

Dietary energy intake and sexual behavior of Toggenburg goats.

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Abstract / Resumo:

In order to evaluate the sexual behavior of Toggenburg goats fed with different dietary energy, 32 kids in reproductive age and free of any reproductive pathology were divided in 3 groups according to the dietary treatment. Group 1, maintenance (M) (n=11); Group 2, supplied energy 1.5 times energy maintenance (1.5M) (n=10); and Group 3, supplied energy 2.0 times energy maintenance (2.0M) (n=11). The estrus cycles of all kids were induced and synchronized by insertion of an intravaginal sponge impregnated with 60mg Medroxyprogesterone Acetate. An ultrasound scanner fitted with an 8.0-MHz linear transducer, adapted for small ruminants was used to determine ovulation time and females were tested for estrus twice daily after sponge removal by the use of a male goat. Time between sponge removal and beginning of estrus and from beginning of estrus until ovulation, as well as estrus length were measured. Results were analyzed by the Duncan test employing a significance level of $P < 0.05$. All animals from groups 1 and 2 (100%) had signs of estrus while one goat from group 3 did not show signs (9.10%). Estrus length had no differences between groups (Group 1: 31.63 ± 12.32 hours; Group 2: 43.20 ± 12.90 hours; Group 3: 40.80 ± 14.08 hours – $P > 0.05$). Time between sponge removal and beginning of estrus also did not differ (Group 1: 28.00 ± 12.00 hours; Group 2: 32.80 ± 11.59 hours; Group 3: 30.40 ± 14.08 hours – $P > 0.05$) but time from beginning of estrus until ovulation was substantially shorter in group 3 (15.13 ± 8.63 hours – $P < 0.05$) than other groups (Group 1: 28.28 ± 12.57 hours; Group 2: 27.00 ± 14.40 hours). We conclude that animals fed with high energy diet ovulates faster than others after the onset of estrus.