**Supplementary File – for Online Publication Only**

**Utilisation of milk fatty acids by the suckling Iberian piglet**

M. A. Aguinaga, A. Haro, L. Lara, F. Gómez-Carballar, R. Nieto and J. F. Aguilera

**Supplementary Table S1** *The effect of days on lactation on fat content and fatty acid profile of Iberian sows’ milk throughout a 34-day nursing period1*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | Milk | | | | |  | | |  |  | | |
|  | Colostrum | | Days on lactation | | | | |  | | |  |  | | |
|  | Mean2 | SE | d 5 | d 12 | d 19 | d 26 | d 34 | | SEM | P-value | | | d0-34 | SE |
| Milk yield, kg/d |  |  | 4.479a | 5.834b | 5.452c | 5.176c | 5.427bc | | 0.001 | 0.090 | | | 5.175 | 0.156 |
| Fat, g/kg fresh milk | |  | 63.2 | 61.4 | 61.6 | 54.0 | 55.5 | | 0.614 | 0.199 | | | 58.5 | 3.80 |  |
| Fat, g/kg fresh colostrum | 37.6 | 1.40 |  |  |  |  |  | |  |  | | |  |  |
| Fatty acid composition, g/100 g fatty acid methyl esters | | | |  |  |  |  | |  |  | | |  |  |
| C10:0 | --- | --- | 0.027 | 0.037 | 0.033 | 0.023 | 0.028 | | 0.082 | 0.354 | | | 0.030 | 0.002 |
| C12:0 | 0.041 | 0.002 | 0.19 | 0.20 | 0.19 | 0.15 | 0.15 | | 0.007 | 0.001 | | | 0.17 | 0.008 |
| C14:0 | 2.11 | 0.150 | 3.26 | 3.19 | 3.15 | 2.88 | 2.80 | | 0.001 | 0.001 | | | 3.06 | 0.105 |
| C14:1 n-9 | --- | --- | 0.18 | 0.17 | 0.19 | 0.16 | 0.15 | | 0.005 | 0.001 | | | 0.17 | 0.010 |
| C16:0 | 26.5 | 0.88 | 30.0 | 29.4 | 31.1 | 33.3 | 32.2 | | 0.001 | 0.001 | | | 31.2 | 0.71 |
| C16:1 n-7 | 3.70 | 0.280 | 7.83 | 7.06 | 7.88 | 8.07 | 7.53 | | 0.001 | 0.001 | | | 7.68 | 0.275 |
| C17:0 | 0.56 | 0.013 | 0.24 | 0.25 | 0.30 | 0.60 | 0.39 | | 0.001 | 0.001 | | | 0.36 | 0.050 |
| C18:0 anteiso | 0.46 | 0.008 | 0.35 | 0.40 | 0.48 | 0.76 | 0.52 | | 0.001 | 0.001 | | | 0.50 | 0.056 |
| C18:0 | 5.54 | 0.075 | 4.64 | 4.59 | 4.30 | 4.66 | 4.84 | | 0.001 | 0.001 | | | 4.61 | 0.074 |
| C18:1 n-9t | 0.19 | 0.013 | 0.19a | 0.23ab | 0.24b | 0.25b | 0.26b | | 0.001 | 0.009 | | | 0.23 | 0.008 |
| C18:1 n-7t | --- | --- | 0.051 | 0.066 | 0.060 | 0.074 | 0.057 | | 0.363 | 0.001 | | | 0.061 | 0.008 |
| C18:1 n-9 | 37.0 | 0.06 | 37.5 | 39.6 | 37.6 | 34.7 | 36.6 | | 0.001 | 0.001 | | | 37.2 | 0.91 |
| C18:1 n-7 | 3.13 | 0.029 | 2.83 | 2.88 | 2.62 | 2.22 | 2.44 | | 0.001 | 0.001 | | | 2.60 | 0.103 |
| C18:2 n-6 | 16.7 | 1.01 | 9.97 | 9.29 | 9.25 | 9.78 | 9.55 | | 0.001 | 0.001 | | | 9.57 | 0.150 |
