**Table S1:** General indices related to the phospholipid fatty acid (PL FAs) composition in the mice spleen in the group fed a standard diet, FCO and FOO diets on the 1st, 2nd and 7th d after partial hepatectomy (PHx).

| | Control diet | | | | FCO diet | | | | FOO diet | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Fatty acids** | **Control** | **pHx** | | | **Control-FCO** | **pHx** | | | **Control-FOO** | **pHx** | | |
| | | 1d | 2d | 7d | | 1d | 2d | 7d | | 1d | 2d | 7d |
| **UFA/SFA** | 1.00±0.09 | 1.04±0.08 | 1.03±0.16 | 1.02±0.16 | 1.14±0.15* | 1.10±0.06 | 0.94±0.24 | 0.86±0.14 | 1.02±0.10 | 1.07±0.07 | 0.91±0.21 | 1.24±0.54 |
| **PUFA/SFA** | 0.73±0.09 | 0.71±0.06 | 0.71±0.15 | 0.66±0.15 | 0.84±0.16* | 0.83±0.04 | 0.70±0.22 | 0.63±0.11 | 0.65±0.06 | 0.71±0.07 | 0.49±0.19 | 0.88±0.51 |
| **PUFA/MUFA** | 2.67±0.28* | 2.22±0.38 | 2.22±0.78[d] | 1.83±0.49[f] | 2.79±0.39 | 3.00±0.18 | 2.86±0.63 | 2.72±0.22 | 1.77±0.19* | 1.95±0.13 | 1.15±0.43[d] | 2.43±1.18[f] |
| **18:2/20:4** | 0.65±0.09 | 0.75±0.08 | 0.78±0.12 | 0.59±0.15[f] | 0.87±0.17* | 0.67±0.10 | 0.84±0.22 | 0.58±0.12[c] | 0.66±0.11* | 0.63±0.09 | 0.92±0.44 | 0.41±0.17[f] |
| **20:4/22:6** | 1.33±0.15* | 1.20±0.07 | 1.31±0.30 | 2.39±0.52[e] | 1.42±0.15 | 1.56±0.16 | 1.48±0.22 | 2.20±0.75 | 1.38±0.29* | 1.29±0.17 | 2.04±1.07 | 1.83±0.37[e] |
| ***n*-3/*n*-6** | 0.45±0.06* | 0.50±0.05 | 0.47±0.15 | 0.27±0.07 | 0.37±0.03 | 0.38±0.02 | 0.37±0.09 | 0.33±0.11 | 0.43±0.08 | 0.51±0.08 | 0.34±0.15 | 0.41±0.13 |
| ***n*-9/*n*-6** | 0.48±0.06 | 0.57±0.10 | 0.58±0.12 | 0.65±0.16 | 0.46±0.07 | 0.42±0.03 | 0.43±0.06 | 0.48±0.07 | 0.74±0.07* | 0.69±0.06 | 1.21±0.46[d] | 0.60±0.16[f] |
| **D9C18** | 0.86±0.10* | 1.07±0.29 | 1.01±0.07 | 1.44±0.26 | 0.96±0.09 | 0.90±0.06 | 0.87±0.10 | 1.00±0.19 | 1.30±0.37* | 1.16±0.01 | 1.51±0.20[d] | 1.13±0.35 |
| **D9C16** | 0.05±0.01* | 0.08±0.01 | 0.07±0.01 | 0.05±0.01 | 0.04±0.01 | 0.04±0.01 | 0.04±0.01 | 0.01±0.01 | 0.05±0.02 | 0.06±0.03 | 0.05±0.01 | 0.04±0.02 |
| **D6D** | 0.18±0.04* | 0.12±0.03a | 0.08±0.02[b] | 0.10±0.03[c] | 0.10±0.02* | 0.08±0.03 | 0.07±0.03 | 0.09±0.04[c,f] | 0.22±0.05* | 0.08±0.04 | 0.08±0.02 | 0.09±0.05[f] |
| **D5D** | 16.09±1.3 | 20.26±8.6 | 25.35±10.8 | 26.54±14.5[c,f] | 24.79±2.4* | 24.01±6.3 | 35.36±25.7 | 29.99±20.30[c] | 18.45±7.6* | 27.16±9.4 | 20.74±6.1 | 41.23±23.8[c,f] |
| **ACL** | 18.09±0.14* | 17.95±0.06 | 17.95±0.19 | 17.81±0.22 | 18.07±0.13* | 18.09±0.03 | 17.91±0.34 | 17.84±0.19 | 17.96±0.14 | 18.01±0.12 | 17.71±0.30 | 18.20±0.61 |
| **DBI** | 170±12.45 | 171±8.95 | 169±25.40[d] | 154±24.96 | 177±16.45* | 183±2.26 | 164±35.19 | 156±20.07[e] | 169±11.75* | 166±13.89 | 129±39.56[d] | 185±56.84 |
