Assessment of disease risk
by targeted metabolomics

Supplementary data on method for analysis of 2-Hydroxybutyrate (aHB).

Method based on article
Midttun et al (2016), PMID 27715010.

Material
2-Hydroxybutyrate (purity 97%) was obtained from Sigma-Aldrich, St.Louis, MO 63103 USA or 89555 Steinheim Germany.
2-Hydroxybutyrate-d3 (purity 98%) was obtained from C/D/N Isotopes Inc., 88 Leacock Street Pointe-Claire, Quebec, Canada.

Instrumentation
Agilent 7010B GC/TQ and Agilent 8890 GC System.

Chromatography and detection
GC-MS/MS; positive-ion multiple reaction monitoring (MRM); retention time = 2.86 min.
2-Hydroxybutyrate precursor ion = 145.0 m/z; product ion = 73.0 m/z.
2-Hydroxybutyrate-d3 precursor ion = 148.0 m/z; product ion = 76.0 m/z.

Method performance
Linear range: 1 - 1000 µmol/L.
Linearity: r2: 0.996.
LOD (S/N >5): 1 µmol/L.
Within-day CV: 2-4 %.
Between-day CV: 2-4 %.