

NMR lipid profile of milk from Alpine goats with supplemented hempseed and linseed diets.

Antonella Caterina Boccia ^{*1}, Erica Cusano¹, Paola Scano², and Roberto Consonni¹

¹ CNR, Istituto di Scienze e Tecnologie Chimiche "Giulio Natta"-SCITEC, via A. Corti, 12; 20133 Milano Italy; e-mail: antonella.boccia@scitec.cnr.it (A.C.B.); erica.cusano@cnr.it (E.C.); roberto.consonni@scitec.cnr.it (R.C.)

² University of Cagliari, Department of Life and Environmental Sciences, via Ospedale 72, 09124, Cagliari, Italy; e-mail: scano@unica.it (P.S.)

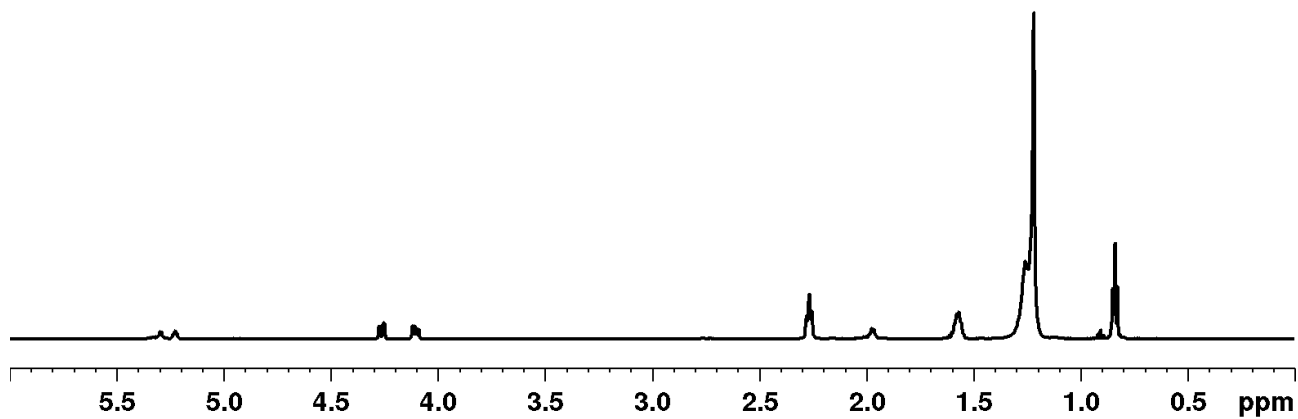


Figure S1. ^1H spectrum of goat milk lipid fraction, recorded on a 600 MHz spectrometer, in CDCl_3 at 298 K.

