Body Composition Testing with a Bod Pod

Body composition testing can be a very useful piece of information to active individuals to help you understand your lean body mass, fat mass, and body fat percentage. Knowing your numbers can help you determine if weight loss is an appropriate goal for performance enhancement, and how many pounds of fat can be safely lost without jeopardizing health by cutting into your essential fat stores. As a guide, body fat percentage differs for men and women with different cut-off values for health:

Body Fat Percentage	Men	Women
Risky (High Body Fat)	> 30%	> 40%
Excess Fat	21-30%	31-40%
Moderately Lean	13-20%	23-30%
Lean	9-12%	19-22%
Ultra Lean	5-8%	15-18%
Risky (Low Body Fat)	< 5%	< 15%

However, getting an accurate reading can be difficult without the right piece of equipment. Using bioelectrical impedance analysis (BIA), calipers, or other methods for body composition testing can vary greatly from the true answer, giving you false information about your current body composition status.

A BOD POD is an expensive piece of research equipment and is the current "practical gold standard" in sports science research when it comes to body composition testing. This is because testing is easy and offers quick and accurate results with excellent repeatability. The BOD POD uses a simple 5-minute test to measure a subject's mass (weight) on a very accurate electronic scale, as well as volume, determined to the millilitre by air displacement plethysmography, which works by moving a volume of air around a seated subject inside the egg-shaped chamber. From these two measurements, a highly accurate body composition reading can be calculated, giving you information about your overall:

Diaphragm
System
Electronics

Lung Volume
Measurement
Computer

Scale

- density (body mass / body volume)
- fat mass (in pounds)
- lean body mass (in pounds)
- body fat percentage (%)
- fat-free percentage (%)

To set up an appointment for body composition testing in a sports science research lab at the University of Western Ontario, please contact Jennifer Broxterman, Registered Dietitian & Sports Nutritionist at info@nutritionrx.ca. The cost per body composition analysis is \$60.