

BREATHING SCIENCE NETWORK

Breathing Behavior Analysis Services

We all learn habits, unconsciously and continuously. This includes breathing habits, some that serve us and others that don't. Dysfunctional breathing habits compromise respiration, usually without your knowing it. Compromised respiration often results in symptoms and deficits that can seriously affect health, mental functioning, and performance. Unfortunately, uniformed healthcare practitioners offer "treatments" for symptoms rather than learning solutions for disengaging dysfunctional habits and learning new ones that promote good respiration. The Breathing Science Network offers its clients breathing learning solutions provided by its Certified Breathing Behavior Analysts, including comprehensive assessment sessions and customized tutorial learning sessions.

Breathing Habit Interview (25-minute web-conference meeting)

You may be suffering with symptoms and deficits of a dysfunctional breathing habit, perhaps without your knowing it. Make a 25-minute web-conference appointment with a **Certified Breathing Behavior Analyst** to find out more about your own breathing and whether to consider a comprehensive breathing habit analysis using educational capnography instrumentation. Before meeting for the interview, you will be asked to fill out a form, **Your Breathing Habits**, to be used during the interview by you and your Analyst for exploring and identifying possible breathing habits that may be compromising respiration and creating unwanted symptoms and deficits.

Breathing Behavior Analysis (75-minute web-conference session)

A Certified Breathing Behavior Analyst guides you in a self-discovery process to determine, jointly with you, whether a dysfunctional breathing habit has been learned, and if so, its possible role in the triggering of troubling symptoms and/or deficits. Together you explore the behavioral components of these habits (e.g., aborting the exhale) and their possible triggers (e.g., taking an examination), sustaining factors that keep the habits in place (e.g., "feeling in control"), and historical origins (struggle with asthma as a child).

Central to the breathing behavior assessment is the measurement of physiology that tells you and your Analyst about whether your breathing habits really do compromise respiration, and if so, when, where, and how. Good respiration means regulating carbon dioxide (concentration) in blood plasma and other body extracellular fluids. CO₂ regulates pH (acid-base balance) and electrolyte balance from breath to breath, a process normally regulated by respiratory reflexes in the brainstem. Unfortunately, breathing habits may get in the way of these reflexes which can result in immediate and troubling symptoms of all kinds. We use educational **capnography instrumentation** ("capno" for CO₂) where both you and your Analyst can see CO₂ concentration changing in real-time, permitting both of you to see how habits are affecting your fundamental respiratory chemistry.

Breathing Learning Program (six 50-minute learning sessions with a 30-day instrumentation rental)

If dysfunctional habits are identified, your Analyst will recommend a customizing tutorial program for learning (1) self-intervention techniques for managing your breathing habits when they are triggered and (2) self-regulation learning for disengaging your breathing habits and replacing them with new breathing habits that are consistent with good respiration.

The Breathing Learning Program consists six learning sessions along with a one-month capnography instrumentation rental. Capnography instrumentation is included in the Breathing Learning program and is essential to completing homework assigned to clients by the Analyst. Positive outcomes are almost entirely a result of homework done by clients between learning consultation sessions. Analysts are guides for learning new habits, not therapists who provide treatments; they partner with their clients, assisting them in breathing explorations and habit change.

The initial learning session is scheduled at the time of registering for the Breathing Learning Program. The remaining sessions may be subsequently scheduled at the convenience of the client. Clients may then also extend instrumentation rental time if desired and subscribe to additional sessions.

Capnography Instrumentation

The instrument is not a machine. It does nothing “to you.” It simply tells you about how you are breathing, whether your breathing is serving or compromising your respiration. This real-time information is critical to disengaging dysfunctional breathing habits and learning new ones.

Capnometers measure carbon dioxide (CO₂) concentration in air, including the air going into your lungs and the air exiting your lungs. Your body generates CO₂ as a function of cellular metabolism, some of which must be excreted in the exhale and some of it retained in the blood for moment to moment acid-base regulation. At the end of each breath, you and your Analyst will see the CO₂ concentration in the alveoli of the lungs, that is, where gas exchange takes place. The alveolar CO₂ concentration is generally equivalent to CO₂ concentration in blood plasma.

Breathing is reflex regulated based on blood plasma CO₂ concentration, O₂ concentration, and pH. When breathing habits get in the way of reflexes, respiration may be compromised resulting in symptoms and deficits of all kinds, including physical, mental, and behavioral. Educational capnography instrumentation provides for identifying dysfunctional breathing habits.