| **PI** | 157±15.19 | 151±10.69 | 149±29.61[d] | 127±29.72 | 155±17.64* | 163±2.01 | 144±41.46 | 136±22.76 | 136±9.06* | 152±14.71 | 100±43.65[d] | 169±70.72 |
| **SCD1ratio** | 0.31±0.02* | 0.27±0.03 | 0.24±0.02[d] | 0.23±0.04[f] | 0.28±0.01* | 0.33±0.05 | 0.32±0.02[b] | 0.36±0.05[c] | 0.38±0.06* | 0.36±0.02 | 0.43±0.05 | 0.35±0.04[f] |
| **Elovl6 ratio** | 0.78±0.06 | 0.69±0.05 | 0.59±0.14 | 0.58±0.10[f] | 0.74±0.07* | 0.65±0.04 | 0.67±0.03[b] | 0.67±0.11[c] | 0.84±0.11* | 0.79±0.13 | 0.83±0.10 | 0.67±0.09 |

Values are area per cent (mean ± SD of 6-8 mice/group); *significant difference during PHx among same diet using *Kruskal-Wallis* Anova by Ranks test; [a]significant difference between the control and 1st day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [b]significant difference between the control and 2nd day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [c]significant difference between the control and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [d]significant difference between the 1st and 2nd day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [e]significant difference between the 1st day and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [f]significant difference between the 2nd and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05).

**Table S2:** Fatty acid composition (%) of the total phospholipids (PL) in the mice liver in the group fed a standard diet, FCO and FOO diets on the 1st, 2ndand 7thd after partial hepatectomy (PHx) [29].

| | Control diet | | | | FCO diet | | | | FOO diet | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Fatty acids** | **Control** | **pHx** | | | **Control -FCO** | **pHx** | | | **Control -FOO** | **pHx** | | |
| | | 1d | 2d | 7d | | 1d | 2d | 7d | | 1d | 2d | 7d |
| **18:2*n*-6** | 13.67±1.31* | 16.31±0.85 | 16.12±0.52[b] | 15.96±1.18[e] | 17.46±1.06* | 20.16±1.07[a] | 18.40±1.22 | 17.38±1.57[e] | 13.64±1.17* | 16.31±0.85[a] | 14.23±1.04 | 14.34±1.11 |
| **18:3*n*-6** | 0.42±0.50 | 0.22±0.14 | 0.30±0.15 | 0.24±0.11 | 0.36±0.03 | 0.41±0.21 | 0.40±0.13 | 0.32±0.13 | 0.37±0.09* | 0.12±0.06[a] | 0.26±0.07 | 0.26±0.08 |
| **20:2*n*-6** | 0.18±0.07* | 0.16±0.04 | 0.17±0.04 | 0.25±0.06 | 0.35±0.02* | 0.36±0.07 | 0.30±0.06 | 0.43±0.04[f] | 0.18±0.02* | 0.16±0.04 | 0.16±0.02 | 0.24±0.08[e,f] |
| **20:3*n*-6** | 1.17±0.32 | 0.98±0.27 | 1.28±0.28 | 1.37±0.20 | 1.52±0.15* | 1.03±0.25[a] | 1.13±0.39 | 1.31±0.20 | 1.52±0.15* | 0.89±0.26[a] | 1.21±0.57 | 1.46±0.17 |
| **20:4*n*-6** | 10.89±0.50* | 8.18±1.68 | 9.24±1.01 | 13.46±0.75[e,f] | 13.32±0.66* | 10.00±0.66[a] | 10.51±1.38 | 14.73±1.6[e,f] | 10.59±1.09* | 7.98±0.95 | 9.19±0.80 | 13.52±1.44[e,f] |
