, N. Y.	<i>Granby:</i> E. H. Rollins Guaranty	8.70	7.27	20.00	7.30	51.83	4.90
693	Egatine. Tioga Mill & Elevator Co., Waverly, N. Y.	<i>North Haven:</i> W. L. Thorpe Guaranty	9.03	8.28	26.44	4.68	45.09	3.00
763	Big Y Laying Mash. Yantic Grain & Products Co., Norwich, Conn.	<i>Yantic:</i> Yantic Grain & Products Co. Guaranty	9.25	8.33	21.13	6.43	49.18	5.68
					20.00			4.00

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Extract (Starch, Gum, etc.)	Bether Extract (Crude Fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Poultry Feeds—Continued</i> (Beef Scrap.)								
851	Big 50 Meat & Bone Scrap, American Agricultural Chemical Co., N. Y.	New Canaan: C. H. Fairty Co.	5.05	24.82	53.94	2.36	13.83	
871	Protox Meat & Bone Scrap, American Agricultural Chemical Co., N. Y.	New Milford: Geo. E. Ackley Co.	5.03	23.64	51.94	3.14	16.25	
756	Beach Soap Co., Lawrence, Mass.	Mystic: J. L. Manning.	6.10	33.24	43.13	1.90	3.20	
690	Cooked Meat Scrap for Poultry. Conn. New Haven, Conn.	Guaranty.			35.00		10.00	
696	Frisbie's Poultry Feed Animal Products. L. T. Frisbie Co., New Haven, Conn.	Hamden: I. W. Beers.	6.75	29.06	50.00	2.70	1.44	
870	Frisbie's Poultry Feed. The L. T. Frisbie Co., New Haven, Conn.	Guaranty.			40.00		8.00	
813	Greene's Poultry Scraps, Green Chicken Feed Co., Marblehead, Mass.	Wallingford: A. E. Hall.	6.03	33.03	44.75	2.10	0.69	
804	Cooked Meat & Bone Scraps. A. G. Markham & Co., Springfield, Mass.	Guaranty.			40.00		8.00	
780	Marsh's Pure Ground Scraps for Poultry. Geo. E. Marsh Co., Lynn, Mass.	New Milford: Geo. T. Soule.	6.20	28.76	49.38	2.83	12.83	
850	High Grade Meat and Bone Scraps. Martin & Maurer, Harrison, N. J.	Middletown: Meech & Stoddard, Inc.	4.35	44.80	32.13	8.24	10.48	
		Guaranty.			25.00		5.00	
		Stafford Springs: Dennis Grain Mill.	7.58	33.63	47.56	2.80	8.43	
		Guaranty.			40.00		8.00	
		Norwich: Yantic Grain & Products Co.	5.00	31.48	45.25	4.67	13.60	
		Guaranty.			40.00		8.00	
		New Canaan: C. H. Fairty Co.	5.88	27.06	51.38	3.20	12.48	
		Guaranty.			50.00		10.00	

TABLE II. ANALYSES OF COMMERCIAL FEEDS, INSPECTION OF 1924.

Station No.	Manufacturer and Brand	Retail Dealer	Pounds per Hundred					
			Water	Ash	Protein (N x 6.25)	Fiber	Nitrogen-free Ex- tract (Starch, gum, etc.)	Blether Ex- tract (Crude fat)
PROPRIETARY MIXED FEEDS—Cont.								
<i>Poultry Feeds—Concluded.</i>								
798	Blue Seal Meat Scraps, New England By-Products Corp., Lawrence, Mass.	So. Coventry: E. W. Latimer.	5.90	27.28	52.63	2.31	11.88	
717	White Seal Meat Scraps, New England By-Products Corp., Lawrence, Mass.	Guaranty.	5.80	36.93	40.94	3.00	5.00	
761	Pawtucket Rendering Co., Pawtucket, R. I.	Plainville: W. S. Eaton.	5.18	32.52	50.00	0.90	2.03	
740 ¹	Rauh's Meato, E. Rauh & Sons Animal Feed Co., Indianapolis, Ind.	Guaranty.	4.55	5.75	76.25	4.00	8.00	
852	Swift-Sure Ground Beef Scrap for Poultry, M. L. Shoemaker & Co., Philadelphia, Pa.	Hazardville: Amos D. Bridges' Sons.	4.98	29.82	52.13	1.00	13.05	
732	Cooked Meat and Bone Scraps, Springfield Rendering Co., Springfield, Mass.	East Haven: F. A. Forbes.	7.18	30.30	51.25	2.94	10.13	
812	Meat Scrap for Poultry, John T. Stanley Co., New York, N. Y.	Guaranty.	6.10	28.90	43.88	1.80	8.53	
869	Vico High Protein Meat Scraps, Van Iderstine Co., Long Island City, N. Y.	Suffield: Spencer Bros.	7.18	18.47	58.69	0.00	8.00	
776	Royal Worcester Beef Scrap, Worcester Rendering Co., Auburn, Mass.	Guaranty.	7.30	28.89	48.25	0.00	10.25	
782	Royal Worcester Special Meat Scrap, Worcester Rendering Co., Auburn, Mass.	Guaranty.	6.28	21.78	56.13	0.00	13.10	
		Guaranty.	7.30	28.89	48.25	5.31	8.00	
		Middletown: Meech & Stoddard, Inc.	6.10	28.90	43.88	8.19	12.93	
		Guaranty.	7.18	18.47	58.69	3.11	10.00	
		New Milford: Geo. T. Soule.	7.18	18.47	58.69	3.11	12.55	
		Guaranty.	7.30	28.89	48.25	5.31	5.00	
		Norwich: Norwich Grain Co.	7.30	28.89	48.25	5.31	10.25	
		Guaranty.	6.28	21.78	56.13	2.71	8.00	
		Jewett City: Red Wing Feed Store.	6.28	21.78	56.13	2.71	13.10	
		Guaranty.	7.30	28.89	48.25	5.31	8.00	

