

Table showing effect on quality with lot I (3 cows):

Week ending—	Average p. c. fat.	Average p. c. solids not fat.	Average p. c. total solids.	Weekly lb. fat.	lb. butter in two days.	lb. milk for one lb. butter.	Ration.
April 17....	3.50	8.90	12.40	21.21	5.0	23.0	No. 1.
" 24....	3.34	8.71	12.05	20.74	6.1	25.2	50 lb. ensilage; 5
May 1....	3.31	8.77	12.08	19.73	4.1	27.8	lb. hay (uncut);
" 8....	3.30	8.65	12.01	18.85	5.5	26.7	1 lb. bran.
Averages.	3.38	8.76	12.14	20.13	5.2	25.7	No. 2.
May 22....	3.10	8.85	11.95	20.00	.....	.....	50 lb. ensilage; 5 lb.
" 29....	3.31	8.90	12.21	20.85	5.5	28.9	pea meal; 3 lb. oat
June 5....	3.37	8.86	12.23	20.06	4.9	25.1	meal; 2 lb. barley
" 12....	3.43	8.81	12.24	20.03	6.9	21.9	meal; 5 lb. hay
Averages.	3.30	8.86	12.16	20.19	5.8	25.3	(uncut).

Table showing effect on quality with lot II (3 cows):

Week ending—	Average p. c. fat.	Average p. c. solids not fat.	Average p. c. total solids.	Weekly lb. fat.	lb. butter in two days.	lb. milk for one lb. butter.	Ration.
April 17....	3.69	9.20	12.89	18.84	4.0	26.3	No. 2.
" 24....	3.63	9.20	12.83	18.36	5.6	23.9	50 lb. ensilage; 5
May 1....	3.65	9.29	12.94	17.54	5.3	24.8	lb. pea meal; 3
" 8....	3.65	9.12	12.77	17.42	5.4	25.7	lb. oatmeal; 2
Averages.	3.66	9.20	12.86	18.04	5.1	25.1	lb. barley meal; 5
May 22....	3.71	8.76	12.47	13.69	.....	.....	lb. hay (uncut).
" 29....	3.81	8.89	12.70	11.66	2.9	24.8	No. 1.
June 5....	4.00	8.20	12.20	11.48	3.6	24.7	50 lb. ensilage; 1
" 12....	.....	.....	.....	.....	.....	.....	lb. bran; 5 lb. hay.
Averages.	3.84	8.62	12.46	12.28	3.3	24.8	

* A. 2 was sick during the latter part of the third week of this period, and hence the results are not reported for the last week. The average per cent. of fat for this week from cow No. 2 was 4.30, and from No. 4 was 4.08. For the last week of period I, the average per cent. of fat from the same cows was respectively 3.67 and 3.77. The average per cent. of total solids from these two cows during the last week of period I, on the rich ration was 12.88, and during the second period on the poor ration, the average was 12.33.

Conclusions as to Quality.

1. The average of four weeks on a poor ration with Lot I was 3.38 per cent. of fat. With one week intervening, during which time they were changed to a rich ration, containing the same amount