| **22:4 *n*-6** | 0.11±0.05* | 0.16±0.12 | 0.07±0.05 | 0.20±0.05[f] | 0.14±0.05 | 0.29±0.20 | 0.09±0.04 | 0.28±0.13 | 0.16±0.04* | 0.18±0.17 | 0.08±0.02 | 0.28±0.06[f] |
| **Σ*ν*6–** | **26.43±1.15*** | **26.01±2.16** | **27.19±0.97** | **31.48±1.33[c,e]** | **33.15±0.73*** | **32.25±0.70** | **30.83±1.52** | **34.45±1.44[f]** | **26.46±0.56*** | **25.64±0.97** | **25.14±0.93** | **30.11±2.09[e,f]** |
| **20:5*n*-3** | 0.95±0.28* | 0.85±0.36 | 0.94±0.16 | 0.53±0.14[c,f] | 0.46±0.06 | 0.59±0.15 | 0.50±0.06 | 0.34±0.17 | 0.69±0.08 | 0.79±0.29 | 0.84±0.21 | 0.59±0.10 |
| **22:5n-3** | 0.66±0.07* | 0.70±0.14 | 0.61±0.07 | 0.45±0.06[c,f] | 0.44±0.06 | 0.45±0.05 | 0.40±0.06 | 0.53±0.17 | 0.47±0.07 | 0.49±0.06 | 0.45±0.07 | 0.50±0.09 |
| **22:6*n*-3** | 19.61±1.56* | 17.81±0.72 | 17.97±1.44 | 12.75±1.10[c,f] | 14.68±1.44* | 15.55±0.96 | 15.90±1.42 | 13.65±1.03[f] | 15.09±1.01* | 18.58±0.64 | 15.22±1.74 | 13.53±1.27[e] |
| **Σ*ν*3–** | **21.22±1.77*** | **19.36±0.28** | **19.52±1.41** | **13.72±1.12[c,f]** | **15.58±1.50*** | **16.58±1.00** | **16.80±1.42** | **14.52±1.06[f]** | **16.25±1.10*** | **19.86±0.84** | **16.51±1.83** | **14.62±1.29[e]** |
| **ΣΑΦΥΠ** | **47.65±0.91*** | **45.37±2.10[a]** | **46.71±1.79** | **45.19±1.64[e]** | **48.73±1.14** | **48.83±1.39** | **47.63±1.91** | **48.96±1.17** | **42.71±1.13*** | **45.50±1.35** | **41.64±2.32[d]** | **44.72±2.09[e]** |
| **14:00** | 0.06±0.02 | 0.05±0.01 | 0.07±0.03 | 0.07±0.02 | 0.07±0.02 | 0.05±0.02 | 0.09±0.07 | 0.07±0.01 | 0.06±0.02 | 0.05±0.01 | 0.06±0.01 | 0.08±0.01[e] |
| **16:00** | 25.22±1.16* | 27.80±1.71[b] | 26.19±1.33 | 25.05±1.02[e] | 23.20±0.63* | 24.00±1.22 | 25.04±1.40 | 23.33±0.79 | 25.23±1.93 | 24.02±0.46 | 25.99±1.27[d] | 24.92±1.76 |
| **18:00** | 16.14±1.49 | 16.87±2.07 | 17.19±0.60 | 16.37±1.20 | 19.18±0.68* | 18.36±1.17 | 17.93±1.12 | 16.71±0.85[c] | 16.24±2.48* | 17.22±0.78 | 16.98±1.21 | 14.72±1.03 |
| **20:00** | 0.33±0.12* | 0.14±0.12[a] | 0.12±0.06[b] | 0.19±0.07 | 0.56±0.08* | 0.17±0.07[a] | 0.18±0.07[b] | 0.23±0.07 | 0.56±0.13* | 0.23±0.18 | 0.11±0.05[b] | 0.19±0.06 |
| **24:00 :00** | 0.20±0.21 | 0.13±0.09 | 0.09±0.08 | 0.09±0.04 | 0.13±0.04 | 0.12±0.06 | 0.10±0.05 | 0.10±0.05 | 0.18±0.08 | 0.12±0.06 | 0.13±0.04 | 0.09±0.05 |
| **ΣΑΦΣ** | **41.94±2.08*** | **44.98±1.44[a]** | **43.66±1.10** | **41.77±1.09[e,f]** | **43.13±0.74*** | **42.70±1.88** | **43.33±1.50** | **40.44±0.66[c,f]** | **42.28±1.07*** | **41.64±1.25** | **43.27±2.05** | **40.01±1.45[f]** |
| **16:1*n*-7** | 0.97±0.20 | 1.36±0.49 | 1.18±0.20 | 1.35±0.24[c] | 0.68±0.08* | 0.79±0.12 | 0.96±0.16 | 1.20±0.28[c] | 1.04±0.39* | 0.97±0.16 | 1.20±0.06[d] | 1.65±0.55[c,e] |
