

From a study of Table I., it will be at once apparent that proper protection of well mouth and of immediately surrounding soil reduces very materially the percentage of safe waters, while lack of such protection increases markedly the chances of contamination, in fact makes contamination almost certain.

Table II.

Bacterial Character of Water	Protected Springs	Springs not protected	Streams, Creeks and Small Rivers	Lakes and Large Rivers	Total
Good - - - - -	13	2	2	2	19
Passable , - - - - -	1	2	0	2	5
Slightly Contaminated - - -	3	6	4	1	14
Quite Contaminated - - - -	0	11	9	2	22
Grossly Contaminated - - -	1	3	2	0	6
Totals - - - - -	18	24	17	7	66

18 Protected springs=77.7% safe water (good or passable).

24 Non-protected Springs=16.6% safe water.

24 Creeks and Lakes=25% safe water.

A very similar finding can be recorded for the spring waters examined as seen in Table II. Thus in springs protected in apparently good manner 77.7 per cent. proved safe waters, 72 per cent. being classed as good waters; while with the water derived from unprotected springs only 16.6 per cent. proved safe waters. Again where streams, creeks, rivers or lakes were used as sources of supply, the pipe usually being close inshore, but 25 per cent. of the samples are classed as safe waters for reasons which scarcely need statement,

such as drainage of manured land, drainage of houses, stables and cheese factories themselves.

With such data at our command, it is hoped that we have taken the first step toward ensuring better water supplies at cheese factories, creameries and dairy farms in Eastern Ontario as the information obtained was placed in the hands of dairy inspectors who possess authority to demand improvements in all matters of dairy sanitation.

Table III.

Water Samples from various Counties, listed as to quality—1911.

County	No. of Sample	Good	Passable	Slightly Contaminated	Quite Contaminated	Grossly Contaminated
Carleton - - -	29	6	2	4	13	4
Dundas - - -	22	3	3	4	8	4
Frontenac - - -	5	1	0	1	2	1
Grenville - - -	5	0	2	1	1	1
Glengarry - - -	21	1	2	7	9	2
Haliburton - - -	1	1	0	0	0	0
Hastings - - -	32	6	8	10	9	0
Lanark - - -	17	3	5	5	4	0
Leeds - - -	38	9	11	4	11	3
Lennox and Add'n	12	2	3	3	2	2
Northumberland -	7	1	1	1	3	1
Peterborough - -	10	4	1	0	3	2
Prescott - - -	36	2	10	3	16	5
Prince Edward - -	13	4	1	0	8	0
Renfrew - - -	18	3	1	4	8	2
Russell - - -	12	2	4	2	3	1
Stormont - - -	22	6	2	2	5	7
Victoria - - -	11	4	2	2	3	0
Totals - - -	311	58	57	58	108	35