

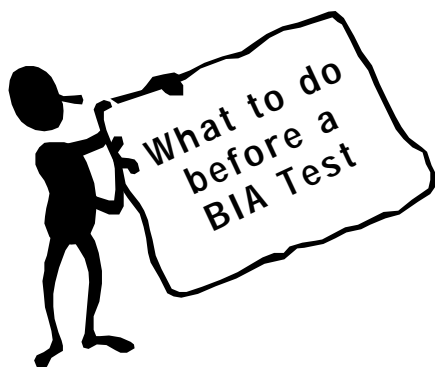


HIGHLIGHTS: Bioelectrical Impedance Analysis (BIA)



This fact sheet is about bioelectrical impedance analysis (BIA). Learning about the body's muscle and fat helps to tell us more about weight changes. BIA is a fast way to guess how much body muscle and fat we have. BIA, height, weight, and other body changes help to assess weight changes.

BIA is the most helpful when it is done on a regular basis. A BIA machine helps to measure muscle loss or gain. Ask a health care provider for the name of a person that does BIA tests. It is important to have later tests done by the same person. This helps to track body changes such as muscle loss or fat gain better.



Limit activities that can cause you to lose a lot of body fluid. At least eight hours before the BIA test **do not:**

- drink a lot of beverages with caffeine
- exercise so much that it causes you to sweat a lot
- put lotion, oil, or petroleum jelly on your hands, wrists, feet, or ankles
- use things such as diuretics that act like caffeine to increase fluid loss

What should I tell the person doing the BIA?

There are a few things to tell the person doing the BIA. Tell them if you:

- sweat a lot
- urinate a lot, have diarrhea, or are vomiting
- have a pacemaker, automatic implanted cardiac defibrillator, or other metal in your body

What will happen when I get a BIA?

- The test takes less than five minutes to do.
- Height and weight will be measured.
- You will lay on your back on a flat surface. Legs and arms need to be slightly apart. They should not touch each other.
- Things called electrodes will be put on one hand and one foot. The electrodes usually go on the right side of the body.
- You will move jewelry to at least one inch away from the electrodes.





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What are the readings that the BIA takes?

BIA readings show how the body resists and reacts to electrical current. People do not feel the current. Phase angle is also a measure of BIA. It does not indicate overall health. The phase angle changes as body cells change. Body cells are active tissue such as muscles, organs, and body fat.

Who should I share my BIA results with?



Share BIA results with health care providers. This helps to meet your health goals. See a health care provider at least twice a year. A nutritionist can help to design a healthy meal plan.

BIA Tips Review

1. Ask a health care provider for the name of a person that does a lot of BIA tests. Eight hours before the BIA:

- limit activities that greatly change body fluid levels
- do not put lotion, oil, or petroleum jelly on your hands, wrists, feet, or ankles

2. Tell the person doing the BIA if you:

- have lost a lot of body fluid that day
- have a pacemaker, automatic implanted cardiac defibrillator, or other metal in your body

3. Share BIA results with health care providers.

Treatment goals are based on many things.

- BIA test results
- Blood test results
- Eating habits
- Medical history
- Medication history
- Alcohol and illegal drug use

Note: This information is to help people learn about BIA. The information is current as of March 2005. It is not medical, fitness, dietetic, or professional advice. Ask a health care provider about the things in this fact sheet.