

half a pint will be fed when the calf is about seven weeks old. I have found it a good practice to feed nothing but pure linseed to calves up to four weeks old, after which other materials may be added. The proportions and conditions in which the various substitutes should be used have been dealt with in detail in previous issues of the *Journal*.

When a calf is living almost wholly on milk diet—that is, up to two or three weeks old—the whole work of digestion is carried out by the fourth stomach, but the first, second, and third stomachs take up their proper functions of preparing the food for digestion in the fourth stomach immediately the animal commences to graze. From this time on the calf should have access to good clean pasture, both in order to provide for the normal development of the stomachs and to secure their natural nourishment. While concentrated foods used in moderation are of great value for feeding to calves as substitutes for the ingredients taken from the milk for commercial purposes, or as adjuncts to pasture, it will be detrimental to the future welfare of the animals to feed such foods in excessive quantities, or to look upon them as satisfactory substitutes for bulky natural food, such as grass, which is so necessary to the proper development of the organs of digestion in the young ruminant. In order to secure the maximum degree of quality in any animal at maturity the growth from birth must be steady and uniform in the production of bone and muscle and in barrel-development. The excessive use of highly concentrated food will cause calves to lay on body fat at the expense of bone, muscle, and barrel-development, with the result that though calves so treated may make good vealers or mature into good cattle if nursed through the first winter, they are likely to become “wasters” if thrown wholly on their own resources after weaning, even under moderately good conditions. Graziers who regularly purchase dairy weaners for stocking high country come to realize this fact, and give preference to clean, moderately grown calves with good bone and barrel-development rather than to the heavier, fleshy calves with light barrels, although the latter class are at first sight more pleasing to the eye.

A good range of succulent pasture is necessary to the health and normal growth of calves, and the bad practice which is followed on many farms of utilizing the same small enclosure annually as a calf-paddock is responsible for a great deal of disease and mortality. Such enclosures, besides being calf-sick, are often foul with excrement of other animals, such as pigs, poultry, &c., and are quite unfit for the purpose for which they are used.