

New Zealand Society of Animal Production online archive

This paper is from the New Zealand Society for Animal Production online archive. NZSAP holds a regular annual conference in June or July each year for the presentation of technical and applied topics in animal production. NZSAP plays an important role as a forum fostering research in all areas of animal production including production systems, nutrition, meat science, animal welfare, wool science, animal breeding and genetics.

An invitation is extended to all those involved in the field of animal production to apply for membership of the New Zealand Society of Animal Production at our website www.nzsap.org.nz

[View All Proceedings](#)

[Next Conference](#)

[Join NZSAP](#)

The New Zealand Society of Animal Production in publishing the conference proceedings is engaged in disseminating information, not rendering professional advice or services. The views expressed herein do not necessarily represent the views of the New Zealand Society of Animal Production and the New Zealand Society of Animal Production expressly disclaims any form of liability with respect to anything done or omitted to be done in reliance upon the contents of these proceedings.

This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](http://creativecommons.org/licenses/by-nc-nd/4.0/).



You are free to:

Share— copy and redistribute the material in any medium or format

Under the following terms:

Attribution — You must give [appropriate credit](#), provide a link to the license, and [indicate if changes were made](#). You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

NonCommercial — You may not use the material for [commercial purposes](#).

NoDerivatives — If you [remix, transform, or build upon](#) the material, you may not distribute the modified material.

<http://creativecommons.org.nz/licences/licences-explained/>

Summary Only

MEAT MEAL IN EARLY WEANING CALF
CONCENTRATE MIXTURES

R. H. KHOURI

Ruakura Agricultural Research Centre, Hamilton

BUTTERMILK POWDER and good quality meat meal were compared as sources of protein in the concentrate mixture fed to Jersey calves early weaned from milk on to pasture. Forty animals were used in the trial (Aug.-Nov., 1967). All calves had scoured badly during early post-natal life when they were fed milk only and while on another experiment conducted indoors.

At the age of three weeks the calves were randomly allocated to one of four treatments, each containing 10 animals. Treatments differed only in the concentrate mixtures offered and contained 0%, 8%, 16% and 24% meat meal, respectively. The animals were rotationally grazed. They were fed 1.5 kg of wholemilk twice daily during the first week on pasture and once daily during the following week. Concentrates and hay were offered free choice to a bodyweight of 55 kg.

There were no significant differences in growth rate between treatments. Calves in all four groups gained on average about 0.5 kg per day and consumed approximately 53 kg of concentrate. Complete replacement of buttermilk powder with meat meal reduced the costs of concentrate feeding by over 25%.

The trial has shown that calves early weaned on to pasture will readily consume concentrate mixtures containing up to 24% meat meal. It has demonstrated that casein is not essential for the early weaned calf and that the protein of good quality meat meal can be an equally satisfactory and more economical substitute.