Table S1 Effect of dietary treatments on blood fatty acid composition of dairy goats

| Fatty acid,g/100 g total FA | Treatment | SEM | *P*-value |
| --- | --- | --- | --- |
| CON | FUM | NPD | FN | wk | FUM | NPD | F×N |
| C10:0 | 0.10 | 0.08 | 0.10 | 0.07 | 0.017 | 0.007 | 0.265 | 0.680 | 0.667 |
| C11:0 | 0.03 | 0.03 | 0.03 | 0.03 | 0.002 | <0.001 | 0.987 | 0.207 | 0.711 |
| C12:0 | 0.32 | 0.32 | 0.37 | 0.26 | 0.062 | 0.002 | 0.408 | 0.906 | 0.421 |
| C13:0 | 0.22 | 0.25 | 0.21 | 0.28 | 0.029 | <0.001 | 0.126 | 0.608 | 0.447 |
| C14:0 | 2.11 | 1.79 | 2.55 | 2.14 | 0.209 | 0.001 | 0.098 | 0.081 | 0.825 |
| *cis*-9 C14:1 | 0.18 | 0.17 | 0.17 | 0.19 | 0.015 | <0.001 | 0.580 | 0.758 | 0.255 |
| C15:0 | 1.00 | 1.06 | 1.03 | 1.09 | 0.043 | 0.141 | 0.174 | 0.573 | 0.938 |
| *iso* C15:0 | 0.59 | 0.60 | 0.63 | 0.58 | 0.044 | 0.162 | 0.680 | 0.718 | 0.556 |
| *cis*-10 C15:1 | 0.17 | 0.16 | 0.17 | 0.16 | 0.019 | <0.001 | 0.781 | 0.993 | 0.975 |
| C16:0 | 27.03 | 25.94 | 27.41 | 26.54 | 0.430 | 0.011 | 0.038 | 0.270 | 0.803 |
| *cis*-9 C16:1 | 1.09 | 1.03 | 1.09 | 0.96 | 0.066 | <0.001 | 0.178 | 0.606 | 0.620 |
| C17:0 | 2.26 | 2.09 | 2.03 | 2.25 | 0.103 | 0.389 | 0.828 | 0.712 | 0.082 |
| *iso* C17:0 | 1.30 | 1.22 | 1.32 | 1.33 | 0.069 | 0.027 | 0.627 | 0.356 | 0.513 |
| *cis*-10 C17:1 | 0.88 | 0.89 | 0.96 | 0.86 | 0.050 | <0.001 | 0.370 | 0.646 | 0.302 |
| C18:0 | 25.79 | 24.06 | 26.70 | 25.73 | 0.656 | <0.001 | 0.057 | 0.069 | 0.573 |
| *trans*-9 C18:1 | 0.66 | 0.62 | 0.48 | 0.52 | 0.071 | 0.003 | 0.961 | 0.075 | 0.573 |
| *trans*-10 C18:1 | 2.48 | 2.49 | 2.70 | 2.37 | 0.101 | 0.006 | 0.133 | 0.658 | 0.113 |
| *trans*-11 C18:1 | 6.78 | 7.57 | 6.40 | 6.66 | 0.274 | <0.001 | 0.076 | 0.033 | 0.346 |
| *cis*-9 C18:1 | 6.99 | 7.18 | 6.70 | 7.16 | 0.285 | 0.003 | 0.269 | 0.605 | 0.648 |
| *cis*-11 C18:1 | 2.65 | 2.60 | 2.80 | 2.48 | 0.106 | 0.001 | 0.104 | 0.871 | 0.214 |
| *cis*-9,*trans*-11 CLA | 0.05 | 0.04 | 0.04 | 0.04 | 0.004 | 0.774 | 0.102 | 0.075 | 0.075 |
| *trans*-10,*cis*-12 CLA | 0.05 | 0.04 | 0.05 | 0.04 | 0.007 | <0.001 | 0.119 | 0.846 | 0.565 |
| C18:2n-6 | 4.04 | 4.40 | 3.54 | 4.08 | 0.209 | <0.001 | 0.051 | 0.071 | 0.678 |
