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Government of Canada



THE
SUGAR REFINING INDUSTRY
1948



**DOMINION BUREAU OF STATISTICS
DEPARTMENT OF TRADE AND COMMERCE**



**THE
SUGAR REFINING INDUSTRY
1948**

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THE SUGAR REFINING INDUSTRY IN CANADA, 1948

The output of the sugar refining industry in 1948 was 273,429,787 pounds greater than in 1947. The production of sugar of all kinds amounted to 1,358,139,315 pounds (1,182,498,065 pounds made from cane and 175,641,250 pounds from beets). The production of cane sugar increased by 254,051,237 pounds and that of beet sugar increased by 19,378,550 pounds. Granulated sugar comprises over 84 per cent of total sugar produced.

The production of beet sugar which is dependent upon weather conditions, fluctuates widely from year to year. The record output which amounted to 215,879,271 pounds was attained in 1941. Through adverse weather conditions in 1943 the output declined to a low of 129,268,010 pounds. In spite of the wide fluctuations in production, the trend during the past ten years has been upward. Production in 1946 amounted to 205,779,800 pounds, in 1947 it totalled 156,262,700 pounds, and in 1948, 175,641,250 pounds. The percentage of beet sugar to the total produced was only 12.9 per cent in 1948. During the war years when the consumption of sugar was restricted through rationing, the percentage of beet sugar to the total was much higher. In 1942 it was 23.6 per cent, the highest since the inception of the annual industrial census in 1917.

The price of refined sugar, at the factory, increased during 1948. Beet sugar increased from 8.45 cents per pound in 1947 to 8.92 in 1948, and cane sugar from 6.92 to 7.98 cents per pound. The value of sugar of all kinds rose from 7.14 to 8.10 cents per pound.

The refineries are located as follows: Nova Scotia 1, New Brunswick 1, Quebec 3, Ontario 2, Manitoba 1, Alberta 2 and British Columbia 1. These refineries in 1948 reported a gross value of production of \$113,510,547, they employed 3,267 persons who received \$7,662,318 in salaries and wages, and paid out \$88,031,106 for raw materials. Since 1943 several plants were shut down and their operations pooled with other refineries in the vicinity. This was due to the limited amount of raw sugar available as well as a shortage of labour.

Detailed statistics of production, materials used, employment, etc. are given in the tables following. In order that there may be no disclosure of statistical information of individual plants, the statistics are given for the Dominion only.

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Table 1. - Principal Statistics of the Sugar Refining Industry,
Representative Years, 1917 - 1948

Year	Estab- lish- ments	Capital Invested	Em- ploy- ment	Salaries and Wages	Cost of Materials Used	Gross x Value of Production
	No.	\$	No.	\$	\$	\$
1917	8	31,818,133	2,527	2,324,828	53,179,911	61,429,787
1920	8	46,719,034	3,118	4,632,814	103,689,088	119,086,731
1925	8	50,089,717	2,784	3,828,442	54,457,385	68,445,879
1929	8	43,534,113	2,325	3,686,037	35,640,124	47,151,960
1933	8	35,758,074	2,092	3,048,817	22,846,473	37,189,960
1934	8	33,151,249	2,080	2,919,662	24,099,994	36,007,208
1936	10	33,199,993	2,559	3,413,698	27,924,998	40,405,377
1938	10	36,347,866	2,318	3,315,633	28,838,685	41,392,096
1939	10	40,511,884	2,399	3,467,367	33,728,967	49,896,763
1940	11	42,966,073	2,538	3,623,661	42,150,263	57,274,122
1941	11	43,915,168	2,642	3,834,639	46,067,190	62,402,709
1942	11	45,232,672	2,326	3,772,431	33,283,971	45,969,711
1943	10	44,144,876	2,274	4,068,473	38,613,832	51,239,749
1944	11	/-	2,590	4,576,060	48,033,547	63,874,868
1945	11	/-	2,713	4,860,264	46,518,380	61,821,443
1946	11	/-	2,633	5,010,789	45,900,913	61,181,621
1947	11	/-	3,003	6,309,481	63,883,259	80,194,369
1948	11	/-	3,267	7,662,318	88,031,106	113,510,547

x Selling value at the factory. Statistics since 1935 do not include excise taxes.
/- Not collected since 1943.

