

THE BUTEYKO BREATHING METHOD

Dorisse Neale

To meet everything and everyone through stillness instead of mental noise is the greatest gift you can offer to the universe. - Eckhart Tolle

As enigmatic as the title may sound, the Buteyko Breathing Method is actually a very simple set of tools and techniques used to correct chronic patterns of hyperventilation, or overbreathing. The method was developed in Russia in the 1950's by Dr. Konstantin P. Buteyko, who had a fascination with the breath, and spent hundreds of hours quietly observing the breathing patterns of patients. He noticed that hyperventilation was one of the primary symptoms of illness, and theorized that it contributed to carbon dioxide depletion in the body. Over the next 30 years his theories were tested in medical diagnostic laboratories throughout Russia, and time and time again he was proven correct. When hyperventilation was corrected and carbon dioxide levels in the body were increased, he and his colleagues witnessed 100% improvement of conditions such as hypertension, angina pectoris (lack of blood supply to the heart muscles) and asthma. In 1981, after a successful clinical trial with asthmatic children, it was adopted as the treatment of choice in pediatric asthma and is still widely used to this day.

Our human bodies are but a microcosm of the world at large. As the entire planet has literally sped up (Utne Reader, March-April 1997, p.41) in the last 300 years, as airplanes, fast cars, fast foods and instantaneous global communication via the internet have become the norm, so have our bodies had to adapt to this fast paced life style by compensating with our respiratory system. It has been estimated that in the last decade of the 20th century, up to 90% of individuals throughout the world are chronic "hidden hyperventilators", which means that it is not apparent to most of us that we are hyperventilating, if in fact we are. Reversing this pattern of overbreathing not only can restore

physiochemical balance in the body, but can take us to an inner place of quiet and calm as we pay attention to each and every breath we take.

The German spiritual teacher Eckhart Tolle says, "Attention is the key to transformation" and talks of the importance of "inhabiting the body". It has been widely accepted over the centuries in both Aryuvedic and Oriental medicine that breathing is the route to longevity and emotional stability, and has great restorative and regenerative powers for persons suffering from illness and debilitation as it is a key element in immune system health. Tolle also says in his book *The Power Of Now*, "Great strengthening of the immune system occurs when you inhabit the body. It's as if every cell awakens and rejoices - the body loves the attention. Most illness creeps in when you're not present in the body. The more consciousness you bring into the body, the stronger the immune system. This is a potent form of self healing." As we learn to regulate and calm the overstimulated breath, so we take responsibility for our own healing.

The Buteyko Breathing Method is also known as Eucapnic Breathing. "Eucapnia" is defined as "the presence of normal amounts of carbon dioxide in the blood"; this is what makes this breathing method stand apart from the many breathing methods that are taught and practiced worldwide. It is by inducing intermittent periods of hypoxia (low oxygen) on a regular basis, that carbon dioxide is able to increase steadily over time. The use of intermittent hypoxic breathing training has been developed by other Russian doctors, and Professor Assya Kolchinskaja of the Commission for Advanced Medical Technologies of the Ministry of Health Care of the Russian Federation says, "The cell of the person after being given hypoxic training will utilise even more oxygen than in the case of being given hyperoxia." In one research trial in which 49 infertile women were given hypoxic training (involving breathing an air mixture low in oxygen daily over short

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periods of time), 48 of the 49 women became pregnant and went on to deliver healthy babies.

One of the essential points to know about this much needed chemical is that carbon dioxide is the body's natural bronchodilator (opens up the air passages of the lungs) and is a potent vasodilator (relaxes the blood vessels). A body low in carbon dioxide will manifest spasming of the smooth muscle which lines the blood vessels; this means that there will be a decreased ability for blood to circulate, from the brain to the pancreas to the toes and everywhere in between. This fact stands behind the basis of "eucapnic" breathing: when carbon dioxide levels are increased, circulation and oxygenation improve throughout the body.

The most efficient means of slowing carbon dioxide release is by slowing the breathing rate and depth. Breathing in and out always through the nose (which is the beginning of the respiratory system) will insure a healthy maintenance of CO₂, as rapid exhaling through the mouth depletes CO₂ more rapidly than any other factor. Chronic depletion of carbon dioxide will cause the body to begin compensating through a complex series of events, which signal the beginning of disease. Essentially it is a highly developed dance of balance which is going on within the physiology of our cells at every moment of our life. Breathing is happening to us whether we're sound asleep or going about our daily lives.

The relationship between oxygen and carbon dioxide is a well-known scientific fact. In any physiology textbook we will find Bohr's Law, which states that "oxygen can only be released into an acid environment", and carbon dioxide is that acid component of our blood. To visualize this, make a tight fist. Imagine this fist to be a red blood cell, holding on to oxygen as it travels throughout the blood stream. The only way that fist can relax, or that the oxygen can be released, is if there are adequate amounts of carbon dioxide. Because of this, a person being checked for the oxygen content of their blood can

show a 98% – 99% O₂, yet still be extremely short of breath and acutely or chronically ill.

