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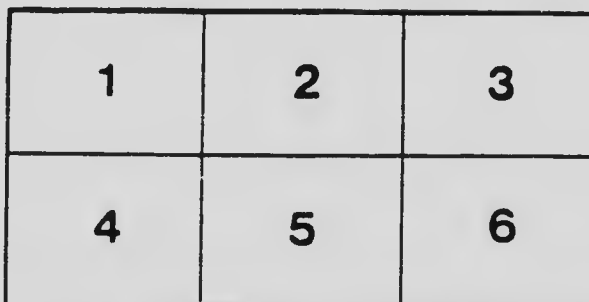
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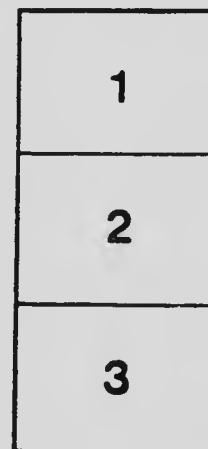
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LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 224

Tomato Catsup.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No. 224

Tomato Catsup.

OTTAWA, May 30, 1911.

W. J. GERALD, Esq.
Deputy Minister of Inland Revenue.

SIR,—In June and July of last year a collection of Tomato Catsup was made, ten samples being obtained in each of fifteen inspectoral districts.

The samples in question were all examined by my assistants and reported to me ; but the records were believed to have been destroyed in the fire of 4th January last ; which also destroyed the samples themselves.

The recovery of part of the reports on these samples of catsup makes it possible to hand you this fragmentary record ; which possesses certain features of interest that may justify its publication.

In the cases of the following districts, the analytical records are totally lost, viz :—

	Samples.
Nova Scotia	10
Prince Edward Island	10
New Brunswick	8
Kingston	10
London	1
Manitoba	1
Vancouver	5
Victoria	10
Total lost	75

The present report, therefore, includes as follows :—

	Samples.
District of Quebec	10
" St. Hyacinthe	10
" Montreal	10
" Ottawa	10
" Toronto	10
" Windsor	10
" Manitoba	5
" Calgary	10
Total	75

Catsup is rather to be regarded as a condiment, i.e., a seasoning for food than as a food proper; for which reason a consideration of the total nutriment derivable from the article would be out of place. The value of a catsup is to be judged rather by its palatability, its effectiveness as a stimulant to appetite, than by its nutritive quality.

If however, tomato catsup derive, in any degree, its value from the actual amount of fruit spices and other solid matters used in its production, there is room for astonishment at the great variability in dry solids found in the 75 samples now reported. The total solid matter varies from less than 5 per cent (No. 1349) to above 30 per cent. (Nos. 45089 and 43782) of the weight of the article. The mineral solids (chiefly salt) vary from 0.68 per cent to 3.82 per cent.

Bulletin No. 129 (Dec. 1906) contains a report upon 49 samples of tomato catsup, and in these a variation of from 7.44 p.c. to 29.04 p.c., was noted in total solids; while the mineral matter (ash) varied from 1.60 to .66 per cent. It is worthy of note that the highest ash is not found in those samples which give highest total solid matter.

Under the regulations made in conformity with the Pure Food Law of the United States, catsup is defined as "The clean, sound product, made from the properly prepared pulp of clean, sound, fresh, ripe tomatoes, with spices, and with or without sugar and vinegar."

This definition is very incomplete, inasmuch as it contains nothing quantitative. It would seem reasonable to insist upon a certain minimum amount of fruit, and perhaps of spices, in catsup. The definition quoted possesses, however, one important and valuable feature, in that it insists upon the pulp being clean and sound, and prepared from clean, sound, fresh and ripe fruit. Many convictions have been obtained against manufacturers whose catsup has been found mouldy, rotten or swarming with bacteria. (See notices of judgment 156, 388, &c.). But even here there is a difficulty, since an absolutely sterile catsup is practically impossible. It would seem well to fix upon a bacterial limit, beyond which the article would be illegal. Section 3 (e) of our Adulteration Act is quite as precise as the definition above quoted.

All of the 75 samples reported were found to be in good condition, and free from moulds or decay.