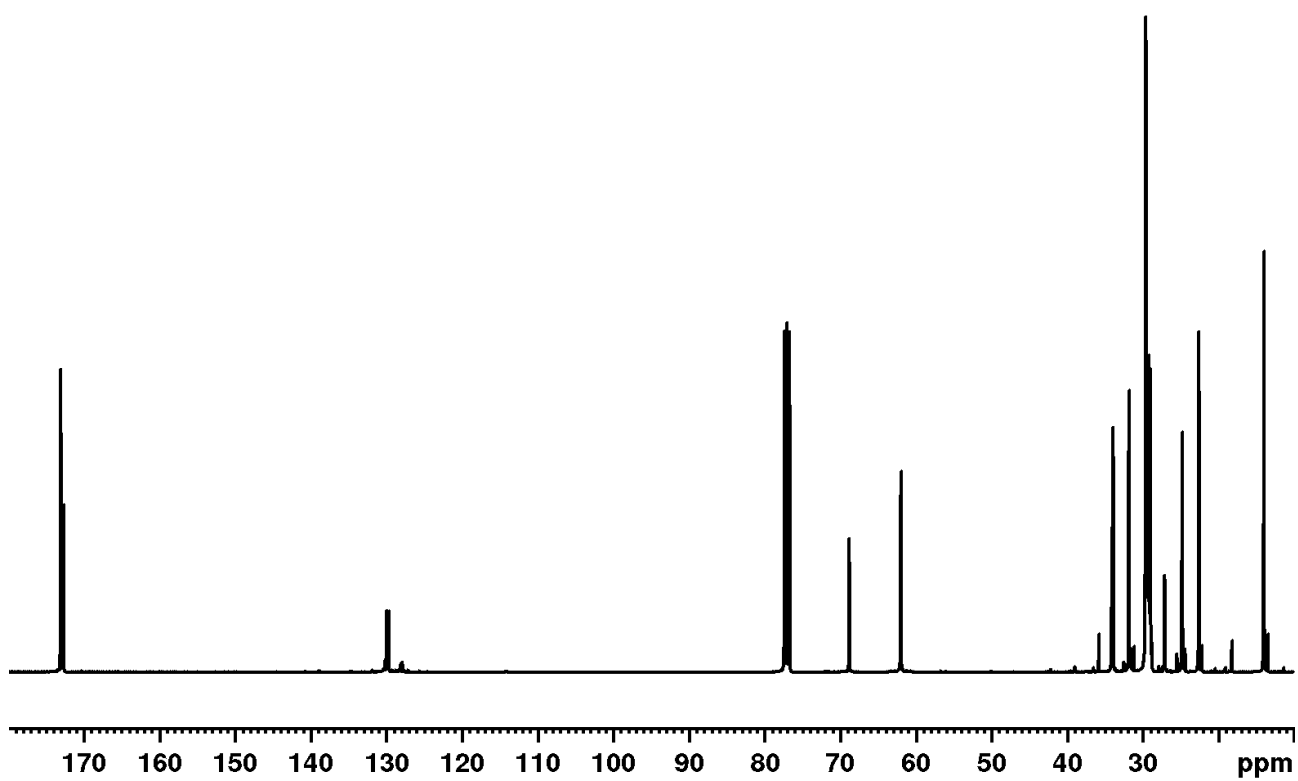


Figure S2. ^{13}C spectrum of goat milk lipid fraction, recorded on a 400 MHz spectrometer, in CDCl_3 at 298 K.

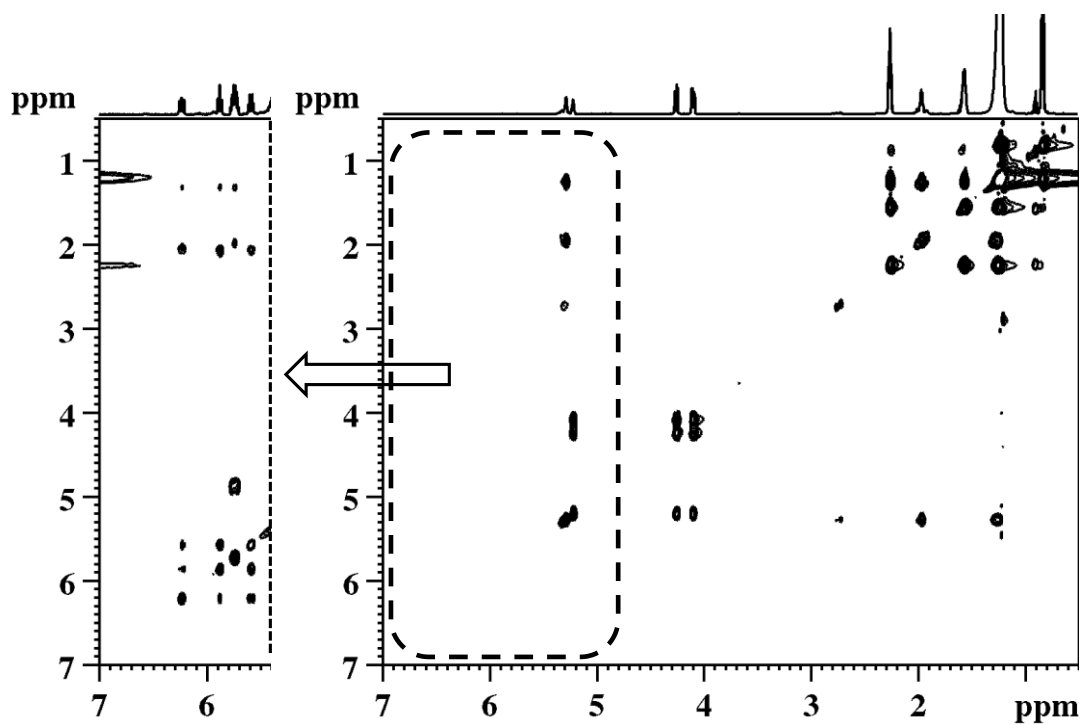


Figure S3. ^1H - ^1H TOCSY spectrum of goat milk lipid fraction, recorded on a 600 MHz spectrometer, in CDCl_3 at 298 K.

