Table S2. Mean, standard error of mean (SEM) and probabilities (*P*-value) of lipids that differed (*P* ≤ 0.05) between feedlot finished animals with high growth rate (F-H) and pasture finished animals with low growth rate (P-L).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Lipid, % | | F-H | P-L | Fold ratioa | SEM | *P*-value |
|  | *Lipid subset A* | | | | | |
| TG 16:0\_32:0 | | 0.23 | 0.43 | 1.87 | 0.126 | <0.001 |
| TG 16:0\_34:0 | | 0.34 | 0.69 | 2.03 | 0.212 | <0.001 |
| TG 16:0\_34:3 | | 1.60 | 1.07 | 0.67 | 0.367 | 0.005 |
| TG 16:0\_36:0 | | 0.38 | 0.76 | 2.00 | 0.233 | <0.001 |
| TG 16:0\_36:1 | | 0.08 | 0.17 | 2.13 | 0.053 | <0.001 |
| TG 16:0\_36:3 | | 0.87 | 0.56 | 0.64 | 0.235 | 0.014 |
| TG 16:0\_36:5 | | 0.03 | 0.09 | 3.00 | 0.048 | 0.026 |
| TG 16:0\_36:6 | | 0.02 | 0.08 | 4.00 | 0.048 | 0.041 |
| TG 16:0\_38:0 | | 0.12 | 0.37 | 3.08 | 0.160 | 0.001 |
| TG 16:0\_38:2 | | 0.03 | 0.09 | 3.00 | 0.054 | 0.037 |
| TG 16:0\_38:4 | | 0.03 | 0.09 | 3.00 | 0.052 | 0.041 |
| TG 16:0\_38:8 | | 0.02 | 0.08 | 4.00 | 0.052 | 0.041 |
| TG 16:0\_40:0 | | 0.02 | 0.08 | 4.00 | 0.049 | 0.031 |
| TG 16:1\_34:3 | | 0.03 | 0.09 | 3.00 | 0.048 | 0.038 |
| TG 16:1\_36:0 | | 3.14 | 4.36 | 1.39 | 0.780 | 0.001 |
| TG 16:1\_36:1 | | 0.72 | 0.82 | 1.14 | 0.078 | 0.015 |
| TG 16:1\_36:2 | | 0.06 | 0.13 | 2.17 | 0.043 | 0.002 |
| TG 16:1\_36:3 | | 0.02 | 0.08 | 4.00 | 0.049 | 0.033 |
| TG 16:1\_36:5 | | 0.03 | 0.09 | 3.00 | 0.050 | 0.022 |
| TG 16:1\_38:0 | | 1.09 | 2.44 | 2.24 | 0.779 | 0.005 |
| TG 16:1\_38:1 | | 2.27 | 2.84 | 1.25 | 0.487 | 0.036 |
| TG 16:1\_38:2 | | 0.19 | 0.35 | 1.84 | 0.098 | <0.001 |
| TG 16:1\_38:3 | | 0.04 | 0.12 | 3.00 | 0.056 | 0.003 |
| TG 16:1\_38:4 | | 0.03 | 0.08 | 2.67 | 0.050 | 0.031 |
| TG 16:1\_38:5 | | 0.02 | 0.09 | 4.50 | 0.051 | 0.031 |
| TG 16:1\_38:6 | | 0.04 | 0.14 | 3.50 | 0.064 | 0.002 |
| TG 16:1\_38:7 | | 0.23 | 0.51 | 2.22 | 0.170 | 0.001 |
| TG 16:1\_40:0 | | 0.03 | 0.10 | 3.33 | 0.055 | 0.013 |
| TG 16:1\_40:1 | | 0.04 | 0.11 | 2.75 | 0.055 | 0.034 |
| TG 16:1\_40:2 | | 0.03 | 0.09 | 3.00 | 0.048 | 0.021 |
