
LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 346

CHOCOLATE CANDY

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 matters 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 Analyst.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
BULLETIN No 346
CHOCOLATE CANDY

OTTAWA, July 27, 1916.

J. U. VINCENT, Esq.,
Deputy Minister of Inland Revenue

SIR,—I beg to hand you herewith a report dealing with the results of analyses of 151 samples purchased by our inspectors as chocolate candy.

Attention has been drawn, by various large manufacturers of confectionery to the employment of solid paraffin as a stiffener in certain brands of chocolate. One correspondent writes as follows: "We wish that the Government would be as particular in regard to the adulteration of chocolate and chocolate products in Canada, where substitutes are used for cocoa butter and other substitutes for chocolate, as they are in regard to maple. We think it would be of advantage to every one if it were so. We have recently been advised by a salesman for paraffin wax, that the confectioners in Canada are using this very largely. This is an adulterant that has been cut out in almost every other country except Canada. We believe it is largely used in the cheap chocolates referred to, for when they use a substitute for cocoa butter, they have to use something to stiffen up the chocolate coating."

The National Confectioners' Association of the United States, issued a Food Law Circular under date May 20, 1913, containing a list of substances prohibited in confectionery, among which appears paraffin.

The Food Laws of Illinois, Nebraska and Utah, specifically forbid the use of paraffin in candy; and those of many other States are interpreted in such a way as to condemn its use.

It is certain that so-called paraffin or paraffin wax is wholly without food value; is quite indigestible, and is not a normal component of any natural food material. Its melting point (about 54.5° C. = 130.1° Fah.) is so high as to keep it solid at the body temperature, and being quite insoluble in the digestive fluids, it is conceivable that serious results might ensue from its presence in foods, consequent upon mechanical disturbances.

It will be noted that 126 samples are found to be genuine, in the sense of being essentially cocoa material, while seven samples contain more or less starch, as the only foreign matter. Ten samples show the presence of other fats than cocoa fat, and eight samples contain paraffin.

We have as yet, no legalized definition of confectionery specifically forbidding the use of paraffin. The report now handed you will constitute a basis for the study of this matter, with a view to recommending legislation. I would respectfully suggest its publication as Bulletin No. 346.

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

A. MCGILL,
Chief 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—

1916.							
Feb. 17	Chocolates.	64381	Moir's, Ltd., Halifax.	1½ lb.	45	Vendors	.....
" 17	"	64382	" " "	1½ "	25	"	.....
" 17	"	64383	" " "	1½ "	25	"	.....
" 17	"	64384	F. W. Woolworths, Ltd., Halifax.	1½ "	45	Moir's, Ltd., Halifax.	Mfr.....
" 17	"	64385	" " "	1½ "	30	Patterson & Co., Brantford.	"
" 17	"	64386	" " "	1½ "	30	Robertson Bros., Toronto.	"
" 17	"	64387	G. J. Hamilton & Sons, Halifax.	2 "	50	G. J. Hamilton & Son, Pictou.	"
" 17	"	64388	" " "	2 "	50	" " "	"

DISTRICT OF NOVA SCOTIA—

1915.							
Dec. 29	Chocolate candy.	69868	A. J. Root, New Glasgow	1½ lb.	75	Moirs Ltd., Halifax	Mfrs.....
" 29	"	69869	S. M. Lockhart & Co., Glasgow.	1½ "	90	Unknown	Nickerson & Co., New Glasgow.
" 29	"	69870	Jas. Cavanagh, New Glasgow.	1½ "	60	Ganong Bros., St. Stephen.	Mfrs.....
" 30	"	69871	C. A. Fraser & Co., Stelarton.	1½ "	75	Cowan Ltd., Toronto.	.....

DISTRICT OF PRINCE EDWARD ISLAND—

Dec. 14	Chocolate candy.	60393	Coffin & Co., Charlottetown.	1½ lb.	90	Cowan Co. Ltd., Toronto.	.....
" 14	"	60394	P. A. Smith, Charlottetown.	1½ "	60	John P. Mott & Co., Halifax.	.....
" 17	"	60395	Beer & Goff, Charlottetown.	1½ "	75	Cowan Co., Ltd., Toronto.	.....
" 17	"	60396	W. W. Walker, Charlottetown.	1½ "	45	Corona Co., Ltd., St. John.	.....
" 21	"	60393	M. & A. McLeod, Charlottetown.	1½ "	90	Moir's Ltd., Halifax.	.....
" 21	"	60398	J. P. Duff, Charlottetown.	1½ "	60	" " "	.....
" 24	"	60399	Johnson & Johnson, Charlottetown.	1½ "	90	" " "	.....