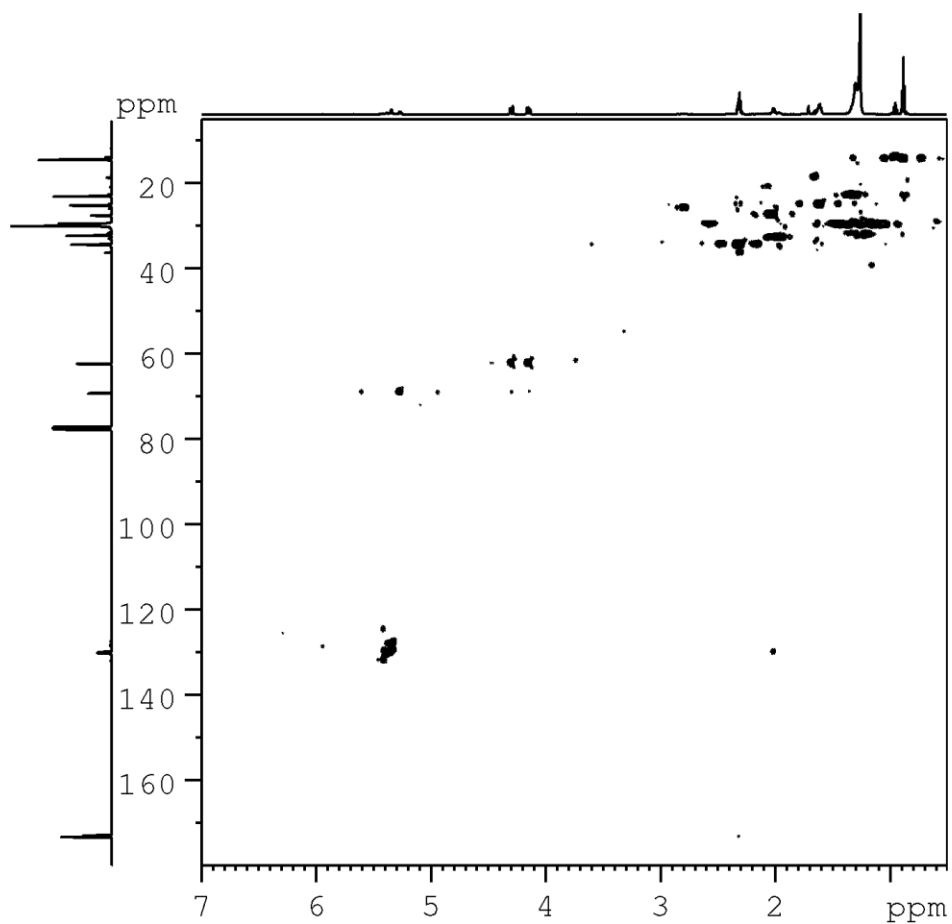


Figure S4. ^1H - ^{13}C HSQC full spectrum of goat milk lipid fraction, recorded on a 600 MHz spectrometer, in CDCl_3 at 298 K.

