

Results

3.1 Sampling

Samples were receipted into the laboratory by logging into the Fera Laboratory Information Management System (LIMS). Each sample was assigned a unique number. Sample details are given in Table 1.

3.2 Trace element analysis

The concentrations of the elements determined in the samples are provided in Table 2. Quality assurance data is provided in Annex 1.

3.3 Curcumin, bisdemethoxycurcumin and demethoxycurcumin method development and validation

Method performance data is provided in Annex 2.

3.4 Curcumin, bisdemethoxycurcumin and demethoxycurcumin analysis

The concentrations of curcumin, bisdemethoxycurcumin and demethoxycurcumin determined in the samples are provided in Table 3. Concentrations are reported in units of mg/kg as received for the fresh, ground and supplements in tablet form. For the supplement capsules the powder was removed from the capsule and tested and so the concentrations are reported in units of mg/kg of the powder content. The mass of the powder in the capsule is also provided, as well as the mass of the tablet for those in tablet form. For the lyophilised fresh samples both the dry weight concentration and the equivalent wet weight concentrations have been reported.

3.5 Piperine method development and validation

Method performance data is provided in Annex 3.

3.6 Piperine analysis

The concentrations of piperine determined in the samples are provided in Table 4.

Concentrations are reported in units of mg/kg as received for the fresh, ground and supplements in tablet form. For the supplement capsules the powder was removed from the capsule and tested and so the concentrations are reported in units of mg/kg of the powder content. The mass of the powder in the capsule is also provided, as well as the mass of the tablet for those in tablet form. Samples TU06, TU07 TU12, TU17, TU21 and TU30 contained levels above the calibration range and were diluted 10 fold to obtain quantitative data.