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.				No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Examination of Fat.					
	Fat.	Bitype- Refracto- meter.	Melting Point ° C.	Iodine Number.		

R. J. WAUGH, INSPECTOR.

Maple Cream.....	46.5	33.6	6.1	64381	Genuine cocoa product.
Twists.....	46.6	35.1	35.6	64382	" "
Royals.....	46.5	35.4	36.6	64383	" "
Caramels.....	46.2	32.6	35.4	64384	" "
Covered Cherry.....	45.0	32.4	32.1	64385	" "
Old Fashioned Choco- late Drops.....	46.9	33.3	38.0	64386	" "
X. F. Chocolates.....	46.4	35.6	35.4	64387	" "
Old Fashioned Choco- late Drops.....	42.4	30.2	25.6	64388	Contains foreign fat.

W. A. PETIPAS, TEMPORARY INSPECTOR.

.....	47.6	33.6	26.5	69868	Genuine cocoa product.
.....	46.2	33.3	36.6	69869	" "
.....	46.7	33.7	36.7	69870	" "
.....	46.3	33.3	26.8	69871	" "

WM. A. WEEKS, INSPECTOR.

.....	46.1	32.5	36.2	60393	Genuine cocoa product.
.....	46.7	33.3	35.5	60394	" "
.....	46.3	33.0	36.4	60395	" "
.....	46.8	33.5	36.8	60396	" "
.....	46.4	33.6	35.8	60397	" "
.....	46.9	33.4	37.4	60398	" "
.....	46.6	33.6	36.6	60399	" "

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 NEW BRUNSWICK—

1915.							
Dec. 13	Chocolate candy.	66255	W. A. Simonds, St. John.	3 bxs.	90	Moir's Ltd., Halifax.	
" 27	" ..	66256	Mrs. Lucy Downing, St. John.	1½ lb.	40	Corona Candy Co., St. John.	
" 27	" ..	66257	Walter Gilbert, St. John.	1½ "	1.05	H. D. Fors & Co., Boston, Mass.	
" 29	" ..	C3258	H. G. S. Adams, St. John.	1½ "	90	Ganong Bros., St. Stephen.	
1916.							
Jan. 6	" ..	66259	Ganong Bros., St. Stephen	1½ "	90	" ..	
" 12	" ..	66260	G. T. Whelpley, Fredericton.	3 bars.	30	W. Baker & Co., Montreal.	
Feb. 9	" ..	66261	Read Co., Ltd., Moncton.	3 bxs.	60	Moir's Ltd., Halifax	
" 11	" ..	66262	V. A. Danville, Chatham.	1½ lb.	90	Corona Co., Ltd., St. John.	

DISTRICT OF QUEBEC CITY—

1915.							
Dec. 17	Chocolates.	56616	A. Coté, 381 St. Jean, Quebec.	1½ lb.	38	Dunn & Co.	Manufacturers
" 17	" ..	56617	" ..	1½ "	60	McCormick Co.	"
" 17	" ..	56618	" ..	1½ "	90	Moir's, Ltd.	"
" 17	" ..	56619	" ..	1½ "	90	Ganong Co.	"
" 17	" ..	56620	McWilliam, 310 St. Jean, Quebec.	1½ "	75	Vendor.	
" 17	" ..	56621	L. Leclerc, 239 St. Joseph, Quebec.	1½ "	75	Lowney Co.	Manufacturers
" 17	" ..	56622	" ..	1½ "	75	" ..	"
" 17	" ..	56623	" ..	1½ "	45	" ..	"

DISTRICT OF QUEBEC PROVINCE—J. E. AUDET, O. BROCHU,

Dec. 13	Chocolates.	3643	J. E. Fortier, St. Henri.	½ lb.	15	Viau & Frere.	
" 15	" ..	3645	C. Noël, St. Jean Chryst.				N. Turcotte, Quebec.
" 16	" ..	3647	Egide Hallé, Breakyville.	1½ "	23		
" 20	" ..	3652	L. Lemieux, St. Lambert.	1½ "	30	A. B. Dupuis, Quebec.	
" 22	" ..	4441	J. A. Lemieux, St. Michel.	1½ "	60	Paterson's, Toronto.	

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					Remarks and Opinion of the Chief Analyst.
	Fat.	Examination of Fat.			No. of Sample.	
		Buero- Refracto- meter.	Melting Point°C.	Iodine Number.		

JNO. C. FERGUSON, INSPECTOR.