Table 2. - Comparison of Principal Statistics

Items		1 9 4 8	1 9 4 7	+ Increase - Decrease	
Refineries reporting	No.	11	11	-	
Employees on salaries -					
Total	No.	411	408	+	3
Male	No.	310	302	+	8
Female	No.	101	106	-	5
Total salaries	\$	1,500,930	1,318,141	+	182,789
Employees on wages - (monthly average) -					
Total	No.	2,856	2,595	+	261
Male	No.	2,541	2,292	+	249
Female	No.	315	303	+	12
Total wages	\$	6,161,388	4,991,340	+	1,170,048
Cost of fuel and electricity	\$	2,753,831	2,106,343	+	647,488
Cost of materials used	\$	88,031,106	63,883,259	+	24,147,847
Gross value of production	\$	113,510,547	80,194,369	+	33,316,178
Value added by manufacture x	\$	22,725,610	14,204,767	+	8,520,843

x Gross value of products less cost of materials, fuel and electricity.

NOTE: Profits or losses cannot be estimated from census figures as no data are collected for certain items such as interest, rent, depreciation, taxes, insurance, advertising, etc.

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Production in Sugar Refineries

Table 3 gives the production of sugar and its by-products by class, quantity and selling value at the refinery for the years 1947 and 1948. The quantity of sugars produced in Canadian refineries during 1948 was greater than that of 1947 by 273,429,787 pounds and the selling value by \$32,602,071. The quantity of beet sugar increased by 19,378,550 pounds and cane sugar increased by 254,051,237 pounds, making the increase as stated above. Molasses increased and in quantity and value.

Table 3. - Sugar and By-Products

Products	Unit of Measure	1 9 4 8		1 9 4 7	
		Quantity	Selling Value at Factory 1/	Quantity	Selling Value at Factory 1/
			\$		\$
Sugar - Made from cane	Lbs.	1,182,498,065	94,367,535	928,446,828	64,220,498
Made from beets	"	175,641,250	15,663,858	156,262,700	13,208,824
Total sugar produced	"	1,358,139,315	110,031,393	1,084,709,528	77,429,322
Granulated	"	1,146,896,371	93,059,358	911,755,196	65,368,978
Yellow or Brown	"	142,338,703	10,678,251	118,124,797	7,602,154
Pulverized (no starch added)	"	2,175,700	200,504	2,245,300	184,576
Icing (starch added)	"	54,296,021	4,850,576	38,704,590	3,055,819
Loaf	"	12,432,520	1,242,704	13,879,645	1,217,795
Syrups (not including molasses)	"	13,502,000	1,030,890	15,500,000	698,531
Molasses - Made from cane	"	23,552,000	578,576	18,526,000	437,014
Made from beet	"	44,152,000	850,403	46,880,000	838,855
Total molasses	"	67,704,000	1,428,979	65,406,000	1,275,869
Beet pulp, wet and dried	Tons	108,075	1,019,285	115,062	790,647
Other products	-	-	-	-	-
TOTAL VALUE OF PRODUCTS			113,510,547	-	80,194,369

1/ This does not include excise taxes.

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Table 4. - Production of Sugar Beets and Beetroot Sugar

The number of acres of sugar beets harvested, the total yield and average yield per acre and the total value of the crop delivered at the factory are shown in Table 4 for the years 1918 to 1948. Acreage of sugar beets harvested in 1948 was 1,233 acres more than in 1947, the total yield was 23,465 tons more and the total value of the crop increased by \$769,517.

