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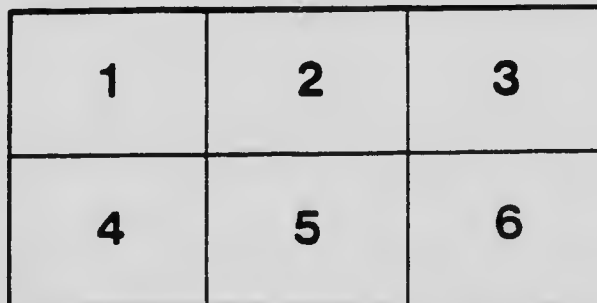
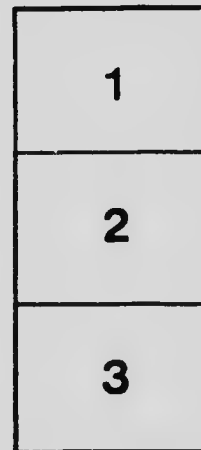
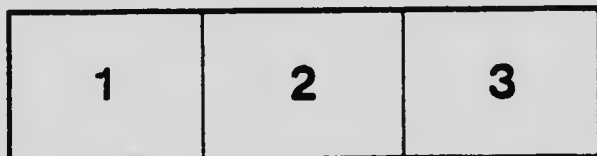
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LABORATORY
OF THE
INLAND REVENUE DEPARTMENT

OTTAWA, CANADA

BULLETIN No. 413

EGG SUBSTITUTES.

NOTES AND COMMENTS.

Under this heading, as occasion arises, the Bulletins issued by this Department will contain, as an appendix, such comment as may seem necessary or advisable upon matter relating to the work of the Department in connection with the administration of the Adulteration Act, the Fertilizers Act, the Feeding Stuffs Act or the Proprietary Medicines Act.

It frequently happens that correspondents ask information regarding the above Acts, of such a nature that the matter in question possesses general interest, and comment upon it would prove acceptable and useful to others than the immediate questioner. In such cases the reply may find a place in these columns. For convenience of reference these notes will be numbered in series.

A. MCGILL

Chief.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 413

EGG SUBSTITUTES.

OTTAWA, August 23, 1918.

GEO. W. TAYLOR, Esq.,
Assistant Deputy Minister of Inland Revenue,

SIR,—I beg to hand you a report upon a class of food substances which has recently appeared on our markets, as so-called egg substitutes. The work of analysis and investigation involved was placed in the hands of Mr. Rowat of this staff, and he has furnished me with a report sufficiently complete to justify me in recommending its publication as herein inclosed. I believe that this report will be read with interest by the public.

There can be no question regarding the essentially fraudulent character of many, perhaps most, of these preparations; and section 3 (*b*), (*d*), and (*h*) of the Adulteration Act which forbids substitution of inferior material, imitation and selling under the name of another article, and colouring so as to make an article appear better or of greater value than it really is, enables me to declare certain samples adulterated. At the same time it must not be forgotten that some manufacturers, not properly informed, may place these articles on the market under a mistaken idea that they possess a greater food value than the facts warrant. No considerable expenditure for machinery or for material used in their preparation is needed and, unfortunately, the possession of so much technical knowledge as would warrant a manufacturer in undertaking the exploitation of a widely used food material, is not regarded as necessary. I fear that until the general public acquires a more intelligent grasp of the subjects of food and nutrition, this temptation to place comparatively valueless products on our markets will successfully appeal to cupidity.

It is quite certain that articles of the kind herein reported should be labelled in such a way as to furnish the purchaser with information to enable him to buy intelligently. The interpretation, however, of the most explicit label implies, on the part of the purchaser, a certain amount of knowledge as to food values. Terms such as protein, fat, starch, sugar, carbohydrates should not be regarded as other than common English words, included in the ordinary vocabulary of every intelligent person, and the meaning of these component sorts of human food in their relation to nutrition should equally be a fair assumption. That vital energy, in the physical sense of that

term, depends upon and is quantitatively related to food, is a truism, and the use of the calorie as a unit of measurement of energy will soon become, if indeed it has not already become, as much a part of everyday speech as the use of the pound, yard, or gallon, respectively, as units of measurement for weight, length, and capacity. It is the duty of the analyst to ascertain, as fully as possible, the nature of the components of the various foods offered for sale, and to describe as simply as possible, their composition and food value. But he can only do this by employing accepted terminology; and the use of such terms as above referred to should not make too great demands upon the intelligent reader.

Egg powder should mean the same thing as *powdered egg*. Whether or not the name *egg powders* must be held to be identical with *egg powder* is perhaps open to question. Unfortunately we have, so far as Canada is concerned, no legal pronouncement in the matter. This class of articles has only recently appeared on our markets, due, no doubt, to the restrictive cost of eggs during the last few years. Under section 26 of the Act the Governor in Council is empowered to define and fix limits of variability for this and other classes of foods; and I would respectfully advise that the necessary action be taken without delay.

It is conceivable that a manufactured article might be a substitute for eggs in a limited sense, without being an equivalent for eggs in the wide sense. Thus, eggs give colour to sponge cake made with them. But it is possible to give the same colour to a sponge cake by the use of a dye. The dyestuff is a substitute for egg so far as colour is concerned. Many proteids are capable of replacing each other quantitatively in the diet of man. Egg proteids may, so far as nutritive value is concerned, be replaced weight for weight by the proteids of wheat, milk, meat, etc., without materially altering the food value of an article. Such an article might be a substitute for eggs, so far as nutritive proteid is concerned. But a complete substitute for eggs must possess much more than colour and protein value. We have to consider fat content, the salts, and other components characteristic of egg, as well as the flavour and the physical properties which make eggs so peculiarly of value in certain kinds of cake, and other food products.

For these reasons, I am of opinion that the word egg (whether spelled with one or two g's) should not be permitted, either alone or in combination, upon the label of any substance which does not contain the material of actual egg. And further, that the label should be required to show the true percentage of egg material present; which should reach at least a specified minimum. We are not particularly interested to protect the careless buyer against deception; but the intelligent buyer should be furnished with such information as to be a safe guide in his purchases. We are, moreover, desirous to prevent the manufacturer of a valueless article, from making a profit even in the case of the careless buyer.

I consider that the information given in Mr. Rowat's report will be welcomed by the intelligent reader of these pages; and will furnish him with the means of properly discriminating between such articles of the class under discussion as make reasonable and proper claims, and those which seek to win his support by exaggerated and untruthful statements.

I have pleasure in transmitting to you Mr. Rowat's report and would suggest publication of the whole as Bulletin No. 413.

I have the honour to be, Sir,

Your obedient servant,

A. MCGILL,
Chief Analyst.

Dr. A. MCGILL, B.A., B.Sc., LL.D., F.R.S.C.,
Chief Analyst,
Ottawa, Ont.