¹ Wire tags.

TABLE III. FEEDS NOT CONFORMING TO GUARANTIES OR OTHERWISE ILLEGAL.

Station No.	Manufacturer and Brand	Protein Deficiency	Fat Deficiency	Fiber Excess	Remarks
	COTTONSEED MEAL.	%	%	%	
868	Steerboy. S. P. Davis, Little Rock, Ark.	7.37	.....	3.88	Wire tags, illegal.
778	Dixie. Humphreys-Godwin Co., Memphis, Tenn.	8.62	.....	3.93	.....
749	Neal's Choice. L. B. Lovitt & Co., Memphis, Tenn.	.....	.....	.....	.....
	HOMINY FEED.				
701	The Patent Cereals Co., Geneva, N. Y.	.....	.....	.....	Wire tags, illegal.
	DAIRY FEED				
754	Nobotheration Dairy Ration. C. W. Campbell Co., Westerly, R. I.	1.56	.....	.....	.....
785	Wirthmore 20 Protein Dairy Feed. C. M. Cox Co., Boston, Mass.	.....	1.22	.....	.....
709	Elmore Milk Grains. Elmore Milling Co., Oneonta, N. Y.	.....	0.47	.....	.....
743	Bull Brand Dairy Ration. Maritime Milling Co., Buffalo, N. Y.	1.50	.....	.....	.....
766	Uncle John's 24% Cream Pot Ration. Ontario Milling Co., Oswego, N. Y.	2.37	.....	.....	.....
687	Pillsbury's 24% Dairy Feed. Pillsbury Flour Mills Co., Minneapolis, Minn.	1.19	.....	.....	.....
825	Mill Streams Boomerang Dairy Feed. Winchell Smith Grist Mill, Farmington, Conn.	.....	0.27	.....	.....
	STOCK FEED.				
797	Pennant Brand Stock Feed. E. W. Bailey & Co., Swanton, Vt.	.....	0.87	.....	.....
762	Nobotheration Stock Feed. C. W. Campbell Co., Westerly, R. I.	.....	1.27	.....	.....
848	Davis Stock Feed. R. G. Davis & Sons, New Haven, Conn.	.....	1.17	.....	.....
715	Flory's Special Stock Feed. Flory Milling Co., Bangor, Penn.	.....	.....	1.24	.....
835	Nabob Stock Feed. Francis H. Leggett & Co., Norwalk, Conn.	.....	0.42	.....	.....

TABLE III. FEEDS NOT CONFORMING TO GUARANTIES OR OTHERWISE ILLEGAL.

Station No.	Manufacturer and Brand	Protein Deficiency	Fat Deficiency	Fiber Excess	Remarks
	POULTRY FEEDS.				
845	Armour's Cak-Cak Laying Mash. Maple Flake Mills, Chicago, Ill.	% 1.25	% .....	% .....	.....
829	Quisenberry Quality "Big 4" Mash. Quisenberry Feed Mfg. Co., Buffalo, N. Y.	.....	.....	2.15	.....
	BEEF SCRAP.				
871	Protox Meat & Bone Scrap. American Agricultural Chemical Co., New York City.	.....	.....	.....	.....
740	Rauh's Meato. B. Rauh & Sons Animal Feed Co., Indianapolis, Ind.	3.06	.....	.....	.....
852	Swift-Sure Ground Beef Scrap for Poultry. M. L. Shoemaker & Co., Philadelphia, Pa.	.....	.....	.....	Wire tags, illegal.
		2.87	.....	.....	.....

