

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 CO₂*, 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.®

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Products: www.betterphysiology.com Education: www.bp.edu

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 CO₂.
- *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 (CO₂ 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 (CO₂ 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:

CO₂ waveform, in mmHg: airflow pattern
Breathing rhythmicity: breath holding, gasping
End-tidal CO₂ (ETCO₂), 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% CO₂. CO₂ response time: 500 msec.
Heart rate: plethysmograph ear sensor, beat to beat calculations.
Standard warranty: one year, parts and labor.
CO₂ Calibration: send to BP Calibration Center

PRICING AND SUPPORT

CapnoTrainer I: \$3,000.00.

Starter kit: DVD tutorial, 100 nasal cannula, 15 filters: **\$200.00**

CapnoTrainer II: \$3,600.00

Extended Warranty: defects, accidental damage, misuse for 2 years
HRV software application, 100 nasal cannula, 15 filters
DVD tutorial, and forms & documents CD.

Go to www.betterphysiology.com for ordering instruments, supplies, and accessories

HOW TO CONTACT US

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