| **18:1*n*-9** | 9.39±1.51* | 8.83±1.69 | 8.12±0.74 | 11.57±2.38[f] | 7.46±0.50* | 7.38±0.70 | 7.81±0.62 | 9.25±1.27[e] | 13.97±0.45* | 11.56±0.99[a] | 13.48±1.04[d] | 13.50±1.10[e] |
| **20:1*n*-9** | 0.04±0.09* | 0.21±0.10 | 0.33±0.11[b] | 0.11±0.03[f] | 0.00* | 0.31±0.12[a] | 0.28±0.08[b] | 0.14±0.05 | 0.00* | 0.33±0.13[a] | 0.40±0.04[b] | 0.11±0.04[f] |
| **ΣΑΦΥΜ** | **10.40±1.58*** | **10.39±2.09** | **9.62±0.81** | **13.04±2.52[f]** | **8.14±0.55*** | **8.47±0.65** | **9.04±0.79** | **10.59±1.48[c]** | **15.01±0.77*** | **12.86±0.94[a]** | **15.08±1.09[d]** | **15.27±1.38[e]** |

Values are area per cent (mean ± SD of 6-8 mice/group); *significant difference during PHx among same diet using *Kruskal-Wallis* Anova by Ranks test; [a]significant difference between the control and 1st day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [b]significant difference between the control and 2nd day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [c]significant difference between the control and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [d]significant difference between the 1st and 2nd day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [e]significant difference between the 1st day and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [f]significant difference between the 2nd and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05).

**Table S3:** General indices related to the phospholipid fatty acid (PL FAs) composition in the mice liverin the group fed a standard diet, FCO and FOO diets on the 1st, 2nd and 7th d after partial hepatectomy (PHx) [29].

| | Control diet | | | | FCO diet | | | | FOO diet | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Fatty acids** | **Control** | **pHx** | | | **Control-FCO** | **pHx** | | | **Control-FOO** | **pHx** | | |
| | | 1d | 2d | 7d | | 1d | 2d | 7d | | 1d | 2d | 7d |
| **PUFA/SFA** | 1.14±0.08* | 0.99±0.09[a] | 1.07±0.07 | 1.08±0.03 | 1.13±0.04 | 1.15±0.08 | 1.10±0.08 | 1.21±0.03 | 1.01±0.05* | 1.09±0.06 | 0.96±0.10 | 1.12±0.09[f] |
| **PUFA/MUFA** | 4.66±0.63* | 4.44±0.86 | 4.89±0.58 | 3.60±0.81[f] | 6.02±0.51* | 5.79±0.36 | 5.31±0.62 | 4.71±0.81[c] | 2.85±0.19* | 3.56±0.36[a] | 2.72±0.28[d] | 2.96±0.37 |
| **18:2/20:4** | 1.26±0.13* | 1.95±0.34[a] | 1.76±0.19 | 1.19±0.10[e,f] | 1.32±0.14* | 2.03±0.19[a] | 1.78±0.30 | 1.20±0.22[e,f] | 1.31±0.23* | 2.07±0.31[a] | 1.57±0.24 | 1.07±0.12[e,f] |
| **20:4/22:6** | 0.56±0.06* | 0.46±0.09 | 0.52±0.07 | 1.06±0.12[e,f] | 0.92±0.12* | 0.65±0.05 | 0.67±0.13 | 1.08±0.11[e,f] | 0.70±0.03* | 0.43±0.06 | 0.62±0.08 | 1.01±0.12[e,f] |
| ***n*-3/*n*-6** | 0.84±0.11* | 0.79±0.09 | 0.74±0.06 | 0.45±0.04[c,e] | 0.49±0.05* | 0.53±0.03 | 0.57±0.05 | 0.44±0.04[e,f] | 0.64±0.05* | 0.78±0.04 | 0.66±0.05 | 0.50±0.06[e,f] |
