**SDC 2**

**Full details of MRI procedures.** The reliability of muscle volume measurements for the medial gastrocnemius (MG) obtained using the 3D ultrasound technique has previously been validated against MRI (2). Nevertheless, no study has reported the accuracy of this measurement for the whole triceps surae muscle group or the lateral gastrocnemius (LG) and soleus (SOL) muscles. We therefore conducted comparisons between our ultrasound volume measurements and those obtained from axial plane MRI scans of the lower leg in a subsample (n=6) of control subjects that were able to undergo this form of imaging. During the scan, subjects were lying in a supine position with ankle and knee joint at 0° and 10°, respectively, by means of plastic splint so as to match the water bath condition. MRI images were collected using a Magnetom Espree 1.5T scanner (Siemens, Erlangen, Germany) with a turbo spin echo pulse sequence of 697 ms repetition time, 11 ms time to echo, 148 Hz receiver bandwidth, 384x288 voxel image matrix and a 5 mm slice thickness. A total of 90-120 slices were taken for each subject depending on leg length to allow full anatomical coverage from just proximal of the patella to the Achilles tendon insertion on the calcaneous. MRI images were subsequently imported and analyzed directly in Mimics 8.11 (Mimics, Materialise, Ann Arbor, MI, USA); the segmentation process was conducted by a single investigator (FAP).