.....	46.7	33.4	36.9	66255	Genuine cocoa product.
.....	47.1	33.0	37.2	66256	" "
.....	46.7	33.6	35.6	66257	" "
.....	46.8	33.7	36.9	66258	" "
.....	46.7	33.8	36.2	66259	" "
.....	46.5	33.4	34.9	66260	" "
.....	46.5	33.6	36.0	66261	" "
.....	46.4	33.4	36.3	66262	" "

F. X. W. E. BELAND, INSPECTOR.

.....	46.4	33.2	35.6	56616	Genuine. Cocoa product.
.....	46.4	31.0	36.2	56617	" "
.....	44.7	32.8	25.3	56618	Contains foreign fat.
.....	46.0	32.8	35.1	56619	Genuine. Cocoa product.
.....	46.0	33.8	35.1	56620	" "
.....	46.7	33.8	35.9	56621	" "
.....	46.5	32.6	37.1	56622	" "
.....	45.5	32.0	35.2	56623	" "

T. GENDREAU, A. PELLETIER, AND N. CADIEUX, TEMPORARY INSPECTORS.

.....	47.7	34.2	37.4	3643	Genuine. Cocoa product.
.....	31.6	45.5	14.5	3645	Contains paraffin, coloured.
.....	39.6	38.0	18.3	3647	Contains paraffin, similar to No. 4906.
.....	46.6	33.5	36.7	3652	Genuine. Cocoa product.
.....	46.0	33.8	40.3	4411	" "

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 PROVINCE—

1915.							
Dec. 23	Chocolates..	4452	Arthur Arsenault, St. Gervais.	1½ lb.	30	Boivin & Chenier.....	
" 23	" ..	4458	Theodore Bernard, St. Raphael.	1½ "	30	.....
" 24	" ..	4463	Arthur Fradette, Armagh.	1½ "	30	A. B. Dupuis.....	
" 18	" ..	72206	T. B. C. Londreau, Montmagny.	1½ "	38	Perrin & Co., London, Ont.	
" 23	" ..	72210	Jos. L'Abadie, Berthier.	1½ "	30	McCormick, Montreal.	
" 29	" ..	72228	J. B. Poirier, St. Thomas.	1½ "	30	.....	A. B. Dupuis, Quebec.
" 30	" ..	72236	Renée L'Esperance, Montmagny.	1½ "	60	Perrin & Sons, London, Ont.	
" 22	" ..	4906	Louis O. Aubu, Bic.....	1½ lbs.	30	.....	Montreal Biscuit Co., Montreal.
" 22	" ..	4910	Jos. O. Aubu, Bic.....	1½ "	30	Perrin Co., London....	Jos. Langes, Bic.
" 22	" ..	4917	P. E. Danjoras & Fils, Bic	1½ "	38	Viau & Frere, Montreal.	
" 23	" ..	4924	Gagnon & Belzile, St. Fabien.	1½ "	27	.....	T. Langlais, Fraserville.
" 18	" ..	351	C. Javellas, St. Jerome.	3 boxes	30	Lowney's.....	
" 28	" ..	360	Gideon Cote, Ste. Agathe des Monts.	3 "	33	"	
" 28	" ..	361	A. Labelle, Ste. Agathe des Monts.	3 "	75	Cowan's.....	
1916.							
Jan. 7	" ..	373	S. St. Jean, St. Eustache deux Montagnes.	1½ lbs.	36	Fry's.....	

DISTRICT OF THREE RIVERS—

1915.							
Dec. 14	Chocolates..	69187	Philippe Gervais, Joliette	1½ lbs.	75	W. M. Lowney, Co....	
" 17	" ..	69198	Arcade Brault, Ste. Melanie.	1½ "	60	Viau Freres, Montreal.	Magnan Chevalier, Joliette.
1916.							
Jan. 3	" ..	69229	J. A. Boisvert, Joliette...	1½ "	67	Ganong Bros., Ltd., St. Stephen.	
" 5	" ..	69227	O. Massicotte, Ste. Melanie	1½ "	25	.....	Jos. Dufresne, Joliette.

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Examination of Fat.						
	Fat.	Butyro- Refracto- metry.	Melting Point ° C.	Iodine Number.			

Concluded.

