IASMS
International Association of Sciences in Medicine and Sports

COURSES on STANDARDISED ULTRASOUND METHOD (SUM) of SUBCUTANEOUS ADIPOSE TISSUE (SAT)

Recommended preparation: Müller W. et al. *Subcutaneous fat patterning in athletes: selection of appropriate sites and standardisation of a novel ultrasound technique.* Br J Sports Med 2016;50:45-54 (including appendix).

Goals of the course parts:

Basic SUM Course (First day):

Accuracy and reliability obtainable with SUM, compared to other methods
Marking of the eight standardised sites for US measurements of SAT
Getting started with the US system
US measurement technique for measuring SAT
Image evaluations (*NISOS-BCA 5.0 Software*) of US measurement series
Questions and discussion

Basic SUM Course (Second day):

Marking exercises and anthropometric data collection
Image capturing and appropriate setting of the B-mode ultrasound system
Capturing of US image series (two test persons, eight sites each)
US image evaluations of the US image series
Comparison of results (inter-observer comparisons, elimination of errors)
Competency check
Questions and discussion

Advanced SUM Course, Part 1 (Third Day):

SUM measurements of several test persons: marking, image capturing, and image evaluations
Comparison of results (inter-observer comparisons, elimination of errors)
Usage of all features of the *NISOS-BCA 5.0 Software*: data export and import modes, anonymous fsc- and pdf files, image formats, adding and correcting meta-data.
Direct measurement results, estimated values, SAT patterning
Competency check
SAT and body weight as health and performance factors
Optimisation of physical performance
Body composition - physical activity - nutrition (bio-energetics)
Anthropometric variables and indices as performance factors
Discussion of SUM study designs for lab and field
Possible applications to various groups of customers
General discussion

Advanced SUM Course, Part 2 (Post-course Training):

(The software NISOS-BCA-120 for the post-course training is included in the course fee).
SUM measurement of 8 persons
The fsc- and pdf-files obtained will be checked by the course leader.
Feedback and discussion

Certificates issued by IASMS: Basic SUM course
Advanced SUM course

On behalf of the *IASMS* team
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