Three (3) samples contained salicylic acid as a preservative; forty-six (46) contained benzoic acid, and six (6) contained sulphurous acid or sulphites. These last were, of course, artificially coloured.

Coal tar dyes were found in 54 cases. There is no greater objection to harmless colouring matter in catsup than in candy. But a suspicion naturally arises that the colour may be used to conceal inferiority in the article, since it is well known that the use of fresh and ripe tomatoes renders a dye unnecessary; and in fact, some of the most attractively coloured samples herein reported were found to be free from dyes.

The question of fixing a standard for tomato catsup must receive consideration in due course; and a collection to supplement that herein reported, will be made as soon as work in hand permits.

This report is belated, for reasons already given. The work contained in it belongs to the fiscal year ending March 31, 1911.

I beg to recommend its publication as Bulletin 224.

I have the honour to be, sir,

Your obedient servant,

A. MCGILL,

Chief Analyst.

BULLETIN No. 224—TOMATO CATSUP.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.		Quantity.	Cost.		Inspector's Report. (In not an expression of opinion).	RESULTS OF ANALYSIS.							No. of Sample.		
			Name and Address of Vendor.	Name and Address of Manufacturer or Furnisher as given by the Vendor.		Cent.	Cent.		Total Solids.	Total Ash.	Acidity stated as	Coal Tar Dye.	Salicylic Acid.	Benzoic Acid.	Sulphurous Acid.			
1910.									p.c.	p.c.	p.c.	p.c.	p.c.	Pre-sent.	Pre-sent.	Pre-sent.	Pre-sent.	
June 23	Tomato Catsup.	36423	Alexandre Marcot, Beauport.	Quebec Preserving Co., Quebec.	3 Bots	30	30	.....	10.04	2.88	1.05	0.87	None	Pre-sent.	None	None	None	36423
" 23	"	36424	Philias Parent, Beauport.	N. Turotte & Cie, Quebec.	3 "	30	30	.....	5.50	1.40	0.87	0.74	None	None	None	None	None	36424
" 23	"	36425	" " " "	J. B. Renaud & Cie, Quebec.	3 "	30	30	.....	14.44	1.70	0.74	0.93	Pre-sent.	Pre-sent.	None	None	None	36425
" 23	"	36426	" " " "	" " " "	3 "	30	30	.....	17.32	1.56	0.93	0.99	None	None	None	None	None	36426
" 23	"	36427	Alphonse Vachon, Beauport.	Unknown	3 "	45	45	.....	13.44	2.08	0.99	0.93	None	None	None	None	None	36427
" 23	"	36428	" " " "	" " " "	3 "	60	60	.....	18.30	2.30	0.93	0.93	Pre-sent.	Pre-sent.	None	None	None	36428
" 23	"	36429	Joseph Godreau, Beauport.	Quebec Preserving, Quebec.	3 "	30	30	.....	8.86	1.34	1.30	0.74	None	None	None	None	None	36429
" 23	"	36430	Jule Belanger, Beauport.	N. Rioux & Cie, Quebec.	3 "	30	30	.....	14.24	2.00	0.74	0.99	Pre-sent.	Pre-sent.	None	None	None	36430
" 23	"	36431	Elie Noel, Beauport.	J. B. Renaud & Cie, Quebec.	3 "	45	45	.....	15.40	1.70	0.99	0.68	None	None	None	None	None	36431
" 23	"	36432	Narcisse Fortier, Beauport.	N. Rioux & Cie, Quebec.	3 "	30	30	.....	14.60	1.64	0.68	0.68	None	None	None	None	None	36432

DISTRICT OF QUEBEC—E. BELAND, INSPECTOR.

DISTRICT OF ST. HYACINTHE—J. C. ROULEAU, INSPECTOR.

June 23	Tomato Catsup.	1349 J. Chartier, St. J. bla.	J. A. Ferrault & Cie, Montreal.	45	45	4.80	1.24	Pre-sent.	None.	None.	1349
" 23	"	1350 H. F. Barlow, Magog.	The Aylmer Canning Co., Aylmer, Ont.	35	35	12.54	0.99	Pre-sent.	None.	None.	1350

BULLETIN No. 224—TOMATO CATSUP.

