**Table S1.** TaqMan Probe sequence (Life Technologies, CA, USA) used for rt-PCR.

| Gene | NCBI References | Probe Sequence | ID |
|---|---|---|---|
| *ACTA2* | NM_007392.3 | TAGCCCTGGCCTAGCAACACTGATT | Mm00725412_s1 |
| *ATGL* | NM_025802.3 | CCAAGACTGAATGGCTGGATGGCAA | Mm00503040_m1 |
| *COL1A1* | NM_007742.3 | AGTCTACATGTCTAGGGTCTAGACA | Mm00801666_g1 |
| *CPT1a* | NM_013495.2 | TTCCAGGAGAATGCCAGGAGGTCAT | Mm01231183_m1 |
| *FASN* | NM_007988.3 | AGCAATTGTGGATGGAGGTATCAAC | Mm00662319_m1 |
| *FOXO1* | NM_019739.3 | TCGGCGGGCTGGAAGAATTCAATTC | Mm00490671_m1 |
| *IL1B* | NM_008361.3 | TCCTTGTGCAAGTGTCTGAAGCAGC | Mm01336189_m1 |
| *PCK1* | NM_011044.2 | CCGTAGACCTGAAGGTGTCCCCCTT | Mm01247058_m1 |
| *PGC1a* | NR_027710.1 | CTGGAACTGCAGGCCTAACTCCTCC | Mm01208835_m1 |
| *PFK* | NM_008826.4 | GCGGTGATGCGCAAGGTATGAATGC | Mm00435587_m1 |
| *PPAR-γ* | NM_0011273330.1 | ATGCTGTTATGGGTGAAACTCTGG | Mm01184322_m1 |
| *SLC2A1* | NM_011400.3 | CATCGCCCTGGCCTTGCTGGAACGG | Mm00441480_m1 |
| *SLC2A2* | NM_031197.2 | CCGCCTCCCCCGGCGCGCACACACC | Mm00446229_m1 |
| *SLC2A4* | NM_009204.2 | TGGCTCTGCTGCTGCTGGAACGGGT | Mm00436615_m1 |
| *TNFα* | NM_013693.2 | CCCTCACACTCAGATCATCTTCTCA | Mm00443259_g1 |

*Acta2:* α-smooth muscle actin*, Atgl*: Adipose triglyceride lipase, *Cd68*: Cluster of differentiation 68, *Cpt1a*: Carnitine palmitoyltransferase 1a, *Fasn*: Fatty acid synthase, *Foxo1*: Forkhead box protein O1, *Pgc1a*: Peroxisome proliferator-activated receptor gamma coactivator 1-α, *Pck1*: Phosphoenolpyruvate carboxykinase 1, *Ppar-γ*: Peroxisome proliferator-activated receptor gamma, *Pfk*: Phosphofructokinase, SE: cigarette smoke exposure, SE+MQ: SE with MitoQ supplementation, *Slc2a1*: Glut1, *Slc2a2*: Glut2, *Slc2a4*: Glut4, *Tnfα*: Tumor necrosis factor-α.

**Table S2.** Lipid species in the liver detected by lipidomics analysis.

| RT (min) | Identification | Sham Intensity (cps) | SE Intensity (cps) | SE+MQ Intensity (cps) |
|---|---|---|---|---|
| 13.191 | PE 36:5 | 4748±1345 | 5524±1085 | 5834±835 |
| 13.359 | PE 38:7 | 93671±12543 | 161508±39763 | 91261±11121 |
| 13.847 | PE 40:8 | 42933±8000 | 65586±16331 | 49017±5949 |
| 13.855 | PE 36:5 | 50681±8323 | 95868±25379 | 48692±6984 |
| 13.855 | PE 38:8 | 3921±617 | 7600±1921 | 4520±644 |
| 14.15 | PE 34:3 | 21528±4301 | 33784±7186 | 21459±2996 |
| 14.192 | PE 38:7 | 18933±3512 | 31311±7458 | 22078±3079 |
| 14.226 | PE 37:6 | 12163±2852 | 16650±3625 | 15457±2265 |
| 14.495 | PE 38:8 | 10385±1851 | 13684±2959 | 11249±1591 |
| 14.522 | PE 39:7 | 32430±5655 | 49481±10664 | 44258±5233 |
| 14.53 | PE 40:7 | 3727±339 | 5966±1318 | 4811±819 |
| 14.604 | PE 36:4 | 63487±14994 | 85918±18161 | 67706±7782 |
| 14.629 | PE 38:6 | 178755±35163 | 300132±74613 | 184502±21694 |
| 14.705 | PE 34:3 | 23789±9463 | 22096±2078 | 29859±3641 |
| 15.041 | PE 34:3 | 4766±1050 | 6287±1533 | 5190±665 |
| 15.148 | PE-NMe2 38:6 | 57240±14340 | 61935±14019 | 53637±8398 |
| 15.215 | PE 35:3 | 2159±563 | 2898±597 | 2288±221 |
| 15.369 | PE 38:6 | 4694148±713042 | 6099049±982543 | 5619157±736726 |
| 15.377 | PE 40:9 | 227368±27913 | 169240±24766 | 202810±36130 |
| 15.503 | PE 42:10 | 64210±9180 | 55613±8582 | 62573±11614 |
| 15.522 | PE 40:7 | 1333445±295460 | 1899879±341033 | 1498967±183253 |
| 15.654 | PE 32:1 | 13533±2019 | 26077±5536 | 14686±2265 |
| 15.915 | PE-NMe2 34:2 | 5878±1238 | 10478±2709 | 6670±806 |
| 15.996 | PE 40:8 | 84216±14709 | 98276±14505 | 83927±10770 |
| 16.017 | PE 39:6 | 9570±1516 | 17099±3625 | 14245±1853 |
| 16.051 | PS 40:6 | 782327±174683 | 693019±160100 | 683561±102890 |
| 16.124 | PE 34:2 | 734740±152746 | 855722±170424 | 762476±84106 |
| 16.287 | PE 36:3 | 444326±99436 | 589139±128140 | 469697±49028 |
| 16.302 | PE 38:6 | 24721±4917 | 25200±3944 | 22791±2676 |
| 16.445 | PE 39:6 | 58586±14526 | 69779±14877 | 68037±10619 |
| 16.663 | PE 33:1 | 1700±216 | 2843±510 | 2521±325 |