| C18:3 n-6 | 0.23 | 0.019 | 0.13a | 0.11ab | 0.079bc | 0.064c | 0.064c | | 0.001 | 0.001 | | | 0.091 | 0.008 |
| C18:3 n-3 | 1.06 | 0.063 | 0.64a | 0.61a | 0.64a | 0.70b | 0.62a | | 0.001 | 0.004 | | | 0.64 | 0.011 |
| C20:0 | 0.12 | 0.001 | 0.088 | 0.088 | 0.092 | 0.099 | 0.099 | | 0.002 | 0.058 | | | 0.093 | 0.002 |
| C20:1 n-9 | 0.33 | 0.011 | 0.41 | 0.47 | 0.43 | 0.36 | 0.43 | | 0.001 | 0.001 | | | 0.42 | 0.020 |
| C20:2 n-6 | 0.32 | 0.014 | 0.25 | 0.27 | 0.24 | 0.21 | 0.24 | | 0.001 | 0.004 | | | 0.24 | 0.011 |
| C20:3 n-6 | 0.20 | 0.006 | 0.091 | 0.085 | 0.088 | 0.087 | 0.093 | | 0.110 | 0.003 | | | 0.089 | 0.002 |
| C20:3 n-3 | 0.073 | 0.003 | 0.060 | 0.064 | 0.058 | 0.042 | 0.048 | | 0.001 | 0.227 | | | 0.055 | 0.004 |
| C20:4 n-6 | 0.90 | 0.012 | 0.59a | 0.46b | 0.40b | 0.38b | 0.41b | | 0.001 | 0.001 | | | 0.45 | 0.021 |
| C20:5 n-3 | 0.10 | 0.006 | 0.055 | 0.049 | 0.051 | 0.070 | 0.060 | | 0.233 | 0.971 | | | 0.057 | 0.003 |
| C22:0 | 0.045 | 0.002 | 0.037 | 0.026 | 0.029 | 0.030 | 0.029 | | 0.318 | 0.654 | | | 0.030 | 0.001 |
| C22:1 n-9 | 0.057 | 0.002 | 0.075 | 0.085 | 0.084 | 0.070 | 0.078 | | 0.021 | 0.667 | | | 0.078 | 0.003 |
| C22:2 n-6 | 0.053 | 0.001 | 0.032 | 0.031 | 0.024 | 0.023 | 0.029 | | 0.428 | 0.347 | | | 0.048 | 0.019 |
| C22:4 n-6 | 0.13 | 0.006 | 0.072a | 0.062b | 0.055bc | 0.050c | 0.057bc | | 0.001 | 0.058 | | | 0.060 | 0.002 |
| C22:5 n-3 | 0.29 | 0.007 | 0.14a | 0.12b | 0.11c | 0.097c | 0.11bc | | 0.001 | 0.025 | | | 0.11 | 0.004 |
| C22:6 n-3 | 0.043 | 0.001 | 0.025b | 0.019ab | 0.018ab | 0.012a | 0.017ab | | 0.036 | 0.065 | | | 0.018 | 0.001 |
| C24:0 | 0.093 | 0.002 | 0.029b | 0.023a | 0.030b | 0.029b | 0.030b | | 0.003 | 0.958 | | | 0.028 | 0.001 |
| C24:1 n-9 | 0.077 | 0.003 | 0.049 | 0.046 | 0.053 | 0.047 | 0.053 | | 0.023 | 0.319 | | | 0.050 | 0.001 |
| ∑SFA | 35.4 | 0.94 | 38.9 | 38.2 | 39.7 | 42.6 | 41.1 | | 0.001 | 0.001 | | | 40.1 | 0.80 |
| ∑MUFA | 44.5 | 0.18 | 49.1 | 50.6 | 49.2 | 45.9 | 47.6 | | 0.001 | 0.001 | | | 48.5 | 0.77 |
| ∑MUFA n-9 | 37.6 | 0.071 | 38.4 | 40.6 | 38.6 | 35.6 | 37.6 | | 0.001 | 0.001 | | | 38.1 | 0.93 |
| ∑PUFA n-6 | 18.6 | 1.05 | 11.2 | 10.3 | 10.3 | 10.6 | 10.5 | | 0.001 | 0.001 | | | 10.6 | 0.17 |
| ∑PUFA n-3 | 1.57 | 0.069 | 0.92a | 0.86b | 0.87b | 0.92a | 0.85b | | 0.001 | 0.628 | | | 0.88 | 0.009 |

1Determined in 4 sows in each of the two trials performed.

