Comparison of the eating behaviour of two types of cows on pasture

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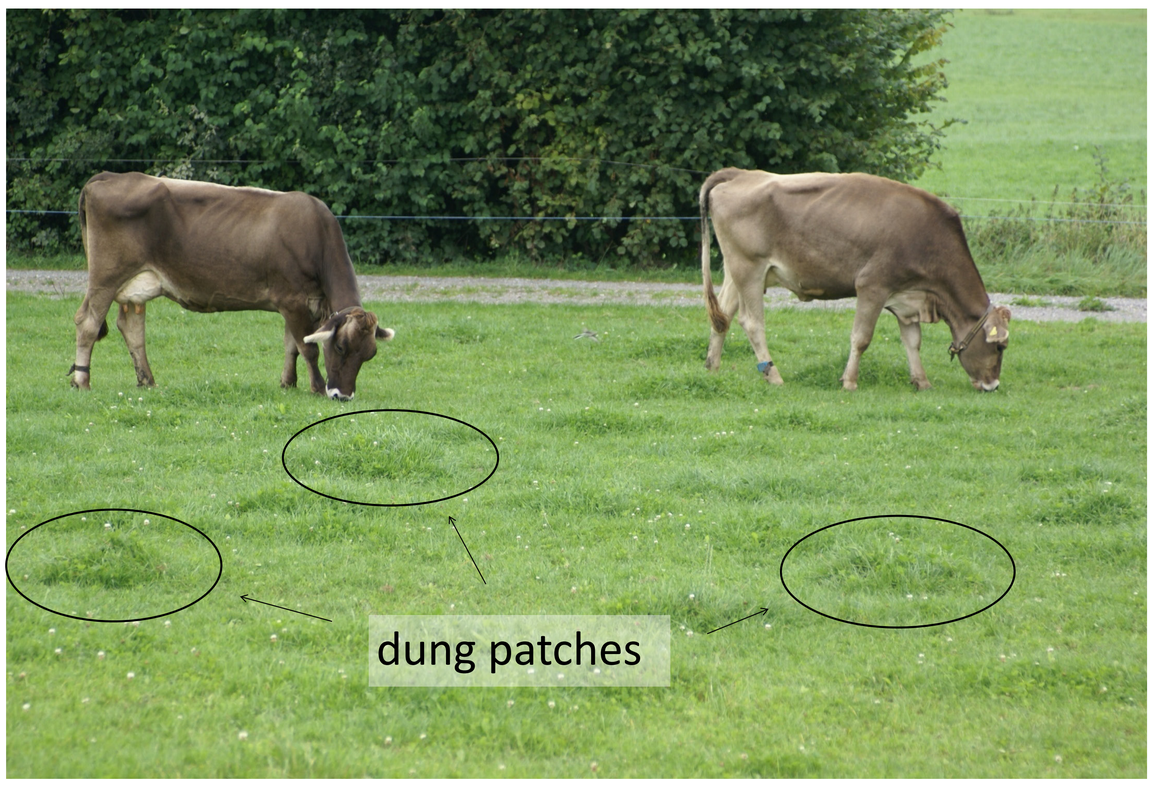
Objective

To investigate whether the eating behaviour of the Swiss cow breeds Swiss Fleckvieh (CH FV), Brown Swiss (CH BS) and Swiss Holstein Friesian (CH HF) differs from that of New Zealand Holstein Friesian cows (NZ HF).



Animals, Material & Methods

- 28 pairs of NZ HF, CH FV, CH BS and CH HF cows were compared on eight full-grazing dairy farms
- Eating time in seconds-per-minute and eating frequency were recorded on dung patches for a period of 2.5 hours after milking

Results and Discussion

Tab. 1: Eating time on dung patches and eating frequency of the two cow types: NZ (HF) and CH (FV,BS,HF)

	NZ N = 28	CH N = 28	Significance
Eating time on dung patches (s/min)	**16.3[a]**	**6.9[b]**	**0.004**
Eating frequency (bites/min)	**60.5[a]**	**62.4[b]**	**0.027**

Indices (a, b) indicate significantly differing values ($p<0.05$)

- NZ cows graze for significantly longer periods on dung patches with a higher food supply
- CH cows exhibit slightly higher eating frequency than the NZ cows, as they prefer the patches with shorter grass
- Under the same conditions during the experiment, NZ cows produced more milk (kg ECM) per 100 kg live weight (LW) than the CH cows (3.6 kg vs. 3.1 kg per 100 kg LW)
- The higher amount of milk produced by the NZ cows suggests that their eating behaviour (higher feed intake per bite, fewer bites) results in a higher consumption of grass in comparison to the CH cows (lower intake per bite, more bites).

Conclusion

When compared to Swiss cows, NZ Holstein Friesian cows graze for noticeably longer periods around dung patches with a higher food supply.