DEAR SIR,—I beg to submit the following report, dealing with the analysis of 144 samples of so-called Egg Powders and Egg Substitutes collected by our inspectors during the past few months. The samples here reported belong to two different collections: forty-three belong to the collection of food materials suspected to contain arsenic (and reported, as regards arsenic content, in Bulletin No. 411) and the remainder belong to the collection of April last. Four of the samples were analyzed by Mr. Hill at Vancouver, twelve by Mr. Forward at Halifax, fourteen by Mr. Forster at Winnipeg, and the remainder by myself at Ottawa. Some twenty-five brands of these powders are represented in these collections, which are believed to be fairly typical of the Canadian market.

As this is the first time that any extensive examination of such products has been undertaken by these laboratories, a brief review of the literature on the subject is deemed advisable.

THE MANUFACTURE OF DESICCATED EGGS.

A product known as "Dried Egg" or "Desiccated Egg," made from actual eggs, has been on the market for some years. This product may be prepared in a number of ways, of which the following are chief:—

(1) Whole eggs are beaten up to a homogeneous liquid with a little sodium bicarbonate and water, and the emulsion thus formed is sprayed on heated revolving drums, where it quickly dries, leaving a coat of desiccated material. This is then scraped off the cylinder and reduced to powder.

(2) The eggs, after being beaten to a homogeneous mass with a little salt and sugar are dried in vacuo at 45° C.

(3) Dr. Wiley recommends the following as the best and most hygienic method of drying eggs: "The egg product is forced through small orifices under a high pressure into a drying chamber so adjusted as to temperature and size as to secure the desiccation of the minute particles of egg spray before they fall to the bottom. The egg powder thus formed is almost devoid of moisture, and when properly collected and stored out of contact with air, may be kept for a time without deterioration." This process is analogous to that employed in the preparation of milk-powder.

Frequently egg whites and egg yolks are dried separately. Dried whites are easily powdered, while dried yolks, because of their high fat content, form a cheesy mass not easily reduced to powder.

The composition of dried egg as given by Tibbles (Foods, Their Origin, Composition and Manufacture, p. 180) is as follows:—

Water..	5.9.....	6.5 per cent.
Protein..	45	51 "
Fat..	38.5.....	41 "
Ash..	3.5.....	5.3 "

Dry egg products such as have been described, made from fresh eggs may be considered unobjectionable. Unfortunately dried products are sometimes made from decayed eggs. Wiley (Foods and Their Adulteration, p. 115) records the case of a factory using decomposed eggs in preparing this product.

EGG SUBSTITUTES.

The analysis of powdered egg as given above shows this product to be a substance of unusually high protein and fat content and to represent food of value in a concentrated form. The consumer of limited means is largely prohibited from using

either whole or powdered eggs to the same extent in baking as was formerly the case. Aided by this condition, and partly as a direct result thereof, many products called "Egg Substitutes" and "Egg Powder" have been placed on the market, and are finding an increasing sale chiefly among those who are suffering most under the conditions of increased cost of living.

These egg substitutes are claimed by their makers to be the equivalent of eggs at a small fraction of the cost thereof, and are sold to an unsuspecting public with this claim on the package label. In reality, these products offer a means whereby manufacturers may dispose of goods of insignificant value at exorbitant prices. Corn starch, the chief constituent of these mixtures, retails today at 12 cents per pound; coloured with yellow dye and packed in an eye-catching container labelled "Egg Powder," it may command from 50 to \$1.90 per pound.

THE GENERAL COMPOSITION OF EGG SUBSTITUTES.

The composition of egg substitutes varies considerably, but it is safe to state that the general practice of manufacturers is to use, for the protein of egg, some other protein which is available at a low price, in much smaller proportion than egg proteins occur in egg; in place of real egg fat to substitute starch in much larger proportion than fat occurs in egg; for natural egg colouring to use a yellow aniline or vegetable dye; and in some instances to add baking powder materials to the mixture. Finally, if it is desired to claim the presence of real egg in the mixture, a very little real powdered egg may be added to thicken the compound.

The common protein materials used in egg substitutes are commercial albumen, casein, gluten and gelatin. Commercial albumen is a serum albumen derived from the blood of slaughtered animals. In its best quality it consists of thin transparent flakes, odorless and tasteless, and easily soluble in cold water. As a substitute for white of egg it is not without merit, but it has the disadvantage that in solution it will not whip. The casein used in egg substitutes is derived from skim milk. It has a high nutritive value and its water solution can be whipped to a froth much as can egg albumen, but its froth is not permanent. The gluten used is a by-product of starch manufacture. A solution of gluten will whip to a stiffer and more permanent froth than will egg albumen, hence for some purposes gluten-containing substances might be superior to eggs. Gelatin is a very poor substitute for the protein of egg for two reasons: (1) It is practically devoid of food value. (2) Instead of coagulating at the cooking temperature, gelatin softens and substances baked with it invariably fall flat instead of rising and remaining porous.

Several patents have been issued for the use of cooked, dried, and powdered pumpkin rind, in conjunction with casein or albumen, as an egg substitute.

The more common starches used in these egg substitutes are those from rice, wheat, and maize. Rice starch is commonly found in products of European origin, while maize and wheat are used on this continent.

The colouring matters used consist entirely of aniline and vegetable dyes.

It may thus be seen that egg substitutes bear no resemblance to eggs, save in colour. The purpose of this added colour can only be to deceive the purchaser and feed the eye.

The average composition of egg substitutes as sold in England is given by Tibbles (foods, their origin, composition and manufacture, p. 181) as follows:—

Moisture	10.45 per cent.
Soda Bicarb.	21.30 "
Tartaric acid.	10.45 "
Albumen.	6.5 "
Starch.	51.30 "

In Canada the general practice would seem to be to omit the baking powder material and to increase the protein and starch content proportionately. The average

analysis of these egg substitutes which contain no more than a trace of egg, as sold to-day in Canada is as follows (based upon samples now reported):—

Moisture.....	9.93 per cent.
Ash.....	9.15 "
Protein.....	11.30 "
Fat.....	0.47 "
Starch.....	69.15 "

DISCUSSION RE "EGG SUBSTITUTES IN COOKING."

All these egg substitutes were sold to replace eggs in cooking only. The actual functions which eggs perform in cooking must be taken into account before either the value or lack of value of these substances may be accurately appreciated. Eggs serve a four-fold purpose in cooking: (1) By virtue of their composition they greatly increase the food value of any product containing them. (2) Egg albumen coagulates at the cooking temperature to form a fairly firm foundation for raised cakes, etc. The supporting material of sponge cake is a framework of coagulated albumen. (3) The albumen and fat of eggs form a material suitable for holding together particles of grain, poor in adhesive materials. Unless cornmeal, etc., be retained by some such substance as egg albumen or the gluten of wheat flour they will crumble easily. (4) To give their characteristic flavour to the product.

