

METROPOLITAN HEALTH COMMITTEE

August 6th, 1938.

Dr. J.W. McIntosh,
Senior Medical Health Officer,
Metropolitan Health Board,
Vancouver, B.C.

Sir:

With reference to the article appearing in the "Vancouver Sun" under date of August 2nd, 1938, which reads as follows:

CITY MILK CRITICIZED BY EXPERT

' Vancouver Gets Along By Good Fortune,
Not Good Management '

Good fortune and not good management has kept some of Vancouver's milk supply free of disease germs.

This was the opinion of Dr. Ernest McCulloch, M.A., Ph.D., of the State of Washington, given to today's session of the Pacific Northwest Veterinary Medical Association convention in the Hotel Georgia.

Dr. McCulloch, a veterinarian, an authority on disinfectants and author of a book on the subject, condemned what he had seen of "so-called pasteurization" here.

" It's fortunate that the milk is not infected with typhoid, dysentery, and septic sore-throat germs" he said. " All of them could have got through the plant I visited."

Dr. McCulloch said he had wandered into one pasteurization plant today and " was terrifically shocked" at what he saw.

COULD RE-INFECT WHOLE SUPPLY

He explained that the "draw-off valve" or "dead-end" held a bit of milk that never got heated at all.

This had the power to re-infect all the milk that had been through the pastuerization tubs.

" In pastuerization, every bit of milk should be subject to 30 minutes' heating at 142 to 145 degrees Fahrenheit. If any milk escapes heating for this time or temperature, the germs in that can recontaminate the entire lot," he said.

" A trained veterinarian would have spotted this in a minute."

Dr. McCulloch advised Vancouver to get a staff of trained veterinarians as milk inspectors and "this sort of thing won't happen."

In reply to the above I beg to state that Dr. McCulloch did not at any time communicate with the Food Division of the City Health Department, did not make himself known to any member of this Division, nor did he request our assistance or co-operation in obtaining information directly or indirectly concerning Dairies and Dairy operations in this city. It was therefore with some difficulty that we finally located the dairy in which he introduced himself and which I presume is the dairy to which he refers.

Briefly, the story as told is as follows: On August 2nd, 1938, at 5:30 o'clock in the morning a man came to the rear entrance of the Empress Dairies Limited, 1002, West Hastings Street, Vancouver, B.C. and stated "I am Dr. McCulloch, a visitor", used to be a Dairy Inspector in St. Louis, U.S.A. and I want to look through your plant; the Plant was not then in operation and Dr. McCulloch then asked at what time the milk was pastuerized, he was informed every day around 11 o'clock a.m. He then went to the milk cooler and said "this would be condemned in the United States". He then went to the Pastuerizing Vats and stated "they would be condemned in the U.S.A."

He stated "your plant is clean" and on leaving put his hand into a can and picked out a used Milk Bottle cap which had been returned on a bottle of unsold milk. He was informed that the milk cap was not new and believing that he wished a souvenir of his visit was handed a new milk cap with the Dairy's name and license number on it. Dr. McCulloch remained in the Dairy about 15 minutes, leaving at 5:45 o'clock in the morning.

The above statement was obtained from:-

Mr. H.L. Nott, 2186 East Waverly Street, Vancouver, B.C.

This man has been employed for three and one-half years with

the Empress Dairies Ltd., who have City of Vancouver, Dairy License Number 78; his hours of work are from 1:15 o'clock in the morning until 9:45 o'clock in the morning. Mr. Nott further states that he did not inform the Dairy management of this incident until his attention was later called to an article appearing in the press, he believing that Dr. McCulloch, his visitor of August 2nd, was merely seeing Vancouver in the quiet hour of the dawn and had just wandered into the dairy, although he states that never before in his experience had anyone visited the dairy at that hour in the morning.

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The following statement was obtained from:-

Mr. K. Strickland,
485 East 44th Avenue,
Vancouver, B. C.

Employed for 4 years with the Empress Dairies Ltd., as a Dairyman.

He states as follows:-

I was on duty in the dairy supervizing the pastuerization of milk on August 2nd, 1938, at about 10:50 o'clock in the morning when a man appeared at the rear entrance to the dairy and stated he was Mr. McCulloch, that he used to be a Milk Inspector and would like to show a lady through the plant. Both the lady and Mr. McCulloch went upstairs to the pastuerizing room and appeared to be looking around, but made no comments to the Dairyman in charge. The milk was in process of being pastuerized and the equipment was in operation. Mr. McCulloch and the lady then went to the Homogenizer which operates under a pressure of 2,500 lbs. per square inch; this machine was not in operation at that moment. Mr. McCulloch asked Mr. Strickland for a Homo wrench in order that he, Mr. McCulloch, could take off the cylinder head of the Homogenizer. This request coming from a stranger so amazed the dairyman that it was promptly refused. Mr. McCulloch then put down his brief-case and seizing the pressure gauge of the Homogenizer with both hands attempted to unscrew it; being unable to do so he again asked the Dairyman for a Homo wrench, this request was again refused and Mr. McCulloch was advised to see the Dairy Manager. Mr. McCulloch appeared annoyed, picked up his brief-case, and both he and the lady left the dairy. They were present in the dairy altogether about 15 minutes leaving at about 11:05 o'clock in the morning. This practically completes the statement of Mr. Strickland.

