

The Buteyko Asthma Solution .....	2
Introduction .....	2
What is Buteyko? .....	3
How does Buteyko Work? .....	3
How is Buteyko taught? .....	4
Who Can Learn Buteyko? .....	4
HISTORY: .....	4
PHYSIOLOGY.....	5
1. CO <sub>2</sub> Controls Your Body’s pH: .....	5
2. CO <sub>2</sub> Controls Your Smooth Muscle:.....	6
3. CO <sub>2</sub> Controls Your Breathing: .....	6
Summary: .....	7
Symptoms of Hyperventilation .....	8
THINGS YOU CAN DO RIGHT NOW (HINTS).....	8
BUTEYKO COURSE AGENDA: .....	11
GLOSSARY: .....	12
• Acid.....	12
• Alkaline .....	12
• Anaerobic tissue respiration.....	12
• Bicarbonates .....	12
• Pressurized arterial CO <sub>2</sub> .....	12
• Reliever Medication .....	12
• Preventer Medication .....	12

# The Buteyko Asthma Solution

## Introduction

Asthma has reached epidemic proportions in the United States. Over 17 million Americans suffer from asthma and 5,500 of them die from it each year. Asthma is a chronic respiratory disease characterized by excessive mucus production, inflammation and constriction of the airways.

There are thousands of things, which may trigger an asthma attack; stress, colds, pollen, dust, animals, exercise, food and medications are just a few. When a person with asthma encounters a trigger their airways become inflamed and dry out, excessive mucus is produced and the smooth muscle wrapped around the airways tightens. These events result in a variety of symptoms; wheezing, coughing, and breathlessness are the most common.

Despite the amazing advances in modern medicine, the Western medical community has not found a cause for asthma instead they are forced to treat its symptoms with trigger removal and a variety of medications—the only resources available until now.

Konstantin Buteyko, a Russian respiratory physician and scientist developed the Buteyko Method, a system of breathing retraining, which has a dramatic effect on asthma and other breathing disorders. Used widely in Australia, New Zealand, Great Britain, Russia, and Holland, the Buteyko Method delivers unparalleled results. This new breathing therapy is now available in the United States.

The significant features of the Buteyko Method are that it is:

- **Effective** - over 90% of workshop participants come off all asthma reliever medications within one week (medical trial results published in Medical Journal of Australia Dec 1998)
- **Safe** –asthma education delivered follows the standards set by the NIH, National Institute of Health.
- **Scientific** - based on the standard medical principles of respiration, the normalization of breathing and the Bohr Effect

People who use the Buteyko Method experience:

- A Significant reduction in, or elimination of, asthma reliever and preventer medications.
- A Significant reduction in, or elimination of, asthma symptoms and attacks and also the relief of other respiratory disorders
- Increased stamina and energy levels, better work performance, improved sleep, and better management of the symptoms of stress.

If you have asthma, you are literally days away from seeing a huge improvement in your health. Unlike your doctor and your pharmacist, Buteyko instructors offer a 30-day money back guarantee. Give it a try; the only thing you have to lose is your asthma!

## **What is Buteyko?**

The Buteyko method is a program of education and simple breathing exercises that heals asthma and allows asthmatics to control and reduce the frequency of their asthma symptoms. The method encompasses the Buteyko breathing exercises, as well as a comprehensive description of asthma and how to manage it.

The Buteyko method is currently used successfully for the treatment of asthma, emphysema, allergies, chronic bronchitis, hyperventilation syndrome, panic attacks, bronchiectasis, the relief of hay fever, chronic sinusitis and other stress-related diseases.

Buteyko involves no herbs, vitamins, special diets, positive thinking, traditional chest physiotherapy, medication, religion, drugs and there is no equipment needed. The Buteyko method is not a cure for asthma; it simply offers a choice. Asthmatic's can control their symptoms with Buteyko breathing exercises or take medication. The alternative for most asthmatics is a lifetime of drug dependency. Unlike the medication option, Buteyko has no known side effects.

## **How does Buteyko Work?**

The Buteyko breathing technique works because it returns the breathing of asthmatics to a normal level. We breathe to meet the needs of our metabolism, to provide the body with sufficient oxygen and to remove excess carbon dioxide. Studies have shown repeatedly that all asthmatics breathe considerably more than is regarded as normal. At rest, breathing of 4 to 6 liters of air per minute is considered healthy. Asthmatics breathe an

average of 14 liters of air per minute. This chronic over-breathing, is called hyperventilation, and results in irritation, inflammation and constriction of the airways.

