

*Other considerations for milk*

Milk production during early lactation is very important to calf weight gain because calves eat little else than milk until they are about 2 months old. This is the reason that poor milking cows stunt their calves, and therefore there is a practical minimum limit to milk production. Stunted calves will not reach acceptable weaning weights even when excellent forage is provided during the last half of lactation. Poor milk production cannot be completely overcome with creep feed because calves will not consume much dry feed until they are about 3 months old.

At the other end of the scale, cows producing very large amounts of milk may suffer reproductively. In-

creased suckling frequency and intensity has a direct negative feedback on estrus.

Great increases in milk production may affect longevity. The 6 year old Holsteins used in the cross fostering study shown in Table 2 were the same cows that as 3-year-olds produced the lactation curves shown in Figure 4. The drop in milk production between 3 and 6 years of age is obvious. At 7 years of age, the Holstein cows were producing about the same level of milk as the Hereford x Holstein crosses. Mastitis and udder problems are also increased with heavy levels of milk. Although using Holsteins as beef cows is clearly extreme, it shows the consequences of overmatching cows to their environment.

## Abstracts

### Production of bovine identical twins by embryonal microsurgery.

*M. Monaci, U. Chicchini and P. Chiacchiarini.*

*Atti della Societa Italiana Buiatria* (1989) XXI, 330.

The authors describe the procedures concerning bovine embryos microsurgery to produce identical twins and then they examine the results obtained by the transfer in the recipients.

The transplantation was carried out immediately after the micromanipulation (Tr.I), also after 36 h. in culture (Tr.II). The pregnancy rate was 40% and 72% in Tr. I and Tr. II, respectively.

### Arthroscopy for the treatment of septic arthritis in calves

*Munroe, G. A. & Cauvin, E. R.*

*British Veterinary Journal* (1994) **150**, 439

Septic polyarthritis is common in calves and the infection is often difficult to eliminate by systemic treatment with antibiotics. Similarly, more invasive procedures such as drainage of the joint and arthrotomy, are often ineffective either because they fail to cure the condition or because they cause complications. This article

describes the application of arthroscopy to the treatment of infectious arthritis and osteomyelitis in two calves. In one them, two joints were explored and debrided in one operation. The advantages of the technique are discussed.