The writer then interviewed Mr. Cranswick, Dairy Manager, who states he is satisfied that Dr. McCulloch who appeared at the dairy at 5:30 o'clock on the morning of August 2nd, and the Mr. McCulloch appearing at the dairy at 10:50 o'clock in the morning on the same day, is one and the same person and that the Dairy referred to in the press is the Empress Dairies Ltd., of which he (Mr. Cranswick) is Manager.

The equipment which Dr. McCulloch criticizes as disease breeding and which he states is condemned in the United States is the Cooler and the two Pastuerizing Vats. The Pastuerizing Vats in operation in the Empress Dairies are De Laval - Alpha C. Model - Numbers 2961207 and 3161261 and have a capacity of 2,500 lbs. each; they were purchased 4 years ago as the most up-to-date and most modern equipment available at that time and were supplied by the De Laval Company of Peterboro, Canada, who have been manufacturing dairy equipment for over 45 years and for the past 20 years have concentrated on improvement and manufacture of pastuerizing equipment. The vats referred to above were installed in the Empress Dairy premises by Mr. Grandy local Branch Manager of the De Laval Company; Mr. Grandy has had long years of experience in Dairy Engineering and in the installation of Dairy and Sanitary pipe equipment. There are positively no cold pockets in these vats. Nor are there cold pockets in any pastuerizing vats in any licensed dairy supplying milk to the City of Vancouver.

The Milk Cooler in the Empress Dairies is the usual model of Modern Sanitary Tubular Cooler working efficiently, cooling the milk from the pastuerizing vat from a temperature slightly above 142 degrees Fahrenheit to 40 degrees Fahrenheit almost immediately. As further evidence of proof of the high degree of plant efficiency attained, I am submitting a list of official Bacteria Counts taken on samples of Empress Dairies Ltd., pastuerized milk; these counts cover a period of one year, previous years show an almost identical record to the one given below. An average of approximately 150 samples of milk and cream are taken each month from the various dairies for examination and analysis.

The City of Vancouver Milk By-Law requires that the Bacteria Count on pastuerized milk must not exceed 50,000 Bacteria per cubic centimetre.

I would point out that the Bacteria Record of the Empress Dairies Ltd., is one of which any City or Dairy may well be proud and clearly indicates the care used in the sterilization of dairy equipment - the high degree of efficiency with which the pastuerization and cooling equipment is operating and the absolute absurdity of the false, misleading, and ridiculous statement that the milk in this Dairy is not properly pastuerized.

BACTERIA RECORD OF EMPRESS DAIRIES LTD.
Pastuerized Milk

For one year - July 6th 1937, to July 18th, 1938

<u>Date</u>	<u>Grade of Milk</u>	<u>Bacteria Final Count</u>
July 6, 1937	Pastd. & Hom., 3.25%	5,400
" 13, "	Pastd 5% Jersey	1,700
" 21, "	Pastd 4%	39,000
" 26, "	Pastd 3.25%	1,800
August 2, 1937	Pastd & Hom., 3.25%	6,300
" 10, "	Pastd 3.25%	1,200
" 17, "	Pastd 5% Jersey	4,900
" 24, "	Pastd 4%	3,400
Sept. 7, "	Pastd 3.25%	2,100
" 15, "	Pastd & Homo., 3.25%	6,900
" 21, "	Pastd 5% Jersey	5,100
" 22, "	Pastd 4%	3,700
Oct. 6, "	Pastd 3.25%	1,200
" 13, "	Pastd & Homo., 3.25%	10,300
" 18, "	Pastd 5% Jersey	1,100
" 28, "	Pastd 4%	1,800
Nov. 2, "	Pastd & Hom., 3.25%	3,000
" 10, "	Pastd 4%	700
" 17, "	Pastd 5% Jersey	1,200
" 24, "	Pastd 3.25%	8,200
Dec. 6, "	Pastd & Hom., 3.25%	2,200
" 14, "	Pastd 5% Jersey	1,300
" 22, "	Pastd 4%	1,200
" 28, "	Pastd 3.25%	2,000
Jan'y. 4, 1938	Pastd & Hom., 3.25%	6,000
" 12, "	Pastd 5% Jersey	800
" 18, "	Pastd 4%	900
" 24, "	Pastd 3.25%	600

Bacteria Record of Empress Dairies Ltd.

