Activity: Body Composition

Introduction

In the lecture, you learned about the various methods available to assess body composition. A review of those methods can be found in Sports Science Exchange #145. Most of these methods are expensive, technical, or uncomfortable for the person being measured. Many, if not most, professional sports teams and elite colleges have a DEXA or Bod Pod, but this equipment is not widely available. A technology that is now becoming more common in gyms is bioelectric impedance (BIA) since it is less costly, not technical to use, quick and easy for the individual.

There are a few different types of BIA devices, either scales to stand on with bare feet, handheld devices, or a combination of a scale with hand sensors. In all of these, an electrical current is sent through the body. Body composition is estimated based on the impedance, or how the current is conducted through the body. Muscle contains more water and therefore is more conductive than fat tissue.

Scenario

You are the owner of a fitness facility and are planning to offer body composition testing via BIA for your clients. Create a one-page flyer with brief information explaining the BIA test and instructions for users to make the test as accurate as possible. Be sure to include information on when to eat before the test, hydration status, timing of the test in relation to exercise, and the approximate amount of time it takes to complete the test. Also include some general information on what the results mean and why an individual might want to do this assessment.