

The results from Series C do not show any advantage from supplementing at any particular stage of growth, but rather indicate that the important factor so far as fat is concerned is the quantity of meal fed. Proportion of fat was also assessed by fat measurements along the back-line at the thickest point of the shoulder and the thinnest point over the loin. The carcasses were graded on a basis of these measurements according to the New Zealand official grading-scheme.

Table X.—Effect on Shoulder-fat Thickness and Commercial Grading Quality.

Group and Series Number.			Meal-supplementing Rate.*	Back-fat Thickness at		Grading Quality.†	
				Shoulder.	Loin.	First Grade.	Second Grade.
SERIES A.							
I .. .. .	..	..	Lb. Nil	Inches. 1.65	Inches. 1.05	Percentage. 60.0	Percentage. 40.0
2 .. .. .	..	..	140	1.70	1.10	40.0	60.0
3 .. .. .	..	..	260	1.90	1.20	..	100.0
SERIES B.							
I .. .. .	..	..	Nil	1.60	1.38	58.0	42.0
2 .. .. .	..	..	130	1.65	1.30	42.0	58.0
3 .. .. .	..	..	200	1.75	1.37	34.0	66.0
SERIES C.							
I .. .. .	..	..	Nil	1.76	1.10	37.5	62.5
2 .. .. .	..	..	120	2.00	1.20	..	100.0
3 .. .. .	..	..	40	1.75	1.00	62.5	37.5
4 .. .. .	..	..	160	1.90	1.00	..	100.0
5 .. .. .	..	..	85	1.75	1.00	62.5	37.5

* Per 100 lb. weight-gain—dressed carcass. measurements only, taken on cold dressed carcass (N.Z.).

† N.Z. Official standards—grading on fat measure-

These results are in agreement with those taken on the loin-cut, a greater thickness of back-fat being associated with heavy rates of meal-supplementing, and the best measurements being shown by the pigs fed buttermilk alone. Little variation in fat over the loin existed. The variations in shoulder fat were responsible for a higher proportion of first-grade carcasses from groups fed buttermilk alone or supplemented at the lower rates. It is to be noted that the shoulder-fat measurements and grading results of Group 1, Series C, bring this group more in line with the related results.

In respect to this tendency for meal-supplementing to produce an increased proportion of fat in the carcass, several points of practical significance arise. The inherent tendency of New Zealand bacon pigs to carry too high a proportion of fat has been demonstrated in Part I. Any system of feeding which may accentuate this tendency is potentially dangerous on economic grounds. Yet other economic advantages of meal-feeding makes the limited use of supplements with by-products highly desirable. Rather than these investigations, therefore, suggesting the abandonment of a system of feeding with many husbandry and financial advantages(4, 9, 13), they point to the necessity for improvement in the type of pig in New Zealand to one capable of producing carcasses with the correct proportion of fat at bacon weights.