| TG 16:1\_40:4 | | 0.03 | 0.09 | 3.00 | 0.050 | 0.035 |
| TG 16:1\_40:5 | | 0.02 | 0.09 | 4.50 | 0.050 | 0.029 |
| TG 16:1\_40:7 | | 0.03 | 0.09 | 3.00 | 0.053 | 0.028 |
| TG 16:1\_40:8 | | 0.04 | 0.12 | 3.00 | 0.059 | 0.006 |
| TG 16:1\_42:4 | | 0.03 | 0.09 | 3.00 | 0.058 | 0.048 |
| TG 16:1\_42:8 | | 0.02 | 0.08 | 4.00 | 0.049 | 0.043 |
| TG 18:0\_30:0 | | 0.13 | 0.20 | 1.54 | 0.050 | 0.012 |
| TG 18:0\_30:2 | | 0.93 | 0.57 | 0.61 | 0.233 | 0.002 |
| TG 18:0\_32:1 | | 0.22 | 0.31 | 1.41 | 0.055 | 0.001 |
| TG 18:0\_32:3 | | 4.22 | 2.50 | 0.59 | 1.004 | 0.009 |
| TG 18:0\_34:0 | | 0.10 | 0.19 | 1.90 | 0.067 | 0.005 |
| TG 18:0\_34:1 | | 3.46 | 4.10 | 1.18 | 0.503 | 0.019 |
| TG 18:0\_34:2 | | 21.07 | 15.75 | 0.75 | 3.216 | <0.001 |
| TG 18:0\_34:3 | | 2.56 | 1.72 | 0.67 | 0.607 | 0.007 |
| TG 18:0\_34:4 | | 0.11 | 0.21 | 1.91 | 0.072 | 0.004 |
| TG 18:0\_34:5 | | 0.03 | 0.08 | 2.67 | 0.047 | 0.031 |
| TG 18:0\_36:0 | | 0.03 | 0.09 | 3.00 | 0.048 | 0.027 |
| TG 18:0\_36:1 | | 0.66 | 1.26 | 1.91 | 0.346 | 0.004 |
| TG 18:0\_36:3 | | 6.38 | 4.34 | 0.68 | 1.710 | 0.030 |
| TG 18:0\_36:5 | | 0.05 | 0.15 | 3.00 | 0.081 | 0.023 |
| TG 18:0\_36:6 | | 0.03 | 0.09 | 3.00 | 0.050 | 0.037 |
| TG 18:0\_36:7 | | 0.04 | 0.10 | 2.50 | 0.053 | 0.021 |
| TG 18:0\_36:8 | | 0.46 | 0.86 | 1.87 | 0.242 | <0.001 |
| TG 18:0\_38:2 | | 0.02 | 0.08 | 4.00 | 0.050 | 0.035 |
| TG 18:0\_38:6 | | 0.03 | 0.09 | 3.00 | 0.050 | 0.029 |
| TG 18:0\_38:7 | | 0.03 | 0.09 | 3.00 | 0.051 | 0.024 |
| TG 18:1\_30:0 | | 0.46 | 0.74 | 1.61 | 0.188 | 0.002 |
| TG 18:1\_30:2 | | 0.91 | 0.56 | 0.62 | 0.242 | 0.005 |
| TG 18:1\_32:0 | | 0.03 | 0.09 | 3.00 | 0.051 | 0.031 |
| TG 18:1\_32:1 | | 0.51 | 0.85 | 1.67 | 0.216 | 0.001 |
| TG 18:1\_32:3 | | 6.86 | 7.02 | 1.02 | 1.280 | 0.003 |
| TG 18:1\_34:0 | | 0.23 | 0.48 | 2.09 | 0.155 | <0.001 |
| TG 18:1\_34:1 | | 3.64 | 4.92 | 1.35 | 0.846 | 0.002 |
| TG 18:1\_34:2 | | 12.75 | 9.61 | 0.75 | 1.903 | <0.001 |
| TG 18:1\_34:4 | | 0.06 | 0.17 | 2.83 | 0.065 | 0.008 |
| TG 18:1\_36:0 | | 0.03 | 0.09 | 3.00 | 0.056 | 0.036 |
| TG 18:1\_36:1 | | 0.05 | 0.14 | 2.80 | 0.062 | 0.004 |
