

In vivo performances and slaughtering traits of Holstein young bulls fed with sunflower cake

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OBJECTIVE

The aim of this study was to evaluate the effect of sunflower cake (by-product of biodiesel) as source of protein for cattle fattening.

METHODS



The study was carried out with 11 Holstein young bulls divided in two experimental groups.

Group C (n=6)

Maize silage

Soybean

0,96 UFV/kg DM

14,50 PG/kg DM



Group G (n=5)

Maize silage

Soybean (2/3)

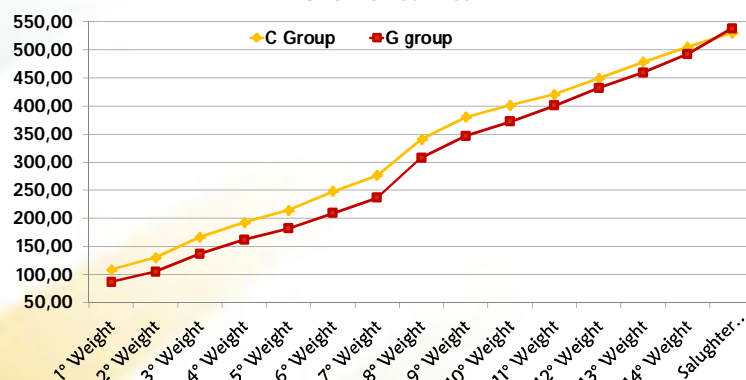
Sunflower cake (1/3)

Animals were fed for 140 days and were weighted every 21 days. At 540 kg of live weight all animals were slaughtered in a commercial slaughterhouse. Dressing percentage was calculate as ratio (carcass weight/live weight) and carcass evaluation were performed according to SEUROP grid

RESULTS

The average daily gains (ADG) did not differ significantly between the two groups even if the group G has a higher ADG than group C (1.36 kg/d vs 1.18 kg/d)

Growth curves



In vivo and slaughter performances

	<u>C GROUP</u>	<u>G GROUP</u>	<i>Mean</i>	<i>RMSE</i>
n	6	5		
Initial weight	380.0	352.0	367.5	33.44
Initial age	11.8	12.0	11.9	0.77
Trial period	138	142	140	34.5
ADG	1.18	1.36	1.26	0.186
Slaughter weight	536	546	540.5	22.21
Slaughter age	16.4	16.7	16.6	0.92
Carcass weight	292.73	296.64	294.51	13.745
Dressing Percentage	54.63	54.34	54.50	1.248
Conformation class	O (1.8)	O (1.6)	O (1.72)	0.669
Fat class	2 (2.0)	2 (2.4)	2 (2.18)	0.596

No significant differences were found about slaughter performances. No significant differences were observed by Metii et al. (2009) on Marchigiana bulls, while Mapiye et al (2010) have shown that Nguni bulls fed with sunflower cake had ADG and slaughter weights higher than control group but they had not significant differences on dressing percentages. Xazela et al. (2012) shown that the effect of sunflower cake on goats is more related to the breeds than to the diets.

CONCLUSIONS

It is possible to use sunflower cake as protein source without compromising in vivo and at slaughter performances. In addition it is possible to reduce the cost of diet, in fact the price of sunflower cake is 40% less than the price of concentrates with soybean source.