A. Steinwidder, M. Ehm- Blach, E. Zeiler, L. Gruber and F. Lettner (2001): **Effect of day or night grazing on forage intake and grazing behaviour of dairy cows** (in German). Züchtungskunde, 73, (3), 215-232.

Summary

In two experiments (V1, V2) the influence of grazing conditions on feed intake and grazing behaviour of dairy cows was examined over ten and twelve weeks respectively. In V1 cows were grazing pasture during the day (TW), during day and night (TW/NW) or fresh forage was fed in the stable (ST). In V2 feeding pasture during the day (TW) or during the night (NW) were compared with feeding green forage in the stable (ST). The forage ration consisted of 60 % of fresh forage in V1 and 50 % in V2. Concentrate was fed above a milk yield of 13 kg. Cows were grazing pasture for 8 (TW) or 18 (TW/NW) hours in V1 and for 10 (TW, NW) hours per day in V2.

In both trials only a slight selection of fresh forage was found at pasture. Energy concentration of grazed forage was by 0.2 MJ NEL higher than forage offered.

In V1 the intake of fresh forage was significantly lower in group TW. The intake of fresh forage was around 8.0 kg DM in group TW. This was by 1.0 and 1.6 kg DM lower compared to group ST and TW/NW, respectively. No significant differences were found in the intake of concentrate, total feed, energy and protein.

In V2 the intake of fresh forage was highest in group TW (7.7 kg) and lowest in NW (6.5 kg), the intake of group ST being intermediate (7.2 kg DM). The same trend was found for total feed, energy and protein intake as well as nutrient supply.

In both experiments the grazing behaviour was considerably influenced by the time the cows spent at pasture, by the time of day as well as length of day. Climatic conditions showed an impact on the grazing behaviour too.

Keywords: dairy cattle, grazing, feed intake

Zitat (Deutsch):

A. Steinwidder, M. Ehm- Blach, E. Zeiler, L. Gruber and F. Lettner (2001): Einfluss von Tag- oder Nachtweidehaltung auf Futteraufnahme und Fressverhalten von Milchkühen. Züchtungskunde, 73, (3), 215-232.