2A composite sample was analysed in duplicate within trial.

∑SFA = C10:0 + C12:0 + C14:0 + C16:0 + C17:0 + anteiso C18:0 + C18:0 + C20:0 + C22:0 + C24:0

∑MUFA = C14:1 n-9 + C16:1 n-7 + C18:1 n-9t + C18:1 n-7t + C18:1 n-9 + C18:1 n-7 + C20:1 n-9 + C22:1 n-9 + C24:1 n-9

∑MUFA n-9 = C14:1 n-9 + C18:1 n-9t + C18:1 n-9 + C20:1 n-9 + C22:1 n-9 + C24:1 n-9

∑PUFA n-6 = C18:2 n-6 + C18:3 n-6 + C20:2 n-6 + C20:3 n-6 + C20:4 n-6 + C22:2 n-6 + C22:4 n-6

∑PUFA n-3 = C18:3 n-3 + C20:3 n-3 + C20:5 n-3 + C22:5 n-3 + C22:6 n-3

Within a row, means without a common superscript differ (*P*<0.05)

**Supplementary Table S2** *The fatty acid relative profile of different body compartments (BC) and whole body (WB) of Iberian piglets at birth and at 35 days of age. Effect of age on whole-body fatty acid profile*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | At birth1 | | | | | |  | After 34-d lactation2 | | | | | |  |  | P-value |
| Body compartment | Carcass | HFT | Viscera | SEM  (BC) | P-value  (BC) | Whole Body |  | Carcass | HFT | Viscera | SEM  (BC) | P-value  (BC) | Whole body |  | SEM  (WB) | Age effect  (WB) |
| FA, g/100 g of FAME |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C12:0 | 0.13c | 0.085b | 0.049a | 0.002 | 0.001 | 0.11 |  | 0.089b | 0.086b | 0.069a | 0.002 | 0.003 | 0.085 |  | 0.003 | 0.002 |
| C14:0 | 3.91c | 2.71b | 2.08a | 0.079 | 0.001 | 3.33 |  | 2.62b | 2.44b | 1.94a | 0.050 | 0.001 | 2.49 |  | 0.075 | 0.001 |
| C14:1 n-9 | 0.075c | 0.044b | 0.026a | 0.002 | 0.001 | 0.060 |  | 0.084ab | 0.089b | 0.068a | 0.003 | 0.025 | 0.082 |  | 0.004 | 0.019 |
| C16:0 | 31.8b | 32.3b | 30.2a | 0.22 | 0.004 | 31.7 |  | 33.6b | 31.6a | 32.4a | 0.20 | 0.001 | 33.1 |  | 0.23 | 0.010 |
| C16:1 n-7 | 6.71c | 3.79a | 4.66b | 0.130 | 0.001 | 5.68 |  | 7.39b | 7.72b | 6.09a | 0.130 | 0.001 | 7.25 |  | 0.177 | 0.001 |
| C17:0 | 1.13 | 1.02 | 1.10 | 0.026 | 0.278 | 1.10 |  | 0.35ab | 0.32a | 0.40b | 0.009 | 0.005 | 0.35 |  | 0.014 | 0.001 |
| C18:0 anteiso | 0.74b | 0.55a | 0.56a | 0.022 | 0.005 | 0.66 |  | 0.45ab | 0.49b | 0.41a | 0.008 | 0.002 | 0.45 |  | 0.015 | 0.001 |
| C18:0 | 11.6a | 16.4c | 14.6b | 0.18 | 0.001 | 13.2 |  | 6.60a | 6.21a | 11.6b | 0.11 | 0.001 | 7.28 |  | 0.129 | 0.001 |
| C18:1 n-9t | 0.15a | 0.16a | 0.21b | 0.004 | 0.001 | 0.16 |  | 0.18a | 0.19ab | 0.22b | 0.007 | 0.045 | 0.18 |  | 0.017 | 0.109 |
| C18:1 n-7t | 0.068a | 0.081b | 0.10c | 0.002 | 0.001 | 0.076 |  | 0.083a | 0.097ab | 0.11b | 0.003 | 0.016 | 0.089 |  | 0.003 | 0.083 |
| C18:1 n-9 | 26.5 | 24.9 | 24.9 | 0.36 | 0.164 | 25.9 |  | 41.3b | 43.1b | 34.4a | 0.32 | 0.001 | 40.5 |  | 0.38 | 0.001 |
