

INGESTIVE BEHAVIOR OF BEEF CATTLE FED WITH DIFFERENT CONCENTRATE LEVELS IN FEEDLOTS

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INTRODUCTION

The dry matter intake is an important factor that determines the performance of beef cattle, and may be influenced by the diets characteristics. The aim of this study was to evaluate the ingestive behavior of beef cattle fed with different concentrate levels in feedlot finishing system.

METHODS

Thirty-six Nellore steers with an initial body weight (BW) of 336 kg and 24 months of age were used. Treatments consisted of three levels of concentrate based on the dietary dry matter (40%, 60% and 80%), and corn silage was used as roughage. The diet was supply once daily and adjusted daily allowing orts of 10%, and the ingestive behavior was evaluated according to FORBES (1986). Thus, the experiment was conducted in a completely randomized design, with twelve replicates per treatment.

RESULTS

The rumination time standing and lying, dry matter intake (kg/day and in % BW) decreased ($P < 0.05$) in animals fed with 80% of concentrate. Lying idle times were higher ($P < 0.05$) in animals fed diet with high grain content, but the time of idleness and stay standing in the trough did not differ ($P > 0.05$) among treatments. The results of this study showed that increasing the participation of concentrate in the diet resulted in reduced dry matter intake by animals, but without reducing the time spent at the trough.

TABLE 1: Ingestive behavior of beef cattle in feedlot fed with different levels of concentrate evaluated in 24 hours.

Parameters	Participation Concentrate (%)			CV (%)
	40	60	80	
Rumination standing	1,22 ^a	1,17 ^a	0,57 ^b	55,90
Rumination lying	4,94 ^a	4,51 ^a	2,65 ^b	23,63
Standing idle	4,51 ^a	4,50 ^a	5,63 ^a	25,67
Lying idle	9,22 ^b	9,71 ^b	11,70 ^a	12,47
Time trough	3,95 ^a	3,92 ^a	3,24 ^a	21,13
DMI (kg/day)	7,75 ^a	7,53 ^a	5,62 ^b	15,98
DMI (%BW)	1,97 ^a	1,92 ^a	1,51 ^b	13,22

P value < 0,05

CONCLUSIONS

The feeding behavior of beef cattle undergoes changes with an increase in dietary concentrate, causing reduction in dry matter intake.

REFERENCES

FORBES, J.M. The voluntary food intake and diet selection in farm animals. London, Butterworth and Co., 1986. 206p.

