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**Finnish energy and protein feeding standards
for growing and fattening cattle**

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The official Finnish recommendations date from 1962 but they are no longer in use. The recommendations given here, although they are unofficial (MELEN, 1976), are widely followed. They are used in those feeding tables which are calculated for almost every herd belonging to the milk control system.

TABLE 1

ENERGY (FFU/day) AND PROTEIN RECOMMENDATIONS FOR GROWING BULLS

Liveweight kg	Liveweight gain, g/day						g DCP/ day
	700	800	900	1 000	1 100	1 200	
100-150	2.8	2.9	3.0	3.2	3.4	3.7	138
150-200	3.1	3.3	3.5	3.8	4.1	4.5	128
200-250	3.4	3.7	4.0	4.4	4.8	5.3	119
250-300	3.8	4.2	4.5	5.0	5.5	6.1	113
300-350	4.2	4.7	5.1	5.7	6.3	7.0	108
350-400	4.7	5.2	5.7	6.4	7.1	7.9	105
400-450	5.2	5.8	6.4	7.1	7.9	8.8	102
450-500	5.8	6.4	7.1	7.9	8.8		100

New recommendations for energy and protein standards are being prepared in Finland. They are being based on feeding trials carried out on bulls and heifers of the common breeds in Finland and their cross-breeds.

Energy standards are expressed in Fattening Feed Units and protein standards in DCP, g/FFU. Recommendations published in Sweden, Denmark and England (BRÄNNÄNG and EKMAN-BJÄRESTEN, 1965; ANDERSEN, 1975; MAFF, 1975) form the basis for energy standards but they are adjusted according to feeding trial data obtained in Finland. Higher energy standards have been used for forage feeds than for feeds rich in concentrates. However, this distinction is not well motivated and the standards presented here are those for feeds rich in concentrates.

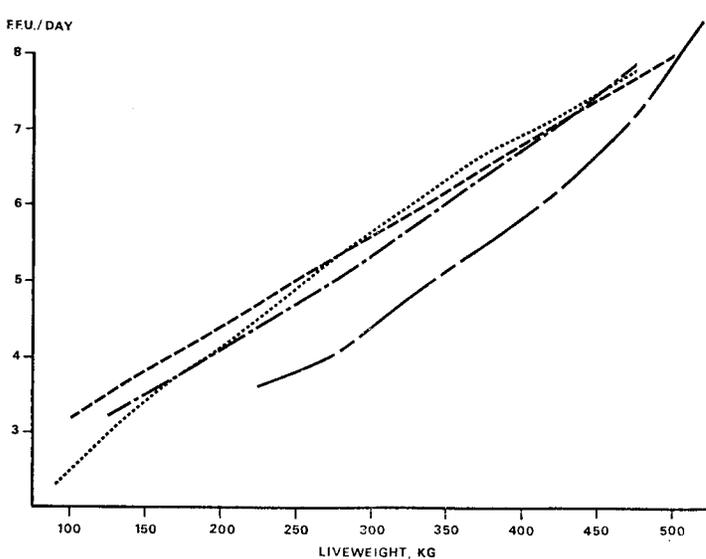


FIG. 1. — Feed unit requirement at 1000 g liveweight gain.

— — — — Finnish norm (conc.-forage feeding) BRÄNNÄNG & EKMAN-BJÄRESTEN 1965;
 - - - - - ANDERSEN 1975;
 - - - - - MAFF 1975 (Net energy allowances, (f.f.u. = 7.7. MJ).

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