.....	44.2	31.8	33.8	4452	Genuine cocoa product.
.....	46.0	31.8	37.6	4458	" "
.....	46.0	31.6	33.8	4463	" "
.....	45.3	31.4	35.6	72206	" "
..... Sapon. value 205..	44.0	31.0	23.8	72210	Contains foreign fat.
..... Sapon. value 201..	43.6	32.3	25.7	72228	" "
.....	46.3	33.5	35.2	72236	Genuine. Cocoa product.
..... Unaponifiable 5% —M.P. 57.0° C. —Refractometer 21.2° at 60° C.	39.5	37.5	18.1	4906	Contains paraffin.
.....	42.4	36.5	24.3	4610	Contains foreign fat.
.....	46.2	33.5	33.7	4917	Genuine cocoa product.
.....	46.7	33.5	37.9	4924	" "
Boubons	46.0	33.0	36.2	351	" "
"	46.0	33.2	35.1	360	" "
"	46.0	32.6	39.3	361	" "
"	46.8	33.0	35.1	373	" "

DR. V. P. LAVALLEE, TEMPORARY INSPECTOR.

.....	46.2	33.0	34.3	69187	Genuine cocoa product.
.....	46.1	31.5	35.6	69198	" "
.....	46.1	32.8	41.6	69220	" "
.....	36.0	45.5	29.4	69227	Contains paraffin.

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 EASTERN TOWNSHIPS—

1916.							
Feb.	1	Chocolates.	67541	A. Roy, Sherbrooke.	1½ lbs.	38	
"	3	"	67542	F. Goupal, Sherbrooke.	1½ "	60	
"	3	"	67543	Rowell, Son & Co., Sherbrooke.	1½ "	40	Vendors.
"	10	"	67544	M. L. Lemaire, Magog.	1½ "	60	
"	10	"	67545	"	1½ "	60	
"	11	"	67546	John Costes, Granby.	1½ "	60	
"	11	"	67547	"	1½ "	75	
"	11	"	67548	Vassillon Bros, Granby.	1½ "	60	

DISTRICT OF MONTREAL—

Feb.	11	Chocolates.	67141	Pantilis Nolis, 171 Church Ave., Verdun.	1½ lb.	75	Cowan's
"	11	"	67142	Jeffrey Bros., 221 Church Ave., Verdun.	1½ "	75	Webb's
"	15	"	67148	A. Zahalon, 419 Church Ave., Verdun.	1½ "	90	Lowney's
"	16	"	67144	J. Thomas, 623 Wellington St., Montreal.	1 "	50	Peter's
"	16	"	67145	J. Lanille, 713 Charlevoix St., Montreal.	1½ "	75	Fry's
"	16	"	67146	Alexanders, 219 St. James St., Montreal.	1½ "	1 13	Vendor
"	16	"	67147	Whelan & Audette, 239 St. James St., Montreal.	1½ "	90	Vendors

DISTRICT OF OTTAWA—

1915.							
Dec.	11	Chocolate Candy.	70575	J. D. McDonald & Co., Morrisburg.	1½ lb.	30	Crother's, Kingston
"	14	"	70591	Leo Raby, Arnprior.	1½ "	75	Vendor
"	17	"	70608	Royal Candy Store, Brockville.	1½ "	30	Vendors
"	20	"	70615	D. Rubin, 1104 Somerset St., Ottawa.	1½ "	38	M. Loeb, 89 Eccles St., Ottawa.
"	27	"	70633	W. H. McCreery, Creighton St., Ottawa.	42 1½ "	60	D. S. Perrin & Co., London, Ont.

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.				No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Examination of Fat.					
	Fat.	Buysse- Refracto- meter.	Melting Point C.	Iodine Number.		

J. J. COSTIGAN, ACTING INSPECTOR.

Regent Brand	46.7	33.6	34.2	67541	Genuine cocoa product.
.....	46.0	33.6	36.2	67542	" "
Vanilla	45.5	33.2	36.2	67543	" "
Meadow Milk	46.0	31.5	34.4	67544	" "
Moir's Daisies	46.4	32.6	34.4	67545	" "
Montrose Caramels	46.2	32.6	34.2	67546	" "
Lowney's Milk Bars	45.5	32.0	37.4	67547	" "
Chocolate Chips	46.7	32.8	34.4	67548	" "

D. J. KEARNEY, INSPECTOR.

.....	46.3	32.0	37.4	67141	Genuine cocoa product.
.....	46.0	32.6	35.2	67142	" "
.....	45.3	32.8	37.4	67143	" "
.....	45.4	32.8	35.9	67144	" "
.....	46.0	32.0	35.2	67145	" "
.....	46.0	33.0	35.9	67146	" "
.....	46.0	32.8	35.2	67147	" "

J. A. RICKEY, INSPECTOR.

Creanus	37.2	41.5	21.9	70575	Contains paraffin.
"	46.4	32.0	35.5	70591	Genuine cocoa product.
..... Sapon. value=222	42.7	32.0	26.8	70608	Contains foreign fat.
.....	45.3	33.4	34.4	70615	Genuine cocoa product.
.....	46.0	32.0	35.6	70633	" "

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 OTTAWA—

1915.							
Dec. 29	Chocolate Candy.	70644	London Confectionery, 47 Rue Principal, Hull.	1½ lb.	75	Vendor	.....
" 29	" ..	70645	Palace Garden, 55 Rue Principal, Hull.	1½ "	60	"	.....
" 29	" ..	70647	Peter Chidores, 115 Rue Albert, Hull.	1½ "	60	"	.....

