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Summary only

GRASS COMPARED WITH CONCENTRATES AS AN EARLY WEANING FEED FOR FRIESIAN BULL CALVES

M. J. BYFORD

Massey University, Palmerston North

An experiment was conducted using autumn-born Friesian bull calves, to study early weaning of calves on to a diet of either grass alone or grass and concentrates. The composition of the concentrate was 65% rolled barley, 14% meat meal (60% protein), 15% linseed meal, 5% molasses, and the balance minerals and vitamins.

During the pre-weaning period the calves were fed in the same manner and in accordance with early weaning practice — *i.e.*, restricted levels of milk to induce a rapid ingestion of solid food. Concentrates and grass were made available after one week. In order to guarantee the ingestion of grass the level of concentrate was restricted. Calves were weaned off milk by five weeks of age.

In the post-weaning period from 5 through to 8 weeks of age, the animals were divided into two groups, seven in each, with one group receiving grass *ad libitum* and the other a restricted level of grass (8 to 10% DM) and concentrate *ad libitum*.

The liveweight gains for the grass-fed group and the grass plus concentrate-fed group were, respectively,  $0.42 \pm 0.029$  and  $0.40 \pm 0.028$  kg/day pre-weaning (1 to 4 weeks) and  $0.32 \pm 0.014$  and  $0.58 \pm 0.058$  kg/day post-weaning (5 to 8 weeks).

It was concluded that grass was inferior to the concentrate diet in promoting liveweight gains in early weaned calves. This occurred despite similarities in DM digestibilities, which were approximately 76% for both the concentrate and the grass. The major difference was that of intake, with the lower intake of grass probably being associated with its greater bulk.

The animals were put out on to pasture when 12 weeks of age and their post-experimental performance recorded. When last weighed (average age 8 months) the difference in liveweight established at 12 weeks had persisted.