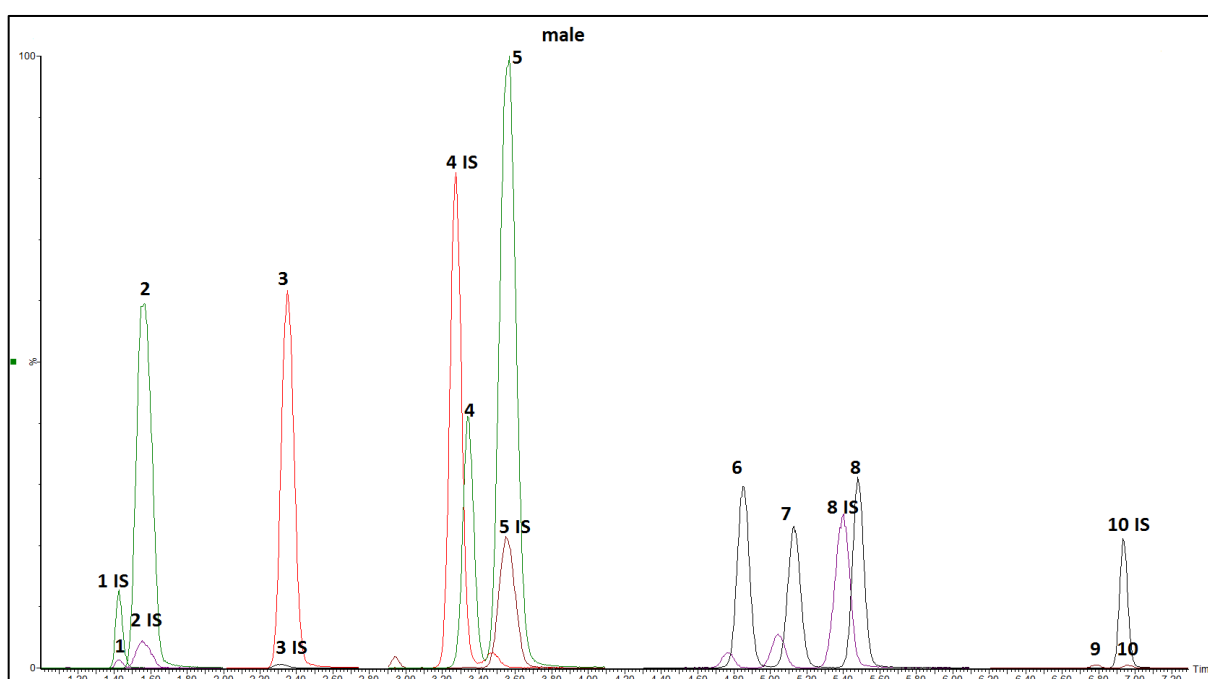
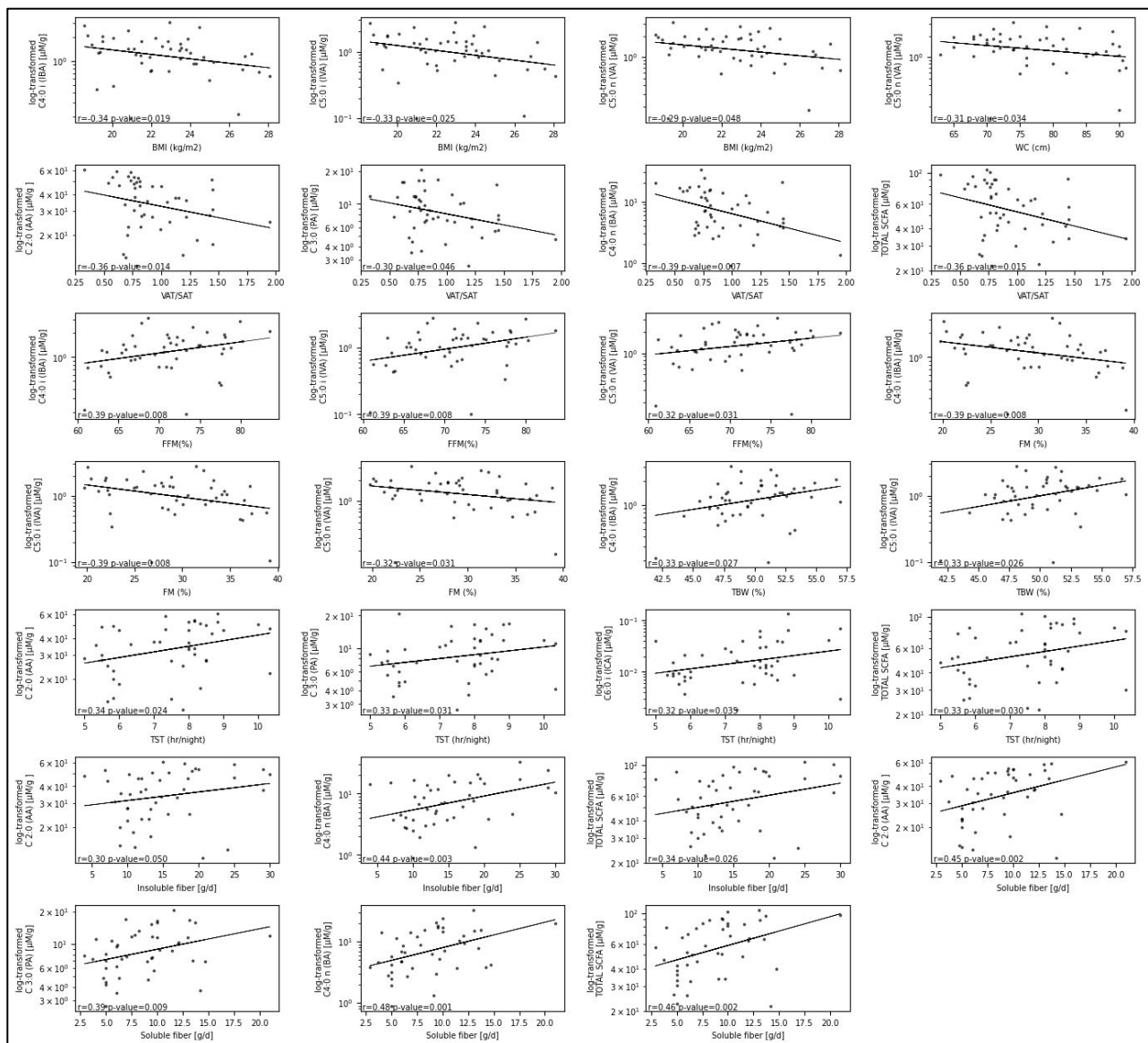


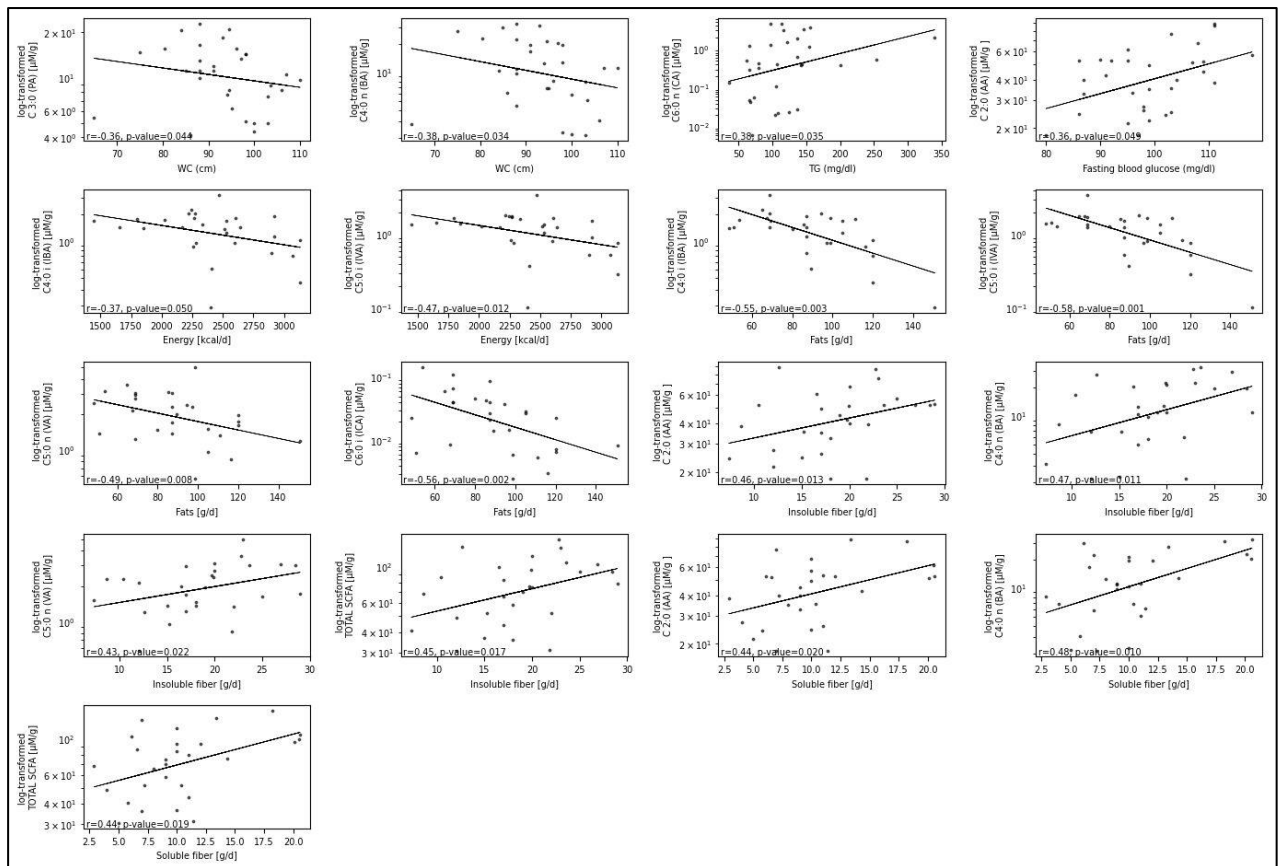
Supplementary Figure S1. Chromatograms of SCFAs and their internal standards (IS) of a representative fecal sample – females. **2** - C 2:0—acetic acid (AA), **3**- C 3:0—propionic acid (PA), **4** - C 4:0 i— isobutyric acid (IBA), **5** - C 4:0 n butyric acid (BA), **7** - C 5:0 i— isovaleric acid (IVA), **8** - C 5:0 n—valeric acid (VA), **9** - C 6:0 i— isocaproic acid (ICA), **10** - C 6:0 n—caproic acid (CA). **1** and **6** – data not analyzed in this study.



Supplementary Figure S2. Chromatograms of SCFAs and their internal standards (IS) of a representative fecal sample – males. **2** - C 2:0—acetic acid (AA), **3**- C 3:0—propionic acid (PA), **4** - C 4:0 i— isobutyric acid (IBA), **5** - C 4:0 n butyric acid (BA), **7** - C 5:0 i— isovaleric acid (IVA), **8** - C 5:0 n—valeric acid (VA), **9** - C 6:0 i— isocaproic acid (ICA), **10** - C 6:0 n—caproic acid (CA). **1** and **6** – data not analyzed in this study.



Supplementary Figure S3. Scatter plots of statistically significant correlations of anthropometric, biochemical, and lifestyle parameters and fecal SCFAs – females.



Supplementary Figure S4. Scatter plots of statistically significant correlations of anthropometric, biochemical, and lifestyle parameters and fecal SCFAs – males