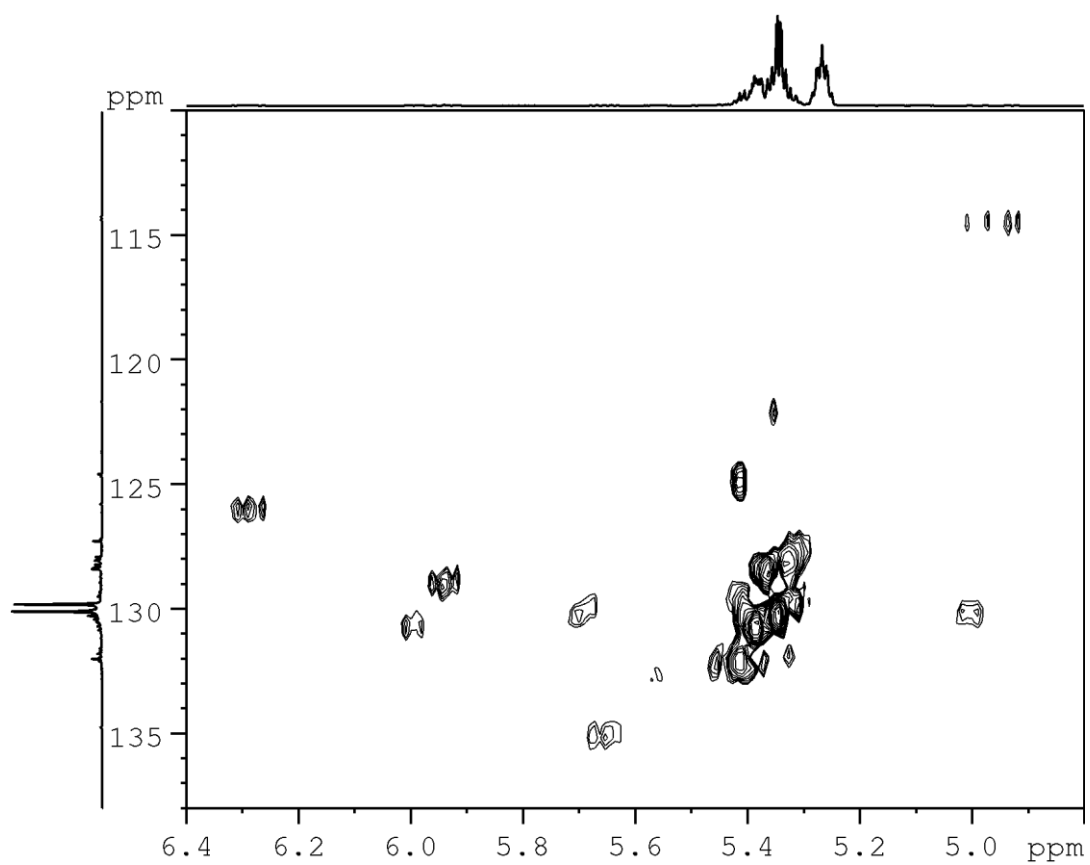


Figure S5. Expanded region of ^1H - ^{13}C HSQC spectrum of goat milk lipid fraction, recorded on a 600 MHz spectrometer, in CDCl_3 at 298 K.

Table 1S. Composition of the administered control (C), linseed (L) or hemp (H) diets (% on dry matter).[ref13]

Ingredients	C	L	H
Meadow hay second cut ¹	23.9	23.9	23.9
Meadow hay first cut ¹	13.6	13.6	13.6
Alfalfa hay third cut ¹	10.2	10.2	10.2
Corn flakes ^{1,2}	17.4	12.3	12.3
Corn meal ¹	5.1	5.1	5.1
Soybean hulls ^{1,2}	12.9	12.9	12.9
Solvent soybean meal ^{1,2}	6.2	2.6	2.6
Carob pulp ¹	4.4	4.4	4.4
Cane molasses ²	0.5	0.5	0.5
Salts ²	1.4	1.4	1.4
Vitamins ²	0.3	0.3	0.3
Linseeds ²		8.5	
Hemp seeds ²			8.5

1) ingredients of the basal ration (86.5%); 2) ingredients of supplement concentrates (13.5%).

- 13 Cremonesi, P., Conte, G., Severgnini, M., Turri, F., Monni, A., Capra, E., Rapetti, L., Colombni, S., Chessa, S., Battelli, G., Alves, S. P., Mele, M., Castigioni, B. Evaluation of the effects of different diets on microbiome diversity and fatty acid composition of rumen liquor in dairy goat. *Animal*, **2018**, 12, 9, 1856-1866