

# BOD POD

Body Composition Assessment

“Numbers you  
can trust”



The world's gold standard for fast, accurate  
and safe body composition assessment



**COSMED**

The Metabolic Company

“The BOD POD® GS-X is the 4th generation of the world’s first and only Air Displacement Plethysmography (ADP) System using whole-body densitometry to determine body composition in adults and children.”

- I Gold Standard accuracy using whole-body densitometry
- I Two compartment model analysis (Fat and Fat-Free Mass)
- I Safe, non-invasive, and ideally suited for frequent testing
- I Quick test time (less than 5 minutes)
- I Automatic calibration system
- I Exclusive database of body composition references over a wide range of subjects
- I Pediatric Option™ (for children from 2 to 6 years)
- I Thoracic Gas Volume (TGV) option



The BOD POD is the world’s only Air Displacement Plethysmography (ADP) system using whole body densitometric principles to determine body composition (Fat and Fat-Free Mass) in adults and children.

In comparison to other body composition assessment methods, the BOD POD’s Air Displacement Plethysmography has eliminated the invasiveness of Dual Energy X-Ray Absorptiometry (DXA) as well as the difficulties associated with underwater submersion in hydrostatic weighing.

The combination of accuracy, safety and speed has resulted in the BOD POD now being recognized as the practical Gold Standard for body composition assessment from a long list of universities and research centers.

The BOD POD is ideal for assessing the body composition of special populations such as:

- Elderly persons
- People with disabilities
- Subjects weighing up to 250 kg
- Young children from 2 to 6 years with the Pediatric Option™

The BOD POD’s ability to test virtually all populations makes it the most flexible option for frequent testing and longitudinal tracking of body composition changes over time.

## THE BOD POD TECHNOLOGY

**ACCURATE:** Technology validated in over 2,000 published research articles within a diverse range of subjects, since 1995.

**SAFE:** Non-invasive (no radiation) Air Displacement Plethysmography technology.

**QUICK:** Easy assessments in about 5 minutes.

**DURABLE:** The BOD POD is designed for durability over time. An internal diagnostic function analyzes system performance.

**CONNECTED:** OMNIA™ software provides database management activities, networking, communication via HL7® protocol, and integration of BOD POD test data with all COSMED systems and connected devices.



Simple and easy for both subject and operator

## Proven Accuracy

Each BOD POD is a complete turnkey system based on the same operating principles as hydrostatic (underwater) weighing, using whole-body densitometry to determine body composition. This technique relies on a mass measurement from the precise electronic scale and a volume measurement from the test chamber. Once body density (Density = Mass/Volume) is determined, the BOD POD measures or predicts Thoracic Gas Volume (TGV) and uses densitometric equations to calculate percent Fat and Fat-Free Mass.

Since its introduction in 1994, the BOD POD has been used extensively worldwide for a variety of applications in Healthcare, Academic/Research, Performance, Wellness, Nutrition Counseling, Military, and Public Safety.

Over 2,000 published research studies have validated the BOD POD’s accuracy, reliability, and excellent repeatability within a diverse subject range, including athletes, elderly, obese, pregnant women, military and children ([www.cosmed.com/bibliography](http://www.cosmed.com/bibliography)).

Measurements have been found to be equivalent (no statistically significant difference) to those obtained from 4-Compartment Model reference techniques.

## Test Sequence

The BOD POD's efficient automatic calibration system, the easy subject maneuvers, and the user-friendly software interface allow for a complete test to be accomplished in less than 5 minutes:

