

It is by the introduction of water, rather than by an excess of salt, that the producer can increase the weight of his product, since modern taste objects to the presence of more than 3 or 4 per cent of salt. This is seen in the following resume of the present collection:—

Salt below 1 per cent in 7 samples.		
" from 1 to 2 "	50	"
" " 2 to 3 "	51	"
" " 3 to 4 "	28	"
" " 4 to 5 "	13	"
" " 5 to 6 "	5	"
" " 6 to 7 "	2	"
" above 7 "	1	"
Total. ....	157	"

Where a butter contains 3 per cent of salt, it is evident that not more than 14·5 per cent of water can be present, if the butter is legal butter; that is if it contains 82·5 per cent of milk fat, as required by law. It would appear from the above record of water content, that this allowance is ample; and indeed the best butters contain much less than 14·5 per cent of water.

The following statement is instructive as showing that the best butter making provinces furnish a butter with comparatively low water content.

10 samples of butter from Nova Scotia, average 8·38 per cent water.			
10	"	Pr. Ed. Island	3·93
10	"	New Brunswick	5·66
10	"	Quebec	6·34
10	"	St. Hyacinthe	7·82
10	"	Montreal	8·23
10	"	Ottawa	5·13
10	"	Kingston	6·70
10	"	Toronto	6·14
8	"	London	6·14
9	"	Windsor	6·40
10	"	Manitoba	11·01
10	"	Calgary	11·36
10	"	Nelson	7·66
10	"	Vancouver	8·25
10	"	Victoria	9·73

This showing becomes more emphatic when considered in relation to the average price of butter in the different provinces.

Province.	Number Samples.	Average Price.	Average Water Content.
		cts.	
<b>Nova Scotia</b> .....	10	30·7	8·38
<b>Prince Edward Island</b> .....	10	29·5	3·93
<b>New Brunswick</b> .....	10	32·4	5·66
<b>Quebec</b> .....	30	37·1	7·46
<b>Ontario</b> .....	47	35·3	6·09
<b>Manitoba</b> .....	10	42·5	11·01
<b>Alberta</b> .....	10	44·0	11·36
<b>British Columbia</b> .....	30	41·2	8·55

It appears from the above, that the price of butter of good quality, varies from 29·5 cents per pound in Prince Edward Island, where it is cheapest, to 44·0 cents per pound in Alberta, where the ruling price is highest. But if we consider the cost of the essential component of butter, namely the milk fat, the difference in price at these two extremes is much greater. Alberta butter averages 2·35 per cent of salt; Prince Edward butter averages 3·01 per cent. So that while 29·5 cents pays for 93·06 per cent butter fat in Prince Edward Island, 44·0 cents pays for only 86·29 percent butter fat in Alberta. While the nominal difference in price per pound is expressed by the ratio 1 to 1·49 the real difference in cost for the butter fat is 1 to 1·608.