Suckling lambs meat quality influenced by oil-supplemented ewe diet

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Forty eight lactating Churra ewes were used to investigate the influence of feeding four dietary vegetable oils (hydrogenated palm oil (Control), olive oil (OL), soybean oil (SO) and linseed oil (LI)) on carcass and meat quality of suckling lambs. After lambing, all lambs stayed with their dams and were raised exclusively on maternal milk until slaughter at 11 kg live weight. Animal performance and carcass quality were evaluated. Muscle colour (L*, a*, b*) and lipid oxidation (TBARS) were measured in M. longissimus at 24 h, 5 days and 8 days after slaughter. Animal performance and carcass characteristics of suckling lambs were not affected by ewe diet composition. However, muscle colour parameters were affected by treatment. Lambs suckling ewes in OL group showed higher a* values at 24 h, 5 and 8 days (P<0.05) than those in groups Control and SO. The effect of ewe feed composition only affected lipid muscle oxidation 8 days after slaughter, the greatest TBARS values being observed for lambs from LI group (P<0.05), and the lowest for OL lambs. Therefore, the type of oil feed to lactating ewes affect colour and lipid stability of suckling lambs.