Some conception of the value of egg substitutes may be obtained by comparing them with real eggs for the purposes outlined above. In no sense can the egg substitute on the market be said to be the equivalent of real eggs in food value. This is especially true when one considers the amount of substitute that is generally recommended as sufficient to replace one egg. An average hen's egg will yield about 0.35 ounce of dry material. Of this 0.17 ounce is protein and 0.14 ounce fat. The housewife is usually asked to replace this one egg with one teaspoonful (0.085 ounces of egg substitute) which will on the average contain 0.0096 ounce protein and 0.0005 ounce fat. Thus it appears that 0.0096 ounce of some protein (albumen, casein or gelatin) is claimed to be the equivalent of 0.17 ounce of real egg protein, an obvious impossibility. Similarly 0.0005 ounce of questionable fat is made to pose as the equivalent of 0.014 ounce of egg fat, another absurdity. Putting it in another way, the average egg substitute possesses not quite $\frac{1}{7}$ the protein value of real eggs and barely $\frac{1}{300}$ of the fat value of eggs. True, egg material contains only traces of carbohydrates (starches and sugars) while the bulk of the materials entering into the composition of egg substitutes is of this nature. This material has only the usual food value of starch and flour and can in no sense be compared with eggs.

It is also claimed that these egg substitutes are the equivalent of eggs for light cooking. This claim can best be disproved by considering the protein ratio of one egg to its supposed equivalent in substitute. This in the preceding paragraph was shown to be at least 17 to 1. Assuming that the protein of the substitute has properties similar to that of egg protein it is evident that the substitute will, on the average, possess only $\frac{1}{7}$ the cooking power of eggs in forming supporting framework for cakes, etc.

The assumption that equal, or in this case, far smaller amounts of one protein are equivalent to another in baking is quite unwarranted, and it should be pointed out that the fundamental basis of such advertising is the fact that large differences in cost exist between the proteins used in egg substitutes and the protein of real egg, the substituted protein being much the cheaper.

Actual baking experiments must decide finally the relative merits of such products, so far as cooking alone is concerned. The Kansas State Board of Health, Bulletin March, 1918, reports baking tests made to decide the actual value of egg substitutes in supplanting eggs. Where eggs are necessary in cooking, and only egg substitutes were used, dismal failure was the sole and only result. The cooking value of real eggs is not to be duplicated by any such simple mixture as casein and starch. There can be absolutely no doubt as to the "binding" power of the substitutes, as all cakes made with such materials were reported as "tough" or "very tough."

ANALYTICAL WORK REPORTED.

The work reported here was done to ascertain the composition of these mixtures and to detect the presence or absence of egg material. The simple determinations of ash, moisture, fat and protein were made and carbohydrates estimated by difference. These values bear a direct relationship to the food value of the product and should be considered along with the selling price per pound of the article.

A qualitative examination of the petroleic ether extract for organic phosphorus was made also in order to ascertain whether or not actual egg material was present. Phosphatides are easily soluble in petroleic ether, and a positive test for phosphorous here would indicate the presence of real egg in the compound, since eggs are rich in the phosphatide lecithin. Casein and albumen do not contain any ether-soluble phosphorous since they are themselves insoluble in petroleic ether. If the result of the phosphorus test was positive, it was concluded that real egg was present.

Tabulated data regarding the average composition and comparative value of the different brands will be found in the following table. The figure 32 in column 7 refers to the fact that on the average it takes 32 eggs to yield one pound of dry material. The manufacturers of several of these compounds refrain from stating what they deem the exact egg equivalent of their product to be. They are not averse, however, to making exaggerated, non-numerical claims for their powders.

TABLE OF COMPARATIVE VALUES.

Brand.	Moisture.	Ash.	Protein.	Fat.	Carbohydrate by difference.	Value per lb. in terms of whole eggs from standpoint of				Cost per lb.	
						Weight.	Fat.	Protein.	Claim.	Sub- stitute.	Dry eggs at 40c. a doz.
Rola	8.47	2.71	19.80	22.50	46.52	32	12.8	20.0	96	1.00	1.06
Club	9.95	0.38	2.40	0.28	86.99	32	0.14	1.68	.....	0.32	1.06
Bird's	9.70	9.43	6.30	0.00	74.59	32	0.0	5.10	.....	0.64	1.06
Holbrooks Imperial Egg Sub- stitute	8.17	23.78	5.10	0.32	62.63	32	0.18	3.2	.....	0.40	1.06
Kkovah Egg Substitute	6.96	12.25	5.85	0.36	74.58	32	0.27	4.7	.....	0.80	1.06
Eggine	8.02	6.73	23.2	0.30	61.75	32	0.20	18.7	128	1.30	1.06
No-Egg Yolks	8.82	0.84	14.9	0.00	76.44	32	0.00	11.9	172	1.10	1.06
No-Egg Whites	8.23	1.76	45.1	0.00	44.91	32	0.00	36.8	172	1.10	1.06
No-Egg	9.59	1.45	35.1	0.00	53.86	32	0.00	28.4	172	1.10	1.06
Populaire's	6.73	3.94	2.9	0.13	86.30	32	0.04	2.4	128	0.88	1.06
Effel Tower	7.87	11.59	4.9	0.40	75.15	32	0.27	4.0	.....	0.34	1.06
Nation's Best	11.38	10.80	5.54	0.00	72.28	32	0.00	3.76	.....	0.49	1.06
Snow Mellow	9.29	0.95	42.6	0.10	47.06	32	0.06	28.6	.....	2.00	1.06
Egg-Save	10.08	0.40	3.2	0.11	86.22	32	0.06	1.20	269	1.96	1.06
Eggerine	9.39	2.65	1.5	0.07	86.39	32	0.04	0.60	128	1.30	1.06
Equal-Egg	12.00	0.42	2.5	0.00	84.10	32	0.06	2.0	144	1.78	1.06
Eggo	7.05	7.70	14.4	2.80	68.05	32	1.86	11.5	128	1.30	1.06
Canadian Egg and Baking Powder	6.43	32.59	4.7	1.84	54.54	32	1.28	3.60	.....	0.92	1.06
Economic Powder	13.80	28.10	4.4	1.06	52.61	32	0.70	3.50	.....	0.96	1.06
Ajax	8.50	0.52	12.40	0.00	78.58	32	0.00	10.2	144	0.67	1.06
Holbrooks Egg Powder	5.60	14.46	5.60	0.48	73.86	32	0.28	4.5	.....	0.50	1.06
Kkovah Egg Powder	8.65	21.27	19.7	0.36	50.00	32	0.24	15.8	.....	0.80	1.06
Symington's Custard Powder	10.20	0.40	0.44	0.06	88.90	32	0.04	0.32	.....	0.69	1.06
Bird's Custard Powder	12.50	0.92	0.60	0.06	85.02	32	0.00	0.45	.....	1.06	1.06
Royal Shield	10.45	0.80	2.63	0.40	85.72	32	0.29	1.83	.....	1.06	1.06
Powdered Egg	5.00	3.50	48.70	41.80	0.10	32	32.0	32.0	.....	1.10	1.06

DYES.

All brands examined which purported to be the equivalent of whole eggs, or egg yolks, were found to be dyed with anilino or vegetable dyes. These dyes were found to have been introduced in various concentrations and gave, on shaking up with water, solutions which were excellent imitations, as far as colour was concerned, of yellow egg yolks. In general it may be said that samples manufactured in England were found to contain vegetable dyes, while those manufactured in Canada and the United States contained permitted aniline dyes only. No prohibited dyes were found in any of these products.

It is the usual custom to use certified dyes in admixture in such products. Manufacturers are supplied with various mixtures of certified dyes, furnished to the trade through a few well-known dye houses. All Canadian and United States brands were found to contain tartrazine 94 or naphthol yellow S 4 as the basic yellow principle. In order to tone these colours, and introduce variations, orange 1, 85, amaranth 107, or ponceau 3 R 56, were found to have been added in many samples. A few of these gave evidence of containing as many as three permitted aniline dyes. It is a fairly difficult matter to confirm the presence of very small amounts of these dyes when added in conjunction with larger amounts of the principal dye. The ratio of the red dye to the yellow may be as 2 to 25 which necessitates the extraction of large amounts of the egg powder before any appreciable amount of the lesser dye may be secured for confirmatory tests. Some manufacturers desire their egg substitute to be a brilliant yellow powder; others produce a product which gives its yellow colour only on solution with water. Many samples gave evidence of red dyes in admixture, by the simple method of blowing the egg powder across a moistened filter paper. Small particles contaminated with nearly pure red dye appear in their true shade intermixed with the prevailing yellow. In English brands, turmeric seemed to be almost the only dye used.

LABELS.

The labels under which these products are sold merit some attention. Manufacturers of products which are designed to counterfeit eggs frequently label their compounds "egg powder" without due qualification. Commercially the terms "egg powder" and "powdered egg" have come to have an entirely different significance. "Powdered egg" refers to whole eggs reduced to the form of powder. "Egg powder" may denote a mixture of substances containing very little or no powdered egg, while, in some respects, resembling powdered egg.

I have the honour to be, Sir,
Your obedient servant,

R. M. ROWAT,
Public Analyst.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.
DISTRICT OF NOVA SCOTIA—R. J. WAUGH							
1918							
May 17	Egg Powder Co.	83451	J. L. Wilson & Co., Halifax.	3 tins.	60	Rola Products Co., Montreal.	Mfrs. agent, To- ronto.
" 17	Egg Powder . .	83452	John Tobin & Co., Hali- fax.	1½ lb.	1.65	Unknown	Rose & Lafam- me, Montreal.
" 17	Egg Powder....	83453	R. B. Seeton & Co., Halifax.	3 pkgs	45	Imperial Co., Que- bec.	Mfrs....
" 17	Egg Substitute..	83454	R. B. Seeton & Co., Halifax.	"	33	Sutcliffe & Bing- ham, Cornbrook, Eng.	Mfrs. agent, To- ronto.
" 30	Egg Powder ...	86023	James McArthur, New Glasgow, N.S.	"	45	Synington & Co., Bowden Mill, Eng.	.....
DISTRICT OF CAPE BRETON—							
May 22	Eggine	86203	J. F. Miles, Sydney, N.S.	3 pkgs	75	Cha. T. Morrissey, Chicago.	.....
" 27	Egg Powder....	86206	T. F. Fortune & Son, Sydney, N.S.	3 "	75	Rola Products, Montreal.	.....
DISTRICT OF PRINCE EDWARD ISLAND—							
May 8	Egg Powder....	60524	Beer & Goff, Charlotte- town, P.E.I.	3 tins.	75	Rola Products, Montreal.	.....
" 15	Egg Powder....	60542	R. T. Holman & Co., Ltd., Summerside, P.E.I.	3 "	75	" " . . . . .	.....
DISTRICT OF NEW BRUNSWICK—							
May 23	Egg Substitute..	80098	G. E. Barbour Co., Ltd., St. John, N.B.	3 tins.	27	S. H. Ewing & Sons, Montreal..	.....
" 27	Egg Powder Co.	80099	McBeath's Grocery, St. John, N.B.	3 "	75	Rola Products, Montreal.	.....
June 19	Egg Substitute..	80104	G. H. Beaman, Moncton, N.B.	3 pkgs	30	La Compagnie Im- périale, Québec.	.....
DISTRICT OF QUEBEC CITY—							
April 25	Poudre d'œufs.	8116	J. B. E. Letellier, Que- bec.	¼ lb.	8	La Cie Impériale, Québec.	.....
" 25	" ..	8117	Turcotte & Frères Cie, Québec.	1 pkge	8	Canada Drug Store Québec.	.....
" 26	" ..	8128	Whitehead & Turner, Ltd., Québec.	¼ lb.	19	Rola Products, Montreal.	.....

EGG SUBSTITUTES AND EGG POWDERS.

