THE EFFECTS OF YARDING AND TRUCKING ON FOOD INTAKE BY SHEEP

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Sheep shipped live from Western Australia may be yarded and handled several times and trucked for several hours prior to being penned and fed on board ship. In addition, sheep will be mixed with strangers and may be subject to large changes in diet. A minimum disturbance to food intake is wanted if sheep are to maintain condition.

Comparisons were made of the effects on the food intake of Merino wethers moving from green pasture, of various periods of starvation in yards, of trucking, type of ration and mixing with strangers. Groups of ten sheep were used that were fed ad libitum in pens with 5 m$^2$ space per sheep and 0.2 m$^3$ per sheep trough space. Intake was measured over 10-12 days.

Unstarved sheep ate 650g day$^{-1}$ of a 50:50 mixture of hay and oat grain, but the level of intake initially was depressed with starvation (Figure 1). The starved sheep dropped sharply in intake on the second day of feeding and took six days to reach the level of unstarved sheep. Trucking after 36 hours starvation had a small but persistent depressing effect on food intake when followed by a further 24 hours starvation. The experiment was repeated with other sheep but using an all chaff ration. This was done to see whether the depression was due to a high grain intake on the first day after starvation. However, this time the sheep starved for 60 hours did not reach the daily intake of starved sheep even after 10 days of feeding, averaging 14% less on days 8-10 than unstarved sheep, sheep starved for 60 hours and trucked ate 33% less.

The feed intake of sheep accustomed to all their companions was similar to that for sheep where half the companions were strangers.

The marked effect of starvation on food intake, particularly the drop on the second day of feeding is almost certainly due to lack of rumen microorganisms to digest the food. The indications are that six days are needed to re-establish the levels where grain is fed and more than twice as long where only chaff is fed. Trucking on top of starvation has a stress effect that needs further study.

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