## Buteyko Clinic International Instructor Script

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#### **Control Pause (CP)**



- Take a normal breath in and out through your nose;
- Pinch your nose with your fingers to hold your breath;
- Time the number of seconds until you feel the first definite desire to breathe, or the first involuntary movements of your breathing muscles;
- Following the Control Pause, the first breath should be the same as prior to the measurement.



The maximum length of time that you can hold your breath following a normal exhalation. Breathing must be under good control following resumption of breathing.

## **Extended** Pause



Anything greater than the Control Pause but less than the maximum pause. For example, if the Control Pause is 10 seconds and the maximum pause is 20 seconds, then an extended pause is 15 seconds.

#### **Exercise 1: Decongest the Nose**

First, check which side of the nose is more congested. Ask the student to block one nostril with a finger and breathe through the other. Then switch nostrils. This provides feedback as to how congested or decongested each side of the nose is. It is normal for one side to be more congested than the other. The instructor should listen for signs of nasal obstruction.

## Decongest the nose

Exhale and hold breath.

Hold breath until strong air hunger.

To decongest the nose, instruct the student to perform the following:

- Take a normal breath in and out through your nose;
- Pinch your nose with your fingers to hold your breath;
- As you hold your breath, move your body or gently nod your head up and down;
- Hold your breath for as long as you can until you feel a strong air hunger;
- Let go of your nose and breathe through it calmly as possible.

Repeat 6 times with a 30-60 second rest between each.

Take care, as this exercise involves holding the breath until a strong air hunger is experienced. It is not suitable for people with high blood pressure, anxiety, panic disorder or cardiovascular issues, or during pregnancy.

To decongest the nose, the breath hold must be at least30 seconds to be effective. The exercise also works to shift mucous from lungs and relieve constipation. If nostrils are very narrow, Breath Right strips or nasal expanders (like Mute) can be advised during sleep.

If the nose still feels stuffy after practicing Exercise 1, then practice six repetitions of Exercise 5 (Steps) to create a strong air hunger.

#### **Exercise 2: Breathe Light**

All Breathe Light exercises should be practised with mouth closed, correct tongue posture, lips together, jaws relaxed, breathing in and out through the nose.

There are a number of variations to this exercise:

- a. Hands on chest and tummy
- b. Hands cupping face
- c. Finger blocking nostril
- d. Cadence breathing to six breaths per minute
- e. Using Buteyko Belt (especially for those who have difficulty slowing down their breathing. Instruction using belt is the same as variation a.)
- f. Listening to the relaxation MP3 downloadable from Buteykoclinic.com/reducedbreathing

Use the acronym **PAST** for all variations:

Posture (same for all variations)

Awareness (same for all variations)

Slow down breathing/Short breath in

To create a tolerable air hunger (same for all variations)

#### Posture

"I would like you to sit up straight so as not to compress the diaphragm. Imagine there is a piece of string pulling you upwards from the crown of your head towards the ceiling. Lengthen the distance between your navel and sternum. Widen the distance between your ribs."

#### Awareness

Only when people can see, feel, hear or follow their breath can they change it. Awareness of the breath is very important in order to improve breathing patterns.

"I would like you to notice the slightly colder air coming into the nose and the slightly warmer air leaving the nose. Look down at your breathing. Feel your breathing. Really concentrate on your breathing."

To help the students' awareness of their breathing, the instructor can move their hand in synchronisation with the student's breath, repeating the words: *"There is your breath in, and there is your breath out."* 

It may also help to ask the student to draw his or her breathing pattern across a page as they breathe. The student follows their breathing pattern, their inspiration and expiration and draws this across the page. In order to draw it, one must be able to follow and focus on the breath. In general, most people are able to follow and concentrate on their breathing pattern. However, older students or those with anxiety or a lot of mind activity may find it difficult to focus on their breath. Overly analytical people can also sometimes have difficulty following their breathing.

Awareness of breathing is important to make changes to breathing. Sometimes, it can take a couple of sessions for the student to become aware of their breathing. Wearing the Buteyko Belt can help, as it exerts a resistance to breathing muscles and brings focus to the area around the diaphragm.

When the student is aware of their breath, proceed to slowing down or shortening the breath.

Slow down breathing/Short breath in. This section is described in detail in each variation below.

#### To create a tolerable air hunger

"The goal is to create a feeling that you would like to take in more air; to feel an air hunger. To create air hunger, your breathing now should be less than what it was before you started. I need you to feel a want for air; a feeling that you would like to take in a deeper breath. I would like you to feel slightly suffocated\*."

[\*People don't like the word suffocated but they get it!]