Inspector's Report (is not an expression of opinion).	Results of Analysis.										Remarks and Opinion of the Chief Analyst.
	Moisture.	Ash.	Protein.	Fat.	Carbohydrate by difference.	Nature of Starch.	Starch by acid inversion.	Dye.	Pa O ₂ test on Ether Extract.	No. of Sample.	
INSPECTOR. W. A. PETIPAS, TEMPORARY INSPECTOR.											
Rola Quality....	6.85	3.10	19.08	21.40	49.57	Maize	.....	Tartrazine Amaranth & Natural Egg colour.	Positive..	83451	Contains about 50% real egg.
.....	4.52	3.25	36.20	47.08	8.45	.....	.....	None.....	"	83452	Genuine powd. egg
.....	9.65	3.95	2.62	0.06	83.72	Maize	.....	Tartrazine and Ama- ranth.	Negative.	83453	Contains no egg.
Kkovah Brand..	5.10	13.55	5.87	0.22	.....	Rice..	53.68	Tartrazine.	"	83454	"
.....	10.20	0.40	0.44	0.06	88.90	Maize	.....	Tartrazine and Ama- ranth.	"	86023	"
E. F. MACKEN, INSPECTOR.											
.....	8.55	7.38	21.85	0.39	71.83	Maize	.....	Tartrazine & Amaranth.	Negative.	86203	Contains no egg.
.....	6.40	2.97	20.07	21.11	49.45	"	.....	Natural Egg colour. Tar- trazine and Amaranth.	Positive..	86206	Contains about 60% real egg.
J. F. ARSENAULT, INSPECTOR.											
Rola.....	7.17	3.40	19.62	21.35	48.46	Maize	.....	Natural Egg colour. Tar- trazine and Amaranth.	Positive.	60524	Contains about 50% real egg.
".....	7.95	3.10	19.26	22.03	47.66	"	.....	" ..	"	60542	"
JOHN C. FERGUSON, INSPECTOR.											
.....	9.05	0.30	2.06	0.12	88.47	Maize	.....	Tartrazine..	Negative.	80098	Contains no egg.
Rola.....	7.92	3.15	18.88	20.36	49.69	"	.....	Tartrazine & Amaranth. Natural egg colour.	Positive..	80099	Contains about 50% real egg.
.....	9.62	1.60	2.44	0.12	86.22	"	.....	" ..	Negative.	80100	Contains no egg.
LEON HARDY, ACTING INSPECTOR.											
La Populaire....	9.20	4.18	3.31	0.08	83.23	Maize	.....	Tartrazine & Amaranth.	Negative.	8116	Contains no egg.
Eggerine..	9.18	2.35	0.69	0.07	.....	"	74.40	Turmeric...	"	8117	"
Rola.....	7.87	3.30	25.78	17.92	45.13	"	.....	Tartrazine, Amaranth & Nat. egg col'r	Positive..	128	Contains about 50% real egg.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.
DISTRICT OF QUEBEC CITY—							
1918.							
April 26	Poudre d'œufs..	8129	Langlois & Paradis, Ltd., Quebec.	½ lb.	10	S. H. Ewing & Sons, Montreal..	.....
" 26	Egg Substitute..	8140	A. Grenier, Quebec.	½ lb.	20	Alfred Bird & Sons, Ltd., Birming- ham, Eng.	.....
" 27	" ..	8142	Joseph Boiteau, Quebec	½ lb.	10	The Economical Mills, Montreal.	.....
" 29	Poudre d'œufs..	8147	A. G. Gagnon, Quebec..	1 pkge	10	Chas. T. Morrissey Co., Chicago.	.....
DISTRICT OF THREE RIVERS—							
April 23	Eggerine.	84830	J. L. Bruneau, St. Felix de Valois.	3pkgs.	30	Canada Drug Co., Montreal.	.....
" 23	Eggine	84833	George Dufresne St. Félix de Valois.	"	30	Chas. T. Morris- sey, Chicago.	.....
" 23	"	84836	Ernest Asselin, St. Félix de Valois.	"	30	"	.....
May 1	Poudre d'œufs Co.	84847	Magnan et Frères, Jo- liette.	"	90	Rola Products, Montreal.	.....
DISTRICT OF EASTERN TOWNSHIPS—							
May 1	Subs. d'œufs....	6522	Chevalier Marchessant, Drummondville.	3pkgs.	25	S. H. Ewing & Sons, Montreal.	.....
" 1	"	6525	J. B. Tremblay, Drum- mondville.	1 W.	30	"	.....
" 2	"	6527	Côté Frères, St. Cyrille..	3pkgs.	30	"	.....
" 3	Poudre d'œufs..	6529	J. O. Gauthier, Drum- mondville.	"	30	Chas. T. Morris- sey, Chicago.	.....
" 3	"	6531	Oscar Martel, Drum- mondville.	"	30	S. H. Ewing & Sons, Montreal.	.....
" 4	"	6532	J. B. A. Beauchemin, St. Germain, P.Q.	"	45	Davis & Lawrence, Montreal.	.....
" 4	"	6533	J. Laferté, St. Germain, P.Q.	"	45	Rola Products, Montreal.	.....
DISTRICT OF MONTREAL—							
May 27	Egg Substitute..	84522	T. S. Beerbrier, 437 Notre Dame St. W., Montreal.	3pkgs.	20	La Compagnie Im- périale, Quebec.	.....
" 27	"	84533	H. Fournier, 496 St. James St. W., Montreal.	"	45	The Economical Mills, Montreal.	.....
" 27	"	84534	J. U. Chatrand, 114 Fulford St. W., Mon- treal.	"	45	"	.....
" 28	"	84535	Victoria Grocery, Reg., 42 Victoria St. W., Montreal.	"	45	S. H. Ewing & Sons, Montreal.	.....
" 31	"	84556	Rose & Lallamie, St. Paul St., Montreal.	"	75	Rola Products Co., Reg.	.....
June 1	"	84538	S. H. Ewing & Sons, King St., Montreal.	"	25	Vendors.....	.....
" 1	"	84539	Swift's Provision Store, 251 Beaumont St., Montreal.	"	45	Holbrooks Ltd.....	.....

EGG SUBSTITUTES AND EGG POWDERS.

Inspector's Report. (Is not an expression of opinion).	Results of Analysis.									No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Moisture.	Ash.	Protein.	Fat.	Carbohydrate by difference.	Nature of Starch.	Starch by acid inversion.	Dye.	P ₂ O ₅ test on Ether Extract.		
<i>Concluded.</i>											
Club Custard	9.70	0.40	1.81	0.25	87.84	Maize	.....	Tartrazine.	Negative	8129	Contains no egg.
Birds Concentrated Eggs.	7.20	10.55	5.57	0.18	.....	Rice.	61.24	Turneric...	"	8140	"
La Canadienne..	4.87	36.50	4.06	1.70	.....	Maize	32.16	Tartrazin	"	8142	"
Eggerine.....	8.50	6.05	23.58	0.32	61.55	"	.....	Tartrazine & Amaranth.	"	8147	"
DR. V. P. LAVALLEE,											
.....	9.88	2.90	1.6	0.0	85.54	Maize	..	Turneric.	Negative.	84830	Contains no egg.
.....	7.90	6.09	23.2	0.34	62.47	"	.....	Amaranth & Tartrazine.	"	84833	"
.....	8.75	6.98	23.0	0.25	61.02	"	.....	"	"	84836	"
.....	7.97	3.13	19.6	22.34	46.96	"	.....	"	Positive.	84847	Contains about 50% real egg.
E. BLONDIN, INSPECTOR.											
.....	10.14	0.31	2.1	0.18	87.27	Maize	.....	Tartrazine & Amaranth.	Negative.	6522	Contains no egg.
.....	9.57	0.58	2.6	0.36	86.89	"	.....	"	"	6525	"
.....	9.69	0.36	2.6	0.28	87.07	"	.....	"	"	6527	"
.....	7.67	6.41	23.3	0.40	62.22	"	.....	"	"	6529	"
.....	9.77	0.39	2.5	0.32	87.02	"	.....	"	"	6531	"
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*6532	.....
.....	8.65	2.77	19.8	23.2	45.62	Maize	.....	Amaranth & Tartrazine.	Positive.	6533	Contains about 50% real egg.
J. J. COSTIGAN, INSPECTOR.											
Poudre d'œufs Populaire.	6.65	3.97	3.2	0.16	86.04	Maize	.....	Amaranth & Tartrazine.	Negative.	81522	Contains no egg.
Canadian Egg & Baking Powder.	5.92	36.09	4.7	1.92	51.37	"	.....	Tartrazine.	Faint Positive	4533	Doubtful.
Rola Egg Compound.	9.16	2.81	19.8	23.84	46.81	"	.....	Amaranth & Tartrazine.	Positive	34534	Contains about 50% real egg.
Club Brand Mixture.	10.63	0.43	2.4	0.18	86.36	"	.....	"	Negative.	84535	Contains no egg.
Rola brand.	8.62	2.76	19.8	23.54	46.28	"	.....	"	Positive.	84536	Contains about 50% real egg.
Club Brand Mixture.	10.97	0.39	2.5	0.19	86.85	"	.....	"	Negative	84538	Contains no egg.
Imperial Egg Substitute.	7.25	23.66	5.3	0.42	63.37	Rice.	.....	Turneric....	"	84539	"

* Condition Powder, collected by mistake.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF VALLEYFIELD—

1918							
May 17	Egg Substitute..	84501	S. E. Duolos, Chambly Centre, P.Q.	3 pkgs	45	.....	.....
" 21	"	84503	A. Clement, Hawkesbury.	3 "	30	.....	.....
" 21	"	84504	Laurin Frères, Hawkesbury.	3 "	75	.....	.....

