

Supplement

Anthropometric measurements

Patients' height and weight were measured with stadiometry in terms of meters (m) and kilograms (kg), respectively. Body mass index (BMI) was calculated with the following formula:

$$\text{BMI} = \text{weight}/(\text{height})^2 \text{ (kg/m}^2\text{)}$$

And, mid-arm muscle circumference (MAMC) was calculated using mid-arm circumference (MAC) and triceps skinfold thickness (SFT).^[10]

$$\text{MAMC (cm)} = \text{MAC (cm)} - \pi \text{ triceps skinfold (cm)}$$

Anthropometric measurements were done with a fiberglass flexible measuring tape. MAC was measured at the midpoint between acromion of humerus and olecranon of the nondominant arm or opposite arm of arteriovenous fistula. SFT of triceps, biceps, subscapular, and suprailiac regions was measured with Skinfold Caliper. For SFT measurements, skin and subcutaneous tissue were lifted away from the muscular tissue by the first and the second digits; then, the ends of the caliper was pressed slightly and the distance between the ends read. Measurements were made vertically at the lateral face of the upper arm (at the midpoint between acromion and olecranon) on biceps muscle for biceps SFT; vertically on triceps muscle for triceps SFT; diagonally at the lower edge of scapula for subscapular SFT; and diagonally just above iliac crest at midaxillary line for suprailiac SFT in terms of millimeters.

Total body fat percentage

Durnin–Womersley formulas^[10] were used to determine body density using triceps, biceps, subscapular, suprailiac

SFTs. Then, total body fat percentage was calculated with Siri equation^[11] using body density.

Durnin-womersley formulas

$$\text{Male} = 1.1610 - (0.0632 \times [\text{LOG}_{10} (\text{triceps} + \text{biceps} + \text{subscapular} + \text{suprailiac SFT})])$$

$$\text{Female} = 1.1581 - (0.0720 \times [\text{LOG}_{10} (\text{triceps} + \text{biceps} + \text{subscapular} + \text{suprailiac SFT})])$$

Siri equation

$$\text{Total body fat percentage} = (4.95/\text{density} - 4.50) \times 100$$

Total body fat was estimated from percentage of body fat and body weight.

$$\text{Lean body mass (LBM)} = \text{Body weight} - \text{fat body weight}$$

$$\text{Lean BMI (LBMI)} = \text{LBM}/(\text{height in meter})^2$$

The calculation was done on free online available software for male, i.e., <http://www.unit-conversion.info/othertools/durnin-womersley-mens-percent-body-fat/#data> and for female, i.e., <http://www.unit-conversion.info/othertools/durnin-womersley-womens-percent-body-fat/#data>.

Subjective global assessment

Because of its strengths, subjective global assessment (SGA) has been recommended by the National Kidney Foundation Kidney Disease/Dialysis Outcomes and Quality Initiative for use in nutritional assessment in the adult dialysis population. We used 7-point scale SGA form in our study.^[12]