**Table S15**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metabolites [μM/l] | Young | Elderly | Centenarians | Down |
| Mean ± SD | Mean ± SD | Mean ± SD | Mean ± SD |
| Trp | 87.7 ± 15.2 | 80.5 ± 12.7 a(\*) | 71.3 ± 11.5b(\*\*\*),c(\*\*\*) | 78.4 ± 13.5 e(\*\*),f(\*\*) |
| LPC 18:2 | 61.1 ± 13.05 | 39.0 ± 12.4 a(\*\*\*) | 27.6 ± 10.3b(\*\*\*),c\*\*\*) | 34.9 ± 10.1 e(\*\*\*),f(\*\*\*) |
| LPC 20:4 | 11.5 ± 3.38 | 10.0 ± 3.23 a(\*) | 8.07 ± 2.51b(\*\*\*),c(\*\*\*) | 8.48± 2.2 d(\*\*\*),e(\*\*\*) |
| PC32:0 | 9.58 ± 1.68 | 11.2 ± 2.39 a(\*\*) | 12.7 ± 2.39 b(\*\*\*),c(\*\*\*) | 9.32± 2.26 d(\*\*\*),f(\*\*\*) |
| SM 16:0 | 119.1 ± 17.6 | 127.0 ± 22.6 a(\*) | 138.3 ± 24.1b(\*\*),c(\*\*\*) | 109.7±21.3 d(\*\*\*),f(\*\*\*) |
| SM 24:1 | 55.9 ± 6.81 | 65.7 ± 10.9 a(\*\*\*) | 69.9 ± 12.6b(\*),c(\*\*\*) | 55.2±11.8 d(\*\*\*),f(\*\*\*) |