| C18:1 n-7 | 7.26b | 7.12ab | 6.37a | 0.126 | 0.025 | 7.09 |  | 4.12b | 4.49c | 3.85a | 0.038 | 0.001 | 4.14 |  | 0.062 | 0.001 |
| C18:2 n-6 | 4.80ab | 3.58a | 6.11b | 0.247 | 0.003 | 4.70 |  | 1.39a | 1.54a | 5.86b | 0.086 | 0.001 | 2.09 |  | 0.101 | 0.001 |
| C18:3 n-6 | 0.17b | 0.12a | 0.12a | 0.003 | 0.001 | 0.15 |  | 0.024b | 0.014a | 0.021b | 0.001 | 0.002 | 0.022 |  | 0.002 | 0.001 |
| C18:3 n-3 | 0.23a | 0.30b | 0.37c | 0.006 | 0.001 | 0.27 |  | 0.065 | 0.073 | 0.069 | 0.003 | 0.583 | 0.067 |  | 0.002 | 0.001 |
| C20:0 | 0.19b | 0.19b | 0.12a | 0.004 | 0.001 | 0.18 |  | 0.072a | 0.073ab | 0.081b | 0.002 | 0.037 | 0.073 |  | 0.002 | 0.001 |
| C20:1 n-9 | 0.38b | 0.49c | 0.15a | 0.006 | 0.001 | 0.38 |  | 0.58b | 0.63b | 0.44a | 0.012 | 0.001 | 0.56 |  | 0.016 | 0.001 |
| C20:2 n-6 | 0.18 | 0.17 | 0.21 | 0.009 | 0.328 | 0.19 |  | 0.73c | 0.59b | 0.38a | 0.020 | 0.001 | 0.66 |  | 0.032 | 0.001 |
| C20:3 n-6 | 0.071a | 0.12a | 0.51b | 0.010 | 0.001 | 0.15 |  | 0.034a | 0.036a | 0.10b | 0.002 | 0.001 | 0.045 |  | 0.003 | 0.001 |
| C20:3 n-3 | 0.069 | 0.075 | 0.061 | 0.005 | 0.515 | 0.069 |  | 0.006a | 0.011b | 0.015c | 0.001 | 0.001 | 0.008 |  | 0.001 | 0.001 |
| C20:4 n-6 | 3.13a | 4.28b | 6.25c | 0.139 | 0.001 | 3.90 |  | 0.043a | 0.059a | 1.15b | 0.023 | 0.001 | 0.21 |  | 0.046 | 0.001 |
| C20:5 n-3 | 0.10a | 0.066a | 0.15b | 0.005 | 0.001 | 0.099 |  | 0.094a | 0.078a | 0.17b | 0.006 | 0.001 | 0.10 |  | 0.005 | 0.813 |
| C22:0 | 0.18b | 0.25c | 0.092 | 0.007 | 0.001 | 0.18 |  | 0.054 | 0.051 | 0.055 | 0.001 | 0.349 | 0.054 |  | 0.003 | 0.001 |
| C22:6 n-3 | 0.30a | 0.81b | 0.79b | 0.049 | 0.001 | 0.50 |  | 0.013a | 0.014a | 0.061b | 0.002 | 0.001 | 0.021 |  | 0.013 | 0.001 |
| C24:0 | 0.14b | 0.24c | 0.086a | 0.005 | 0.001 | 0.15 |  | 0.018a | 0.027b | 0.059c | 0.002 | 0.001 | 0.026 |  | 0.001 | 0.001 |
| C24:1 n-9 | 0.090 | 0.082 | 0.075 | 0.003 | 0.253 | 0.086 |  | 0.026a | 0.021a | 0.055b | 0.001 | 0.001 | 0.030 |  | 0.001 | 0.001 |
| ∑SFA | 49.8a | 53.8b | 48.9a | 0.34 | 0.001 | 50.6 |  | 43.9b | 41.3a | 47.0c | 0.26 | 0.001 | 43.9 |  | 0.30 | 0.001 |
| ∑MUFA | 41.2b | 36.7a | 36.5a | 0.24 | 0.001 | 39.4 |  | 53.7b | 56.3c | 45.2a | 0.27 | 0.001 | 52.9 |  | 0.30 | 0.001 |
| ∑MUFA n-9 | 27.2 | 25.7 | 25.4 | 0.36 | 0.131 | 26.5 |  | 42.12b | 44.0b | 35.2a | 0.32 | 0.001 | 41.4 |  | 0.39 | 0.001 |
| ∑PUFA n-6 | 8.35a | 8.27a | 13.2b | 0.20 | 0.001 | 9.08 |  | 2.23a | 2.24a | 7.50b | 0.090 | 0.001 | 3.03 |  | 0.090 | 0.001 |
| ∑PUFA n-3 | 0.70a | 1.25b | 1.37ab | 0.050 | 0.001 | 0.94 |  | 0.18a | 0.18a | 0.31b | 0.006 | 0.001 | 0.20 |  | 0.014 | 0.001 |