Encourage the student to sustain the feeling of air hunger for 3-5 minutes. If their breathing muscles contract or if they start to feel tense, then the air hunger is too strong. When this happens, instruct them to take a rest for 15 seconds and start again. It is normal at the beginning to take a rest a few times during the exercise. With practice, it becomes easier to sustain the air hunger for longer periods of time.

The goal is to allow breathing to soften, to slow down and reduce breathing using thoughts and concentration.

Remind the student: "Don't hold your breath. Don't freeze your breathing. Don't tense your breathing muscles, or restrict your breathing to reduce the amount of air you are taking into your body. Instead, soften your breathing so that the amount of air you are taking into your body is less than what it was before you started."

Continue repeating the instruction for 4-5 minutes.

#### Variation A: Hands on chest and tummy to slow down inhalation and exhalation

Posture (described at beginning of Ex2) Awareness (described at beginning of Ex2) Slow down your breathing (different depending on variation) To create air hunger (described at beginning of Ex2)



**Slow down your breathing:** *"I would like you to slow down the speed of air as it enters your nostrils. Breathe so gentle that hardly any air enters your nose. Breathe so soft that the fine hairs within the nose do not move."* 

By focusing on the area just inside the nose it is easier to soften breathing without tensing the body or deliberately interfering with breathing muscles.

After breathing in, the breath out should be very slow and relaxed. Encourage the student to allow the exhalation to happen naturally. The breath out should be unforced, passive, gentle and about 1.5 times the length of the breath in.

"As you breathe out, bring a feeling of relaxation throughout your body. After you breathe out, wait until you feel the need to take a breath in again. Then take a soft, slow, gentle breath in. At the top of the breath, allow a relaxed slow gentle breath out. I would like you to really concentrate on slowing down your breathing so that you are taking less air into your body."

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#### Variation B: Hands cupping face (traditionally in Buteyko, place finger under your nose)

Posture (described at beginning of Ex2) Awareness (described at beginning of Ex2) Short breath in and out To create a tolerable air hunger (described at beginning of Ex2)

Ask the student to cup their hands against their face, with hardly any gaps between the fingers. This serves two purposes. Firstly, the hands provide good feedback of breathing volume. Use the hands as a barometer of breathing. The student should be able to feel the warm air as it enters their hands. Secondly, cupping the hands pools carbon dioxide to be re-inhaled, and this will help to create a feeling of air hunger.



or half an inch of air.

Short breath in and out: "I would like you to take a short breath in through your nose. With your hands cupping your face, only breathe 1cm, or half an inch of air into your nose. Then breathe out 1cm. Breathe just enough air to fill your nostrils and no more. Take a tiny breath into your nose and allow a tiny breath out through your nose. It is almost as if you are hardly breathing at all. Take a flicker of air into your nostrils and no more. As the breath in is tiny, the breath out will also be tiny."

The student will feel air hunger straight away with this exercise. If the air hunger is too much, then encourage them to breathe a little more air into their nose.

Continue in this way for 4-5 minutes. The goal is not to pant. The goal is to reduce the tidal volume or the size of each breath so that less air enters the body.

This exercise will involve shallow breathing with the feeling of air hunger. As with all variations of Exercise 2, the aim is to reduce the sensitivity of the body to carbon dioxide. Exposing the body to a feeling of air hunger may also help to change the student's perception of breathlessness.

#### Variation C: Finger blocking nostril

Posture (described at beginning of Ex2) Awareness (described at beginning of Ex2) Slow down your breathing To create air hunger (described at beginning of Ex2)

The purpose of this exercise is to concentrate total airflow through one nostril. This helps to increase breathing awareness.



"With your finger, block one of your nostrils. It doesn't matter which nostril you block. It can be your free or partially congested nostril. Feel the slightly colder air coming into your nose and feel the slightly warmer air leaving your nose. Slow down the speed of air entering into your nostrils. Breathe so softly that you cannot hear your breathing. Breathe so softly that the fine hairs within the nose do not move. Breathe so quietly that you feel hardly any air entering your nose. At the top of the breath, bring a total feeling of relaxation to the body and allow a relaxed, soft, slow, gentle breath out. Hide your breathing. I would like you to reduce your breathing movements by about 30%. It should be difficult for me to see your breathing. Calm your breathing. Quieten your breathing."

#### Variation D: Cadence breathing

(Note: This is not part of the Buteyko Method, as Dr Buteyko did not agree with counting the respiratory rate or timing breathing. However, there are many papers showing the benefit of cadence breathing.)



### Slow, Light and Deep

"Now I would like you to breathe slow, light and deep...."

**Slow:** "Slow down the number of breaths per minute so that you are taking fewer breaths than you normally do. The goal is to achieve six breaths per minute."