			(continued)	Bacteria
			Grade of Milk	Final Count.
Feb'y	1,	1938	Pastd 5% Jorsey	200
"	7,	"	Pastd & Hom., 3.25%	5,700
"	14,	"	Pastd & Hom., 3.25%	8,500
"	22,	"	Pastd 3.25%	200
"	28,	"	Pastd 4%	2,700
Mar.	9,	"	Pastd 5% Jorsey	600
"	15,	"	Pastd & Hom., 3.25%	14,400
"	28,	"	Pastd 3.25%	10,300
"	30,	"	Pastd & Hom., 3.25%	14,600
Apr.	4,	"	Pastd 4%	800
"	11,	"	Pastd & Hom., 3.25%	3,600
"	19,	"	Pastd 5% Jorsey	300
"	26,	"	Pastd 3.25%	500
May	3,	"	Pastd 3.25%	1,100
"	9,	"	Pastd 4%	1,100
"	17,	"	Pastd & Hom., 3.25%	2,200
"	31,	"	Pastd 5% Jorsey	600
June	13,	"	Pastd 4%	1,400
"	15,	"	Pastd 5% Jorsey	5,200
"	20,	"	Pastd & Hom., 3.25%	3,200
"	30,	"	Pastd 3.25%	1,600
July	5,	"	Pastd & Hom., 3.25%	4,200
"	12,	"	Pastd 5% Jorsey	1,300
"	18,	"	Pastd 3.25%	1,000

The Staff of the Food Division of the Metropolitan Health Board whose duties include the inspection and control of Milk Pastuerizing Plants, are men of experience - qualified and skilled in the control and processing of milk.- There are also two Veterinarians who have been attached to the staff of the Food Division for many years. The methods of control and the purity of the milk in this city ranks second to none in any city in Canada or the United States.

No Dairy may obtain a City of Vancouver dairy license number until the premises and equipment are in complete conformity with the requirements of Milk By-law 1572. This Department does not tolerate faulty or improper installation of dairy equipment.

With reference to the statement of Dr. McCulloch that the equipment in the Empress Dairies Ltd., is a Health Menace and that when he entered the Dairy "He was terrifically Shocked", I can only suggest that Dr. McCulloch is indeed due for many more shocks: I would suggest that he investigate dairy conditions in the State of Washington - the state which he calls his home - and where no doubt, matters pertaining to public health would be of real and deep concern to him.

If Dr. McCulloch cares to enquire he will find that Pastuerizing Vats identical and similar in every detail to the vats he so viciously condemned in Vancouver during his visit here, are being recommended and offered for sale to dairy interests in the State of Washington.

If Dr. McCulloch cares to investigate further he will find that the identical pastuerization vats, similar in every detail to the ones he condemned so harshly in this city on August 2nd, of this year, are being used by Dairymen in the State of Washington for the pastuerization of milk for human consumption.

In order to assist Dr. McCulloch in his investigation I will mention a few of the dairies in the State of Washington using and operating Pastuerizing Vats of the type referred to above:-

Alpino Dairy, Seattle, Washington.
Producers Dairy, Seattle, Washington.
Golden Rule Dairy, Seattle, Washington.
Cyr Brothers, Bollingham, Washington.
Blue Ribbon Dairy, Bollingham, Washington.

Situations similar to the above apply in many other States in the Union and also in the Dominion of Canada and the faults in these vats which Dr. McCulloch professed to have seen while in Vancouver and which he stated "Would have been spotted in a minute by a trained veterinarian" have apparently so far escaped detection by his fellow veterinarians, be they especially trained in the science of milk inspection or otherwise.

As a matter of fact, the type of equipment referred to above, is Standard Dairy Equipment universally used for over twenty years throughout Canada and the United States. There is another type of pasteurizing vat recently placed on the market, but this fact can in no manner impair the value or efficiency of equipment which has operated successfully for so many years.

Replying to Dr. McCulloch's statement that the milk pasteurized in a dairy in this city is in fact, not properly pasteurized", and may carry disease germs": I will state definitely that the milk pasteurized in dairies licensed to so pasteurize, by the City of Vancouver, IS SAFE MILK.

In conclusion, may I suggest that it is regrettable that the statements alleged to have been made by Dr. McCulloch before the Veterinary Association in Convention, should have been permitted by the Association to remain unchallenged, and that a cloud should be cast over a reputable local industry without protest from any member of the association who could so easily have obtained information from the offices of the City Health Department which would have avoided unpleasant controversy and at the same time could have refuted the inaccurate and irresponsible statements attributed to Dr. McCulloch.

Respectfully Submitted,

(Signed) John F.C.B. Vance
City, Provincial & Dominion Analyst
Chief Food & Dairy Inspector