DISTRICT OF KINGSTON—

Dec. 10	Chocolates..	71755	A. Plagianos, Kingston..	1½ lb.	45	Vendor	.....
" 10	" ..	71756	P. Dafnas, Kingston....	1½ "	30	"	.....
" 10	" ..	71757	G. B. Demeson, Kingston.	1½ "	45	"	.....
" 10	" ..	71758	B. Febar, Kingston	1½ "	45	Robertson & Co., Toronto.	.....
" 10	" ..	71759	Geo. Masoud, Kingston..	1½ "	60	Lowney's Co., Montreal.	.....
" 10	" ..	71760	T. Sakells, Kingston.....	1½ "	60	Vendor	.....
" 10	" ..	71761	G. Athanas, Kingston...	1½ "	45	"	.....
" 15	" ..	71762	T. Hooper, Peterboro....	1½ "	38	"	.....

DISTRICT OF TORONTO—

Dec. 20	Chocolate Candy.	69998	The Chas. Lander Co., 97 Ontario St., Toronto.	1½ "	29	Vendors	.....
" 21	" ..	69999	J. W. Fenny Candy Co., 109 Frank St., E., Toronto.	1½ "	35	"	.....
" 27	" ..	70000	Quaker Candy Co., 422 Queen St., E., Toronto.	1½ "	20	"	.....
" 27	" ..	70163	Good Bros., 588 Dundas St., Toronto.	1½ "	23	Robertson Bros., Toronto.	.....
" 27	" ..	70164	Queen Candy Works, 1662 Queen St., W., Toronto.	1½ "	37	Vendors	.....
" 27	" ..	70165	S. Bee Confectionery Co., 81 Peter St., Toronto.	1½ "	20	"	.....
" 28	" ..	70166	Purity Candy Co., 767 Dovercourt Road, Toronto.	1½ "	.....	"	.....
" 28	" ..	70167	Robt. Watson Co., 363 Scarron St., Toronto.	1½ "	.....	"	.....

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					Remarks and Opinion of the Chief Analyst.
	Fat.	Examination of Fat.			No. of Sample.	
		Butyrol. Refracto- meter.	Melting Point ° C.	Iodine Number.		

Concluded.

.....	.....	46.0	33.4	34.0	70644	Genuine cocoa product.
.....	.....	44.5	32.0	35.5	70645	" "
.....	.....	46.2	33.4	36.6	70647	" "

JAMES HOGAN, INSPECTOR.

.....	.....	45.0	32.2	35.2	71750	Genuine cocoa product.
.....	.....	46.5	33.1	35.1	71756	" "
.....	.....	46.1	33.4	32.2	71757	" "
.....	.....	45.5	33.0	34.0	71758	" "
.....	.....	46.8	33.6	39.3	71759	" "
.....	.....	46.6	33.0	32.2	71760	" "
.....	Sapon. value, 203.....	42.5	32.5	27.3	71761	Contains foreign fat.
.....	.....	46.1	34.0	36.4	71762	Genuine cocoa product.

H. J. DAGER, INSPECTOR.

.....	Sapon. value, 206.....	43.5	32.6	25.3	69998	Contains foreign fat.
.....	Sapon. value, 216.....	43.1	28.1	23.6	69999	" "
.....	.....	46.7	33.0	39.9	70000	Genuine cocoa product.
.....	.....	46.3	33.2	39.6	70163	" "
.....	.....	46.3	33.0	33.8	70164	" "
.....	.....	32.5	50.8	14.8	70165	Contains paraffin.
.....	.....	26.9	49.0	18.4	70166	" "
.....	Sapon. value, 216.....	40.5	30.8	18.4	70167	Contains foreign fat.

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.	Furnisher	Manufacturer.

