

# CapnoTrainer®

for observing, evaluating, and learning breathing behavior

***A break-through product! The ultimate in breathing education!***

*Did you know that ALLOCATION OF CARBON DIOXIDE, through breathing, directly regulates body pH, electrolyte balance, blood distribution, hemoglobin chemistry, and kidney function?*

**A MUST FOR ALL THOSE WHO DO  
BREATHING TRAINING!**



***Detect bad breathing and learn good breathing with the CapnoTrainer.***

Learned **OVERBREATHING BEHAVIOR** leads to *exhaling too much CO<sub>2</sub>*, resulting in extracellular alkalinity. Shifts in pH may account for "unexplained" symptoms, psychological changes, effects of stress, and performance deficits.

Corporate coaches and employees  
Counselors and clients  
Teachers and students  
Performance consultants and clients

Human service providers and clients  
Health educators and clients  
Fitness trainers and sports enthusiasts  
Mental health practitioners and clients

Better Physiology Ltd. ®

VitaCentre 136 New South Head Road Edgecliff NSW 2027  
Products: [www.breathingwell.org](http://www.breathingwell.org) Education: 1800 777 798

## **PRACTICAL APPLICATIONS**

**Use the CapnoTrainer® for detecting bad breathing behavior and learning good breathing behavior.**

- \*Pinpoint optimal breathing mechanics for acid-base balance.
- \*Discover the triggers for good and bad breathing patterns.
- \*See how thoughts, moods, and emotions are changed by breathing.
- \*Learn how mental and physical performance is altered by breathing.
- \*Evaluate the effects of breathing on learning, memory, and attention.
- \*See how breathing behavior and defensiveness may be related.
- \*Examine how pain, injury, discomfort, and breathing may be linked.
- \*Discover how breathing may be mediating unexplained symptoms.
- \*Test for anaerobic threshold during fitness training by monitoring CO<sub>2</sub>.
- \*Use breathing as a way of exploring awareness and consciousness.
- \*Learn what good and bad breathing behaviors feel like.
- \*Help people overcome their fears about breathing.
- \*Teach embracement through breathing and heart variability training.
- \*Learn to breathe intuitively, inside-out, rather than prescriptively, outside-in.

**If you are an educator, trainer, coach, or therapist, the CapnoTrainer® serves as an important adjunctive tool.**

peak performance training, relaxation training, attention training, alertness training, meditation, patient education, stress management, childbirth training, motivational training, public speaking, learning enhancement, anxiety management (e.g., testing), anger management, mastering performance challenges (e.g., in aviation), athletic training, and breathing training of all kinds.

**Overbreathing (CO<sub>2</sub> deficit) can cause, trigger, or exacerbate physical symptoms, performance deficits, and psychological complaints.**

shortness of breath, breathlessness, chest tightness/pressure, chest pain, feelings of suffocation, sweaty palms, cold hands, tingling of the skin, numbness, heart palpitations, irregular heart beat, anxiety, apprehension, emotional outbursts, stress, tenseness, fatigue, weakness, exhaustion, dry mouth, nausea, light-headedness, dizziness, fainting, black-out, blurred vision, confusion, disorientation, attention deficit, poor thinking, poor memory, poor concentration, impaired judgment, problem solving deficit, reduced pain threshold, headache, trembling, twitching, shivering, muscle tension, spasm, stiffness, abdominal cramps, and bloatedness.

**In predisposed individuals, overbreathing (CO<sub>2</sub> deficit) can trigger or exacerbate acute and chronic conditions:**

phobias (e.g., public speaking), migraine phenomena, hypertension, attention disorder, asthma attacks, angina attacks, heart attacks, panic attacks, hypoglycemia, ischemia (e.g., tissue hypoxia), depression, epileptic seizures, sexual dysfunction, sleep disturbances, allergy, irritable bowel syndrome, repetitive strain injury, and chronic fatigue.

### **RESTRICTED USE:**

The CapnoTrainer is an educational instrument designed for enhancing performance through learning and teaching good breathing behavior. It is not intended for medical diagnosis or treatment.

## **SOFTWARE APPLICATIONS**

The software runs on PC computers and operates within Windows 98 (second edition), Millennium, 2000, NT, XP, and Vista environments.

**Observe the following physiology:**

CO<sub>2</sub> waveform, in mmHg: airflow pattern  
Breathing rhythmicity: breath holding, gasping  
End-tidal CO<sub>2</sub> (ETCO<sub>2</sub>), in mmHg: overbreathing  
Coordinating breath: rate and depth  
Breathing rate averages, in breaths per minute

Heart Rate, beat to beat calculations: heart rate variability  
Breathing Heart Wave (BHW): parasympathetic tone  
BHW amplitude, in beats per minute: degree of relaxation  
Heart Rate (HR) averages (traditional measurement)

**Advanced Option for HRV training:**

Multiple heart wave frequencies (HF/LF/VLF)  
Frequency analysis of heart rate variability (HRV DFT)  
Differential autonomic nervous system measurements

## **SOFTWARE FEATURES**

- \*Signals displayed alone and in multiple combinations
- \*Signals displayed in multiple graphic formats
- \*Live history screens, showing whole or part of session
- \*Evaluation, training, and observational screens
- \*Multi-graph and multi-signal data review screens
- \*Zoom function, select graph & signal
- \*Gain & Auto-gain
- \*Signal offset & Auto-center
- \*Screen sweep time, slower/faster
- \*Freeze screen immediately
- \*Pause screen, end of sweep
- \*Refresh screen
- \*Signal hiding
- \*Averaging function
- \*Set signal threshold & auto-threshold
- \*Audio feedback for signal changes (options menu)
- \*Event marker, draws line and records note
- \*Select predefined task periods, e.g., baseline
- \*Data recording on/off, pause, and erase
- \*Print screen options, live or recorded data screens
- \*Save "screen feature" adjustments to trainee name
- \*Save sessions to "trainee" files/names
- \*Select from among easy to use graphical data reports
- \*Review recorded data in "tape recorder" fashion
- \*Review, format, and save graphical reports as desired
- \*Digital cursor for numerical readout on graphs
- \*Generate automatic Quick reports and Excel reports
- \*Select predefined evaluation and training schedules
- \*Define your own automated task schedules
- \*Use built-in breathing questionnaire form
- \*View HELP windows for education and teaching
- \*Read detailed INFO HELP screens for each screen display

### **Hardware specifications**

Accuracy: +/- 2% of reading or +/- 2 mmHg, whichever is greater  
Size: 5" X 3.75" X 1.5." Weight: 7 oz. Color: bone white.  
Power source: USB connector.  
Range: 0-60 mmHg or 0-8% CO<sub>2</sub>. CO<sub>2</sub> response time: 500 msec.  
Heart rate: plethysmograph ear sensor, beat to beat calculations.  
Standard warranty: one year, parts and labor.  
CO<sub>2</sub> Calibration: send to BP Calibration Center

### **PRICING AND SUPPORT**

**CapnoTrainer: \$4,500.00**

**Includes Starter Kit and basic training program**  
(DVD tutorial, 100 nasal cannulas, 17 filters, CD with forms & articles)

**Go to [www.breathingwell.org](http://www.breathingwell.org) for**  
ordering instruments, supplies, and accessories

### **HOW TO CONTACT US**

VitaCentre, 136 New South Head Road, Edgecliff NSW 2027

**Tel: 1800 777 798**

**Email: [enquiry@breathingwell.org](mailto:enquiry@breathingwell.org)**