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.	Inspector's Report. (Is not an exhibition of opinion.)	RESULTS OF ANALYSIS.							No. of Sample.
				Quantity.	Centre.			Total Solids.	Total Ash.	Acidity stated as Acetic Acid.	Coal Tar Dye.	Sulphuric Acid.	Hydrochloric Acid.	Preservatives.		Sulphurous Acid.
1910.	June 15	Tomato Catsup.	43046 D. A. Younghus, 3 Bots Ottawa, Elgin St.	30	Canada Preserving Co., Ltd., Hamilton.	"Graham's Lily" Brand.		p.c.	p.c.	p.c.	p.c.	Pre- sent.	None.	None.	43046
"	"	"	43047 J. F. Burrows, 3 " O'Connor St., Ottawa.	50	H. N. Bate & Sons, Ottawa.	Mfg. by T. A. Lytle-Co., Ltd., Toronto.		13 04	2 00	1 24	"	None.	Pre- sent.	None.	43047
"	"	"	43048 S. W. Lee, Elgin 3 " St., Ottawa.	75	"	"Snider's Home- made catsup mfd. by T. A. Snider, Co., Cincinnati, Ohio, not arti- ficially colored		20 01	3 20	1 12	None.	"	"	None.	43048
"	"	"	43049 E. W. Richardson, 3 " Elgin St., Ottawa	30	The Turner Co., Ltd., Toronto.	"Turner" Brand.		19 78	1 84	0 62	Pre- sent.	"	Pre- sent.	"	43049
"	"	"	43050 Alex. Phillips, Som- erset St., Ottawa.	30	The T. A. Lytle Co., Ltd., Toronto.	"Canada Brand		18 36	1 80	0 81	"	"	None.	Pre- sent.	43050
"	"	"	43051 Leacy & Shields, 3 " Pembroke.	35	H. N. Bate & Sons, Ottawa.	"Graham's Lily" Brand mfd. by Canada Preser- ving Co., Ham- ilton.		18 70	1 00	1 73	None.	"	Pre- sent.	None.	43051
"	"	"	43052 Fenton & Smith, 3 " Pembroke.	75	Gorman, Eckert & Co., London, Ont.	"Forest City" Brand Home made Catsup		16 70	3 26	1 05	Pre- sent.	"	"	"	43052

DISTRICT OF OTTAWA—J. A. RICKEY—INSPECTOR.

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75 Gorman, Eckert & Co., "Forest City" 16 70 3 26 1 00 Pre-
Brand Home sent.
made Ce up

" 22	"	43052	Fenton & Smith, 3 "	"	75	Gorman, Eckert & Co., "Forest City" 16 70 3 26 1 00 Pre- Brand Home sent.
" 25	"	43053	Mullin Bros., Mor-3 "	45	Wm. Galbraith & Son, Mid- by T. A. 13 94 1 80 0 80	43053
July 4	"	43054	" " Whitley, 3 "	45	Unknown " " Hillcrest " 11 72 2 21 1 86	43054
" 11	"	43055	Wm. Rhodes, 3 "	30	Gilmour & Co., Brockville, "Canada First" 13 00 2 20 0 87	43055

DISTRICT OF TORONTO—H. J. DAGER—INSPECTOR.