| TG 18:1\_36:3 | | 0.04 | 0.11 | 2.75 | 0.056 | 0.033 |
| TG 18:1\_36:4 | | 0.03 | 0.10 | 3.33 | 0.052 | 0.018 |
| TG 18:1\_36:5 | | 0.03 | 0.09 | 3.00 | 0.050 | 0.018 |
| TG 18:1\_38:0 | | 0.03 | 0.09 | 3.00 | 0.052 | 0.017 |
| TG 18:1\_38:1 | | 0.06 | 0.13 | 2.17 | 0.060 | 0.026 |
| TG 18:1\_38:3 | | 0.04 | 0.10 | 2.50 | 0.057 | 0.048 |
| TG 18:1\_38:4 | | 0.03 | 0.09 | 3.00 | 0.046 | 0.017 |
| TG 18:1\_38:5 | | 0.03 | 0.09 | 3.00 | 0.054 | 0.028 |
| TG 18:1\_38:6 | | 0.02 | 0.08 | 4.00 | 0.047 | 0.025 |
| TG 18:1\_38:7 | | 0.04 | 0.11 | 2.75 | 0.052 | 0.012 |
| TG 18:1\_40:8 | | 0.03 | 0.09 | 3.00 | 0.053 | 0.045 |
| TG 18:2\_30:0 | | 0.07 | 0.13 | 1.86 | 0.044 | 0.011 |
| TG 18:2\_32:0 | | 0.04 | 0.09 | 2.25 | 0.048 | 0.028 |
| TG 18:2\_32:1 | | 0.14 | 0.25 | 1.79 | 0.063 | <0.001 |
| TG 18:2\_34:0 | | 0.18 | 0.33 | 1.83 | 0.094 | <0.001 |
| TG 18:2\_36:0 | | 0.06 | 0.17 | 2.83 | 0.072 | 0.002 |
| TG 18:2\_36:1 | | 0.17 | 0.33 | 1.94 | 0.097 | <0.001 |
| TG 18:2\_36:3 | | 0.05 | 0.12 | 2.40 | 0.058 | 0.029 |
| TG 18:2\_36:4 | | 0.03 | 0.10 | 3.33 | 0.059 | 0.036 |
| TG 18:2\_38:1 | | 0.02 | 0.08 | 4.00 | 0.050 | 0.032 |
| TG 18:2\_38:2 | | 0.03 | 0.08 | 2.67 | 0.048 | 0.041 |
| TG 20:0\_32:0 | | 0.03 | 0.09 | 3.00 | 0.052 | 0.015 |
| TG 20:0\_32:1 | | 0.03 | 0.09 | 3.00 | 0.048 | 0.020 |
| TG 20:0\_34:0 | | 0.03 | 0.09 | 3.00 | 0.050 | 0.020 |
| TG 20:0\_34:1 | | 0.04 | 0.13 | 3.25 | 0.066 | 0.007 |
| TG 20:0\_34:7 | | 0.02 | 0.08 | 4.00 | 0.047 | 0.031 |
| TG 20:0\_34:8 | | 0.02 | 0.09 | 4.50 | 0.051 | 0.031 |
| TG 20:0\_36:0 | | 0.03 | 0.09 | 3.00 | 0.052 | 0.030 |
| TG 20:0\_36:1 | | 0.03 | 0.10 | 3.33 | 0.057 | 0.026 |
| TG 20:0\_36:2 | | 0.03 | 0.10 | 3.33 | 0.058 | 0.031 |
| TG 20:0\_36:3 | | 0.02 | 0.08 | 4.00 | 0.051 | 0.034 |
| TG 20:0\_44:2 | | 0.03 | 0.09 | 3.00 | 0.049 | 0.035 |
| TG 20:4\_30:0 | | 0.02 | 0.09 | 4.50 | 0.051 | 0.029 |
| TG 20:4\_30:2 | | 0.03 | 0.08 | 2.67 | 0.049 | 0.049 |
| TG 20:4\_32:0 | | 0.02 | 0.08 | 4.00 | 0.046 | 0.028 |
| TG 20:4\_32:1 | | 0.02 | 0.08 | 4.00 | 0.047 | 0.039 |