| C18:3n-6 | 1.38 | 1.63 | 1.48 | 1.27 | 0.133 | 0.008 | 0.869 | 0.346 | 0.105 |
| C18:3n-3 | 1.59bc | 2.31a | 1.39c | 1.66b | 0.076 | <0.001 | <0.001 | <0.001 | 0.010 |
| C20:0 | 0.89 | 0.97 | 0.94 | 1.07 | 0.047 | <0.001 | 0.039 | 0.146 | 0.699 |
| *cis*-11 C20:1 | 0.06 | 0.05 | 0.04 | 0.04 | 0.005 | <0.001 | 0.386 | 0.045 | 0.413 |
| C20:2n-6 | 1.91 | 2.09 | 1.50 | 2.24 | 0.572 | <0.001 | 0.435 | 0.818 | 0.629 |
| C20:3n-6 | 0.41 | 0.38 | 0.42 | 0.44 | 0.035 | <0.001 | 0.910 | 0.284 | 0.431 |
| C20:4n-6 | 4.23 | 5.00 | 3.92 | 4.39 | 0.284 | <0.001 | 0.045 | 0.125 | 0.601 |
| C20:5n-3 | 0.57 | 0.61 | 0.55 | 0.57 | 0.052 | <0.001 | 0.604 | 0.548 | 0.863 |
| C21:0 | 1.94 | 2.10 | 2.07 | 2.27 | 0.102 | <0.001 | 0.100 | 0.151 | 0.871 |
| C22:0 | 0.06 | 0.06 | 0.05 | 0.06 | 0.005 | <0.001 | 0.728 | 0.276 | 0.539 |
| *trans*-13 C22:1 | 0.04 | 0.03 | 0.04 | 0.04 | 0.007 | <0.001 | 0.272 | 0.991 | 0.423 |
| *cis*-13 C22:1 | 0.05 | 0.04 | 0.05 | 0.05 | 0.006 | <0.001 | 0.618 | 0.417 | 0.382 |
| C23:0 | 0.05 | 0.05 | 0.04 | 0.04 | 0.005 | 0.003 | 0.997 | 0.119 | 0.978 |
| C24:0 | 0.05 | 0.05 | 0.04 | 0.04 | 0.005 | <0.001 | 0.880 | 0.070 | 0.604 |
| OBCFA | 8.44 | 8.45 | 8.50 | 8.90 | 0.224 | 0.045 | 0.376 | 0.269 | 0.386 |
| MCFA | 32.84 | 31.43 | 33.75 | 32.32 | 0.627 | 0.001 | 0.039 | 0.172 | 0.985 |
| LCFA | 67.16 | 68.56 | 66.25 | 67.68 | 0.627 | 0.001 | 0.039 | 0.172 | 0.984 |
| SFA | 63.74 | 60.67 | 65.52 | 63.78 | 0.814 | 0.003 | 0.010 | 0.009 | 0.432 |
| MUFA | 22.03 | 22.84 | 21.60 | 21.50 | 0.805 | <0.001 | 0.662 | 0.291 | 0.581 |
| PUFA | 14.24 | 16.49 | 12.88 | 14.72 | 0.643 | 0.085 | 0.006 | 0.028 | 0.756 |

CON, Control; FUM, Fumarate; NPD, N-[2-(nitrooxy)ethyl]-3-pyridinecarboxamide; FN, FUM+ NPD; SEM, Standard error of means.

a-bMeans with different superscripts within a row differ significantly (*P* < 0.05).

Means by treatment were the pooled data (n = 6) of 3, 6, 9 and 12 wk.

CLA, Conjugated linoleic acid; OBCFA, Odd carbon and branched chain fatty acid; SCFA, short-chain fatty acids (C6:0-C8:0); MCFA, medium-chain fatty acids (C10-C16); LCFA, long-chain fatty acids (C17:0-C24); SFA, Saturated fatty acids; MUFA, Monounsaturated fatty acids; PUFA, Polyunsaturated fatty acids.