Fatty acid composition of lambs suckling ewes fed with different vegetable oils

T. Manso\(^1\), R. Bodas\(^2\), C. Vieira\(^3\), T. Castro\(^4\) and A.R. Mantecón\(^7\)

\(^{1}\) ETS Ingenierías Agrarias. Universidad de Valladolid. 34004 Palencia, Spain
\(^{2}\) Instituto de Ganadería de Montaña (CSIC-ULE), 24346 Grulleros, León, Spain
\(^{3}\) Estación Tecnológica de la Carne (ITACYL). 37770 Guijuelo, Salamanca, Spain
\(^{4}\) Dpto. Producción Animal. UCM. 28040 Madrid, Spain
\(^{*}\) tmanso@agro.uva.es

Forty eight Churra ewes were used to study the effects of supplementing diets with 3% of different vegetable oils (linseed oil, L; soya oil, S; olive oil, O) or hydrogenated palm oil (Control, C) on fatty acid composition of suckling lambs covered by the protected geographical indication (PGI) “Lechazo de Castilla y León”. The lambs were suckled by their dams and slaughtered when they reached 11 kg body weight. Samples from intramuscular and subcutaneous fat were taken. Regardless the depot, fat from lambs on groups L, S and O presented lower proportion of saturated fatty acids (SFA). Moreover, O lambs showed greater proportions of monounsaturated fatty acids (MUFA). Soya oil produced an increase in n6/n3 ratio in both depots, and increased PUFA and PUFA/SFA ratio in subcutaneous fat. Linseed oil reduced n6/n3 ratio in both depots, whereas also PUFA and PUFA/SFA ratio were greater in subcutaneous fat. Lipid composition of “Lechazo de Castilla y León” suckling lambs can be modified by supplementing their dams with different oils.

**Key words:** meat fatty acids, suckling lamb, vegetable oil, supplementation

---

Feeding value

Syrian A\(^{5}\)

S. Abb\(^{5}\)

\(^{5}\) ETH Zürich, Institut

Traditional feed reso livestock numbers. Several studies have shown that, the need to optimize milk quality. Their diets characterized by industrial by-products. Per diet, ten Awass breed considering days-in-nursery (5.45±0.62 and 5.30±0.62). Test feeds constituted straw vs. olive leaf meal, results of a digestibility test._straw vs. olive leaf meal at ad libitum. During recording were done feeds offered were consumed with sufficient content with tomato. A not significant, a trend in potential antioxidative properties attributed to the milk.

**Key words:** Awass
13th Seminar of the FAO-CIHEAM Sub-Network on Sheep and Goat Nutrition

Challenging strategies to promote the sheep and goat sector in the current global context

León, Spain, October 14-16, 2009