| TG 20:4\_34:1 | | 0.03 | 0.10 | 3.33 | 0.052 | 0.013 |
| TG 20:4\_36:0 | | 0.03 | 0.08 | 2.67 | 0.051 | 0.046 |
| TG 20:4\_36:1 | | 0.03 | 0.09 | 3.00 | 0.050 | 0.022 |
| TG 20:4\_36:2 | | 0.03 | 0.09 | 3.00 | 0.049 | 0.029 |
|  | *Lipid subset B* | | | | | |
| Lyso PC(18:1) | | 0.11 | 0.16 | 1.45 | 0.039 | 0.022 |
| Lyso PC(18:3) | | 0.02 | 0.03 | 1.50 | 0.009 | 0.023 |
| Lyso PC(20:1) | | 0.12 | 0.20 | 1.67 | 0.063 | 0.034 |
| PC(30:2) | | 0.05 | 0.07 | 1.40 | 0.015 | 0.008 |
| PC(32:0) | | 0.34 | 0.39 | 1.15 | 0.036 | 0.008 |
| PC(32:1) | | 2.08 | 2.56 | 1.23 | 0.327 | 0.004 |
| PC(32:2) | | 0.53 | 0.82 | 1.55 | 0.166 | 0.125 |
| PC(32:4) | | 0.04 | 0.08 | 2.00 | 0.018 | 0.033 |
| PC(34:0) | | 1.15 | 1.41 | 1.23 | 0.199 | 0.016 |
| PC(34:2) | | 11.83 | 7.79 | 0.66 | 2.408 | <0.001 |
| PC(34:3) | | 1.69 | 2.03 | 1.20 | 0.243 | 0.006 |
| PC(34:6) | | 0.04 | 0.05 | 1.25 | 0.008 | 0.037 |
| PC(36:1) | | 1.27 | 1.70 | 1.34 | 0.250 | <0.001 |
| PC(36:7) | | 0.08 | 0.13 | 1.63 | 0.030 | 0.004 |
| PC(36:8) | | 0.58 | 1.03 | 1.78 | 0.250 | 0.015 |
| PC(38:2) | | 0.14 | 0.19 | 1.36 | 0.026 | <0.001 |
| PC(38:7) | | 0.05 | 0.06 | 1.20 | 0.007 | 0.017 |
| PC(38:8) | | 0.11 | 0.15 | 1.36 | 0.026 | 0.002 |
| PC(38:9) | | 0.08 | 0.09 | 1.13 | 0.013 | 0.003 |
| PC(40:6) | | 0.05 | 0.07 | 1.40 | 0.014 | 0.023 |
| PC(40:8) | | 0.04 | 0.05 | 1.25 | 0.009 | 0.004 |
| PCo(32:0) | | 0.11 | 0.19 | 1.73 | 0.044 | 0.012 |
| PCo(32:1) | | 0.25 | 0.32 | 1.28 | 0.049 | 0.003 |
| PCo(32:2) | | 0.31 | 0.52 | 1.68 | 0.128 | <0.001 |
| PCo(32:3) | | 0.10 | 0.13 | 1.30 | 0.021 | 0.005 |
| PCo(34:0) | | 0.19 | 0.27 | 1.42 | 0.049 | 0.001 |
| PCo(34:1) | | 2.08 | 2.85 | 1.37 | 0.535 | 0.004 |
| PCo(34:3) | | 7.11 | 5.32 | 0.75 | 1.094 | <0.001 |
| PCo(34:4) | | 1.32 | 1.65 | 1.25 | 0.255 | 0.017 |
| PCo(36:0) | | 0.08 | 0.13 | 1.63 | 0.030 | 0.005 |
| PCo(36:1) | | 0.58 | 1.03 | 1.78 | 0.250 | 0.015 |
| PCo(36:4) | | 2.32 | 1.50 | 0.65 | 0.526 | 0.001 |
| PCo(36:5) | | 2.09 | 1.51 | 0.72 | 0.404 | 0.005 |
| PCo(38:0) | | 0.05 | 0.06 | 1.20 | 0.007 | 0.017 |
| PCo(38:1) | | 0.11 | 0.15 | 1.36 | 0.026 | 0.002 |