1FA composition were determined in 4 piglets (1 piglet/litter) in each of the two trials performed.

2FA composition were determined in 8 (4 litters x 2 piglets/litter) piglets in each of the two trials performed.

∑SFA = C12:0 + C14:0 + C16:0 + C17:0 + anteiso C18:0 + C18:0 + C20:0 + C22:0 + C24:0

∑MUFA = C14:1 n-9 + C16:1 n-7 + C18:1 n-9t + C18:1 n-7t + C18:1 n-9 + C18:1 n-7 + C20:1 n-9 + C24:1 n-9

∑MUFA n-9 = C14:1 n-9 + C18:1 n-9t + C18:1 n-9 + C20:1 n-9 + C24:1 n-9

∑PUFA n-6 = C18:2 n-6 + C18:3 n-6 + C20:2 n-6 + C20:3 n-6 + C20:4 n-6

∑PUFA n-3 = C18:3 n-3 + C20:3 n-3 + C20:5 n-3 + C22:6 n-3

Within a row and age, means without a common superscript differ (*P*<0.05)

**Supplementary Table S3** *The fat content and fatty acid composition of the lipid fraction from different body compartments (BC) and whole body (WB) of Iberian piglets at birth and at 35 days of age. Effect of age on whole-body fatty acid composition*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | At birth1 | | | | | |  | After 34-d lactation2 | | | | | |  |  | P-value |
| Body compartment | Carcass | HFT | Viscera | SEM  (BC) | P-value | Whole body |  | Carcass | HFT | Viscera | SEM  (BC) | P-value | Whole body |  | SEM  (WB) | Age effect  (WB) |
| Weight of body compartment or empty BW, kg | 0.762 ± 0.012 | 0.309 ± 0.005 | 0.197 ± 0.003 |  |  | 1.361 ± 0.021 |  | 4.444 ± 0.080 | 1.034 ± 0.016 | 0.980 ± 0.023 |  |  | 6.777 ± 0.111 |  |  |  |
| Empty body gain3, g/d |  |  |  |  |  |  |  |  |  |  |  |  | 159 ± 3 |  |  |  |
| Fat, g/kg empty BW |  |  |  |  |  | 26.4 ± 0.8 |  |  |  |  |  |  | 125.3 ± 2.8 |  |  |  |
| Fat, g/kg body compartment | 30.8 ± 2.75 | 16.3 ± 1.47 | 38.3 ± 3.42 |  |  |  |  | 155.2 ± 3.95 | 106.7 ± 2.66 | 48.1 ± 0.83 |  |  |  |  |  |  |
| FA / Fat ratio | 0.80 | 0.82 | 0.76 |  |  |  |  | 0.80 | 0.82 | 0.76 |  |  |  |  |  |  |
| FA, g/kg of fat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C12:0 | 1.03c | 0.70b | 0.37a | 0.018 | 0.001 | 0.84 |  | 0.71b | 0.71b | 0.53a | 0.019 | 0.001 | 0.70 |  | 0.020 | 0.005 |
| C14:0 | 31.3c | 22.2b | 15.8a | 0.62 | 0.001 | 26.7 |  | 21.0b | 20.0b | 14.8a | 0.40 | 0.001 | 20.5 |  | 0.64 | 0.001 |