Table 4. - Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar Compared, 1918 to 1948

Year	Acres Grown	Total Yield	Yield per Acre	Total Value	Average Price Per Ton	Production and Value (at the refinery) of refined beetroot sugar		
	No.	Tons	Tons	\$	\$ cts.	Lb.	\$	\$ cts. per cwt.
1918	18,000	204,000	11.25	2,593,715	12.71	50,092,835	4,358,077	8.70
1919	18,600	180,000	9.50	2,630,027	14.61	37,839,271	3,924,411	10.70
1920	34,491	343,000	9.94	5,307,243	15.47	89,280,719	12,856,424	14.40
1921	25,535	199,334	7.80	1,974,384	9.90	52,862,377	3,554,203	6.70
1922	14,955	127,807	8.55	966,521	7.56	29,911,770	1,645,885	5.50
1923	17,941	159,200	8.87	1,922,668	12.08	39,423,160	3,745,200	9.50
1924	31,111	295,177	9.50	1,704,791	5.78	85,770,709	6,192,645	7.30
1925	34,803	370,047	10.63	2,688,302	7.27	72,819,919	5,206,624	7.15
1926	30,073	267,754	8.90	2,286,761	8.54	70,388,105	4,269,076	6.06
1927	25,961	206,713	7.96	2,012,134	9.73	60,969,131	3,719,117	6.10
1928	34,323	244,930	7.14	2,041,465	8.33	64,653,348	3,340,571	5.17
1929	32,556	235,465	7.23	2,080,996	8.84	69,399,213	3,335,344	4.81
1930	40,532	397,576	9.81	3,278,625	8.25	94,624,701	4,529,944	4.79
1931	43,337	435,992	10.06	3,190,198	7.32	107,139,129	4,794,551	4.48
1932	44,817	505,671	11.28	3,113,942	6.16	132,016,859	5,789,205	4.38
1933	43,807	442,391	10.10	2,790,928	6.31	131,392,501	5,713,181	4.35
1934	38,495	412,672	10.72	2,599,982	6.30	114,002,950	4,714,624	4.14
1935	51,985	459,223	8.83	2,881,098	6.27	119,857,668	4,617,733	3.85
1936	x 50,444	555,969	11.02	3,510,922	6.31	156,066,242	6,103,264	3.91
1937	x 43,758	422,152	9.65	2,825,006	6.69	120,440,235	5,230,971	4.34
1938	x 45,194	498,102	11.02	3,403,635	6.83	143,013,847	6,001,380	4.20
1939	x 57,316	586,444	10.23	4,417,372	7.53	169,320,343	8,063,332	4.76
1940	x 77,548	825,344	10.64	6,022,670	7.30	213,602,511	10,853,665	5.08
1941	x 63,925	708,616	11.08	5,781,151	8.16	215,879,271	11,639,825	5.39
1942	x 62,381	701,884	11.25	6,434,517	9.17	189,066,870	11,349,746	6.00
1943	x 52,693	474,378	9.00	4,592,240	9.68	129,268,010	8,728,995	6.75
1944	x 55,020	564,927	10.27	5,598,383	9.91	165,318,840	11,281,052	6.82
1945	x 59,273	618,790	10.44	6,192,942	10.01	163,837,790	11,198,989	6.84
1946	x 66,869	735,849	11.00	8,030,859	10.91	205,779,800	14,022,621	6.81
1947	x 58,832	605,741	10.30	8,517,159	14.06	156,262,700	13,208,824	8.45
1948	x 60,065	629,206	10.48	9,286,676	14.76	175,641,250	15,663,858	8.92

x This is the number of acres harvested. The acreage seeded is slightly higher than these figures, being 57,483 acres in 1943, 70,446 in 1944, 63,134 in 1945, 71,939 in 1946, 67,376 in 1947 and 66,501 in 1948.