DISTRICT OF WINDSOR—

1916.							
Jan. 11	Chocolate Candy.	54532	Geo. M. McLellan & Co., Clinton.	1½ lb.	45	Cowan, Toronto.....	
" 11	" ..	54537	H. Bartliff, Clinton....	1½ "	30	Robertson Bros., Toronto.	
" 12	Chocolates.	54551	W. J. Powell, Goderich..	1½ "	60	D. S. Perrin & Co., London, Ont.	
" 18	" ..	54589	Olympia Candy Co., London.	1½ "	45	Vendors.....	
" 18	" ..	54581	G. W. Kent, London....	1½ "	45	Vendor.....	
" 18	" ..	54582	Fawkes & Son, London..	1½ "	75	Vendors.....	
" 18	Cream Chocolates.	54583	Peters, London.....	1½ "	75	Vendor.....	
" 18	Chocolate Bars.	54584	J. M. Chivas, London....	12 barr	60	J. S. Fry & Son, Bristol, Eng.	
" 18	Cream Chocolates.	54585	Sissons Bros., London....	1½ lb.	45	Lundy, Peterboro....	

DISTRICT OF MANITOBA—

1915.							
Dec. 22	Chocolate Candy.	71901	Len Larken, Carman....	1½ lb.	1.50	Willard Chocolate Co. Toronto.	
" 30	" ..	71902	F. D. Halpenny, Minnedosa.	1½ "	75	Win. Neilson Co., Toronto.	
" 30	" ..	71904	Empress Confectionery, Neepawa.	1½ "	90	" "	
" 31	" ..	71905	W. H. McLeod, Neepawa.	1½ "	90	Willards, Toronto....	
1916.							
Jan. 5	" ..	71906	McNeil's Fruit Store, Souris.	1½ "	90	Ganongs, St. Stephen	
" 5	" ..	71907	Mitchell's Bakery, Souris.	1½ "	75	Hyslops, Winnipeg...	
" 5	" ..	71908	E. Claury, Souris.....	1½ "	40	Paulin Co., Winnipeg.	
" 6	" ..	72012	Central Produce Co., Brandon.	1½ "	60	Mooney's Chocolate Co., Winnipeg.	

DISTRICT OF SASKATCHEWAN—

Feb. 9	Chocolate Candy.	71549	T. S. Armstrong, Swift Current.	1½ lb.	75	Vendor.....	
" 9	" ..	71550	J. W. Bertin, Swift Current.	1½ "	75	W. M. Lowrey Ltd., Montreal.	
" 10	" ..	71551	A. McIntyre, Moose Jaw.	1½ "	75	Vendor.....	
" 10	" ..	71552	Victoria Cafe, Moose Jaw.	1½ "	90	" ..	

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.				No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Examination of Fat.					
	Fat.	Butyro-Refractometer.	Melting Point, ° C.	Iodine Number.		

JOHN TALBOT, INSPECTOR.

	p.c.					
.....	46.2	33.1	35.9	54532	Genuine cocoa product.	
.....	46.5	33.1	33.8	54537	" " "	
.....	46.1	32.3	33.8	54551	" " "	
.....	46.5	33.7	35.6	54580	" " "	
.....	46.2	32.3	34.2	54581	" " "	
.....	44.8	32.5	34.2	54582	" " "	
.....	46.0	32.2	35.6	54583	" " "	
.....	46.8	33.2	37.6	54584	" " "	
.....	46.0	33.6	34.2	54585	" " "	

J. B. COSGROVE, TEMPORARY INSPECTOR.

.....	34.72	47.2	32.0	36.1	71961	Genuine cocoa product.
.....	34.08	46.5	32.0	36.0	71962	" " "
.....	29.60	46.4	32.0	36.7	71964	" " "
.....	32.64	46.9	32.0	35.9	71965	" " "
.....	38.54	47.2	34.0	35.4	71966	" " "
.....	35.66	47.6	33.0	35.8	71967	" " "
.....	37.80	33.0	43.0	31.4	71968	Contains paraffin.
.....	34.96	47.2	33.0	36.3	72012	Genuine cocoa product.

L. H. HALL, TEMPORARY INSPECTOR.

Creams.....	36.20	46.7	32.0	35.5	71549	Genuine cocoa product.
".....	32.96	47.6	33.0	37.1	71550	" " "
Fine apple creams.....	32.44	46.8	32.0	36.6	71551	" " "
Vanilla creams.....	42.64	47.0	33.0	39.3	71552	" " "

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

DISTRICT OF ALBERTA—

1916.							
Feb. 10	Chocolate Candy.	52345	J. H. Morris & Co., Edmonton.	1½ lb.	90	J. S. Fry & Son, London, Eng.	.....
" 10	" "	52346	J. A. Hallier, Edmonton.	1½ "	1.00	Caillory Bros., Bourneville, Eng.	.....
" 11	" "	52347	James Ramsay, Ltd., Edmonton.	1½ "	75	Wm. Neilson, Toronto.	.....
" 11	" "	52348	Connor Bros., Camrose...	1½ "	90	" " "	.....
" 16	" "	52349	T. Loutit, Stettler.....	1½ "	90	Cowan's, Toronto.....	.....
" 22	" "	52350	P. Mores, Calgary.....	1½ "	75	" " "	.....
" 23	" "	52351	Geo. J. Wood, Calgary..	1½ "	50	W. M. Lowney Co., Montreal.	.....
" 23	" "	52352	Rochons, Ltd., Calgary..	1½ "	80	W. Baker & Co., Dorchester, Mass.	.....