June 16	Tomato	Catsup.	45087	A. Harris & Uxbridge.	30	The Aylmer Canning Co., "Canada first" 12 52 2 20 0 50 0 90	45087
" 18	"	"	45088	Geo. O. Elder, Mary St. Hamilton.	30	Burlington Canning Co., "Burlington" 18 18 1 80 0 79 None.	45088
" 21	"	"	45089	Jamea Kennedy, Arthur St., Toronto.	45	H. J. Heinz Co., Pitts-burgh, Pa. Heinz Tomato Catsup con- tains no artifi- cial preserva- tive or color- ing. 32 20 2 24 1 73	45089
" 23	"	"	45090	John Cheesman, 3 Barrie.	30	Jno. Sloan & Co., Toronto, "De France" 12 46 1 66 1 05 Pre- sent.	45090
" 29	"	"	45091	Ward & Co., Ger- ard St. E., To- ronto.	30	Ingersoll Canning & Pre- serving Co., Ingersoll, "Dun" 5 30 0 76 0 73 None.	45091
" 29	"	"	45092	R. J. Poyntz, Dun- das St. W., To- ronto.	45	Green & Co., Toronto, "Nation" 5 84 1 86 2 23	45092
" 30	"	"	45093	C. H. Crystall, 3 Oshawa.	30	Napanee Canning Co., Ltd., "Canadas Price" 16 02 1 68 0 68 Pre- sent.	45093
July 4	"	"	45095	Thomas Haywood, 3 Orillia.	30	The Mesford Canning Co., "Vernon" Brand 6 32 1 90 0 86	45095
" 5	"	"	45096	Thos. Fielding, 3 Gravenhurst.	45	The T. A. Lytle Co., Ltd., "Canada" Brand 17 40 1 72 1 18	45096
" 5	"	"	45097	J. D. Cummings, 3 Bracebridge.	45	The North Land Mfg. Co., "Home made" choice tomato catsup. 16 44 1 44 1 18	45097

DISTRICT OF WINDSOR—JNO. TALBOT, INSPECTOR.

June 20	Tomato	Catsup.	42322	A. H. Scarff & Co., Essex.	35	Wm. Davies & Co., Tor-onto, "Davies Tomato Catsup" 16 34 2 26 1 96	42322
" 20	"	"	42323	Thos. A. Kennedy, Essex.	45	T. A. Lytle Co., Toronto, "Canada" Brand. 19 16 2 28 0 99	42323

BULLETIN No. 224—TOMATO CATSUP.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.		Quantity.	Cost.	Inspector's Report. (Is not an expression of opinion).	RESULTS OF ANALYSIS.										
			Name and Address of Manufacturer or Furnisher as given by the Vendor.	Centre.				Total Solids.	Total Ash.	Acidity stated as Acetic Acid.	Coal Tar Dyes.	Saltyle Acid.	Benzoic Acid.	Sulphurous Acid.	No. of Sample.			
1910.																		
June 21	Tomato Catsup.	42325	Geo. E. Fox, Leamington.	30		Canada Spice & Grocery Co., London.	Crest' Brand.	p.c.	p.c.	p.c.	Pre-sent.	None.	None.	None.	42325			
"	"	42329	Geo. M. Sawyer, Leamington.	45		H. H. Co., Leamington.	Heinz Tomato Catsup.	28.64	3.74	1.92	None.	None.	None.	42329				
"	"	42330	Robinson Bros., Leamington.	30		Imperial Spice Co., Hamilton.	Champion Tomato Catsup.	12.68	2.10	0.80	Pre-sent.	"	"	42330				
"	"	42332	C. G. Moore, Chat-ham.	30		Tilbury Canning Co., Tilbury.	Tilbury' Brand.	13.30	2.34	0.62	"	"	Pre-sent.	42332				
"	"	42335	Jno. Diprose, London.	30		Gorman Eckert & Co., London.	Forest City Brand Home-made Tomato Catsup.	14.34	1.98	1.43	"	"	"	42335				
"	"	42336	J. T. May, London.	40		"	'Rex' Brand Tomato Catsup.	14.24	2.08	2.64	"	"	"	42336				
"	"	42345	T. McKay, London.	30		Imperial Spice Co., Hamilton.	"	12.32	2.36	0.50	"	Pre-sent.	None.	42345				
"	"	42350	Wm. Loughrey, London.	30		London Canning Co., London.	"	12.28	2.22	0.74	"	None.	None.	42350				

DISTRICT OF WINDSOR—JNO. TALBOT, INSPECTOR—Concluded.

DISTRICT OF MANITOBA—A. C. LARVIERE, INSPECTOR.