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Table 5. - Exports - Sugar, Molasses and Beet Pulp, 1942-1948

Product	Unit of Measure	Quantity	Value
			\$
Molasses and syrups, n.o.p.			
1942	Gal.	2,341,278	480,401
1943	"	2,140,652	529,145
1944	"	1,067,701	420,465
1945	"	876,015	566,977
1946	"	1,639,397	615,070
1947	"	849,182	429,350
1948	"	1,180,835	495,357
Sugar, n.o.p. -			
1942	Cwt.	161,435	698,332
1943	"	22,392	127,669
1944	"	163,952	887,693
1945	"	447,805	2,630,820
1946	"	20,982	127,001
1947	"	22,960	167,011
1948	"	10,744	77,372
Beet pulp -			
1942	Cwt.	194,785	265,463
1943	"	27,800	39,431
1944	"	72,905	134,524
1945	"	49,789	107,426
1946	"	88,545	235,443
1947	"	78,449	239,097
1948	"	119,556	329,848

Table 6. - Imports of Sugar, Molasses, etc., 1942-1948

Product	Unit of Measure	Quantity	Value
			\$
Molasses of cane testing under 35° but not less than 20° -			
1942	Gal.	1,549,844	237,048
1943	"	44,108	21,266
1944	"	25,574	6,658
1945	"	134,214	41,675
1946	"	5,940,384	997,471
1947	"	9,557,049	1,684,616
1948	"	9,814,229	3,194,970
Molasses of cane, imported direct, testing not less than 35° nor more than 56° -			
1942	Gal.	37,452	15,654
1943	"	66,260	36,640
1944	"	29,042	17,105
1945	"	274,791	115,217
1946	"	700,988	318,695
1947	"	188,796	105,309
1948	"	85,276	54,618

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Table 6. - Imports of Sugar, Molasses, etc., 1942-1948 Concl'd.

Product	Unit of Measure	Quantity	Value
			\$
Molasses of cane the produce of any country entitled to the British Preferential Tariff, imported direct, testing not more than 56° -			
1942	Gal.	662,057	240,528
1943	"	2,581,705	1,004,057
1944	"	5,625,763	2,195,943
1945	"	4,613,815	1,787,653
1946	"	4,488,167	2,143,147
1947	"	5,258,933	3,229,503
1948	"	4,891,031	3,842,198
Syrups and molasses of all kinds, the product of the sugar cane or beet, n.o.p. and all imitations and substitutes -			
1942	Cwt.	4,133	20,619
1943	"	7,707	50,765
1944	"	10,641	68,085
1945	"	10,685	68,769
1946	"	10,175	80,029
1947	"	7,851	47,480
1948	"	6,691	53,176
Sugar, raw, when imported or purchased in bond in Canada for refining purposes only -			
1942	Cwt.	6,095,716	16,421,694
1943	"	8,253,976	23,654,547
1944	"	8,916,586	28,709,555
1945	"	8,376,764	28,482,362
1946	"	8,616,972	31,790,956
1947	"	9,962,365	46,406,917
1948	"	12,277,576	62,116,276
All sugar above No. 16 D.S. in colour, and all refined sugars of whatever kinds, grades or standards, not covered by tariff item 135, and sugar syrups testing over 56° -			
1942	Cwt.	155,811	486,342
1943	"	154,464	486,504
1944	"	141,822	519,955
1945	"	113,858	467,997
1946	"	155,740	624,685
1947	"	180,723	990,520
1948	"	161,747	945,384

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Table 7. - Wholesale Prices of Sugar at Montreal and Vancouver for Specified Months
(Compiled by the Prices Section)

Sugar at Montreal				Sugar at Vancouver			
Sugar, Granulated Standard, per Cwt.		Sugar No. 1 Light Yellow per Cwt.		Sugar Granulated per cwt. f.o.b. Factory		Sugar No. 3 Yellow, per Cwt. f.o.b. Factory	
1948	1947	1948	1947	1948	1947	1948	1947
\$	\$	\$	\$	\$	\$	\$	\$
January .. 7.89	6.89	7.63	6.63	7.89	6.89	7.51	6.51
April 7.89	7.89	7.63	7.63	7.89	7.89	7.51	7.51
July 7.89	7.89	7.63	7.63	7.89	7.89	7.51	7.51
October .. 7.89	7.89	7.63	7.63	7.89	7.89	7.51	7.51

Materials Used

The cost of materials used in the industry during 1948 as shown in Table 6, amounted to \$88,031,106. This is an increase from the previous year of \$24,147,847. Raw materials, consisting of raw cane and sugar beets, constitute over 93 per cent of the total cost, other materials about 2 per cent, and containers of all kinds over 5 per cent. The average cost price of raw cane sugar laid down at the factory was 5.92 per hundred-weight in 1948 and 5.18 per hundredweight in 1947. The cost at the factory of sugar beets was \$14.76 per ton in 1948 and \$14.06 in 1947.

