

In this table the percentages of fat are arranged in the order of their amounts in both L. and H., giving a range from 3.080 in L. to 4.338 in H. In this table also the L. and H. samples are separately grouped to give an average for L. samples, representing milk low in fat, and for H. samples, representing milk high in fat. An examination of the figures under "ratio of fat to casein" reveals a gradual decrease with some variation in the proportion of casein to fat as the milk increases in richness. By comparing the groups it will be seen that L., with an average of 3.302 per cent. of fat, gives on an average 0.67 of one pound of casein to one pound of fat; and H., with an average of 3.919 per cent. of fat, gives on an average 0.60 of one pound of casein to one pound of fat. While it would not do to conclude hastily from these tests, covering only one week in each of two months, that milk containing 4 per cent. of fat contains less casein in proportion to its fat, than milk which contains 3 per cent. of fat, still it must be admitted that these results point in that direction. Below is given the results of tests along this same line made by the Geneva Station (Bulletin 68, New Series). Samples of milk were collected once each week through the entire season from the herd which gave milk richest in fat and also from the herd which gave milk poorest in fat. The average results secured from each of these two herds during the season were as follows:

	Average per cent. of fat in milk.	Average per cent. of casein in milk.	Pounds of casein for one pound of fat in milk.
Herd giving milk poorest in fat .....	3.33	2.20	0.66
Herd giving milk richest in fat .....	4.08	2.57	0.63

These results show that the milk poorest in fat contained a trifle more casein for each pound of fat in milk; but, for all practical purposes, the results may be regarded as showing uniformity in the relation of fat to casein in factory milk from different herds.

Our averages for the milk poorest in fat and for the milk richest in fat are practically the same as those of the Geneva poorest and richest milk; their tests cover one day of every week throughout the season and our tests cover the first week of May and of June; the conclusions drawn from their results and from ours are the same, viz., that the poorest milk contains more casein for each pound of fat, but Geneva found a difference of 0.03, while we found a difference of 0.07.