



Metabolic Testing FAQ's

What is Metabolic Testing/Breath Analysis and what does it measure?

-Breath analysis (AKA cardio-metabolic testing, VO2max testing, ergospirometry, cardiopulmonary exercise testing, or metabolic testing) is the method of analyzing several elements of your exhaled and inhaled breath. It was initially conceived in the 1920s and since then has gradually evolved to become a key biometric assessment in several disciplines of medicine and sport science. During a breath analysis test, three main elements of the human breath are analyzed on every breath cycle: The volume of air exchanged with the environment, the concentration of oxygen (O₂), and the concentration of carbon dioxide (CO₂). The value of each metric is measured several times per second capturing its evolution through inhalation and exhalation.

How long will the test take?

-The resting metabolic test (RMR) will take 10 minutes to perform, and the active metabolic test (AMR) will take approximately 10-20 minutes to complete.

How Does Breath Analysis Monitor Your Heart, Lungs, Circulation, and Cells?

-Your vital functions, such as heart, brain, and liver activity, along with physical exertion (like running or climbing stairs), all hinge on one essential element: oxygen. This oxygen fuels the combustion of macronutrients (fats and carbohydrates, the primary energy sources for your body) within your cells, releasing energy to meet the demands of your organs and movement. The process of metabolizing fats and carbohydrates also generates CO₂, which is removed from the bloodstream and expelled through breathing. This entire mechanism is commonly known as metabolism. The four primary systems necessary for effective metabolism include your heart, lungs, bloodstream, and cells. These systems work together to deliver oxygen to the cells and eliminate carbon dioxide. Any interruption in this process can significantly affect your ability to move or even maintain life. Breath analysis provides biomarkers that, when evaluated in specific combinations, allow us to focus on each system and assess their efficiency.

How will this test help me lose weight?

-Slow metabolism and low fat-burning ability are what prevent most people from losing weight and keeping it off long-term. By analyzing the flow of O₂ and CO₂ through your body, PNOE tracks how fast your metabolism is, how efficiently you burn fat and gets you the personalized plan that works for your individual metabolism.

How will PNOE help me improve my overall health?

-The flow of O₂ and CO₂ involves all systems affected by heart, lung, and metabolic disease. PNOE scans these systems with clinical-grade accuracy and identifies which one(s) may be at risk of disease.

How will PNOE help improve my athletic performance?

-Performance in every sport depends on how well you utilize O₂ and clear CO₂. Your lungs, heart, and cells are the system's critical channels for the flow of O₂ and CO₂ through your body. PNOE pinpoints which system poses the limiting factor in your sport and creates a personalized program to overcome it.

How much does it cost and how frequently should I test?

-The initial testing must be both the RMR/AMR test and is \$169+ tax for CBRC members and \$218 + tax for non-members.

After your initial testing your RMR should be retested every 3 months, and your AMR should be retested every 6 months. The retest cost per RMR and/or AMR is \$84.50 + tax for CBRC members and \$109 + tax for non-members.