WEIGHT GAIN, CARCASS YIELD AND TENDERNESS FROM ANGUS CATTLE SUPPLEMENTED WITH DIFFERENT SELENIUM SOURCES

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The animal protein production is growing in Brazil and beef cattle have a great importance. The feedlots quantity is increasing and the use of 100% grain (high grain) diets may be an alternative to production. The study objective was to evaluate the average daily weight gain, carcass yield and tenderness of Angus beef cattle supplemented with two sources of selenium: sodium selenite and selenium-methionine. For this experiment 22 Angus steers castrated, with 15 months of age were selected and divided in two groups: 11 for sodium selenite and 11 for selenium-methionine. The animals got high-grain diets, being 15% protein pellet, mineral, vitamin and additives and 85% of whole corn grains. Both groups were adapted for 10 days initials, and after that, was provided the mix until the moment of slaughter, totaling 80 days of feedlot. At slaughter, a section was performed between the 11th and 13th rib in the left half carcass and Longissimus thoracis muscle samples were collected for laboratory analysis. The experiment design was completely randomized and data analyzed by Fisher-Snedecor test at 5% significance. The results for the individual daily weight gain were statistically equal, with results of 0.820 kg and 0.950 kg per day for selenium-methionine and sodium selenium, respectively. For carcass yield and shear force, there was also no statistical difference between the groups, with results of 53.01% and 52.79% for carcass yield and 4.85 and 5.06 kg/cm² of tenderness for selenium-methionine and sodium selenite, respectively. Based on this study, we concluded that there were no differences between mineral selenium sources for the analyzed parameters. Studies will be realized to verify differences in the beef fatty acid profile.

Keywords: Angus, feedlot, high grain, supplementation.