Over the five-year period 1920 to 1924 inclusive, from 8 to 12 per cent. of samples examined have been found deficient in individual years. The combined data for this period shows that of 864 samples analyzed 83 have been deficient in one or more of the three items, protein, fat and fiber, which is 9.6 per cent. of the total. In other words 90.4 per cent. of the samples examined have substantially met their guaranties. The distribution of these deficiencies is shown in Table IV.

TABLE IV. SUMMARY AND DISTRIBUTION OF DEFICIENCIES FOR FIVE YEAR PERIOD, 1920 TO 1924 INCLUSIVE.

	No. Samples	No. Deficient
Cottonseed Meal.....	60	9
Cottonseed Feed.....	4	1
Linseed Meal.....	27	0
Wheat Bran.....	70	1
Wheat Feed.....	42	1
Wheat Middlings.....	80	2
Rye Products.....	9	0
Wheat and Rye.....	1	0
Buckwheat.....	2	0
Oat Products.....	4	0
Corn Gluten Feed.....	25	1
Corn Gluten Meal.....	3	0
Corn Meal.....	4	0
Hominy Feed.....	58	11
Distillers' and Brewers' Grains.....	15	3
Dried Beet Pulp.....	25	0
Proprietary Feeds (including Poultry Feeds)..	429	53
Miscellaneous:		
Peanut Oil Meal.....	1	1
Cocoanut Oil Meal.....	1	0
Corn Flakes.....	1	0
Red Dog Flour.....	3	0
Total	864	83

MISCELLANEOUS SAMPLES.

In Table V are included samples submitted by purchasers or others interested. Most of these have required only partial or complete fodder analyses; but in a few cases examinations were made for poisons.

TABLE V. ANALYSES OF FEEDING STUFFS

Station No.	Material	Submitted by
CORN PRODUCTS.		
23162	Buffalo Gluten Feed "A".....	Granby: P. J. Rogers.....
23163	Buffalo Gluten Feed "B".....	P. J. Rogers.....
OAT PRODUCTS.		
898	Canada Oats No. 44.....	Cromwell: Edmund Peterson.....
900	Ground Oats No. 38—40.....	Edmund Peterson.....
1183	Ground Oats.....	Berlin: D. B. Hubbard, Jr.....
WHEAT PRODUCTS.		
897	Red Wheat.....	Cromwell: Edmund Peterson.....
901	Gold Medal Wheat Bran.....	Edmund Peterson.....
902	H. Wheat Middlings.....	Edmund Peterson.....
PROPRIETARY MIXED FEEDS.		
<i>Dairy Feeds and Rations.</i>		
23366	Dairy Feed.....	Hazardville: Amos D. Bridges' Sons
599	Dairy Ration.....	Plantsville: C. A. Cowles.....
23005	Big Y Dairy Ration.....	Norwich: S. C. Beebe.....
22808	Dairy Ration Home Mixture.....	Hazardville: Amos D. Bridges' Sons
22838	Fulpail Dairy Ration No. 1.....	Thomaston: Nils Swanson.....
22839	Fulpail Dairy Ration No. 2.....	Nils Swanson.....
22836	Fulpail 20% Eastern States Ration.....	Norwich: Walter T. Clark.....
22835	Milkmore 24% Eastern States Ration.....	Walter T. Clark.....
176	Red Wing Junior Dairy Ration.....	Middletown: Meech & Stoddard, Inc.
177	Red Wing Special Dairy Ration.....	Meech & Stoddard, Inc.....
935	Red Wing Special Dairy Ration.....	Middlefield: Lyman Farm.....
932	Uncle John's 24% Cream Pot Ration....	Lyman Farm.....
22828	Uncle John's 24% Cream Pot Dairy Ration.....	Middletown: The Coles Company...
23284	Wadfeeco Dairy Ration.....	New Haven: S. C. Salmon.....
<i>Poultry Feeds.</i>		
23004	Big Y Laying Mash.....	Norwich: S. C. Beebe.....
22912	Big Y Laying Mash.....	The Yantic Grain & Products Co.
22683	Eastern States Egg Mash.....	Gaylordsville: Miss H. M. Bamwell.
22684	Eastern States Egg Mash.....	Miss H. M. Bamwell.....
22837	Egg Mash 22% Eastern States Ration.....	Norwich: Walter T. Clark.....
934	Laying Mash.....	Meriden: Reliable Grain & Feed Co.
895	Cracked Corn.....	Cromwell: Edmund Peterson.....
899	Frisbie Meat and Bone Scraps.....	Edmund Peterson.....
23272	Beef Scrap.....	Middletown: Middlesex Refining Co.
294	Bran A-1.....	Cromwell: Edmund Peterson.....