| C14:1 n-9 | 0.60c | 0.36b | 0.20a | 0.016 | 0.001 | 0.48 |  | 0.67b | 0.73b | 0.52a | 0.024 | 0.004 | 0.67 |  | 0.031 | 0.016 |
| C16:0 | 254b | 265c | 230a | 1.7 | 0.001 | 251 |  | 269c | 259b | 246a | 1.6 | 0.001 | 266 |  | 2.0 | 0.002 |
| C16:1 n-7 | 53.7b | 31.1a | 35.4a | 1.01 | 0.001 | 46.6 |  | 59.2b | 63.3b | 46.3a | 1.04 | 0.001 | 59.0 |  | 1.47 | 0.001 |
| C17:0 | 9.02 | 8.39 | 8.34 | 0.208 | 0.361 | 8.79 |  | 2.77 | 2.65 | 3.02 | 0.070 | 0.104 | 2.77 |  | 0.107 | 0.001 |
| C18:0 anteiso | 5.89b | 4.49a | 4.25a | 0.175 | 0.003 | 5.32 |  | 3.61b | 4.01c | 3.14a | 0.066 | 0.001 | 3.64 |  | 0.121 | 0.001 |
| C18:0 | 92.7a | 135c | 111b | 1.4 | 0.001 | 103 |  | 52.8a | 50.9a | 88.0b | 0.88 | 0.001 | 54.5 |  | 1.06 | 0.001 |
| C18:1 n-9t | 1.23a | 1.34a | 1.56b | 0.030 | 0.002 | 1.32 |  | 1.40 | 1.58 | 1.64 | 0.051 | 0.145 | 1.44 |  | 0.045 | 0.252 |
| C18:1 n-7t | 0.54a | 0.66b | 0.77c | 0.014 | 0.001 | 0.61 |  | 0.66 | 0.80 | 0.81 | 0.025 | 0.041 | 0.69 |  | 0.028 | 0.195 |
| C18:1 n-9 | 212b | 204ab | 189a | 2.7 | 0.015 | 206 |  | 333b | 353c | 261a | 2.5 | 0.001 | 329 |  | 3.1 | 0.001 |
| C18:1 n-7 | 58.1b | 58.4b | 48.4a | 0.97 | 0.001 | 56.1 |  | 33.0b | 36.8c | 29.3a | 0.30 | 0.001 | 33.3 |  | 0.52 | 0.001 |
| C18:2 n-6 | 38.4ab | 29.3a | 46.4b | 1.90 | 0.008 | 38.7 |  | 11.1a | 12.6a | 44.5b | 0.68 | 0.001 | 13.2 |  | 0.93 | 0.001 |
| C18:3 n-6 | 1.35b | 0.98a | 0.89a | 0.024 | 0.001 | 1.20 |  | 0.19b | 0.12a | 0.16ab | 0.009 | 0.003 | 0.18 |  | 0.013 | 0.001 |
| C18:3 n-3 | 1.84a | 2.49b | 2.84c | 0.045 | 0.001 | 2.14 |  | 0.52 | 0.60 | 0.52 | 0.025 | 0.338 | 0.53 |  | 0.017 | 0.001 |
| C20:0 | 1.52b | 1.52b | 0.95a | 0.029 | 0.001 | 1.40 |  | 0.57 | 0.60 | 0.62 | 0.012 | 0.359 | 0.58 |  | 0.019 | 0.001 |
| C20:1 n-9 | 3.07b | 4.05c | 1.16a | 0.049 | 0.001 | 2.82 |  | 4.61b | 5.15b | 3.33a | 0.098 | 0.001 | 4.61 |  | 0.132 | 0.001 |
| C20:2 n-6 | 1.46 | 1.43 | 1.58 | 0.072 | 0.665 | 1.49 |  | 5.88c | 4.85b | 2.86a | 0.164 | 0.001 | 5.57 |  | 0.284 | 0.001 |
| C20:3 n-6 | 0.57a | 0.96a | 3.87b | 0.074 | 0.001 | 1.32 |  | 0.28a | 0.29a | 0.79b | 0.018 | 0.001 | 0.31 |  | 0.025 | 0.001 |
| C20:3 n-3 | 0.55 | 0.61 | 0.46 | 0.037 | 0.288 | 0.54 |  | 0.049a | 0.089b | 0.11c | 0.004 | 0.001 | 0.057 |  | 0.012 | 0.001 |