| PCo(38:2) | | 0.08 | 0.09 | 1.13 | 0.013 | 0.003 |
| PCo(38:5) | | 0.88 | 0.61 | 0.69 | 0.199 | 0.008 |
| PCo(40:1) | | 0.04 | 0.05 | 1.25 | 0.009 | 0.004 |
| PCp(32:4) | | 0.34 | 0.39 | 1.15 | 0.036 | 0.008 |
| PE(36:8) | | 0.03 | 0.04 | 1.33 | 0.007 | 0.019 |
| PE(38:5) | | 0.19 | 0.26 | 1.37 | 0.051 | 0.003 |
| PE(40:5) | | 0.08 | 0.11 | 1.38 | 0.018 | 0.001 |
| PEo(36:1) | | 0.03 | 0.04 | 1.33 | 0.007 | 0.019 |
| PEo(36:2) | | 0.05 | 0.07 | 1.40 | 0.010 | 0.007 |
| PEo(38:6) | | 0.08 | 0.07 | 0.88 | 0.009 | 0.004 |
| SM(d18:0/18:0) | | 0.64 | 0.81 | 1.27 | 0.130 | 0.018 |
| SM(d18:0/22:0) | | 0.51 | 0.68 | 1.33 | 0.102 | 0.009 |
| SM(d18:0/24:0) | | 0.06 | 0.07 | 1.17 | 0.012 | 0.029 |
| SM(d18:1/20:0) | | 4.70 | 3.16 | 0.67 | 0.903 | 0.009 |
| SM(d18:1/24:0) | | 0.29 | 0.40 | 1.38 | 0.064 | <0.001 |
| SM(d18:1/24:1)15Z)) | | 0.29 | 0.33 | 1.14 | 0.036 | 0.028 |
| SM(d18:2/18:1) | | 0.03 | 0.05 | 1.67 | 0.010 | 0.014 |
| SM(d18:2/24:1) | | 0.21 | 0.18 | 0.86 | 0.028 | 0.035 |
|  | *Lipid subset C* | | | | | |
| (9Z)-3-hydroxyoctadecenoylcarnitine | | 0.37 | 0.42 | 1.14 | 0.045 | 0.030 |
| 18:2 Cholesteryl ester | | 0.34 | 0.41 | 1.21 | 0.057 | 0.018 |
| Cer(d18:1/22:0) | | 0.45 | 0.39 | 0.87 | 0.054 | 0.042 |
| DG 16:0\_18:1 | | 0.83 | 0.50 | 0.60 | 0.185 | 0.010 |
| DG 18:0\_18:1 | | 0.80 | 0.53 | 0.66 | 0.153 | 0.050 |
| DG 18:1\_16:0 | | 0.48 | 0.43 | 0.90 | 0.050 | 0.001 |
| DG 18:1\_18:1 | | 0.73 | 0.51 | 0.70 | 0.140 | 0.006 |
| DG 18:2\_16:0 | | 0.99 | 0.69 | 0.70 | 0.214 | 0.007 |
| Hexadecanedioic acid mono-L-carnitine ester | | 0.64 | 0.38 | 0.59 | 0.153 | 0.044 |
| PG(34:1) | | 0.36 | 0.32 | 0.89 | 0.034 | 0.019 |
| PG(36:2) | | 0.91 | 0.61 | 0.67 | 0.239 | <0.001 |
| Stearoylcarnitine | | 0.64 | 0.38 | 0.59 | 0.153 | 0.044 |

Lipid subsets A= triglyceride (TG); B= phosphatidylcholine (PC), phosphatidylethanolamine (PE) and sphingomyelin (SM); and C= acyl-carnitine, ceramides (CER), diglyceride (DG), free fatty acids and phosphatidylglycerol (PG), phosphatidylinositol (PI) and phosphatidylserine (PS).

a P-L/F-H.