DISTRICT OF ROCKY MOUNTAINS—

1915.							
Dec. 14	Chocolates.	68126	Choquette Bros., Nelson..	1½ lb.	90	W. M. Lowney, Montreal.	.....
" 14	" "	68127	" " "	1½ "	90	Cowan's, Toronto.....	.....
" 14	" "	68128	" " "	1½ "	90	" " "	.....
" 14	" "	68129	L. E. Murphy, Nelson...	1½ "	1.15	Moir's, Halifax.	.....
1916.							
Jan. 7	" "	68154	Little & Atchison, Cranbrook.	1½ "	75	W. M. Lowney Co., Montreal.	.....
" 17	" "	68166	H. Cherrington, Rossland.	1½ "	75	Cowan's, Toronto.....	.....
" 17	" "	68167	Hunt Bros., Rossland....	1½ "	90	" " "	.....
" 17	" "	68168	" " "	1½ "	90	" " "	.....

DISTRICT OF VANCOUVER—

Jan. 28	Chocolate Mints.	55488	Purdy's, Ltd., 675 Granville St., Vancouver.	1½ lb.	1.15	Vendors.....	.....
" 28	Plain Chocolates.	55489	Fairview Candy Mfg. Co., 2091 Granville St. Vanc.	1½ "	60	De Erve de Jong, Holland.	.....
" 28	Cocanut Chocolate.	55490	R. McDonald, 795 Granville St., Vanc.	1½ "	75	Vendor.....	.....

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					Remarks and Opinion of the Chief Analyst.
	Examination of Fat.					
	Fat.	Batters- Refracto- meter.	Melting Point ° C.	Iodine Number.	No. of Sample.	
A. W. R. MARKLEY, INSPECTOR.						
Vinello Brand	46.1	29.5	35.5	52345	Genuine cocoa product.	
Cadbury's Lunch	46.0	29.5	36.3	52346	" "	
Neilson's Rosebud	45.4	29.5	35.8	52347	" "	
Bars	45.2	29.5	34.0	52348	" "	
Cowan's Milk	45.6	29.0	35.8	52349	" "	
.....	46.4	29.0	35.5	52350	" "	
Diamond Brand	46.5	29.5	36.3	52351	Contains wheat starch, with cocoa.	
Baker's Caracas	46.7	30.0	34.0	52352	Genuine cocoa product.	

THOS. PARKER, INSPECTOR.

Soldiers' Buttons	45.9	30.0	39.3	68126	Much wheat starch pre- sent, with cocoa.
Maple Buds	41.3	30.0	35.3	68127	Genuine cocoa product.
Medallions	43.4	29.5	37.6	68128	" "
Daisies	44.5	30.0	35.0	68129	" "
.....	45.5	30.0	38.8	68154	Much wheat starch, with cocoa.
.....	44.6	30.0	35.6	68166	Genuine cocoa product.
Emblems	45.0	29.5	36.1	68167	" "
Wafers	44.6	29.5	34.2	68168	" "

E. J. MORGAN, INSPECTOR.

.....	45.5	30.0	35.0	55488	Genuine cocoa product.
.....	44.0	29.5	35.3	55489	" "
.....	41.0	26.5	22.4	55490	Much wheat starch with cocoa.

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 VANCOUVER—

1916.							
Jan. 28	Plain Chocolate.	55491	Campbells Ltd., Granville and Hastings St., Vanc.	1½ lbs.	60	Fry & Sons, England	.....
" 29	Chocolate Chips.	55492	A. E. Cusick, Columbia St. New Westminster.	1½ "	75	Vendor	.....
" 29	Chocolate Crust ed Peanuts.	55493	Royal City Candy Mfg. Co., 608 Columbia St., New Westminster.	1½ "	60	Vendors	.....
" 31	Chocolates.	55494	The Wistaria Sweet Shop, 651 Hastings St., W. Vanc.	1½ "	45	"	.....
" 31	" ..	55495	F. W. Woolworth Co., Ltd., 233 Hastings St., W. Vanc.	1½ "	30	Unknown	.....