| C20:4 n-6 | 25.1a | 35.1b | 47.5c | 1.08 | 0.001 | 31.2 |  | 0.34a | 0.48a | 8.71b | 0.177 | 0.001 | 0.82 |  | 0.441 | 0.001 |
| C20:5 n-3 | 0.80a | 0.54a | 1.15b | 0.043 | 0.001 | 0.83 |  | 0.75a | 0.64a | 1.26b | 0.044 | 0.001 | 0.77 |  | 0.041 | 0.493 |
| C22:0 | 1.40b | 2.06c | 0.70a | 0.054 | 0.001 | 1.35 |  | 0.43 | 0.42 | 0.42 | 0.009 | 0.808 | 0.43 |  | 0.026 | 0.001 |
| C22:6 n-3 | 2.38a | 6.60b | 5.97b | 0.399 | 0.001 | 3.79 |  | 0.11a | 0.11a | 0.47b | 0.017 | 0.001 | 0.13 |  | 0.101 | 0.001 |
| C24:0 | 1.10b | 1.94c | 0.65a | 0.035 | 0.001 | 1.13 |  | 0.15a | 0.22b | 0.45c | 0.012 | 0.001 | 0.17 |  | 0.009 | 0.001 |
| C24:1 n-9 | 0.72 | 0.67 | 0.57 | 0.026 | 0.105 | 0.68 |  | 0.21a | 0.17a | 0.42b | 0.008 | 0.001 | 0.22 |  | 0.014 | 0.001 |
| ∑SFA | 398b | 441c | 372a | 2.6 | 0.001 | 399 |  | 351ab | 339a | 357b | 2.1 | 0.003 | 350 |  | 2.6 | 0.001 |
| ∑MUFA | 330c | 301b | 278a | 1.87 | 0.001 | 315 |  | 430b | 461c | 343a | 2.1 | 0.001 | 429 |  | 2.6 | 0.001 |
| ∑MUFA n-9 | 217b | 211b | 193a | 2.7 | 0.007 | 211 |  | 337b | 361c | 267a | 2.6 | 0.001 | 336 |  | 3.2 | 0.001 |
| ∑PUFA n-6 | 65.3a | 66.4a | 98.7b | 1.53 | 0.001 | 72.4 |  | 11.9a | 13.5a | 54.2b | 0.77 | 0.001 | 20.1 |  | 0.83 | 0.001 |
| ∑PUFA n-3 | 5.57a | 10.2b | 10.4b | 0.41 | 0.001 | 7.30 |  | 1.42a | 1.45a | 2.36b | 0.047 | 0.001 | 1.48 |  | 0.116 | 0.001 |

1Fat and FA composition were determined in 4 piglets (1 piglet/litter) in each of the two trials performed.

2Fat composition was determined in 16 (4 litters x 4 piglets/litter) piglets and FA in 8 (4 litters x 2 piglets/litter) piglets in each of the two trials performed, respectively.

3Determined in 24 (4 litters x 6 piglets/litter) piglets in each of the two trials performed.

∑SFA = C12:0 + C14:0 + C16:0 + C17:0 + anteiso C18:0 + C18:0 + C20:0 + C22:0 + C24:0

∑MUFA = C14:1 n-9 + C16:1 n-7 + C18:1 n-9t + C18:1 n-7t + C18:1 n-9 + C18:1 n-7 + C20:1 n-9 + C24:1 n-9

∑MUFA n-9 = C14:1 n-9 + C18:1 n-9t + C18:1 n-9 + C20:1 n-9 + C24:1 n-9

∑PUFA n-6 = C18:2 n-6 + C18:3 n-6 + C20:2 n-6 + C20:3 n-6 + C20:4 n-6

∑PUFA n-3 = C18:3 n-3 + C20:3 n-3 + C20:5 n-3 + C22:6 n-3

Within a row and age, means without a common superscript differ (*P*<0.05)