| ***n-9/n-6*** | 0.36±0.07 | 0.37±0.12 | 0.31±0.03 | 0.38±0.09 | 0.23±0.02 | 0.24±0.01 | 0.27±0.03 | 0.28±0.04 | 0.54±0.03* | 0.47±0.05 | 0.56±0.05[d] | 0.46±0.06[e] |
| **D9C18 ratio** | 0.59±0.15* | 0.54±0.16 | 0.47±0.05 | 0.71±0.18[f] | 0.39±0.03* | 0.40±0.06 | 0.44±0.05 | 0.56±0.10[c,e] | 0.88±0.16 | 0.67±0.08[a] | 0.81±0.11 | 0.92±0.12[e] |
| **D9C16 ratio** | 0.04±0.01 | 0.05±0.01 | 0.04±0.01 | 0.05±0.01[c] | 0.03±0.00* | 0.03±0.01 | 0.04±0.00 | 0.05±0.01[c] | 0.04±0.01* | 0.04±0.01 | 0.05±0.00 | 0.07±0.02[c,e] |
| **D6D ratio** | 0.12±0.06* | 0.08±0.02[a] | 0.10±0.02 | 0.10±0.02[e,f] | 0.11±0.01* | 0.07±0.02[a] | 0.08±0.03 | 0.09±0.01[e] | 0.14±0.01* | 0.06±0.02[a] | 0.11±0.05 | 0.12±0.01[e,f] |
| **D5D ratio** | 10.14±3.91* | 8.81±2.39[a] | 7.66±2.74 | 10.07±1.92[e,f] | 8.83±1.07* | 10.47±3.52[a] | 10.25±3.76 | 11.62±2.95[e,f] | 7.04±1.24* | 9.38±1.61[a] | 8.65±3.83 | 9.35±1.47[e,f] |
| **ACL** | 18.87±0.10* | 18.38±0.07 | 18.44±0.08 | 18.33±0.03[c,f] | 18.46±0.06 | 18.41±0.06 | 18.40±0.07 | 18.43±0.08 | 18.38±0.08* | 18.48±0.04 | 18.31±0.09[d] | 18.37±0.09 |
| **DBI** | 236±12.18* | 211±7.23 | 218±8.85 | 201±5.32[c] | 211±8.80 | 209±7.64 | 210±7.66 | 214±7.14 | 203±7.65* | 218±5.34 | 197±11.88[d] | 207±9.19 |
| **PI** | 228±12.33* | 204±8.32 | 210±11.60 | 182±8.45[c,f] | 198±10.44 | 195±8.74 | 197±9.58 | 196±10.87 | 189±11.56* | 208±5.91 | 181±14.01 | 188±11.72[e,f] |
| **SCD1ratio** | 0.25±0.05* | 0.23±0.05 | 0.21±0.02 | 0.31±0.07[e] | 0.19±0.01* | 0.19±0.03 | 0.20±0.02 | 0.26±0.04[c,e] | 0.36±0.02* | 0.30±0.03[a] | 0.34±0.03 | 0.38±0.04[e] |
| **Elovl6 ratio** | 4.09±0.75* | 4.51±0.73 | 4.69±0.34 | 3.33±0.72[e,f] | 1.12±0.03* | 1.04±0.08 | 0.99±0.08[b] | 1.06±0.04 | 1.16±0.17 | 1.15±0.03 | 1.12±0.05 | 1.07±0.11 |

Values are area per cent (mean ± SD of 6-8 mice/group); *significant difference during PHx among same diet using *Kruskal-Wallis* Anova by Ranks test; [a]significant difference between the control and 1st day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [b]significant difference between the control and 2nd day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [c]significant difference between the control and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [d]significant difference between the 1st and 2nd day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [e]significant difference between the 1st day and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05); [f]significant difference between the 2nd and 7th day PHx using *Kruskal-Wallis* test: multiple comparisons of mean ranks for all groups ($P$<0.05).