DISTRICT OF OTTAWA—

April 26	Eggine.....	80619	J. A. Chevrier, Cornwall	3 pkgs	30	Chas. T. Morrissey, & Co., Chicago..	.....
May 7	Egg Powder Mixture.	80650	Wm. Hamilton & Son, Chesterville.	3 tins.	45	S. H. Ewing & Sons, Montreal.	.....
" 21	Egg Powder Comp.	80661	Anastase Roy, Maniwaki.	3 "	75	Rola Products Reg. Montreal.	.....
" 29	Egg Powder Mixture.	80673	C. H. Irvine, Morrisburg.	3 "	39	S. H. Ewing & Sons, Montreal.	.....
June 5	Egg Substitute..	80692	Stratton & Co., Ottawa.	3 "	75	Alfred Birds & Sons, Ltd., Birmingham, Eng.	.....
" 11	Egg Powder	80693	S. J. Major, Ltd, Ottawa.	3 "	23	La Compagnie Imperiale, Quebec.	.....
May 7	"	80647	Sanders, Soule and Caselman, Chesterville, Ont.	3 "	45	Holbrook & Co., London, Eng.	.....

DISTRICT OF KINGSTON—

May 17	Egg Powder ...	81971	J. Gilbert, Kingston ...	3 tins.	60	Holbrooks, London, Eng.	.....
" 20	"	81972	J. H. P. Young, Belleville.	3 "	45	S. H. Ewing & Sons, Montreal.	.....
" 21	"	81973	M. C. Nichols, Cobourg.	3 "	75	Rola Products, Toronto.	.....

EGG SUBSTITUTES AND EGG POWDERS.

Inspector's Report. (Is not an expression of opinion).	Results of Analysis.								No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Moisture.	Ash.	Protein.	Fat.	Carbohydrate by difference.	Nature of Starch.	Starch by acid inversion.	Dye.			P. O. test on Ether Extract.

J. J. COSTIGAN, ACTING INSPECTOR.

Kkovah Brand..	6.73	12.61	5.9	0.38	74.39	Rice..	.....	Tartrazine.	Nega- tive.	84501	Contains no egg.
Eggine	7.62	6.35	23.2	0.32	62.51	Maize .....	.....	Amaranth & Tartrazine.	"	84503	"
Eggine, Egg Substitute.	8.43	5.72	23.1	0.32	62.43	" .....	.....	"	"	84504	"

J. A. RICKEY, INSPECTOR.

Coloured with pure certified colour. Use as 12 eggs.	7.63	6.08	23.1	0.42	63.77	Maize .....	.....	Amaranth & Tartrazine.	Nega- tive.	80619	Contains no egg.
A most perfect substitute for eggs. Half an ounce of powder equal to 1 egg.	9.84	0.37	2.7	0.24	86.80	" .....	.....	"	"	80650	"
Contains evapor- ated fresh eggs pure food co- louring. Con- tents of pkge equal to 2 doz fresh eggs.	8.49	2.83	19.7	22.38	46.60	" .....	.....	"	Positive.	80661	Contains about 50% real egg.
The most perfect substitute for eggs, for mak- ing custards, puddings and cake making.	10.00	0.41	2.4	0.28	86.91	" .....	.....	"	Nega- tive.	80673	Contains no egg.
Birds, not made from eggs.	8.26	8.94	6.2	Nil.	76.60	Rice..	.....	Turmeric...	"	80692	"
Populaire, pure and wholesome for baking and cooking, equi- valent to 12 eggs.	6.91	3.80	2.8	0.08	86.41	Maize .....	.....	Amaranth & Tartrazine.	"	80693	"
Imperial. A sub- stitute, but not made from eggs.	6.24	22.47	5.5	0.40	65.39	Rice..	.....	Turmeric...	"	80647	"

JAMES HOGAN, INSPECTOR.

.....	9.21	25.19	5.2	0.22	60.18	Rice..	.....	Turmeric...	Nega- tive.	81971	Contains no egg.
.....	10.11	0.33	2.6	0.22	86.64	Maize .....	.....	Tartrazine & Amaranta.	"	81972	"
.....	8.89	2.78	19.7	21.81	47.45	" .....	.....	"	Positive.	81973	Contains about 50% real egg.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF TORONTO—

1918.							
May 7	Egg Substitute..	84087	Loblaws Stores, 891 Queen St. E., Toronto.	3pkgs.	75	The Hipolite Co., St. Louis, Mo.	.....
" 7	Egg Powder Comp.	84088	A. & R. Algoe, 972 Ossington Ave.	3 "	75	Rola Products, Montreal.	.....
" 8	Egg Substitute..	84089	W. Parkhill, 674 Queen St. W.	3 "	75	Parisien Products Co., Ltd., Fort Erie, Ont.	.....
" 8	"	84090	R. Higgins & Sons, Ltd., 804, Yonge St.	3 "	75	Sutcliffe & Bingham, Ltd., Cornbrook, Manchester.	.....
" 9	"	84091	R. Paget, 2967 Dundas St.	3 "	60	Parisien Products Co., Ltd., Fort Erie.	.....
" 10	"	84092	Michie & Co., Ltd., King St. W.	7 1/2 oz.	35	Unknown.....	.....
" 10	Egg Powder Mixture.	84093	The T. Eaton Co., Ltd., Queen and Yonge Sts., Toronto.	3pkgs.	30	S. H. Ewing and Sons, Montreal.	.....
" 11	Egg Substitute..	84094	A. Taylor, 966 Gerrard St. E., Toronto.	"	75	Alfred Bird & Sons, Ltd., Birmingham.	.....
" 11	"	84095	H. B. Watts, 1043 Gerrard St., E., Toronto.	"	30	Foster Clark Ltd., Maidstone, Eng.	.....
" 11	"	84097	C. R. Temper, 1248 Gerrard St. E., Toronto.	"	15	E. J. Nation & Co., Ltd., Bristol.	.....
" 13	"	84098	D. J. Leonard, 363 Church St., Toronto.	"	75	No Egg Co., Toronto.	.....

DISTRICT OF HAMILTON—H. J. DAGER,

April 24	Egg Powder Compound.	84161	F. Hoover, Dunnville..	3pkgs.	75	Rola Products, Montreal.	.....
" 24	Egg Substitute..	84162	S. R. Allen, Dunnville..	"	45	Parisien Products Co., Fort Erie.	.....
" 25	"	84163	Parisien Products Co., Ltd., Fort Erie, Ont.	"	60	Vendors .....	.....
" 26	"	84164	The R. Norwood Co., Ltd., 29 Main St., W., Welland.	"	75	Holbrook & Co., London, Eng.,	.....

EGG SUBSTITUTES AND EGG POWDERS.

Inspector's Report. (Is not an expression of opinion).	Results of Analysis.								No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Moisture.	Ash.	Protein.	Fat.	Carbohydrate by difference.	Nature of Starch.	Starch by acid inversion.	Dye.			P. O. Test on Ether Extract.