Table 8. - Materials Used

Kind of Materials	Unit of Measure	1 9 4 8		1 9 4 7	
		Quantity	Cost Value at the Refinery	Quantity	Cost Value at the Refinery
			\$		\$
Raw cane sugar	Pound	1,231,659,231	72,876,574	981,107,532	50,822,593
Sugar beets	Ton	629,206	9,286,676	605,741	8,517,159
Cornstarch	Pound	1,736,625	167,602	1,332,169	106,994
Boneblack	"	3,939,368	412,615	1,431,804	118,094
Vegetable char	"	63,784	8,815	54,345	8,088
Infusorial earth	"	5,729,441	167,259	4,980,232	141,885
Lime	"	1,449,737	11,200	1,503,998	10,736
Limestone	Ton	34,805	109,096	33,235	80,984
Sulphur	Pound	214,103	5,843	254,415	7,287
Sulphuric acid	"	687,140	8,967	637,813	7,634
Hydrochloric and muriatic acid	"	550,439	13,186	285,780	8,615
Phosphoric acid	"	117,040	10,766	298,334	25,426
Soda ash	"	400,220	9,790	311,513	7,312
Filtering materials, n.e.s..	-	-	28,421	-	33,038
Other chemical materials ..	-	-	14,500	-	12,653
Containers (boxes, bags, etc.)	-	-	4,630,445	-	3,522,825
All other materials and supplies	-	-	269,361	-	451,936
TOTAL COST OF MATERIALS ..			88,031,106		63,883,259

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Employment Statistics

Employment statistics are given in Tables 9 and 10. Wage-earners in 1948 numbered 2,541 males and 315 females, with a payroll of \$6,161,388 while salaried employees numbered 310 males and 101 females, with salaries totalling \$1,500,930. Compared with 1947 there was an increase of 264 in the number of persons employed and an increase of \$1,352,837 in the salaries and wages paid. The maximum employment of wage-earners was reached in October with a total of 3,984 and a minimum in March with a total of 2,239.

Table 9. - Employment for Canada by Number, Sex and Remuneration.

Year	Salaried Employees			Wage-earners (Monthly Averages)			Total Employees Salaries and Wages		
	Male	Fe- male	Total Salaries	Male	Fe- male	Total Wages	Male	Fe- male	Salaries and Wages
	No.	No.	\$	No.	No.	\$	No.	No.	\$
1936	345	63	1,169,529	2,064	87	2,244,169	2,409	150	3,413,698
1937	349	65	1,181,584	1,829	89	2,137,277	2,178	154	3,318,861
1938	364	61	1,163,988	1,809	84	2,151,645	2,173	145	3,315,633
1939	346	60	1,187,767	1,888	105	2,279,600	2,234	165	3,467,367
1940	420	81	1,179,056	1,929	108	2,444,605	2,349	189	3,623,661
1941	378	98	1,187,467	2,043	123	2,647,172	2,421	221	3,834,639
1942	353	106	1,162,006	1,701	166	2,610,425	2,054	272	3,772,431
1943	305	119	1,185,276	1,537	313	2,883,197	1,842	432	4,068,473
1944	294	116	1,078,829	1,787	393	3,497,231	2,081	509	4,576,060
1945	329	113	1,296,052	1,913	358	3,564,212	2,242	471	4,860,264
1946	277	101	1,146,141	1,987	268	3,864,648	2,264	369	5,010,789
1947	302	106	1,318,141	2,292	303	4,991,340	2,594	409	6,309,481
1948	310	101	1,500,930	2,541	315	6,161,388	2,851	416	7,662,318