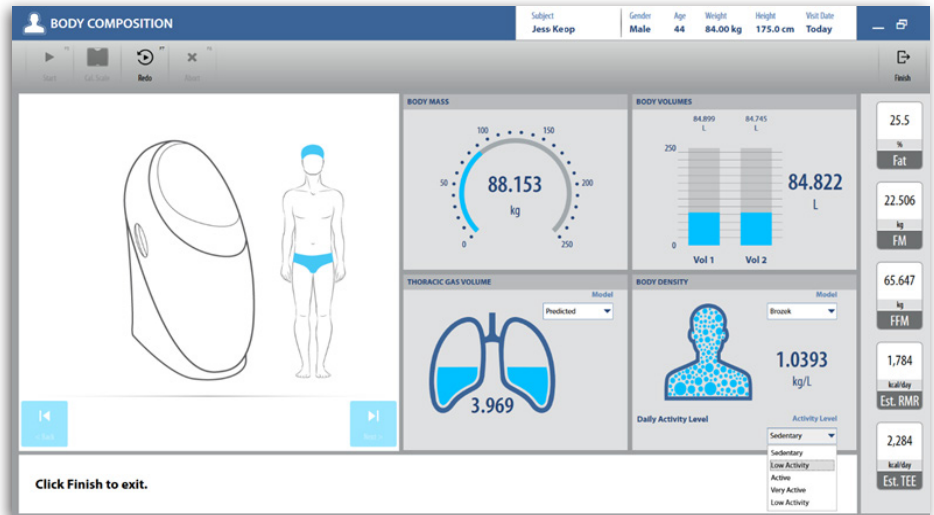
- Enter basic subject information
- Measure subject's mass using high precision electronic scale
- Measure subject's body volume while sitting inside the BOD POD for 2 minutes
- Measure or predict TGV
- Display and print body composition test results
- Clean and disinfect the BOD POD unit

There are no operator licenses necessary for testing with the BOD POD, and the process is extremely fast and easy.

## Powered by OMNIA™ Software

The advanced OMNIA software enhances BOD POD performance:

- Exclusive database of body composition references are provided for adults, the elderly (up to 90 years old), and athletes (over 40 sports and roles/positions).
- References are provided as Mean +/- 1, 2, 3 SD, providing valuable information on results distribution.
- Ability to edit and print software-generated automatic interpretation.
- Population density models are included for children, adults, pregnant women, and ethnic groups.



User-friendly and straightforward software interface provides quick access to features and commands

- Integration of BOD POD with all COSMED systems and connected devices in one single database. This allows for the correlation of Body Composition results with data from other assessments such as Resting Energy Expenditure (REE) or Cardio Respiratory Fitness (VO2Max).
- Ability to enter compartmental information (Total Body Water, Bone Density, Protein), allowing 3- or 4-compartment model calculations.
- OMNIA networking is available as an option to centralize data via SQL database either in a small or large LAN/WAN.

## Pediatric Option™

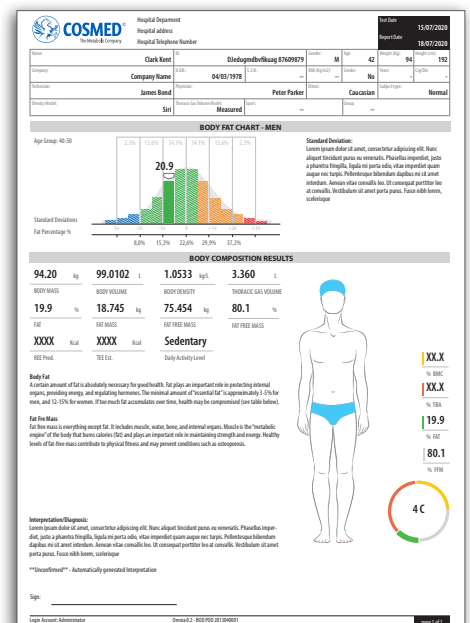
The BOD POD Pediatric Option allows for body composition assessment of young children between 2 and 6 years old, and as small as 12kg. It includes a customized seat insert to create a safe and comfortable testing environment, and a calibration reference volume.



Easy body composition assessment of young children with the Pediatric Option

## Maintenance

The BOD POD is designed for durability over time. Should the need arise, each BOD POD has an internal diagnostic function for analyzing system performance and providing feedback to service personnel.



Comprehensive test report for quick and easy interpretation



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