

### **Supplementary data**

**Table S1.** Intraday (repeatability) and interday (reproducibility) precision for the urine matrix.

Analyte	Repeatability (%RSD* n=5)	Reproducibility (%RSD n=3)
ARG	4.2	6.5
AGM	3.5	8.8
N-AcDAP	6.2	11.2
N-AcPUT	9.0	9.1
GABA	4.8	19.2
N1,N8-DiAcSPD	5.6	7.1
N1-AcIsoPUTR	15.5	19.2
N-AcCAD	5.5	4.5
ORN	5.6	16.2
N1,N12-DiAcSPM	4.1	14.2
LYS	3.7	6.1
N1-AcSPD	5.8	17.4
N8-AcSPD	4.9	15.6
1,3-DAP	8.0	16.7
PUT	4.7	6.4
CAD	8.8	10.7
N1-AcSPM	11.2	16.2
SPD	3.2	5.2
SPM	6.9	5.7

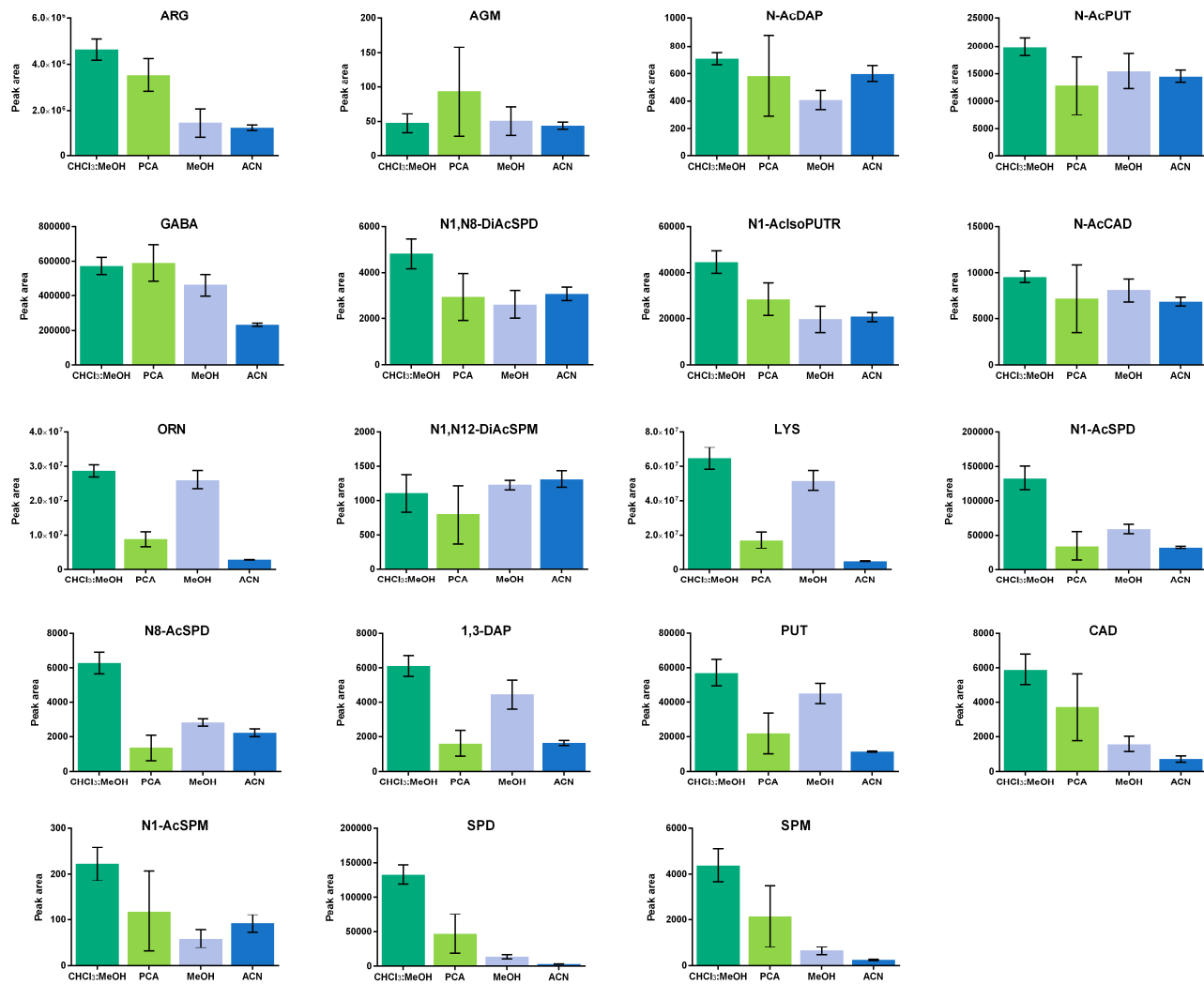
\*Relative standard deviation (RSD)

**Table S2.** Clinical characteristics of the participants included in the analysis.

	Average (SD*)
Age, years	65.5 (4.1)
BMI, mg/kg <sup>2</sup>	32.6 (3.2)
Systolic blood pressure, mm Hg	137.7 (14.7)
Diastolic blood pressure, mm Hg	75.6 (8.6)
Glucose, mg/dL	99.1 (7.4)
HbA1c, %	5.7 (0.3)
Total cholesterol, mg/dL	200.4 (32.2)
HDL-cholesterol, mg/dL	50.2 (11.2)
LDL-cholesterol, mg/dL	120.6 (28.2)
Triglycerides, mg/dL	148.0 (29.8)

\* Standard deviation (SD).

**Figure S1.** Comparison of the response and its variability for each extraction method assessed in serum samples.



**Figure S2.** Scatter dot plot representations of the polyamine levels in the male and female groups. In all the cases represented, there were significant differences in the levels between the study groups ( $p = 0.05$ ).