Carbon dioxide is the chemical which allows the body to utilize oxygen efficiently. When oxygen is utilized efficiently, we are able to function at a more vibrant state of internal homeostasis, and well being is maximized. When oxygen is deficient, we go into a state of anaerobic metabolism, which ultimately draws resources away from certain cells in order to support others. It is estimated that about 85% of the work of maintaining normal pH in the body is carried out by the respiratory system; the kidneys respond by their regulation of bicarbonate, which is the alkaline component. These two organs, the lungs and the kidneys, work together to keep this delicate balance of internal equilibrium.

The respiratory system is the only system of our bodies of which we have both voluntary and involuntary control of at any given moment. During acute trauma, shock or surprise, our sympathetic nervous system kicks in with the well-known "fight or flight" reaction: blood pressure increases, our pain threshold increases, blood gets diverted away from the extremities towards the head and torso, and respiration increases. During meditation, all of the reverse is true, and breathing automatically slows down. And, whenever we choose, we can increase or decrease our breathing voluntarily, although it's more difficult to lower our blood pressure at will, or decide to send more blood to the brain when we're trying to memorize something important.

Other stressors such as dehydration, nutritional deficiencies, over-stimulation of our senses with constant noise, lights, temperature regulating and illness will contribute to overbreathing, since breathing is the place where our body automatically speeds up in order to compensate. So, as human beings have created an external "world out of

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balance” as reflected in planetary changes that are taking place, we have internalized this “world out of balance” by our increasingly frequent dysfunctional breathing patterns.

The Control Pause is a term which Dr. Buteyko coined, and is used to measure the pause at the end of the exhaled breath; that pause that exists before our respiratory system automatically takes another breath and “breathes” us. This breath is triggered by the carbon dioxide threshold at the base of the brain and also by increasing hypoxia as we hold a breath. If carbon dioxide levels are low, there will be a short control pause; if they are high, the control pause is longer. The control pause is a diagnostic tool used to measure the approximate amount of carbon dioxide in the alveoli of the lungs at any given time. One of the goals then becomes to increase the control pause over time by doing exercises designed to increase the body's CO₂ threshold, and therefore it's ability to retain carbon dioxide and ultimately relax the body.

References to the “pause” can be found in literature throughout the world. In Yogic traditions, it is known as “the place of the no breath”. In studies done in India measuring breath rates and depth of yogis, most were found to have small, slow breaths as they maintained a meditative state. It is during the “pause” that the body can relax completely with absolutely nothing else going on save internal physiological functioning; the skeletal and muscular systems are at rest and there is a moment or longer of total peace and quiet internally. If we can be truly present in these moments, if we can bring our awareness and consciousness into this stillness, then we become connected with our internal, intuitive wisdom and power and can ultimately release the need so many of us have to look externally for our sense of self and who we are in the world. As Franz Kafka, the Austrian poet and philosopher said, “You do not need to leave your room. Remain sitting at your table and listen. Do not even listen, simply wait. Do not even wait, be quite still and

ordinary. The world will freely offer itself to be unmasked, it has no choice. It will roll in ecstasy at your feet.”

All it takes to master the Buteyko Breathing Method is patience, plenty of slow time, commitment and a willingness to go beyond our comfort zone in order to experience our true self, where no emotion, psychological trauma or intellectual story exists. Herein lies the challenge, and therefore the potential for it to become a “psychospiritual practice”. Author and teacher John Ramsey in his book *Clarity* says, “The Self is perfect. It is beyond right and wrong. It is even beyond life and death. The Self produces all that we experience”. By slowing the breath, by becoming aware of and then decreasing the need to quickly take in another breath as soon as we have exhaled, we come closer to a place of stillness within, and closer to knowing the Self.

The Buteyko Breathing Method offers us one of the greatest tools to retrain our breathing towards a goal of increased physiological health and well being and repair of physiological damage already done. It gives us an opportunity to fully embrace the present as we quietly observe and slow our breathing, as we learn to embrace and enjoy the pauses between the breaths. The well known and much loved medical doctor from India, Deepak Chopra, reminds us of the Vedic principle of economy of effort “do less and accomplish more”. He says, “If you embrace the present and become one with it, and merge with it, you will experience a fire, a glow, a sparkle of ecstasy throbbing in every living sentient being. As you begin to experience this exultation of spirit in everything that is alive, as you become intimate with it, joy will be born within you, and you will drop the terrible burdens and encumbrances of defensiveness, resentment and hurtfulness. Only then will you become free.”

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