| | | | | |
|---|---|---|---|---|
| 16.665 | PE 36:3 | 54091±9900 | 86536±17012 | 65324±7676 |
| 16.705 | PE 40:8 | 12774±2625 | 14941±2787 | 14120±2118 |
| 16.814 | PE 40:6 | 14647±2268 | 19705±3870 | 14784±1709 |
| 16.827 | PE 40:7 | 2962±432 | 5226±1147 | 3564±334 |
| 16.828 | PE 38:4 | 39291±7762 | 63841±18540 | 35658±4058 |
| 16.91 | PE 39:7 | 4990±766 | 5080±634 | 5437±897 |
| 16.981 | PS 36:2 | 15169±6297 | 13674±3983 | 9675±2478 |
| 17.036 | PI 38:3 | 60653±13052 | 66282±14537 | 55600±5942 |
| 17.19 | PE 35:2 | 24727±5411 | 20516±3955 | 23755±3986 |
| 17.292 | PE 36:3 | 5024±942 | 6784±1564 | 4945±553 |
| 17.439 | PA 34:1 | 9671±2688 | 9476±2536 | 5726±1157 |
| 17.486 | PE 40:6 | 2225961±388150 | 2113916±383568 | 1962195±288930 |
| 17.493 | PE 42:9 | 132729±18044 | 102633±14093 | 129702±25499 |
| 17.621 | PE 34:1 | 121270±8910 | 203223±29207* | 169945±18992 |
| 17.845 | PE 40:7 | 292044±43221 | 240169±32748 | 261743±38716 |
| 17.886 | PE-NMe2 36:2 | 5692±1199 | 5647±1077 | 5463±627 |
| 17.89 | PE 40:5 | 88238±6974 | 156020±25363* | 103893±15011 |
| 18.013 | PE 36:2 | 460362±99622 | 610928±109655 | 573191±83595 |
| 18.182 | PE 41:6 | 22791±4829 | 21557±3433 | 23453±4001 |
| 18.257 | PE 35:1 | 6859±2220 | 6509±868 | 6961±1131 |
| 18.282 | PE 40:5 | 23876±6341 | 27674±4359 | 24190±3495 |
| 18.287 | PE 38:3 | 114568±22675 | 170374±24083 | 129407±16706 |
| 18.289 | PE 40:6 | 16013±2832 | 19184±2866 | 17891±2417 |
| 18.522 | PE 37:2 | 9584±2043 | 8466±1211 | 9572±1399 |
| 18.541 | PE 40:4 | 17766±4039 | 23240±4281 | 19575±2725 |
| 18.668 | PE 38:2 | 12464±2378 | 23058±4678* | 12675±1193# |
| 18.687 | PE 36:1 | 64954±9634 | 93258±14868 | 82146±11525 |
| 18.891 | PE 38:2 | 19272±1728 | 21991±2886 | 20370±1697 |
| 19.034 | PE 40:3 | 2209±320 | 3227±645 | 2564±390 |
| 19.231 | PE 38:1 | 13103±1581 | 21703±3003* | 17024±1922 |
| 19.236 | PE 40:2 | 2940±1066 | 3198±1338 | 3253±761 |
| 20.153 | TG 18:3_18:3_18:3 | 15344±2221 | 43898±19091 | 39434±8783 |
| 20.361 | TG 42:0 | 9675±1220 | 6140±1829 | 8758±1481 |
| 20.372 | TG 14:0_16:0_18:3 | 169454±46336 | 374367±140958 | 841122±549469 |
| 20.437 | TG 16:0_18:3_18:2 | 1387906±307583 | 2552634±775373 | 3976208±1928056 |
| 20.711 | TG 16:0_18:2_18:1 | 8074384±1610661 | 9438356±2154155 | 10861013±3147549 |
| 20.826 | TG 54:3 | 4092231±481959 | 7124186±2264960 | 8524145±2820249 |
| 20.835 | TG 52:2 | 7229942±1500714 | 7174353±848949 | 7261535±1493622 |
| 20.856 | TG 18:2_18:1_20:1 | 653822±69556 | 924291±212524 | 1232330±257067 |
| 20.967 | TG 18:1_18:1_20:1 | 1031411±142735 | 1767167±556538 | 1984807±772490 |
| 21.17 | TG 52:0 | 24053±4113 | 55860±19912 | 29831±11212 |
| 21.215 | TG 18:1_18:1_21:0 | 21682±5595 | 40896±15747 | 39038±18587 |
| 21.297 | TG 18:1_18:1_24:1 | 44775±10731 | 65446±20602 | 69983±29349 |

Data are expressed as mean ± SEM (n=3-5). *P<0.05 vs Sham. #P<0.05 vs SE. PA: phosphatidic acid, PE: phosphatidylethanolamine, PI: phosphatidylinositol, PS: phosphatidylserine, SE: cigarette smoke exposure, SE+MQ: SE with MitoQ supplementation, TG: triglyceride.