Body Composition Quality vs. Quantity

By John M. Reilly

What is body composition?

Fat free mass compared to fat mass

What is fat-free mass?

The part of the body that represents everything but fat including blood, bones, connective tissue, organs and muscle; it is synonymous with lean body mass.

• Hydrostatic weighing — or underwater weighing is considered the "gold standard" for assessing body composition. Although very accurate, this method is often impractical in terms of expense, time and equipment.

• Anthropometric measures are perhaps the easiest and least expensive method for assessing body composition. This information is obtained using skin fold calipers, but requires training and practice to be consistent.

Body Mass Index — can be useful in estimating body composition by utilizing this formula:

BMI = Weight (kg)/Height(squared)(m)

• Bioelectrical impedance is a popular method for determining body composition. This method is fast and easy and requires very little training.

