

How to use.....Skinfold Calipers



When taking measurements, do not allow the calipers to snap shut onto the test subject, as this could cause discomfort and cause damage to the indicator mechanism.

- Measurement should be taken on dry skin. Moist skin is harder to grasp and can influence the measurement.
- Instruct the test subject to keep muscles relaxed during the test.
- Take all measurements on the right side of the body. An exception might be where a deformity or missing limb would necessitate using the left side.
- Mark the skin fold site using a pen. Use a tape measure to accurately find the mid points.
- The skin fold should be firmly grasped by the thumb and index finger, using the pads at the tip of the thumb and finger. Gently pull skin fold away from the body.
- The calipers should be placed perpendicular to the fold on the site marked, dial up, at approximately 1cm below the finger and thumb. While maintaining the grasp of the skin fold. Try to visualise the location of a true double fold of skin thickness, and place calipers there.
- A minimum of two measurements should be taken at each site. If repeated tests vary by more than 1mm, repeat the measurement. If consecutive measurements become increasingly smaller, the fat is being compressed. Go to another site, come and test the site a little later.
- The final value recorded should be the average of the two that seems to best represent the skinfold site.

1. Sum the skin fold measures in mm.

2. Refer to Body Fat % V Skin fold Thickness Table:

Males -<http://www.assist.co.uk/harpenden/HPSection3b.htm>

Females <http://www.assist.co.uk/harpenden/HPSection3c.htm>

MALES: DESIRABLE BODY FAT %		FEMALES: DESIRABLE BODY FAT %	
UP TO 24 YEARS	15%	UP TO 20 YEARS	17%
25 - 27 YEARS	17%	20 - 22 YEARS	18%
28 - 29 YEARS	18%	23 - 25 YEARS	19%
30 - 32 YEARS	19%	25 - 29 YEARS	20%
33 - 39 YEARS	20%	OVER 30 YEARS	22%
OVER 40 YEARS	21%		

Skinfold Sites

Site 1 Biceps



Landmark

At the level of the mid-point between the acromiale (lateral edge of the acromial process, e.g. bony tip of shoulder) and the radiale (proximal and lateral border of the radius bone, approximately the elbow joint), on the mid-line of the anterior (front) surface of the arm (over the biceps muscle).



Pinch

The arm should be relaxed with the palm of the hand facing forwards. A vertical pinch, parallel to the long axis of the arm, is made at the landmark.

Site 2 Triceps



Landmark

At the level of the mid-point between the acromiale (lateral edge of the acromial process, e.g. bony tip of shoulder) and the radiale (proximal and lateral border of the radius bone, approximately the elbow joint), on the mid-line of the posterior (back) surface of the arm (over the triceps muscle).



Pinch

The arm should be relaxed with the palm of the hand facing forwards. A vertical pinch, parallel to the long axis of the arm, is made at the landmark.

Site 3 Subscapular



Landmark

The lower angle of the scapula (bottom point of shoulder blade) If there is difficulty finding this landmark, get the subject to reach behind their back with their right arm, while feeling for the movement of the scapula



Pinch

The pinch is made following the natural fold of the skin, approximately on a line running laterally (away from the body) and downwards (at about 45 degrees).

Site 4 Suprailiac



Landmark

The intersection of a line joining the spine (front part of iliac crest) and the anterior (front) part of the axilla (armpit), and a horizontal line at the level of the iliac crest.



Pinch

The pinch is directed medially (towards the centreline) and downward, following the natural fold of the skin (at an approximate angle of 45 degrees).

Skin fold Measurement Analysis