H. J. DAGER, INSPECTOR.

Labeled Snow Mellow without eggs.	9-56	1-10	42-6	Nil	46-74	.....	.....	None.....	Negative.	84087	Contains no egg.
Rola Quality, contents of package, equal to 2 doz. egg..	8-76	2-51	19-8	21-38	47-55	Maize	.....	Amaranth & Tartrazine.	Positive.	84088	Contains about 50% real egg.
No-egg Egg substitute equal to 24 eggs, yolks.	9-17	0-88	15-1	Nil	74-85	"	.....	Tartrazine..	Negative.	84089	Contains no egg.
Kkovah, free from alum.	6-14	12-64	5-7	0-38	75-14	Rice.	.....	"	"	84090	"
No-egg Egg substitute contents equal to 24 eggs, Whites.	8-24	1-80	44-4	Nil.	45-56	Maize	.....	None.....	"	84091	"
.....	4-85	2-70	42-60	45-02	.....	.....	.....	Natural Egg Colour.	Positive.	84092	Genuine powd. egg
The most perfect substitute for eggs for making custards, puddings and cake making.	9-72	0-36	2-7	0-20	87-34	Maize	.....	Tartrazine & Amaranth	Negative.	84093	Contains no egg.
Not made from eggs.	9-21	9-12	6-6	Nil	76-66	Rice.	.....	Turneric...	"	84094	"
Eiffel Tower, purest and best.	7-83	11-54	5-0	0-41	75-22	Maize	.....	"	"	84095	"
For making puddings without eggs.	11-20	10-82	5-7	Nil	72-28	"	.....	Tartrazine..	"	84097	"
Wholesome, pure, economical contents equal to 40 eggs.	9-41	1-45	34-7	Nil	54-44	"	.....	Naphthol yellow S. Orange I.	"	84098	"

ACTING INSPECTOR.

Rola quality contents of package equal two dozen fresh eggs.	8-23	2-59	19-7	22-50	46-98	Maize	.....	Amaranth & Tartrazine.	Positive.	84161	Contains about 50% real egg.
No egg substitute, yolks equal to 24 egg yolks.	8-76	0-85	14-8	Nil	76-59	"	.....	Tartrazine.	Negative.	84162	Contains no egg.
No egg substitute contents equal to 24 egg whites.	8-24	1-63	44-7	Nil	45-43	"	None.	"	84163	"
Imperial.....	8-89	23-67	5-0	0-34	63-10	Rice.	Turneric....	"	84164	"

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Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF HAMILTON—

1918.							
April 26	Egg Substitute..	84165	Wm. McQuilty, 70 Main St., N., Welland.	3 pkgs	75	Chas. T. Morrissey & Co., Chicago.	.....
May 1	"	84167	A. L. Lawrence & Co., 204 St. Paul St. Catharines	"	75	The Hipolite Co., St. Louis, Mo.	.....
" 1	"	84168	F. A. Wilson, 1 St. Paul St., St. Catharines.	"	45	Sutcliffe & Bingham Cornbrook, Manchester.	.....
" 2	"	84169	J. O. Carpenter, Market Square, Hamilton.	"	75	Rose & Laflamme, Ltd., Montreal.	.....
" 2	"	84170	Pebbles, Hobson & Co., Lt., King and McNabb Sts., Hamilton.	"	50	The Canadian Egg Save Co., Ltd., Toronto.	.....
" 2	"	84171	" " " "	"	50	Alfred Bird & Sons, Ltd., Birmingham, Eng.	.....
" 2	Egg Powder mixture.	84172	K. Fell, 729 Barton St. E., Hamilton.	"	30	S. H. Ewing and Sons, Montreal.	.....
" 2	Egg Substitute..	84173	" " " "	"	45	Foster Clark, Ltd., Maidstone.	.....

DISTRICT OF WINDSOR—

May 7	Egg Substitute.	81280	R. Stirrett & Co., Petro- lia.	3 pkgs	45	Holbrook & Co., London, Eng.	.....
" 9	"	81286	Mihell & Gill, Strathroy.	3 "	45	Chas. T. Morrissey & Co., Chicago.	.....
" 15	Egg Powder ..	81312	A. H. Gammon & Son, Sarnia.	3 "	75	Rola Products Co., Montreal.	.....
" 15	Egg Substit ..	81313	Jas. Galbraith, Sarnia.	3 "	54	Parisian Products Co., Fort Erie.	.....

DISTRICT OF NORTHERN ONTARIO—

April 25	Egg Powder....	79445	The Star Groc-ry, North Bay.	3 ozs.	27	G. Low & Co., Toronto.	.....
" 25	"	79446	H. P. Pilley, North Bay.	3 pkgs	30	Parisian Products Co., Fort Erie	.....
" 25	"	79447	C. H. Passmore, North Bay.	3 cans.	75	S. H. Ewing & Sons, Montreal.	.....
May 3	Egg Substitute..	79453	Iroquois Falls Merchand- izing Co., Iroquois Falls	3 "	45	Sutcliffe & Bingham, Manchester	.....
June 5	Egg Powder ..	79457	J. A. Gauthier, North Cobalt.	3 "	75	Rola Products, Toronto.	.....
" 7	"	79458	F. C. Preston, Haileybury.	3 "	75	Holbrooks, London.	.....
" 7	"	79459	" " " "	3 "	75	Ajax Pure Food Co., Toronto.	.....
" 7	Egg Substitute.	79460	A. J. Carson, Haileybury.	3 "	60	Alfred Bird & Sons, Birmingham.	.....
" 12	Egg Powder....	79462	Laeroix & Morrisette, Cochrane, Ont.	3 pkgs	30	La Compagnie Imp-riale, Quebec.	.....

EGG SUBSTITUTES AND EGG POWDERS.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.								No. of Sample.	Remarks and Opinion of the Chief Analyst.	
	Moisture.	Ash.	Protein.	Fat.	Carbohydrate by difference.	Nature of Starch.	Starch by acid inversion.	Dye.			P ₂ O ₅ test on Ether Extract.
Concluded.											
Eggine, artificially coloured.	7.86	5.92	23.2	0.34	62.68	Maize	...	Tartrazine.	Negative.	84165	Contains no egg.
Hopdite, snow mellow without eggs.	9.03	0.81	42.7	Nil	47.46	...	...	None.	"	84167	"
Kkova h free from alum.	7.43	10.89	6.0	0.36	75.32	Rice.	...	Tartrazine.	"	84168	"
Kola, made from evaporated fresh eggs.	7.75	2.59	19.8	22.70	47.16	Maize	...	Amaranth & Tartrazine.	Positive.	84169	Contains about 50% real egg.
Egg Save, 3 doz eggs for 25 cents.	10.48	0.44	3.3	0.10	85.68	"	...	Naphthol yellow S.	Negative.	84170	Contains no egg.
Birds, not made from eggs.	7.10	11.51	6.3	Nil	75.09	Rice.	...	Turmeric.	"	84171	"
The most perfect substitute for eggs.	10.10	0.30	2.6	0.26	86.74	Maize	...	Tartrazine & Amaranth.	"	84172	"
Eiffel Tower, purest and best.	7.92	11.64	4.9	0.40	75.14	"	...	Turmeric.	"	84173	"

JOHN TALBOT, INSPECTOR.

