

Bone Equivalent Materials - CaHA

For the HU vs. CaHA calibrations with respect to Bone Mineral Densitometry evaluation of bones and to mimic real human bone with respect to its physical X-ray attenuation properties

Calcium Hydroxyapatite (CaHA) is the basic component of human bone (65 - 70% CaHA).

It is predestinated for the following applications:

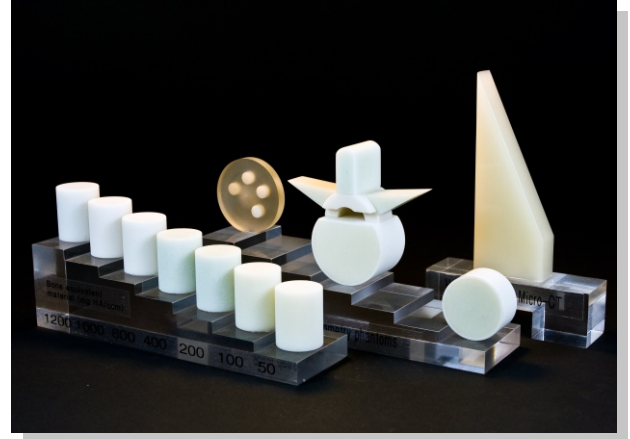
- bone mineral density calibration
- bone density measurements
- bone (spine, hip, etc.) in anthropomorphic phantoms
- Ca-plugs and stenosis in coronary arteries
- high attenuating spheres.

CTwater (a water equivalent plastic) is the basic material which is mixed with the specific fraction of CaHA. Different concentrations (bone mineral densities) of CaHA are available.

Application range of QRM-Bone:

- bone calibration
- bone density measurements
- bone (spine, hip, etc.) in anthropomorphic phantoms
- Ca-plugs and stenosis in coronary arteries
- high attenuating spheres
- and many others

The basic material (which is mixed with the specific fraction of CaHA) is available as CTWater®, tissue equivalent, or fat. Many densities of CaHA (or specified CT-values HU) are available upon request.



Choice of QRM-Bone samples



QRM-Bone in the Bone Calibration Phantom



Bone equivalent inserts in the QRM-MicroCT Mouse Phantom