

# **ASSESSMENT OF ADIPOSITY & ITS DISTRIBUTION USING ANTHROPOMETRIC MEASUREMENTS**

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Available data from epidemiological studies indicate that as compared to Caucasians Indian have higher body fat for a given BMI.

The tendency for higher adiposity begins right from infancy and childhood.

Both amount and distribution of the adipose tissue have been shown to influence the risk of cardiovascular diseases.

This has led to increasing attention being paid to the assessment of fat mass and its distribution.

Circumferential measurements (mid-arm circumference, waist and hip circumferences and waist hip ratio computation) are easy to take and provide excellent information about distribution of body fat.

Measurement of fat fold thickness (triceps, biceps, supra-iliac and sub-scapular fat folds measured using Harpenden's calipers) provide excellent information for assessment of fat mass and its distribution.

However fat fold thickness measurement requires a trained and skilled person and this has come in the way of widespread use of this relatively simple technique for assessment of fat mass.

# MEASUREMENT OF FAT FOLD THICKNESS

**Specifications for calipers for measuring fat fold thickness**

**Dial graduation: 0.20 mm**

**Range of measurements: 0-80 mm**

**Measuring pressure: 10 g/mm<sup>2</sup>**

**Accuracy: 99 %**

**Repeatability: 0.20 mm**





Skin Fold Caliper  
Harpenden type  
SFCG-45



**Check for 0 error**  
**Check for accuracy of measurement of fat-fold thickness against a standard fat-fold thickness measurement calipers**





**FFT measurement in an over-weight girl**



**FFT measurement in a thin girl**



**Measurement of fat-fold thickness in adipose persons are difficult. Lifting the thick fat-fold off the underlying fascia does cause some pain**

Measurement of fat-fold thickness in older persons is easier because the fat-fold can easily be lifted off the underlying fascia.

The fat-fold should never be lifted off from below.