**Light:** "Your breath should be smooth, silent and light. There should be very little turbulence as it enters and leaves the nose."

**Deep:** "*As you breathe in, I would like you to bring the air deep into your lungs. Place your hands at either side of your lower two ribs. As you breathe in, feel your ribs expanding outwards. As you breathe out, feel your ribs moving inwards.*"

Repeat this a few times.

Next, encourage the student to breathe slow, light and deep to a cadence of 4 seconds inhalation and 6 seconds exhalation:

"And now, to time the breath. So, breathing slow, light and deep: Breathe in, 2,3,4... and out,2, 3,4,5,6..."

Continue repeating the instructions for 2 minutes.

"As you breathe in, feel your ribs expanding outwards. You might also feel your tummy moving out. Don't push or pull the movements. Allow it to happen. Guide the movements with your mind. The objective is to breathe slow, light and deep. Use your diaphragm, and feel a light air hunger."

In order to stimulate the baroreceptors, students should practise at home for 10-20 minutes, twice daily.

It's important to stress the importance of feeling a light air hunger so students don't compensate by taking a greater volume of air. A light air hunger will change the student's biochemistry, biomechanics and stimulate the baroreceptors:

#### **Exercise 3: Walking With The Mouth Closed**

"Begin to walk with your mouth closed, correct tongue posture, lips together, jaws relaxed, breathing in and out through your nose. Stand tall. Imagine a piece of string pulling you upwards towards the ceiling or sky. Lengthen the distance between your navel and sternum. Widen the distance between your ribs.

Now I would like you to place your hands on either side of your lower ribs.

As you breathe in, feel your hands moving gently outwards. As you breathe out, feel your hands moving gently inwards.



I would like you to breathe slow, light and deep. Take the air slowly into your nose. Breathe soft, light and slow, only taking the amount of air that you actually need. You will be surprised at how little air you actually need. So, with each breath take the air deep into your lungs. As you breathe in, feel your ribs moving outwards. As you breathe out, feel your ribs moving inwards.

Now I would like you to slow down your breathing to create a comfortable need for air. I would like you to feel slightly breathless, to feel you are not getting enough air. If the air hunger gets too much, slow down your pace or breathe a little deeper."

Repeat the sentences above over the course of 3-4 minutes.

16 Copyright Patrick McKeown 2019 [Another variation of this exercise is to block one nostril while walking. The concept is the same as the blocked nostril variation of Exercise 2 —the only difference is that this version involves walking instead of sitting.]

For children and teenagers, practise walking for one minute, jogging for one minute, walkingfor one minute, jogging for one minute. (Children should wear tape across their lips for the duration of this exercise to maintain nasal breathing.)

#### **Exercise 4: Walking With Breath Holds**

Exercise 4 is often continued from Exercise 3. This exercise involves breath holding followed by normal breathing during walking. It is not suited to those with unstable asthma or unstable breathing as it may disrupt breathing and cause too much breathlessness, or bring on asthma symptoms.



"Begin by walking with your mouth closed, jaws relaxed, tongue in roof of mouth. For this exercise, I would like you to challenge yourself, but not to feel stress. It is important that your breathing remains under control throughout the exercise. When you are ready, I would like you to breathe in and out through your nose, pinch your nose with your fingers, and hold your breath for 10 paces. Then let go and breathe in through the nose."

Follow this pattern repeatedly, increasing every other breath hold by five paces until a strong air hunger is achieved:

- Continue walking with normal breathing for 30-60 seconds. Then breathe in and out through the nose, pinch the nose, and hold the breath for 10 paces;
- Continue walking, breathing through the nose. Breathe normally for30-60 seconds, then repeat;
- Breathe in and out through the nose, pinch the nose, and hold the breath for 15 paces;
- Continue walking, breathing through the nose. Breathe normally for 30-60 seconds, then repeat;

- Breathe in and out through the nose, pinch the nose, and hold the breath for 15 paces;
- Continue walking, breathing through the nose. Breathe normally for 30-60 seconds, then repeat;
- Breathe in and out through the nose, pinch the nose, and hold breath for 20 paces..."

#### **Exercise 5: Steps**

#### Variations:

- c) Steps to 10 paces
- d) Walking Steps (moderate to strong air hunger)
- e) Running Steps (moderate to strong air hunger)

#### Variation A: Steps to 10 paces

Exhale and Rest for 30 seconds. hold breath for Repeat. 5 to 10 paces.

"Exhale through the nose. Pinch the nose with your fingers to hold the breath and walk for 5-10 paces while holding your breath. Stop walking. Breathe in through the nose and rest for 30 seconds or so while standing still."

