**Table S3**

|  |  |  |  |
| --- | --- | --- | --- |
| Metabolites [μM/l] | Young | Elderly | Centenarians |
| Mean ± SD | Mean ± SD | Mean ± SD |
| Trp | 87.7 ± 15.2 | 80.5 ± 12.7 a(\*) | 71.3 ± 11.5b(\*\*\*),c(\*\*\*) |
| PC32:0 | 9.58 ± 1.68 | 11.2 ± 2.39 a(\*\*) | 12.7 ± 2.39 b(\*\*\*),c(\*\*\*) |
| PC34:4 | 0.86 ± 0.29 | 1.21 ± 0.45 a(\*\*\*) | 0.85 ± 0.34 b(\*\*\*) |
| PC36:5 | 9.39 ± 2.44 | 18.2 ± 15.4 a(\*\*\*) | 11.7 ± 5.33 b(\*\*\*) |
| PC36:6 | 0.38 ± 0.13 | 0.60 ± 0.31 a(\*\*) | 0.40 ± 0.18 b(\*\*\*) |
| PC38:4 | 78.4 ± 14.1 | 103 ± 28.3 a(\*\*\*) | 85.3 ± 22.8 b(\*\*\*) |
| PC38:6 | 46.4 ± 10.3 | 64.7 ± 22.9 a(\*\*\*) | 52.8 ± 22.2 b(\*\*\*) |
| PC40:6 | 15.0 ± 4.51 | 23.7 ± 8.95 a(\*\*\*) | 18.9 ± 8.28 b(\*\*\*) |
| PC-O 32:1 | 2.02 ± 0.36 | 2 ± 0.51 | 2.35 ± 0.63 b(\*\*\*),c(\*\*\*) |
| PC-O 34:1 | 7.34 ± 1.07 | 7.88 ± 1.71 | 9.54 ± 2.19 b(\*\*\*),c(\*\*\*) |
| PC-O 34:3 | 5.73 ± 1.4 | 5.07 ± 1.71 | 3.94 ± 1.54 b(\*\*\*),c(\*\*\*) |
| PC-O 36:2 | 9.54 ± 1.75 | 9.58 ± 2.39 | 9.29 ± 2.26 c (\*) |
| PC-O 36:4 | 14.5 ± 2.83 | 14.4 ± 3.55 | 12.4 ± 2.56 b(\*\*\*),c(\*\*\*) |
| PC-O 38.0 | 1.27 ± 0.29 | 1.78 ± 0.64 a(\*\*\*) | 1.31 ± 0.51b(\*\*\*) |
| PC-O 38:6 | 4.64 ± 1.07 | 5.61 ± 1.51 a(\*\*\*) | 4.61 ± 1.37b(\*\*\*) |
| PC-O 40:1 | 1.23 ± 0.23 | 1.41 ± 0.41 | 1.02 ± 0.32b(\*\*\*),c(\*\*\*) |
| LPC 18:0 | 52.2 ± 12.9 | 52.1 ± 13.5 | 40.4 ± 12.0b(\*\*\*),c(\*\*\*) |
| LPC 18:2 | 61.1 ± 13.1 | 39.04 ± 12.4 a(\*\*\*) | 27.6 ± 10.3b(\*\*\*),c\*\*\*) |
| LPC 20:4 | 11.5 ± 3.38 | 10.1 ± 3.23 a(\*) | 8.07 ± 2.51b(\*\*\*),c(\*\*\*) |
| SM 16:0 | 119 ± 17.6 | 127.0 ± 22.6 a(\*) | 138 ± 24.1b(\*\*),c(\*\*\*) |
| SM 24:0 | 23.4 ± 4.37 | 25.6 ± 5.31 | 19.8 ± 4.92b(\*\*\*),c(\*\*) |
| SM 24:1 | 55.9 ± 6.81 | 65.7 ± 10.9 a(\*\*\*) | 69.8 ± 12.6b(\*),c(\*\*\*) |
| SM-OH 22:1 | 14.5 ± 2.94 | 16.1 ± 3.37 | 11.5 ± 3.04b(\*\*\*),c(\*\*\*) |