conclude that animals supplied with high energy diet ovulates faster after sponge removal and therefore follicles of smaller sizes.

Timed hormonal treatments in induction and synchronization of Saanen goats estrus during nonbreeding season.

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Abstract / Resumo:

With the aim to evaluate reproductive performance of Saanen goats among different timed hormonal protocols during nonbreeding season, 30 females had the estrus cycles induced and synchronized by insertion of an intravaginal sponge impregnated with 60mg Medroxyprogesterone Acetate. All goats received 200 IU eCG and 37.5 μg PGF2α analog 24 hours prior to sponge removal. After 5 days of mating, all animals received 250 IU hCG. Animals were divided in 3 groups: Group 1 (G1) – vaginal sponge remaining for 6 days (n=10); Group 2 (G2) – vaginal sponge remaining for 9 days (n=10) and Group 3 (G3) – vaginal sponge remaining for 12 days (n=10). An ultrasound scanner was used to determine time of ovulation and animals were tested for estrus by the use of a buck. All animals (100%) from G2 and G3 had signs of estrus while one goat (10%) from G1 did not show sings. Estrus length had no difference between groups (G1: 34.66 ± 22.80; G2: 30.00 ± 12.96; G3: 37.20 ± 19.14 hours, P>0.05). Time between sponge removal and beginning of estrus (G1: 20.66 ± 16.73; G2: 20.40 ± 7.59; G3: 19.20 ± 10.51 hours) and time from beginning of estrus until ovulation (G1: 26.40 ± 5.37; G2: 30.00 ± 12.96; G3: 34.28 ± 8.28 hours) also did not differ (P>0.05). G2 had all animals ovulating (100%) while G1 had 8 and G3 had 7 (80% and 70%, respectively). Time between sponge removal and ovulation differ between G1 and G3 (39.00 ± 5.55 and 55.71 ± 12.83, hours respectively, P <0.05), but G2 didn´t differ of the others (50.40 ± 13.91 hours). Ovulation rate (G1: 1.50 ± 0.97; G2: 1.50 ± 0.53; G3: 1.00 ± 0.82) as well as ovulatory follicle diameter (G1: 1.00 ± 0.82 X 5.48 ± 0.62mm; G2: 5.68 ± 0.85 X 5.72 ± 1.13mm; G3: 5.77 ± 0.87 X 5.35 ± 0.69mm) had no difference between treatment protocols (P>0.05).

Protein profile is affected by milking frequency in dairy goats

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Abstract / Resumo:

Ten Majorera breed dairy goats during the early lactation were used to determine the protein profile in milk at three different milking frequencies. The goats were machine milked during 5 weeks using different milking frequencies, at week 1 and 5 of the experiment, goats were milked once daily, at week 2 and 4 the animals were milked twice daily and during the week 3 goats were milked 3 times a day. Every week, milk samples (50 ml) from the whole removed milk were collected from each goat after the first morning milking. The samples were aliquoted and storage at -80°C until SDS-PAGE

electrophoresis protein profile analysis. After SDS-PAGE electrophoresis, the gels were scanned and band intensities measured. Particular protein profile was calculated as percentage of each protein over total protein bands intensity. Three groups of proteins were observed. Lactoferrin, Serum Albumin, IgG (heavy and light chains), Kappa Casein and Alfa Lactoglobulin decreased as milking frequency increased in a 30.4, 17.6, 30.2, 54.8, 19.7 and 16.2 %, respectively. After the milking frequency was reduced protein profile values increased at initial values. Beta Casein and Alfa s2 Casein increased as milking frequency increased in a 19.7 and 16.2 %, respectively. After the milking frequency decreased protein profile values decreased at initial values. A third group of proteins (Alfa s1 Casein and Beta Lactoglobulin) remained without changes. In a preliminary conclusion, milking frequency displays an effect on milk protein profile, these changes might be considered when a discussion about increase milking frequency will be stated.

Evolution of immune colostrum components during the first 10 hours after partum

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Abstract / Resumo:

The aim of present study was to investigate the early evolution of immune parameters on colostrum during the first 10 hours after delivery and in colostrum fractions. Ten Majorera breed dairy goats were milked at partum, and after that an intravenous injection of 2 IU of Oxytocin was administered for recovery the residual colostrum. Animals were milked every hour during 10 hours postpartum. Colostrum samples were obtained from each milking, and IgG, IgM and Chitotriosidase activity (ChT) were measure using ELISA for immunoglobulins and Fluorimetric assay for ChT. IgG colostrum concentration was the highest in the first milking (40.0 mg/ml), in the residual colostrum (39.7 mg/ml) and in milking at 1 hour after partum (37.2 mg/ml), dropping sharply until get 3.8 mg/ml at 10 hours postpartum. IgM colostrum concentration was higher in the first milking (1.8 mg/ml), in the residual colostrum (2.1 mg/ml) and milking at 1 hour after partum (2.0 mg/ml), dropping fastly until get 0.2 mg/ml at 10 hours postpartum. Similar evolution was developed by ChT colostrum activity. ChT colostrum activity was higher in the first milking (9302 nmol/ml/h), in the residual colostrum (9287 nmol/ml/h) and in milking at 1 hour after partum (9123 nmol/ml/h), dropping fastly until get 3250 nmol/ml/h at 10 hours postpartum. In a preliminary conclusion, the extended management practice that get the first and second colostrum milking to store for the offspring might be wrong due to fastly drop of immune components in the first 10 hours after delivery.

Cloning and Sequence Analysis of Hormone-sensitive Lipase (HSL) Gene in Xinong Saanen Dairy Goats

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Abstract / Resumo: