



Assessment of disease risk
by targeted metabolomics

Supplementary data on method for analysis of Creatine (Crn)

Method based on article

Midttun et al (2013), PMID 23232958.

Material

Creatine (purity 99,5%) was obtained from CHEM SERVICE, West Chester, PA, USA. Creatine-(methyl-d3) monohydrate (98%) was obtained from Sigma-Aldrich, St. Louis, USA.

Instrumentation

Same as in PMID 23232958.

Chromatography and detection

LC-MS/MS; positive-ion multiple reaction monitoring (MRM);
retention time = 2.2 min.

Crn precursor ion = 132 m/z; product ion = 89 m/z. Crn-d3 precursor ion = 135 m/z; product ion = 92 m/z.

Method performance

Linear range: 0.5 - 1000 $\mu\text{mol/L}$.

Linearity: r^2 : 0.99.

LOD (S/N >5): 1.0 $\mu\text{mol/L}$.

Within-day CV: 3-5 %.

Between-day CV: 3-5 %.