

**Supplementary Table 2.** Correlation of selected inflammatory parameters and PCDAI with fatty acid composition of plasma lipid classes.

| Fatty acid <sup>a</sup> | Phospholipids |        |         | Triacylglycerols |        |          | Cholesteryl esters |        |        |
|-------------------------|---------------|--------|---------|------------------|--------|----------|--------------------|--------|--------|
|                         | FC            | CRP    | PCDAI   | FC               | CRP    | PCDAI    | FC                 | CRP    | PCDAI  |
| 14:0                    | 0.234         | -0.189 | 0.128   | 0.362            | -0.147 | 0.175    | 0.067              | -0.182 | -0.105 |
| 16:0                    | 0.115         | -0.118 | 0.429   | 0.438*           | -0.383 | -0.002   | 0.008              | 0.135  | 0.071  |
| 16:1n-9                 | 0.165         | 0.372  | 0.031   | -0.183           | 0.035  | 0.100    | -0.040             | -0.227 | -0.218 |
| 16:1n-7                 | 0.283         | 0.041  | -0.152  | -0.034           | 0.107  | -0.112   | -0.029             | -0.001 | -0.117 |
| 18:0                    | -0.001        | 0.108  | 0.226   | 0.124            | 0.122  | 0.318    | 0.005              | 0.016  | -0.030 |
| 18:1n-9                 | 0.291         | 0.387  | 0.644** | -0.054           | 0.447  | 0.289    | 0.057              | 0.280  | 0.211  |
| 18:1n-7                 | 0.168         | 0.257  | 0.225   | 0.064            | -0.217 | -0.291   | -0.033             | 0.425  | 0.091  |
| 18:2n-6                 | 0.067         | -0.094 | -0.118  | -0.322           | -0.189 | -0.418   | -0.075             | -0.369 | -0.278 |
| 18:3n-6                 | 0.282         | 0.045  | 0.111   | -0.049           | -0.140 | -0.209   | 0.126              | -0.043 | 0.085  |
| 18:3n-3                 | 0.262         | 0.029  | 0.038   | 0.054            | -0.164 | -0.274   | 0.228              | -0.004 | 0.100  |
| 20:2n-6                 | 0.157         | -0.225 | 0.174   | -0.161           | -0.003 | 0.070    | -0.357             | -0.341 | -0.210 |
| 20:3n-6                 | -0.101        | -0.260 | -0.282  | -0.363           | -0.031 | -0.356   | -0.113             | -0.095 | -0.125 |
| 20:4n-6                 | -0.367        | -0.014 | -0.258  | -0.623**         | 0.003  | -0.248   | 0.068              | 0.155  | 0.270  |
| 20:5n-3                 | -0.052        | -0.142 | -0.477  | -0.189           | 0.054  | -0.409   | 0.254              | 0.109  | 0.273  |
| 22:4n-6                 | 0.119         | -0.027 | -0.029  | -0.364           | 0.072  | -0.346   | -0.321             | -0.408 | -0.358 |
| 22:5n-6                 | 0.279         | -0.271 | -0.253  | -0.365           | -0.171 | -0.644** | -0.273             | -0.353 | -0.323 |
| 22:5n-3                 | 0.144         | 0.112  | -0.138  | -0.296           | 0.132  | -0.385   | -0.244             | -0.202 | -0.241 |
| 22:6n-3                 | 0.063         | 0.024  | -0.369  | -0.160           | -0.088 | -0.584** | -0.198             | -0.173 | -0.115 |
| Σsatur                  | 0.045         | 0.160  | 0.339   | 0.427*           | -0.312 | 0.103    | 0.012              | 0.103  | 0.050  |
| Σmono                   | 0.412         | 0.424* | 0.661** | -0.010           | 0.440  | 0.287    | 0.019              | 0.254  | 0.156  |
| Σn-6                    | -0.338        | -0.317 | -0.459  | -0.448*          | -0.164 | -0.453   | -0.015             | -0.221 | -0.118 |
| Σn-3                    | 0.062         | 0.056  | -0.378  | -0.229           | -0.128 | -0.618** | 0.282              | 0.059  | 0.136  |
| Σn-6/Σn-3               | -0.111        | -0.174 | 0.275   | 0.004            | 0.103  | 0.471    | -0.335             | -0.168 | -0.230 |

Only Crohn's disease (CD) group. Spearman rank correlation coefficients: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001. Σ – Sum, <sup>a/</sup> – shorthand notation of fatty acids- number before colon=number of double bonds; number after n=number of carbon atoms from the methyl end of the chain to the nearest double bond. CRP – C-reactive protein, FC – fecal calprotectin, PCDAI – Paediatric Crohn's Disease Activity Index.