DISTRICT OF VICTORIA—

Feb. 22	Chocolates (Plain).	66657	Dixie H. Ross & Co., 1317 Govt. St., Victoria.	1½ lb.	1 20	D. Peters, Vevey, Switzerland.	.....
" 22	"	66665	The West End Grocery Co., 1062 Govt. Street, Victoria.	1½ "	75	D. Gharardelli, San Francisco.	.....
" 24	"	66674	H. O. Kirkham & Co., 1109 Govt. St., Victoria.	1½ "	50	W. M. Lowney Co., Montreal.	.....
" 24	"	66685	Acton Bros., 1317 Douglas St., Victoria.	1½ "	100	Cadbury, Bournville, Eng.	.....
" 28	Chocolates (Candy).	66698	Ths. Lea, 1358 Gladstone Ave., Victoria.	1½ "	60	Cowan Co. Toronto	.....
" 28	Chocolates (Plain).	71398	L. D. Rines, Menzies and Simcoe St., Victoria.	4 blks.	40	J. S. Fry & Sons, Bristol, Eng.	.....
" 29	"	71341	E. B. Jones, 1800 Cook St. Victoria.	1½ lb.	60	Ramsay Bros. & Co., Ltd., Vanc.	.....
Mar. 16	Chocolate...	71341	The Cook Street, Grocery, Cook and Fort Streets, Victoria.	1½ "	75	Menier, London, Eng	.....

CHOCOLATE CANDY.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					Remarks and Opinion of the Chief Analyst.
	Fat.	Examination of Fat.				
		Reyero- Refracto- meter.	Melting Point ° C.	Iodine Number.	No. of Sample.	

Concluded.

.....	.....	46.6	29.0	38.5	55491	Genuine cocoa product.
.....	.....	43.0	29.5	34.8	55492	" "
.....	.....	46.1	29.0	33.5	55493	" "
.....	.....	45.8	29.0	36.6	55494	" "
.....	.....	43.9	31.5	36.6	55495	" "

D. O'SULLIVAN, INSPECTOR.

.....	Peters Milk Chocolate	42.2	29.5	34.0	66657	Genuine cocoa product.
.....	Eagle, Sweet.....	44.2	36.5	35.3	66665	" "
.....	Diamond	43.5	30.0	36.1	66674	Wheat starch present, with cocoa.
.....	Bournville.....	44.5	30.5	36.3	66685	Genuine cocoa product.
.....	Cowan's Milk.....	42.6	29.5	35.3	66698	" "
.....	Frys Sweet Diamond.	46.6	29.5	39.6	713.8	Wheat starch present, with cocoa.
.....	.....	44.6	29.0	37.3	71311	Maize starch present, with cocoa.
.....	Chocolate Menier	45.0	29.5	35.0	71341	Genuine cocoa product.

DETERMINATION OF MOISTURE IN EVAPORATED APPLES.

AUGUST 23, 1916.

Order in Council of 29th October, 1912, published by this Department as G. 1044, fixed 27 per cent as a maximum amount of water permissible in evaporated apples.

Subsequent investigations showed that even this limit was too high to be consistent with good keeping qualities in the product (see Bulletin No. 293), and an Order in Council of 16th March, 1916, established 25 per cent of moisture as a maximum. Experimental work done in these laboratories shows that the method employed in determination of moisture in evaporated apples, affects more or less the accuracy of the result; and in order to secure uniformity, the following method of working is provisionally adopted.

1. A representative sample (at least 25 grammes) is comminuted by cutting with a sharp knife, on a hardwood board, until the fragments are not larger than a cube of one-fourth of an inch. Machines such as are used to cut sausage meat are objectionable, as they squeeze out more or less of the water, thus causing loss.

2. Weigh out duplicate portions of from 10 to 15 grammes, of the finely cut material, on tared watch glasses, and dry for two hours at 90° Centigrade, in a well-ventilated, water-jacketed oven.

3. Weigh the samples.

4. Return to oven for another hour, under same conditions as above.

5. Weigh again.

If the loss of weight between the two last weighings amounts to less than one-half of one per cent of the weight of the samples, the last weighing is to be accepted as correct, and the weight lost in three hours is to be calculated as a percentage loss on the original weight of the sample, and stated as moisture.

6. If the loss shown in the last hour exceeds one-half of one per cent of the weight of the sample, this is to be returned to the oven for another hour, under same conditions of temperature, etc., and the loss of weight after the fourth hour, is to be taken as measuring the moisture present in the original sample.

NOTE.—It is desirable to employ an oven with forced ventilation. See description of McGill oven in Leach's "Food Inspection and Analysis," page 536.