July 11	Tomato Catsup.	33898	J. Lezack, Logan Ave., Winnipeg.	3 bts.	45	Blackwood Ltd., Winnipeg.	Blackwood Cat-sup.	16.86	3.36	1.49	None.	None.	None.	Pre-sent.	33898
June 22	"	43501	S. G. Prebble, Notre Dame Ave., Winnipeg.	3 "	45	The T. A. Lytle Co., Ltd., Toronto.	Storling Brand.							43501	

Date	Product	Brand	Quantity	Manufacturer	Price	Weight	None	Pre-sent	None	35898
July 11	Tomato Catsup	Lezack, Logan	3 bots.	45	Blackwood Ltd., Winnipeg	16.86	3.36	1.49	None	35898
June 22	"	G. G. Prebble, 3 Notre Dame Ave., Winnipeg	3 "	45	The T. A. Lytle Co., Ltd., Toronto					43501
" 23	"	4572 Collins & Munro, 3 pks Miami	3 pks	15	The Meaford Canning Co., Meaford, Ont.					43502
" 27	"	43503 G. T. Hayes, Elmwood	3 bots.	45	The Dyson Co., Winnipeg					43503
" 27	"	43504 J. H. McGrath, Elmwood	3 "	45	T. A. Lytle, Ltd., Toronto					43504
" 28	"	43505 J. Paterson, Fortage Ave., Winnipeg	3 "	75	T. A. Snider Preserve Co., Cincinnati, Ohio					43505
" 29	"	43506 Paszkov & Zearoin, Western	3 "	45	Blackwood, Ltd., Winnipeg					43506
July 6	"	43507 Gregory & Co., St. James	3 "	45	The Tillyary Canning Co., Ltd., Tilbury, Ont.	11.36	2.40	0.93	Pre-sent	43507
" 7	"	43508 A. Higgins, Elmwood	3 "	75	The Dyson Co., Winnipeg	12.14	3.34	1.24	"	43508
" 8	"	43509 Ross & Cunningham, Elmwood	3 "	75	Delhi Canning Co., Delhi, Ont.	19.35	2.12	0.72	None	43509
" 11	"	43510 W. A. Walls, Nena St., Winnipeg	3 "	75	Van Camp Packing Co., Indianapolis, U.S.	25.00	3.60	1.92	"	43510

5574-12

DISTRICT OF CALGARY—R. W. FLETCHER—INSPECTOR.

Date	Product	Brand	Quantity	Manufacturer	Price	Weight	None	Pre-sent	None	43781
July 5	Tomato Catsup	Craddock & Viner, Lethbridge	3 Tins	40	Delhi Fruit & Vegetable Canning Co., Delhi, Ont.	21.06	2.00	0.83	None	43781
" 5	"	43782 Hudson Bay Co., Lethbridge	3 Bots	1 00	Heinz, Pittsburgh, Pa.	30.70	2.60	1.86	"	43782
" 13	"	43783 R. Dunn, Medicine Hat	3 "	60	Gorman, Eckert & Co., Ltd., London, Ont.	15.70	1.90	1.55	Pre-sent	43783
" 13	"	43784 The D. Milne Co., Medicine Hat	3 "	1 00	Currier Bros., Rochester, N.Y.	18.26	3.56	0.87	None	43784
" 22	"	43785 W. H. Hayes, Calgary	3 "	75	Aylmer Canning Co., Aylmer, Ont.	16.26	3.00	1.12	Pre-sent	43785
" 22	"	43786 E. A. Rosser, Calgary	3 Tins	40	"	8.78	2.68	1.55	"	43786
Aug 8	"	43787 C. E. Compton, Wetaskiwin	3 Bots	90	T. A. Snider Co., Cincinnati, Ohio	21.90	2.28	1.18	None	43787
" 8	"	43788 Thibauden Trad, Wetaskiwin	3 "	1 05	Van Camp Packing Co., Indianapolis, Ind.	26.06	3.66	1.80	"	43788
Aug 9	"	43789 Douglas Bros., Ltd., Strathcona	3 Bots	45	Gorman, Eckert & Co., London, Ont.	15.22	2.52	0.99	Pre-sent	43789
" 10	"	43790 A. Livingston, Edmonton	3 "	75	Van Camp Packing Co., Indianapolis, Ind.	26.10	3.10	1.92	None	43790

