

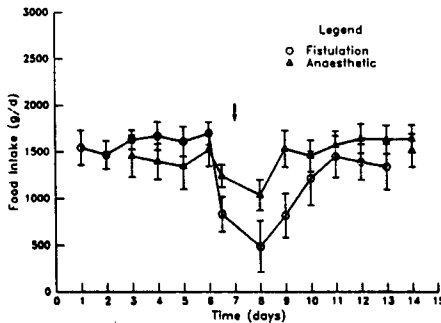
FOOD INTAKE FOLLOWING RUMEN FISTULATION

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Rumen fistulation is a commonly performed surgical procedure for the study of nutritional physiology of ruminants. Animals are normally fasted prior to surgery. However it is not uncommon for some animals to show extended periods of poor appetite following the procedure. The cause of this poor appetite is not known, but a period of intestinal ileus following gastrointestinal surgery is common in most species.

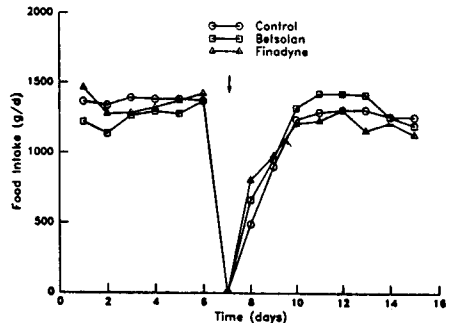
Two studies were conducted. In the first experiment the ad libitum intake of lucerne chaff by 6 ewes was recorded prior to and following general anaesthesia (sodium pentobarbitone 30 mg/kg) with and without concomitant rumen fistulation (Godwin and Chaffey 1988). The results are shown in Fig. 1.

Fig.1. Effects of anaesthesia and surgery on food intake.



Arrows indicate time of surgery

Fig.2. Effects of anti-inflammatory drugs on post-surgical food intake



From the data in Fig. 1 it is concluded that anaesthesia plays only a small role in the depression of post-surgical food intake.

In the second experiment ad libitum food intake was recorded following fistulation of 24 ewes. Eight of the animals had no treatment, eight were given 2 mg/kg of flunixin IM (Finadyne) and eight received 0.04 mg/kg of betamethasone IM (Betsolan) on the day of surgery and for the 4 days following the surgery. The mean values are shown in Fig. 2. It appears that steroidal and non-steroidal anti-inflammatory drugs have little effect on post surgical food intake. Intraruminal pressure changes were recorded after surgery and showed a relatively normal pattern within 24 hours. The mechanism of the inhibition of food intake following fistulation may be due to pain inhibition of appetite drives. This is the subject of further study.

GODWIN, I.R. and CHAFFEY, G.A. (1988). *Aust. Vet. J.*, 65: 227.