Buteyko practitioners call breathing heavily, deeply, or quickly when at rest "hidden hyperventilation", and usually no one is aware that they are doing it, not even the asthmatic! Conventional asthma treatment attempts to control asthma symptoms. The Buteyko method addresses the root cause of the problem, and by restoring normal breathing patterns, the symptoms of asthma are considerably reduced and in many cases disappear.

### **How is Buteyko taught?**

The Buteyko method is taught in a workshop spread over five consecutive days, with each session lasting approximately 90 minutes. The Buteyko breathing exercises are only part of the course. Considerable time is devoted to the safe management of asthma per NIH (National Institute of Health) guidelines, and the necessity of correctly using medication. A full explanation of the physiology of asthma is given and course participants learn skills necessary to live asthma free.

### **Who Can Learn Buteyko?**

Children as young as four years old have successfully been taught the method, as well as adults in their late eighties. Adults and children learn different exercises, with teenagers usually learning both. It is necessary for those under eighteen years old to be accompanied by a parent or guardian, who attends free of charge. Parents need to provide more input if the child is very young.

### **HISTORY:**

Buteyko is a technique, based on well-known physiology (see below under [‘PHYSIOLOGY’](#)). It (the technique) was developed by a Russian doctor, Konstantin Buteyko about 50 years ago. It was used only in Russia until the Iron Curtain came down. At that point an Australian businessman visiting Russia convinced a couple of Buteyko teachers (most notably Sasha Stalmatsky) to bring the method to Australia. It was 4 years before it was accepted and believed in Australia. Around that time it was taken to New Zealand by Russell Stark and his wife Jennifer, (they, incidentally, originally trained me). About 2 years after that it was taken to Great Britain by Christopher Drake and Sasha

Stalmatsky. It is now accepted and fairly well-known in both New Zealand and Great Britain. It has been taught in the US since 1998 and is probably another year and a half away from being well known here.

## **PHYSIOLOGY**

The physiology is based on several discoveries made more than a century ago by scientists Bohr, Lavassier, Henderson and others, but mostly by Bohr. The basis is that carbon dioxide controls a great many things in your body even though we have been told it is the ‘waste gas’ of tissue respiration.

The basic premise of the Buteyko Method is that asthmatics are in a chronic state of hyperventilation, constantly breathing 2-3 times more than their metabolic needs. This chronic hyperventilation causes an imbalance in the gases involved in respiration; Carbon Dioxide and Oxygen. We’ve been taught that Carbon Dioxide is a “waste” gas, however, this is a misconception. Carbon Dioxide is responsible for many of the operations in our body.

The things Carbon Dioxide controls relevant to asthma are:

-[Your body’s pH](#)

-[Your smooth muscle contraction and relaxation](#)

-[Your breathing](#)

### **1. CO<sub>2</sub> Controls Your Body’s pH:**

pH ranges from 0 (most [acid](#)) to 14 (most [alkaline](#)). In your body your blood’s pH must be in the tiny range of 7.35-7.45 for your tissues to be able to effectively use its oxygen. If your blood pH goes higher or lower the blood does not release oxygen effectively to the tissues (Bohr effect). Therefore your body begins to do extraordinary things to try to maintain that narrow pH range.

It is much easier for your CO<sub>2</sub> level to go **lower** (causing your pH to go higher) because of the concentration of CO<sub>2</sub> in the atmosphere as compared to the concentration your body needs to maintain that pH.

Your body wants to maintain 6% CO<sub>2</sub> in the lungs and the blood, while the atmosphere is only .03% (1/200 of the concentration your body wants).

So you can see that the low level in the atmosphere means you can take a few deep breaths and drop the concentration in your lungs very quickly to well below the 6% it wants.

When that happens, your body begins [anaerobic tissue respiration](#). This creates lactic acid which lowers pH (and causes sore chest muscles if your CO<sub>2</sub> levels stay very low for a long time). Then your body gets the kidneys working to get rid of [bicarbonates](#) in an effort to maintain the pH at a level it can use oxygen in the blood.

As an aside, in order to maintain the 6% CO<sub>2</sub> level I mentioned above, the average adult, at rest, should breathe about 5 liters (approximately 5 quarts) of air per minute. The average asthmatic breathes 14.2 LPM (liters per minute) per the Brisbane trials published in the British Lancet and the Australian Journal of Medicine. Severe asthmatics breathe even more than that. This means their bodies are constantly in a state of desperation, trying to keep the pH where it should be.

