**Supplementary Information**

**SI Table 1.** List of considered polycyclic aromatic hydrocarbons with number of aromatic rings, weight class, and mass to charge ratio used for analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| **Compound** | No of aromatic rings | Weight class | m/z |
| Napthalene |  2 | LMW |  128 |
| Acenaphthylene |  2 | LMW |  152 |
| Acenapthene |  2 | LMW |  154 |
| Flourene |  2 | LMW |  166 |
| Phenanthrene |  3 | MMW |  178 |
| Anthracene |  3 | MMW |  178 |
| Flouranthene |  3 | MMW |  202 |
| Pyrene |  4 | MMW |  202 |
| Benzo(*a*)anthracene |  4 | MMW |  202 |
| Chrysene |  4 | MMW |  228 |
| Retene |  3 | MMW |  234 |
| Benzo(*b*)fluoranthene |  4 | HMW |  252 |
| Benzo(*k*)fluoranthene |  4 | HMW |  252 |
| Benzo(*e*)pyrene |  5 | HMW |  252 |
| Benzo(*a*)pyrene |  5 | HMW |  252 |
| Perylene |  5 | HMW |  252 |
| Benzo(*ghi*)perylene |  6 | HMW |  276 |
| Indeno(1,2,3-*cd)*pyrene |  5 | HMW |  276 |
| Dibenzo(*ah)*antracene |  5 | HMW |  278 |

**SI Table 2.** List of considered sterols with chemical classification and mass to charge quantification (qualification) ratio used for analysis.

|  |  |  |
| --- | --- | --- |
| **Compound** | Classification | m/z |
| Coprostanol | 5β-stanol |  215 (370) |
| Epi-coprostanol | epi-5β-stanol |  215 (370) |
| Cholesterol | Δ5-sterol |  368 (370) |
| Cholestanol | 5α-stanol |  355 (460) |
| Sitosterol | Δ5-sterol |  396 (215) |
| Sitostanol | 5α-stanol |  473 (215) |