Table 10. - Number of Wage-earners Employed by Months and Sex

Months	1948		1947	
	Male	Female	Male	Female
January	2,367	332	1,960	278
February	2,341	310	1,775	270
March	1,965	274	1,649	233
April	2,159	348	1,907	255
May	2,196	329	1,974	272
June	2,263	265	2,044	292
July	2,446	300	2,021	284
August	2,668	308	2,311	288
September	2,876	344	3,177	390
October	3,640	344	3,463	395
November	3,112	337	2,903	367
December	2,435	267	2,304	319
Monthly Average	2,541	315	2,292	303

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Table 11. - Power Equipment

Classes of Power	1948		1947	
	Number of Units	Manufacturers' Rating of Horse-Power Capacity	Number of Units	Manufacturers' Rating of Horse-Power Capacity
Steam engines and turbines -				
In use	61	21,645	61	21,645
Idle	6	2,650	6	2,650
Gasoline, gas and oil engines -				
In use	34	888	34	888
Idle	3	45	3	45
Electric motors operated by purchased power -				
In use	630	9,413	620	9,391
Idle	27	913	25	912
TOTAL POWER AVAILABLE FOR MANUFACTURING	761	35,554	749	35,531
Electric motors operated by power generated by the establishment -				
In use	2,110	20,007	2,398	21,992
Idle	176	2,026	216	2,480
Boilers - In use	52	27,074	52	25,134
Idle	2	650	2	650

Table 12. - Consumption of Fuel and Electricity

Kinds of Fuel	Unit of Measure	1948		1947	
		Quantity	Cost Value	Quantity	Cost Value
			\$		\$
Bituminous Coal, Canadian ..	Ton	88,299	642,379	45,668	334,815
" " Imported ..	"	88,849	947,693	97,588	970,592
Sub-bituminous Coal (Alberta)	"	5,719	45,040	1,162	8,357
Lignite Coal	"	37,223	104,525	59,838	150,607
Coke	"	3,159	48,152	2,929	41,036
Gasoline (x)	Imp. Gal.	49,977	16,945	35,844	12,567
Fuel Oil	" "	8,198,014	828,410	7,242,169	473,391
Kerosene or coal oil	" "	4,008	1,154	2,054	476
Gas (Manufactured	M Cu. Ft.	19	42	19	42
(Natural	" " "	-	-	-	-
TOTAL COST OF FUEL		-	2,634,340	-	1,991,883
Electricity purchased (including service charges)	Kw. H.	11,571,963	119,491	12,681,644	114,460
TOTAL COST OF FUEL AND ELECTRICITY			2,753,831		2,106,343

(x) Includes gasoline used in cars and trucks.

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List of Sugar Refineries

NOVA SCOTIA

Acadia Sugar Refining Company Limited Dartmouth.
(Operations pooled with "Atlantic Sugar Refineries, Ltd." since 1943).

NEW BRUNSWICK

(1) Atlantic Sugar Refineries, Limited, Saint John.

QUEBEC

(1) Canada & Dominion Sugar Company Ltd. 1410 Montmorency St., Montreal.
(1) St. Lawrence Sugar Refineries, Limited 4026 Notre Dame St. E., Montreal.
(2) Quebec Sugar Refinery St. Hilaire.

ONTARIO

(2) Canada & Dominion Sugar Company, Limited Chatham.
(1) Canada & Dominion Sugar Company, Limited Wallaceburg.

MANITOBA

(2) The Manitoba Sugar Company, Limited (Fort Garry) Winnipeg.

ALBERTA

(2) Canadian Sugar Factories, Limited Raymond.
(2) Canadian Sugar Factories, Limited Picture Butte.

BRITISH COLUMBIA

(1) The British Columbia Sugar Refining Company Limited Rogers Street, Vancouver.

(1) Made cane sugar only

(2) Made beet sugar only.

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