## **2. CO<sub>2</sub> Controls Your Smooth Muscle:**

Smooth muscle is non-striated muscle that surrounds all the hollow organs in the body including the blood vessels, the bronchioles, the stomach, colon, etc. Low levels of CO<sub>2</sub> tighten (constrict) smooth muscle and high levels loosen (relax) them. If your CO<sub>2</sub> levels drop low enough, the smooth muscle around your bronchioles tighten and you have asthma.

This constriction is the body's attempt to raise the level of CO<sub>2</sub> – even though the asthmatic feels as though he is going to suffocate!

## **3. CO<sub>2</sub> Controls Your Breathing:**

Ironically, CO<sub>2</sub> also controls your breathing, not oxygen. Our bodies carry 2-3 times as much oxygen as we need – a 'reserve' in case of emergencies when we might need a sudden burst of energy. Instead, the body uses CO<sub>2</sub>, a logical choice because it is required for us to be able to USE the oxygen!

To monitor the CO<sub>2</sub> levels, we have chemical receptors in our blood vessels in our chest and neck. When the CO<sub>2</sub> levels RISE to what the chemical

receptors **think** is the ‘correct’ amount, they signal the respiratory center to breathe.

The problem here is that these chemical receptors are adjustable so we can go up and down mountains. If we constantly over-breathe (breathe more than we need), the chemo-receptors think we have changed altitude and adjust to breathe at lower levels of CO<sub>2</sub>.

The level we SHOULD be triggered breathe is 40 mm Hg of [pressurized arterial\(pA\) CO<sub>2</sub>](#). The average asthmatic responds to **only 33 mm Hg of pA CO<sub>2</sub>**. (per the Brisbane trials). Smooth muscle, incidentally, constricts at 30 mm.

### **Summary:**

So, the bottom line is, the more you breathe...  
the less oxygen you can use,  
the closer to asthma you are,  
and the more breathless you are!.

What Buteyko does is to teach you to breathe normally again—readjusting your chemo-receptors without the use of drugs, mind tricks, magic, or any other strange things. Together we can effectively combat your asthma with good asthma education, simple breathing exercises and a lot useful information about how to incorporate the Buteyko Method into your life.

The technique enables the average asthmatic to **reduce their need for reliever medication by 96%** and their preventer medication by 49% within 12 weeks (Brisbane Trials). Some get off it altogether. All learn how to control their asthma using MUCH LESS medication and everyone who uses Buteyko improves their quality of life.

## Symptoms of Hyperventilation

You may think that you don't hyperventilate. The following symptoms are commonly connected to hyperventilation. How many are familiar to you?

**Respiratory system:** Shortness of breath, tightness in chest, a feeling like drowning, over-sensitivity of airways, excessive sneezing, production of mucus, long-term blocked or running sinus, excessive yawning and sighing

**Nervous system:** Light-headedness, dizziness, unsteadiness, poor concentration, numbness, tingling and coldness - especially in the hands and fingers and often in the face. In severe cases, loss of memory or loss of consciousness

**Heart:** Irregular, pounding or racing heart beat

**Psychological:** Degrees of anxiety, tension and apprehension.

**General:** Mouth dryness, abdominal bloating, belching, flatulence, easily tired, poor sleep patterns, general weakness and chronic exhaustion

## THINGS YOU CAN DO RIGHT NOW (HINTS)

These hints are for an adult, slightly altered hints would be given for a child.

1. Remember that asthma and other breathing problems are caused by, and made worse by breathing more air than you need for what you are doing at the moment. The fastest and best way to reduce the air you breathe is to always, always breathe through your nose. Remember, your nose was made to breathe through, your mouth to eat. **You should breathe through your mouth only as often as you eat through your nose!**
2. When you feel the first notion you wonder where your bronchodilator is, slow down and slow your breathing down.
3. If you exercise - that includes walking to the mailbox, up stairs, etc etc. breathe **ONLY** through your nose! It will mean you go slower at first so you can continue to breathe that way, but you will catch back up after a little bit of practice.

4. If your nose is blocked, you will need to clear it so you can breathe through it. Buteyko has a nose-clearing exercise which almost always works. You do it like this:

- Take a normal breath in.
- Take a normal breath out.
- Hold your breath.
- Hold your nose.
- Nod your head up and down slowly until you need to breathe.
- Release your nose.
- Take a nose breath in.
- Take a nose breath out.
- Slow your breathing.
- If necessary, repeat up to 5 times.

If, after all that, your nose isn't clear, you might have to take more drastic measures. Like sprays, vicks etc - but be careful! Some nasal sprays are addictive!

