

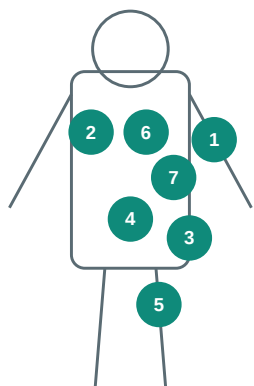
Skinfold Body Fat Testing Guide

7-site protocol, reading technique, and testing log

ISAANSPORT

isaansport.com
Sports Science Testing Equipment

1. The 7 Standard Sites



1. Triceps - vertical fold, back of upper arm, midpoint.
2. Subscapular - diagonal fold, below the shoulder blade.
3. Suprailiac - diagonal fold, just above the hip bone.
4. Abdominal - vertical fold, 2cm beside the navel.
5. Thigh - vertical fold, front of thigh, midpoint.
6. Chest - diagonal fold, between armpit and nipple.
7. Midaxillary - vertical fold, mid-armpit, sternum level.

3. Body Fat % Reference (ACE)

Category	Women	Men
Essential Fat	10-13%	2-5%
Athletes	14-20%	6-13%
Fitness	21-24%	14-17%
Acceptable	25-31%	18-24%
Obese	32%+	25%+

Source: American Council on Exercise (ACE) body fat percentage norms.

2. How to Take a Reading

- 1 Pinch the site**
Grasp a fold of skin and fat firmly, 1cm above the site. Pull it away from the muscle.
- 2 Place the caliper**
Apply the jaws at the marked site, perpendicular to the fold, about 1cm below your fingers.
- 3 Read after 2 seconds**
Let the caliper settle for 2 seconds, then read to the nearest 0.5mm.
- 4 Repeat 2-3 times**
Take 2 readings per site. If they differ by over 1mm, take a third and average.
- 5 Always measure right side**
For consistency, measure the right side of the body unless told otherwise.
- 6 Sum the sites**
Add all 7 measurements together and log the total, or apply your body-fat formula.

Tip

These are general population norms. Athlete populations often run lower. Track change over time for the same person rather than comparing across individuals.

4. Testing Log

Site	Test 1 (mm)	Test 2 (mm)	Test 3 (mm)
1. Triceps			
2. Subscapular			
3. Suprailiac			
4. Abdominal			
5. Thigh			
6. Chest			
7. Midaxillary			
Sum of skinfolds			
Body fat %			

5. Estimating Body Fat % (Jackson-Pollock 7-Site)

S = sum of all 7 skinfolds (mm) A = age in years
Men: Body Density = $1.112 - 0.00043499(S) + 0.00000055(S^2) - 0.00028826(A)$
Women: Body Density = $1.097 - 0.00046971(S) + 0.00000056(S^2) - 0.00012828(A)$
Then: Body Fat % = $(495 / \text{Body Density}) - 450$ (Siri equation)
Tip: the squared term is easiest with a calculator or spreadsheet.