Bod Pod GS-X testing

WHAT IS A BOD POD TEST?

The BOD POD GS-X is an air displacement plethysmography that uses whole-body densitometry to determine body composition (ratio of body fat and fat-free mass). It is considered the gold-standard for body composition testing.

Fat mass consists of all the adipose tissue (fat) within your body. Lean mass consists of bone, bodily fluid (blood), organs, and skeletal muscle. The BOD POD test provides results of these two categories expressed as percentages of total body mass.

Testing is highly accurate, safe, and quick, with a complete analysis in about 10-minutes. It provides excellent repeatability and tracking.

It’s easy and appropriate for many types of people, including the obese, disabled, elderly, and children.

WHY IS IT OF VALUE?
Bod Pod testing is great for anyone who is interested in:

- Making informed decisions about their health
- Changing their body composition
- Tracking fitness improvements

WHAT TO EXPECT

- All testing is done by 30-minute appointment. Please email andrew.denys@csueastbay.edu or call (510) 885-3444 to schedule your test.
- Special clothing is necessary. Women need to bring a swimsuit or form fitting shorts and a sports bra. Men need to bring a speedo or form fitting shorts.
- No food, drink or exercise at least 3 hours prior to testing.
- Don't drink coffee 4-5 hours prior to your test
- Don't smoke or drink alcohol 2 hours prior to your test
- Don't participate in vigorous/high intensity weight training 12 hours prior
- The subject sits comfortably inside the BOD POD for 2-3 50-second testing periods.
- Results are available immediately.
- Kinesiologist tester will help to explain and interpret results

Body composition testing may feel uncomfortable for the parties involved. We strive to create an atmosphere in which our participants feel respected and at ease by refraining from inappropriate
comments and behaviors. By entering our space, you are also agreeing to meet this expectation. Failure to do so may result in cessation of the testing session.

Frequently Asked Questions

How does the BOD POD compare with other body fat assessment techniques?

Body composition measurements from the BOD POD have been found to be equivalent (no statistically significant difference) to those obtained using 4-compartment model reference techniques. The BOD POD is also referred to as the “Practical Gold Standard” because testing is so easy and offers excellent repeatability.

How does the BOD POD measure body composition?

The BOD POD Body Composition Tracking System uses patented Air Displacement Plethysmography for determining percent fat and fat-free mass in adults and children. The simple, 10-minute test consists of measuring the subject’s mass (weight) using a very accurate electronic scale, and volume, which is determined by sitting inside the BOD POD chamber. From these two measurements, the subject's body composition is calculated.

The BOD POD consists of two chambers. The front, or Test Chamber, is where the subject sits and is comprised of a seat that forms a common wall separating it from the rear, or Reference Chamber. During the brief data collection period of the volume measurement, the chamber door is secured by a series of electromagnets and a gasket. A Diaphragm is mounted on the common wall, which oscillates during testing. This causes small changes in volume inside the
chamber, of which the pressure response to these small volume changes is measured. This is done by measuring the interior volume of the empty BOD POD chamber, then measuring it again when the subject is seated inside. By subtraction, the subject’s body volume is obtained. For example, if the interior air volume of the empty chamber is 500 liters, and the volume of the chamber is reduced to 450 liters with the subject inside, the body volume of the subject would be 50 liters.

Once the subject's mass and volume are determined, body density is calculated and the relative proportions of fat and fat-free mass are determined.

**How long does a BOD POD test take?**

A complete test, including printed results, takes about 10 minutes. We schedule 30-minute appointments to allow for paperwork and explanation of results.

**Will the BOD POD accommodate larger individuals?**

The BOD POD GS-X is designed to accommodate a wide variety of human shapes and sizes. The BOD POD can accommodate subjects up to 7 feet tall and 550 pounds.

**Do clothing and/or hair affect BOD POD results?**

Clothing, hair, jewelry, and eyeglasses can have a significant impact on the volume and mass measurements performed during a BOD POD test. Therefore, it is EXTREMELY IMPORTANT that all subjects tested in the BOD POD remove all jewelry and eyeglasses, and wear minimal, form-fitting clothing such as a Spandex® swimsuit during testing. Single-layer compression shorts and/or lightweight jog bras are also acceptable clothing (without padding or wires).
A swim cap will be provided and must also be worn to compress any air pockets within the hair.

**Do masks affect BOD POD results?**

COSMED has found the effect of wearing a surgical face mask on BOD POD % Fat measurements to be negligible. Therefore, it is acceptable for surgical face masks to be worn during BOD POD testing.

**What should I expect during a BOD POD test?**

Participant compliance for testing in the BOD POD is very simple. You need only to sit comfortably and quietly inside the BOD POD for the brief measurement period (no talking). Sounds relating to valves opening and closing may be heard, but most people are unaware of the slight pressure changes that take place during a BOD POD test.

**Can subjects be tested in the BOD POD right after exercising or eating?**

No. Subjects should wait at least two hours after exercising or eating, and always be in a completely relaxed state (normal breathing) when testing in the BOD POD.

**How do I schedule an appointment?**

Email andrew.denys@csueastbay.edu or call (510) 885-3444 to schedule an appointment.