**NMR Metabolomics Method Green Tea Samples**

Contents of each green tea capsule (~25 mg) were transferred into labeled Eppendorf tubes and dissolved in DMSO-d6 (containing 1 mM 3-​(Trimethylsilyl)​propionic-​2,2,3,3-​d4 acid sodium salt [TSP]) to a final concentration of 25 mg/ mL of green tea extract. The DMSO extracts were vortexed for 30 min on the multi-tube vortexer at speed 5,000 rpm. Samples were centrifuged at room temperature and at 16,000 rcf for 10 min and the supernatants were transferred into pre-labeled Eppendorf tubes. Aliquots (200 µL) of supernatants of each study samples were combined to prepare the combined pooled samples. An aliquot of 600 µL of each sample (study and pooled) was transferred into 5 mm (4 inch) NMR tubes (Bruker-Biospin, Switzerland).

1H NMR spectra of green tea extract samples were acquired on a Bruker Avance III 700 MHz NMR spectrometer (located at the David H. Murdock Research Institute at Kannapolis, NC, USA) using a 5 mm cryogenically cooled ATMA inverse probe and ambient temperature of 25℃. A CPMG pulse sequence (cpmg1d) was used for data acquisition. For each sample 64 transients were collected into 64k data points using a spectral width of 8.42 kHz (12.0 ppm), 8 s relaxation delay, and an acquisition time of 3.893 s per FID. Spectra were zero filled, and Fourier transformed after exponential multiplication with line broadening factor of 0.5. Phase and baseline of the spectra were manually corrected for each spectrum. Spectra were referenced internally to the TSP signal. The quality of each NMR spectrum was assessed for the level of noise and alignment of identified markers. Spectra were assessed for missing data and underwent quality checks.

NMR spectra were pre-processed using ACD 1D NMR Processor 12.0 (ACD Labs, Toronto, CA) for metabolomics analysis. NMR bins (0.20 – 10.00 ppm) were made after excluding DMSO-d6 (2.50 – 2.54 ppm) using intelligent binning width of 0.04 ppm and 50% looseness factor. Integrals of each of the bins were normalized to total integral of each of the spectrum.