5. Medication.

- [Relievers](#) (Bronchodilators)

Remember that your bronchodilators are short acting relievers and are meant to be used only when you have symptoms! You should use them that way and that way only. Bronchodilators are the once every 3-8 hour varieties like ventolin, albuterol and alupent. Avoid using nebulizers unless your asthma is not responding to the inhalers. Every nebulizer dose contains 50 times the medication of one puff of your inhaler.

- [Preventers](#)

These are medications like inhaled steroids, Intal, Theodur, and Tilade.

They should be taken whether you have symptoms or not.

**These are the medications which really help your asthma.** If you can go for a long periods without needing the relievers, check with your doctor about reducing your preventers.

6. Sleeping mostly on your left side reduces your breathing somewhat, and should help reduce night-time hyperventilation.

## BUTEYKO COURSE AGENDA:

The Buteyko method is taught in a workshop format. Weekend classes are spread over four consecutive days, each session lasting approximately 90 minutes to 3 hours. Week courses are taught over five days. The Buteyko breathing exercises are only part of the course. Considerable time is devoted to the safe management of asthma and the necessity of correctly using medication.

In this class you will learn for the first time what really causes your asthma, what your medication is doing, and how to use your medications properly and effectively in order to minimize side effects. Your triggers will be identified and solutions for asthma causing situations will be found. You'll learn the Buteyko breathing exercises and how to incorporate them into your life. Most importantly, you'll learn how you can break out of the endless pill-popping cycle in order to heal your asthma naturally, without drugs. You will leave with a complete understanding of your asthma and the new skills to manage it successfully.

<p><b>Day 1</b></p> <ol style="list-style-type: none"> <li>1. Individual review of class attendees and conditions</li> <li>2. History of Buteyko</li> <li>3. Medications - what they do and how to use them (per ALA and manufacturers)</li> <li>4. Basic breathing exercises</li> <li>5. Practice</li> <li>6. Physiology of asthma and other breathing disorders</li> <li>7. Cycle of asthma</li> <li>8. Homework</li> </ol>	<p><b>Day 2</b></p> <ol style="list-style-type: none"> <li>1. Review of class attendee progress</li> <li>2. Review of breathing exercises</li> <li>3. Practice</li> <li>4. Foods which affect your breathing</li> <li>5. The role of (sea) salt in your diet</li> <li>6. Other things which affect your breathing</li> <li>7. Homework</li> </ol>
<p><b>Day 3</b></p> <ol style="list-style-type: none"> <li>1. Review of class attendee progress</li> <li>2. What your Control Pause means</li> <li>3. Colds and Flu</li> <li>4. Physical Exercise When, how and how much</li> <li>5. Hyperventilation Attacks What they are, how you know and how to control them</li> <li>6. Hyperventilation exercises (anti)</li> <li>7. Practice</li> <li>8. Homework</li> </ol>	<p><b>Day 4</b></p> <ol style="list-style-type: none"> <li>1. Review of class attendee progress</li> <li>5. Getting your life back</li> <li>3. When to consult your doctor about reducing preventers</li> <li>4. When to reduce Buteyko exercises</li> <li>5. If you regress - why you do and what to do</li> <li>6. Practice</li> <li>7. Homework</li> </ol>

## **GLOSSARY:**

- **Acid**

Hydrochloric Acid is the most acid of the common acids and is the most acid anything can be. It has a pH of 0 (zero)

- **Alkaline**

Drano is the most alkaline of common alkaline substances. It has a pH of 12.

- **Anaerobic tissue respiration**

This is the process by which your cells create energy without oxygen when no oxygen is available. If this process were not available the cells would die whenever oxygen was unavailable for even a short period. A byproduct of anaerobic tissue respiration is lactic acid. This is the same process your body uses when you exercise heavily.

- **Bicarbonates**

( $\text{HCO}_3^-$ ) Bicarbonates are a byproduct of aerobic tissue respiration. They are [alkaline](#).

- **Pressurized arterial  $\text{CO}_2$**

$\text{CO}_2$  in your blood is measured by mercurial pressure, just as atmospheric pressure is.

- **Reliever Medication**

Reliever medications are the ‘emergency’ ones you take when you are having symptoms.

Examples of these are Ventolin and Albuterol.

- **Preventer Medication**

Preventer medications are the ones you take whether or not you have symptoms.

They, as the name implies, help **prevent** symptoms and are generally prescribed when your reliever medication usage rises above several times a week.

Examples of these are inhaled steroids such as QVar, Flovent, Beclovent, and Pulmicort.