Imperial	7.68	23.26	4.9	0.36	63.80	Rice.	...	Turmeric.	Negative	81280	Contains no egg.
Eggine	7.97	5.95	23.1	0.44	62.54	Maize	...	Amaranth & Tartrazine.	"	81286	"
Egg Powder Compound.	8.63	2.57	19.7	22.50	46.60	"	...	"	Positive.	81312	Contains about 50% real egg.
No egg-yolks	9.45	0.84	14.9	Nil.	75.81	"	...	Tartrazine.	Negative	81313	Contains no egg.

THOS. E. ARMSTRONG, ACTING INSPECTOR.

.....	6.50	4.30	39.20	46.27	.....	.....	.....	Natural Egg Colour.	Positive.	79445	Genuine powd. egg
.....	8.93	0.86	15.9	Nil.	75.11	Maize	.....	Tartrazine.	Negative	79446	Contains no egg.
.....	9.62	0.36	2.40	0.22	87.46	"	.....	Tartrazine & Amaranth.	"	79447	"
Kkova h Brand.	7.21	11.92	5.8	0.44	75.63	Rice.	.....	Tartrazine.	"	79453	"
.....	7.93	2.47	19.6	22.32	47.68	Maize	.....	Amaranth & Tartrazine.	Positive.	79457	Contains about 50% real egg.
.....	5.60	14.46	5.60	0.48	73.86	Rice.	.....	Turmeric.	Negative.	79458	Contains no egg.
Robertson's Brand.	8.50	0.52	12.40	Nil.	78.58	Maize	.....	Naphthol yellow S.	"	79459	"
.....	8.41	9.63	5.9	"	76.06	Rice.	.....	Turmeric.	"	79460	"
.....	6.72	3.84	2.7	0.14	86.60	Maize	.....	Amaranth & Tartrazine.	"	79462	"

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer	Furnisher.

DISTRICT OF MANITOBA

1918							
May 3	Egg Substitute..	79897	The Stanley Park Grocery, 1429 Princess Ave., Brandon.	3 pkgs	1 50	Equal Egg Co., Ltd., Vancouver.	
" 7	"	79816	Nation & Shewan, 1608 Rosser Ave., Brandon.	3 "	60	Holbrook & Co., London, Eng.	
" 10	"	79817	C. H. Hoffman, 967 Main St., Winnipeg.	3 "	75		
" 10	"	79807	A. R. Christie, 353 Portage Ave., Winnipeg.	3 "	1 50	Equal Egg Co., Vancouver.	
" 29	"	79809	Robinson & Co., Main St., Winnipeg.	3 "	60	Alfred Bird & Sons, Birmingham, Eng.	

DISTRICT OF SASKATCHEWAN—

May 27	Egg Substitute..	83023	The Colonial Grocery, Regina.	3 pkgs.	50	A. N. Christy & Co., Newark, N.J.	McLean's Grocery Co., Regina.
" 27	"	83024	R. H. Williams & Son, Regina.	3 "	75	Equal Egg Co., Vancouver.	Mrs.
" 30	"	83025	Thomas Bros. Gull Lake.	3 "	75	Alfred Bird & Sons, Birmingham, Eng.	A. Macdonald Co., Moose Jaw.
" 21	"	81852	John Curry, No. Battleford.	3 tins.	60	"	
" 23	"	81854	D. Rabinovich, Prince Albert.	3 "	1 50	Equal Egg Co., Vancouver.	
" 23	Equal Egg	81864	A. Holmes & Co., Prince Albert.	3 "	75	"	

DISTRICT OF ALBERTA—

April 24	Egg Substitute..	52948	Johnstone Walker, Ltd., Edmonton.	3 tins.	60	Alfred Bird & Sons, Ltd., Birmingham, Eng.	
" 25	"	52949	J. J. Christopher, Wetaskiwin.	3 "	40		Campbell Bros. & Wilson, Edmonton.
" 25	"	52950	Abousofy & Murray, Wetaskiwin.	3 "	75	Equal Egg Co., Ltd., Vancouver.	

DISTRICT OF ROCKY MOUNTAINS—

May 6	Egg Substitute..	68585	S. A. Speers, Creston, B.C.	3 tins.	75	Alfred Bird & Sons, Birmingham, Eng.	
" 6	Custard Powder.	68586	"	3 pkgs.	60	"	
" 13	Equal Egg	68600	Cranbrook Trading Co., Cranbrook.	3 tins.	75	Equal Egg Co., Vancouver.	
June 3	Egg Substitute..	68605	Star Grocery, Nelson.	3 "	75	Holbrook & Co., Manchester.	

EGG SUBSTITUTES AND EGG POWDERS.

Inspector's report. (Is not an expression of opinion).	Results of Analysis.							Dye.	P ₂ O ₅ test on Ether Extract.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Moisture.	Ash.	Protein.	Fat.	Nature of Starch.	Starch by weight (McGill Method).	Starch by acid inversion.				

L. B. COSGROVE, INSPECTOR.

.....	11-50	0-95	2-84	1-00	Maize	.....	Naphthol Yellow S.	Negative	79897	Contains no egg.
.....	8-00	23-20	4-38	0-60	"	.....	Turneric ...	"	79816	"
Rola Brand.	8-00	2-75	19-03	22-00	"	.....	Tartrazine & Natural egg	Positive.	79817	Contains about 50% real egg.
.....	9-80	0-80	2-63	0-40	"	.....	Naphthol Yellow S.	Negative	79807	Contains no egg.
.....	8-75	9-10	5-47	1-20	"	.....	Turneric ...	"	79809	"

L. H. HALL AND J. M. DANIS, INSPECTORS.

Egno.....	10-25	7-50	9-19	0-40	Maize	.....	Turneric ...	Negative.	83023	Contains no egg.
Equal Egg.....	10-45	0-80	2-81	0-60	"	.....	Naphthol Yellow S.	"	83024	"
Egg's Egg Powder.	9-60	9-60	7-44	0-80	"	.....	Turneric ...	"	83026	"
.....	5-70	11-70	5-69	1-60	"	.....	"	"	81832	"
.....	11-10	0-85	2-10	1-00	"	.....	Naphthol Yellow S.	"	81834	"
.....	10-10	0-95	2-84	1-06	"	.....	"	"	81864	"

A. W. R. MARKLEY, INSPECTOR.

Not made from eggs.	6-30	11-90	5-91	1-60	Maize	.....	Turneric...	Negative.	52948	Contains no egg.
Royal Shield Brand Egg Powder.	10-45	33-60	0-88	0-40	"	.....	"	"	52949	"
Equal Egg.....	9-95	0-80	2-63	0-40	"	.....	Naphthol Yellow S.	"	52950	"

THOS. PARKER, INSPECTOR.

.....	13-65	11-95	1-80	0-38	Maize	57-22	.....	Turneric...	Negative.	68585	Contains no egg.
.....	12-50	0-92	0-60	Nil.	"	85-02	.....	Naphthol Yellow S. Orange I 85.	"	68586	"
.....	11-25	0-85	2-67	"	"	35-05	.....	"	"	68600	"
Imperial	13-65	25-65	4-62	0-06	"	48-47	.....	Turneric ...	"	68605	"