During the session, practise up to 10 repetitions. At home, students can practice 6 repetitions of this exercise 5 times daily. Holding the breath for up to 10 paces is very suitable for persons with severe asthma, COPD, panic disorder and disproportionate breathlessness, low CP and anxiety.

#### Variations B & C: Walking or running Steps to achieve moderate to strong air hunger



# Exhale. Hold breath until moderate to strong air hunger. Control breathing.

"Exhale through your nose. Pinch the nose with your fingers to hold the breath. Walk or run while holding your breath. As the air hunger increases, walk or run faster. Continue to relax your body as you feel the involuntary contractions of your breathing muscles. When the air hunger is strong, let go of your nose and breath in. Walk a few paces to recover your breathing. Try to get your breathing under control within a few breaths."

Students can practise 6 repetitions of this exercise 2-3 times daily.

This exercise is suited to relatively healthy children, teenagers and adults, and those with mild/moderate asthma. This exercise is not suitable for children with pulmonary hypertension. For children and teenagers, the air hunger experienced during the Steps exercise must be strong. When a child or teenager has severe asthma, go easy for the first few repetitions to determine the child's comfort level. Challenge them to achieve more steps, without causing distress or loss of control to breathing.

**Exercise 6: Many Small Breath Holds** 



This is an emergency exercise to help stop symptoms of coughing (even extreme coughing, in combination with the Steps exercise to 10 paces), wheezing, panic, or hyperventilation. It is also beneficial if CP is less than 13 seconds, and suitable for those with severe asthma or COPD.

"Take a normal breath in and out through the nose. Pinch the nose with your fingers to hold your breath. Hold your breath for 3-5 seconds. Let go of your nose and breathe normally (through the nose) for 10 seconds. Repeat for 10 minutes or more."

The success of stopping an asthma attack depends on two factors:

- a) Time: The sooner you commence the exercise, the more successful the exercise will be.
- b) Control Pause: The higher the person's normal CP the easier it is to control the attack.

Students can practise this exercise 10 minutes every hour until symptoms abate.

#### **Additional Notes:**

With Exercise 2, students are sometimes confused with the following issues:

- How much air hunger to achieve during the exercise
- How to remain relaxed while creating a hunger for air

The air hunger felt during Exercise 2 should be similar to the air hunger achieved while measuring the Control Pause. If the air hunger is too much, the respiratory centre in the brain reacts to the build-up of carbon dioxide and sends an impulse to breathe. You are looking for the sweet spot; to achieve a degree of air hunger just below the point where the brain reacts; to be on the verge of disrupting your breathing rhythm, but not going beyond it.

When the air hunger is too much, the brain sends impulses to the diaphragm and intercostal muscles to breathe. This causes involuntary contractions of the breathing muscles, resulting in loss of breath control. If this occurs, take a rest for 15-20 seconds and begin again. Breathing volume should be reduced through a combination of relaxation and encouraging thoughts, not by tensing the breathing muscles.

(Some persons prone to anxiety or panic disorder have a strong fear response to air hunger. It is important to regularly monitor their reaction to the air hunger every fifteen seconds or so. If they have a strong reaction to air hunger, then limit exercises to many small breath holds, small paces and Ex 2 with air hunger for 15 to 20 seconds at a time. Ask them not to practice any exercises involving a strong air hunger or long duration of air hunger.)

While there are a number of ways to describe the feeling of air hunger, students can interpret it differently. Some may feel they are not getting enough air. Others may feel that they would like to take in a deeper breath.

Exercises 2, 3, 6 and 7 are designed to create a tolerable air hunger that doesn't induce involuntary contractions of the breathing muscles. These exercises are generally suited to everyone (except during the first trimester of pregnancy).

Exercises 1, 4 and 5, when practised to create a medium-to-strong air hunger, involve involuntary contractions of the breathing muscles. As the air hunger progresses, these involuntary contractions or movements become faster and stronger. Movements can take place in the diaphragm or throat. The key is to relax into the contractions. Upon resumption of breathing, it is important that breathing is brought under control within 2-3 breaths. For persons with low CP (less than 13 sec), breathing may be more unstable. Therefore, breath holds must be limited to create a medium air hunger only, with full control of breathing at end of the breath hold.

In addressing breathing pattern disorders, hyperventilation or dysfunctional breathing (terms are interchangeable), three areas are targeted:

- **Biochemistry:** Reduce the chemosensitivity of the body to the build-up of carbon dioxide.
- **Biomechanics:** Breathe using your diaphragm.
- **Baroreceptors:** Stimulate baroreceptors using a cadence of six breaths per minute.

#### The signs to look out for while doing Exercise 2:

- Eyes go glassy
- Increased saliva in mouth
- Nose may run
- Hands get warm
- Some people feel sudden calmness, others may feel slight panic