

Supplemental Table S1. PCA loadings values of principal component 1 (p[1]) and principal component 2 (p[2]) of mammary gland from the four experimental groups (see scores in Figure 1 in the main text). Highlighted values are the more representatives for the groups clustering along the principal component 1.

fatty acid	p[1]	p[2]
C18:1c9	-0.264668	-4.46E-05
C17:1c9	-0.146357	-0.0924077
C20:4n-6	-0.136248	-0.289984
C17:0	-0.10835	0.216588
C18:0	-0.084521	0.242516
DMA-C16:0	-0.0785919	-0.308417
C22:5n-3	-0.0565417	-0.308813
C16:1c9	-0.055461	0.185648
C16:1c7	-0.0252886	-0.128828
C18:1c11	-0.0068685	-0.0520676
LT (mg/g MS)	-0.0019512	0.279835
C20:0	0.0244574	-0.229331
aC17:0	0.0426691	0.146457
AGT(mg/g MS)	0.06277	0.294971
iC17:0	0.066802	0.0879935
C18:2n-6	0.0861685	-0.269561
C22:4n-6	0.0898652	-0.164366
C18:1t10	0.0990322	0.193492
C14:1c9	0.114154	0.102406
iC15:0	0.134289	-0.0968628
C18:2 isomers	0.167499	0.0322525
C8:0	0.175885	-0.154831
C16:0	0.18647	0.0781456
Rest	0.189043	-0.0955506
C18:1t9	0.189627	0.0692925
C18:1t11	0.195359	0.120596
C18:1t6/t7/t8	0.198336	0.114925
CLA	0.19838	0.0731203
iC16:0	0.204584	0.115011
iC14:0	0.221635	-0.0930905
C18:1c12	0.223882	-0.0154905
aC15:0	0.230073	-0.0062049
C14:0	0.234925	-0.0900802
C10:0	0.240799	-0.153335
C18:3n-3	0.243568	-0.0198951
C12:0	0.255677	-0.144151
C15:0	0.275824	0.0131943

Supplemental Table S2. PCA loadings values of principal component 1 (p[1]) and principal component 2 (p[2]) of milk from the four experimental groups (see scores in Figure 2 in the main text). Highlighted values are the more representatives for the groups clustering along the principal component 1.

fatty acid	p[1]	p[2]
C18:1c9	-0.203997	0.00113312
C17:1c9	-0.191026	0.0391509
C17:0	-0.185802	-0.0378738
C20:1	-0.180149	-0.0487033
i-C17:0	-0.178427	-0.074843
C18:1c11	-0.177048	0.119201
C20:4n-6	-0.176448	0.0686584
C18:1c13	-0.173305	0.125073
C16:1c9	-0.168196	0.147227
C18:2n6	-0.150806	0.124703
C18:3n6	-0.138323	0.0865175
a-C17:0	-0.128543	-0.0679209
C22:6n-3	-0.115834	0.0466135
C22:5n-3	-0.104008	0.0331235
C18:0	-0.0902215	-0.165596
C16:1c7	-0.0251307	0.0906373
C20:5n-3	0.00518563	0.0545764
others C18:2	0.0228415	0.298377
C22:4n-6	0.0342531	0.00286681
i-C15:0	0.0378706	-0.272239
C18:1c12	0.0404287	0.318235
i-C14:0	0.0481355	-0.248753
C22:0	0.0625756	-0.253858
C18:1t9	0.0687373	0.260828
C20:0	0.0902031	-0.240486
C14:1c9	0.0931969	0.23141
i-C16:0	0.100867	-0.191957
CLAc9t11	0.116761	0.193466
C18:1t10	0.137381	0.187788
C18:3n3	0.140831	-0.032085
C21:0	0.141177	-0.149737
C18:1t11	0.153217	0.061876
C4:0	0.158126	-0.137611
a-C15:0	0.162483	-0.162738
C18:1c15	0.167896	0.172653
C18:1t6/t7/t8	0.17412	0.146804
C16:0	0.184924	-0.0163582
C12:0	0.185529	0.069672
C18:1t12	0.186297	0.130231
C18:1t15	0.186935	0.135485
C6:0	0.189518	-0.0806647
C14:0	0.189744	0.0330473
C8:0	0.190168	-0.0551646
C18:1t16+c14	0.191163	0.0914593
C15:0	0.196843	0.00628086
C10:0	0.202056	-0.0057705