

AVERAGE COMPOSITION OF MILK.

(By various authorities.)

Authority.	Solids.	Fat.	Not Fat.	Ash.
Paris Standard, 1887.	13.00	4.00	9.00	.70
Average of a number of farms near Paris By Adams.	13.10	4.10	9.00	.70
Report of Paris (1885) Municipal laboratory.	13.30	4.00	9.30	.70
Average of all authorities quoted.				
Babcock--Milk Inspector, Boston, 1885. Eighty samples as delivered by milkmen.	13.30	3.50	9.80	.70
Wurtz (leading French authority) average of a number of analyses.	13.50	4.00	9.50	.60
J. Carter Bell, average of 181 cows.	13.60	3.70	9.90	.76
New York Dairy Commissioner's report, 1885. Average of 296 cows.	13.73	4.21	9.52	.71
New Jersey State Board of Health, average of 85 Dairies.	13.80	4.22	9.58	.65
Davenport. Average of 18 native cows	13.82	3.84	9.98	.64
Poggiale. Average of ten analyses.	14.00	4.30	9.70	.70
Average of a large number of analyses by Bouchardt.	13.30	4.10	9.20	.70
Davenport.—Milk Inspector of Boston, 1884, average of 31 grade Ayrshire cows.	13.32	3.70	9.62	
Cameron — Average of 100 cows of the Russell Farm, England.	13.40	4.40	9.00	.70
Cameron.—Average of 42 cows of the Agricultural Institute, Dublin.	13.40	4.00	9.40	.70
Davenport. — Boston average of 3 dairies of 56 cows.	13.45	3.79	9.66	.66
Sharples — Report of American Academy of sciences—average of 19 cows.	14.49	4.83	9.66	.66
Average of the above 16 authorities.	13.53	3.91	9.62	.68

In the month of November, 1885, 100 samples of milk from as many vendors, were analysed by the Milk Inspector of Boston. Of these ten were complained of in the municipal court.

The average of these samples including those below standard, was as follows :

Total solids.....	13.00
Fat	3.37
Solids not fat	9.64
Ash62

The experience of individual owners who are known to keep cows for profit, and the animals

kept *without* grain at the Guelph College are known as furnishing milk with a composition above the one urged for adoption here.

It is a well known fact that milk producers and vendors invariably accommodate themselves to the requirements of law. As soon as a new law comes into force there is an immediate change of conduct on the part of those affected by it.

If the creameries and cheese factories had no better milk than our city supplies to work upon the business would soon cease to be remunerative. Few of those pay as high a price as 10 cents per gallon for milk, while all the milk sold in cities is at from 5 to 8 cents per quart—according to quality and locality.

If it be desirable to guard the interest of the ignorant, the dirty and incapable, by avoiding a standard too high, by all means do so, but let us not be restricted to the minimum. We have grades of flour, pork, grain, fertilizers and other goods subject to inspection, and why not of milk? If we must have a low grade, why not a middle, and a high grade also? If to be on the safe side for prosecutions why cannot we take the average as our standard and one better as our high grade. Thus we might adopt the following :

Grades.	Solids	Fat.
No. 1 Quality.....	14.00	4.75
" 2 "	13.00	4.00
" 3 "	12.00	3.50

The following range of values accords with commercial experience—milk having only 3 to 3½ per cent. of fat sells at from five to six cents per quart in the principal cities :

	Butter Fat per cent.	Price per quart.
Milk containing up to	3	5 cents.
" " "	3.6	6 "
" " "	4.2	7 "
" " "	4.8	8 "
Rich Jersey or Guernsey	5.4	10 "

The above prices are obtained in Montreal and Toronto—though the content of fat is not always uniform when the price is below seven cents. Dealers should be required to state which quality of milk they supply—number one, two, or three.

There is no surer way of protecting milk for town and city consumption than by ensuring that it shall first be from well fed cows; such milk will be sound, and be better cared for by the vendors than the thin and poorer qualities.