SUBMITTED BY INDIVIDUALS.

Station No.	Pounds per Hundred					Ether Extract (Crude fat).	Remarks
	Water	Ash	Protein (Nx6.25)	Fiber	Nitrogen-free Extract (Starch, gum, etc.		
23162	....	....	24.56	....	....	....
23163	....	....	25.63	....	....	....
898	9.40	3.34	11.00	9.18	61.60	5.48	
900	10.15	2.99	11.50	9.65	60.56	5.15	
1183	1.97	....	12.31	9.13	....	....
897	10.83	1.78	12.38	2.20	70.86	1.95	
901	10.10	6.04	16.00	8.90	53.71	5.25	
902	10.28	4.90	15.88	8.30	55.09	5.55	
23366	....	....	20.94	....	....	....
599	8.10	5.74	26.56	9.18	44.03	6.70	
23005	....	....	26.94	....	....	....
22808	9.56	....	20.75	....	....	5.21	
22838	....	....	21.75	....	....	....
22839	....	....	23.81	....	....	....
22836	....	....	21.63	....	....	....	Guaranty; protein 20%.
22835	....	....	25.75	....	....	....	Guaranty; protein 24%.
176	....	....	18.94	....	....	....
177	....	....	22.63	....	....	....
935	....	....	20.88	....	....	6.20	Guaranty; protein 24.00, fat 6.00, fiber 9.00%.
932	....	....	23.75	....	....	6.45	Guaranty; protein 24.00, fat 5.5, fiber 9.00%.
22828	....	....	23.19	....	....	....	Guaranty; protein 24%.
23284	....	....	25.00	....	....	....	Guaranty; protein 24.00, fat 5.00, fiber 7.00%.
23004	....	....	22.19	....	....	....
22912	....	....	22.06	....	....	....	Guaranty; protein 20.00, fat 4.00%.
22683	6.16	4.91	21.75	6.58	55.50	5.10	Guaranty; protein 22.00, fat 3.5 fiber, 7.00%.
22684	6.14	5.12	22.56	6.59	54.43	5.16	Guaranty; protein 22.00, fat 3.5, fiber 7.00%.
22837	....	....	23.06	....	....	....	Guaranty; protein 22.00%.
934	6.20	13.32	25.75	5.50	41.73	7.50	
895	12.50	1.03	9.00	1.78	72.39	3.30	
899	6.30	31.41	45.88	....	2.11	14.30	Guaranty; protein 40.00, fat 8%.
23272	....	....	56.50	....	....	....
294	....	....	15.31	....	....	....

