

Supplementary Materials: Determination of Fatty Acids Profile in Original Brown Cows Dairy Products and Relationship with Alpine Pasture Farming System

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Table S1. Concentrate composition of both farms.

Cornflour, protein soybean meal, corn germ meal, dried sugar beet pulp, corn flakes, hulled sunflower seed meal, calcium carbonate (from ground limestone), soft wheat bran, corn gluten meal, soybean hulls, reed molasses, sodium bicarbonate, hydrogenates palm fat, sodium chloride, calcium diphosphate precipitate, magnesium oxide, dried yeasts from <i>Kluyveromyces fragilis</i> , <i>Saccharomyces cerevisiae</i> , <i>Saccharomyces carlsbergiensis</i> cultures	
Vitamin A	20000.00 UI
Vitamin D3	3250.00 UI
Niacin	162.50 mg
Vitamin E	125.00 mg
Zinc (zinc sulphate monohydrate)	100.00 mg
Manganese (manganese oxide)	75.00 mg
Iron (iron sulphate monohydrate)	45.30 mg
Copper (copper sulphate pentahydrate)	26.00 mg
Iodine (anhydrous calcium iodate, granules)	1.20 mg
Selenium (sodium selenite)	0.50 mg

Table S2. Correlation Matrix of fatty acids selected for Principal Component Analysis.

	C12:0	C14:0	C14:1 n9	C15:0	C16:0	C16:1 n9	C18:0	C18:1 n9c	C18:2 n6c	C18:3 n3	CLA n9c, n11t	C20:1 n9	C20:5 n3	C20:4 n6	C21:0
C10:0	0.688	0.436	0.418	-0.045	0.179	0.325	-0.374	-0.405	-0.120	-0.149	-0.370	-0.287	-0.131	-0.009	-0.170
C12:0		0.911	0.733	-0.249	0.682	0.306	-0.716	-0.616	-0.393	-0.522	-0.562	-0.344	-0.228	0.039	-0.332
C14:0			0.721	-0.181	0.866	0.114	-0.777	-0.678	-0.508	-0.531	-0.640	-0.260	-0.203	0.015	-0.359
C14:1 n9				0.035	0.705	0.354	-0.881	-0.484	-0.217	-0.181	-0.304	-0.110	-0.048	-0.138	-0.285
C15:0					-0.102	-0.090	-0.078	0.007	0.244	0.753	0.035	0.217	0.206	-0.277	0.226
C16:0						0.063	-0.823	-0.667	-0.596	-0.448	-0.537	-0.063	-0.130	0.047	-0.386
C16:1 n9							-0.197	0.239	0.232	-0.061	-0.151	-0.421	0.292	0.080	-0.104
C18:0								0.592	0.331	0.205	0.300	0.009	-0.068	0.055	0.144
C18:1 n9c									0.467	0.263	0.298	0.079	0.226	0.071	0.226
C18:2 n6c										0.577	0.303	-0.040	0.135	-0.281	0.145
C18:3 n3											0.362	0.280	0.382	-0.370	0.364
CLA n9c, n11t												0.327	0.307	-0.082	0.585
C20:1 n9													0.090	0.038	0.047
C20:5 n3														0.143	0.561
C20:4 n6															-0.071

Variables highlighted in grey were excluded from the PCA due to the high (> 10.901) poor correlations (< 10.451).

Table S3. Functions at group centroids. Unstandardized canonical discriminant functions evaluated at group means.

Farm	Product	
	Milk	Cheese
Grazing system	1.329	1.210
No grazing system	-1.329	-1.210