TABLE V. ANALYSES OF FEEDING STUFFS

Station No.	Material	Submitted by
	PROPRIETARY MIXED FEEDS— <i>Concluded.</i>	
	<i>Poultry Feeds—Concluded.</i>	
295	Middlings A-2.....	Edmund Peterson.....
296	Corn Meal A-3.....	Edmund Peterson.....
297	Beef Scrap A-4.....	Edmund Peterson.....
298	Dry Ground Fish A-5.....	Edmund Peterson.....
202	Chick Feed.....	Waterbury: F. E. Liebreich.....
23207	Skim Milk Curd.....	Bridgeport: The Mitchell Dairy Co.
22809	Scratch Feed.....	Plainville: Kosenko Bros. Poultry Farm.....
22810	Mash.....	Kosenko Bros. Poultry Farm.....
	MISCELLANEOUS.	
22757	Ground Oats.....	New Haven: Station Agent, stock of R. G. Davis.....
22758	Ground Oats.....	Station Agent, stock of Crittenden Benham Co.....
22759	Ground Oats.....	Thompsonville: Station agent, stock of Geo. S. Phelps & Co.....
22760	Ground Oats.....	Hartford: Station agent, stock of Meech Grain Co.....
22761	Ground Oats.....	Guilford: Station agent, stock of Fred C. Morse.....
22762	Ground Oats.....	Middlefield: Station agent, stock of Middlefield Grain & Coal Co..
22763	Ground Oats.....	Middletown: Station agent, stock of Meech & Stoddard, Inc.
23469	Feed.....	Yantic: Morris Pearson.....
22998	Wheat Bran.....	Bridgeport: Bridgeport Ice Delivery Co.....
22999	Brewers' Grains.....	Bridgeport Ice Delivery Co.....
23000	Oats & Barley.....	Bridgeport Ice Delivery Co.....
1111	Full Cream Milk Powder.....	Stratford: Samuel Wallace.....
460	Bran.....	Middletown: Station agent, stock of Meech & Stoddard, Inc.
461	Cottonseed Meal.....	Station agent, stock of Meech & Stoddard, Inc.
462	Corn Meal.....	Station agent, stock of Meech & Stoddard, Inc.
463	Experimental Ration.....	Station agent, stock of Meech & Stoddard, Inc.
936	Feed.....	Warehouse Point: Edward Potwine.
22519	Feed.....	Storrs: Dept. of Animal Husbandry.
42	Feed.....	Norwich: H. F. Segelkers.....
23003	Dry Buttermilk.....	Simsbury: Robert Darling.....
333	Mash.....	Bridgeport: Homeland Grocery Store
896	Corn Meal.....	Cromwell: Edmund Peterson.....
1015	Corn.....	Orange: Howard Treat.....

SUBMITTED BY INDIVIDUALS.

Station No.	Pounds per Hundred						Remarks
	Water	Ash	Protein (Nx6.25)	Fiber	Nitrogen-free Extract (Starch, gum etc.)	Ether Extract (Crude fat).	
295	....	....	16.81	....	....	....
296	....	....	10.31	....	....	....
297	....	....	50.31	....	....	....
298	....	....	31.94	....	....	....
202	....	....	20.44	....	....	....
23207	68.96	2.73	24.50	....	....	0.54	
22809	10.67	....	11.31	....	....	3.50	
22810	8.58	....	22.06	....	....	5.62	
22757	11.35	3.05	13.38	6.29	60.98	4.95	
22758	11.75	3.11	14.31	7.88	58.57	4.38	
22759	10.81	3.31	12.38	8.96	59.30	5.24	
22760	11.41	3.13	13.06	7.40	60.48	4.52	
22761	11.59	3.01	12.88	7.51	61.04	3.97	
22762	10.81	3.24	12.56	8.68	60.37	4.34	
22763	11.45	3.15	12.13	8.24	60.55	4.48	
23469	....	....	23.88	....	....	....
22998	....	....	16.13	....	....	....
22999	....	....	22.94	....	....	....
23000	....	....	14.00	....	....	....
1111	....	....	....	....	....	27.80	
460	10.58	6.22	14.44	10.00	53.14	5.62	
461	8.70	5.77	36.44	12.73	30.28	6.08	
462	13.44	1.56	9.50	2.43	69.09	3.98	
463	11.43	4.08	17.75	7.43	54.25	5.06	
936	....	....	20.25	....	....	....
22519	6.72	0.66	9.38	0.45	81.99	0.80	
42	....	....	17.44	....	....	....
23003	....	....	31.77	....	....	3.98	
333	9.67	7.38	21.38	5.32	50.00	6.25	
896	11.18	1.74	10.25	3.18	69.10	4.55	
1015	18.00	....	....	....	....	....

TABLE V. ANALYSES OF FEEDING STUFFS

Station No.	Material	Submitted by
<i>MISCELLANEOUS—Concluded.</i>		
1191	Eastern States Mash.....	<i>Bolton:</i> J. W. Phelps.....
1195	Ground Oats.....	<i>New Haven:</i> Crittenden Benham Co.
1196	Corn Meal.....	<i>New Haven:</i> Crittenden Benham Co.
23286	Poultry Mash.....	<i>South Glastonbury:</i> Harry W. Ferry
515	Hopper Mash.....	<i>Seymour:</i> L. H. Smyth.....

SUBMITTED BY INDIVIDUALS.

Station No.	Pounds per Hundred						Remarks
	Water	Ash	Protein (Nx6.25)	Fiber	Nitrogen-free Extract (Starch, gum, etc.)	Ether Extract (Crude fat).	
1191	Composed of wheat, corn and oat products with meat scraps all in substantial proportions.
1195	Chiefly oats, trace corn and wheat; no rye found.
1196	As claimed; slight contamination with oats, wheat and buckwheat.
23286	No evidence of mouldy or smutted grains.
515	No poisons detected.