



**Asthma Care Ireland**  
by Patrick McKeown

## Summary of International Buteyko Clinical Trials

There are currently ten published studies investigating the Buteyko Method as a treatment for asthma, including one study collaborated by Patrick McKeown with the University of Limerick. All studies concluded a significant improvement to asthma control with a number of trials showing a 70% reduction in the need for asthma reliever medication and a 50% reduction in the need for asthma steroid medication within 12 to 24 weeks.

Comments from the papers include: *"If a drug could show these results, then it is likely that it would be used widely in asthma control" "It's just great...75% control is about as good as anyone has got in any study of asthma. The neat thing about it is that it has no side effects. It's very safe. The Buteyko technique certainly has been shown to be an important adjunct to treatment."*

The British Thoracic Society in their May 2008 **British Guidelines on the management of asthma** have upgraded the Buteyko Method to "B" classification indicating that there are *"high quality systematic reviews of case control or cohort studies"* and *"High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal."* [Learn more...](#)

### 1. Role of Buteyko Breathing Technique in asthmatics with nasal symptoms. *Clinical Otolaryngology*. 2013, April;38(2):190-191

In collaboration with the University of Limerick, Patrick McKeown was the instructor in a clinical study investigating the Buteyko Method as a treatment for rhinitis in asthma. Results showed a 70% reduction of nasal symptoms in participants, including snoring, loss of smell, nasal congestion and difficulty breathing through the nose. [Read the study...](#)

### 2. Effect of Buteyko breathing technique on patients with bronchial asthma. Department of Physical Therapy, Cairo University, Egypt. Chest Department, Faculty of Medicine, Ain Shams University, Egypt. Faculty of Physical Therapy, Cairo University, Egypt. Hassan Z, Riad N, Ahmed F. Available online 31 January 2013

Taken from the paper: Even though no study has indicated exactly why Buteyko is so effective at controlling asthma, if a drug could show these results, then it is likely that it would be used widely in asthma control. In the present study, the result of Buteyko

breathing technique showed a decrease in asthma daily symptoms with 52% and 0.8% in group (A) and (B), respectively. The results of this study support the good effect of Buteyko Breathing Technique on patients with bronchial asthma. It significantly decrease the recurrence and the severity of the main bronchial asthma symptoms (nocturnal waking, morning symptoms activity limitation, shortness of breath, wheezing, PEFR% predicted, and Inhaled Corticosteroids). And it significantly increase PEFR. Buteyko Breathing Therapy will improve patients function level and the capacity for independent living by decreasing the severity of asthma symptoms and recurrence of asthma attacks. [Read the study...](#)

### **3. Buteyko Breathing Technique Reduces Hyperventilation Induced Hypocapnoea and Dyspnoea after Exercise in Asthma. 2009. Austin G, Brown C, Watson T, Chakravorty I, PULMONARY REHABILITATION. Physiotherapy School, U Hertfordshire, Hatfield, Herts, United Kingdom.**

"Our study demonstrated the hypothesised physiology of BBT, improving hyperventilation induced hypocapnoea and breathlessness, following maximal exercise. By teaching patients to reduce hyperventilation of breathing (the rate & depth), BBT may reduce asthma symptoms and improve exercise tolerance and control." [Read the paper...](#)

### **4. A randomized controlled trial of the Buteyko technique as an adjunct to conventional management of asthma. Respiratory Journal; 2008 May;102(5):726-32. University of Calgary, Canada. (Cowie RL, et al)**

At six month follow up the Buteyko group had:

- Improved asthma control from 40% to 75%
- 39% of patients decreased inhaled corticosteroids
- 21% eliminated inhaled corticosteroids

[Read the study...](#)

*"I've been astonished and also very pleased with the excellent result. There is no disruption of their life at all by their disease: normal activities; not waking at night; not needing to use any reliever medications. It's just great...75% control is about as good as anyone has got in any study of asthma. The neat thing about it is that it has no side effects. It's very safe. The Buteyko technique certainly has been shown to be an important adjunct to treatment."* Dr. Robert Cowie, Resident Respiriologist of Foothills Hospital in Calgary and head researcher on the Buteyko Breathing Technique Medical Trial. (October 2004 April 2005)

### **5. Double blind randomised controlled trial of two different breathing techniques in the management of asthma Thorax. 2006 Aug;61(8):651-656 (Slader et al, 2006)**

At week 28; Buteyko Method Group achieved:

- Reliever medication decreased by 86%
- Inhaled Corticosteroids decreased by 50%

**6. The New Zealand Medical Journal. 2006 May 19; 119(1234) Buteyko breathing technique and asthma in children: a case series (McHugh et al, 2006)**

At 3 months; Buteyko Group achieved:

- Reliever medication decreased by 66%
- Inhaled Corticosteroids decreased by 41%

*Read the study...*

**7. The New Zealand Medical Journal, 2003 Dec 12;116(1187)**

*Buteyko Breathing Technique (BBT) for asthma: an effective intervention (McHugh et al, 2003)*

At 6 months; Buteyko Group achieved:

- Reliever medication decreased by 85%
- Inhaled Corticosteroids decreased by 50%

*"Conclusions: BBT is a safe and efficacious asthma management technique. BBT has clinical and potential pharmaco-economic benefits that merit further study"*

*Read the study...*

**8. Journal Asthma 2000;37(7):557-64.**

*A clinical trial of the Buteyko Breathing Technique in asthma as taught by a video. Opat Aj, Cohen MM, Bailey Mj, Abramson Mj.*

*"Our results demonstrated a significant improvement in quality of life among those assigned to the BBT compared with placebo (p= 0.043), as well as a significant reduction in inhaled bronchodilator intake (p = 0.008)."*

*Read the study...*

**9. Medical Journal Australia 1998 Dec 7-21; 169 (11-12)<sup>575-578</sup>**

*Buteyko breathing techniques in asthma: a blinded randomized controlled trial. Simon D Bowler, Amanda Green and Charles A Mitchell*

At 3 months; Buteyko Group achieved:

- Reliever medication decreased by 90%
- Inhaled Corticosteroids decreased by 49%

*Read the study...*

The above study found that when the breathing volume of asthmatics decreased from 14 litres to 9.6 litres per minute, their symptoms reduced by 70%, the need for rescue medication decreased by 90%, and the need for preventer steroid medication decreased by 49%.

**10. Systematic review of the effectiveness of breathing retraining in asthma management. Expert Review Respiratory Medicine.2011;5(6) Burgess J, Ekanayake B, Lowe A, Dunt D, Thien F C Dharmage S.**

Discussion The BBT has been the most widely publicized among the CAM techniques used in asthma management. Individual studies using BBT consistently demonstrated a

reduction in asthma medication use, and together with respiratory physiotherapy studies, often showed an improvement in AQOL and the subjective experience of asthma symptoms. However, there was no significant improvement in lung function in any of the BBT studies to account for the positive results. This was supported by the results of meta-analyses, which failed to show an effect of these techniques using pooled estimates. While it is possible that the deep inspiration required for lung function testing might induce bronchoconstriction [56] and override any beneficial effect from BBT, it is also possible that the studies were inadequately powered to detect changes in lung function parameters. Larger studies might reveal an effect. A meta-analysis of the studies that explored the postulated underlying mechanism proposed in BBT showed a significant increase in end-tidal CO<sub>2</sub> in the active intervention arm.

Critics of BBT argue that medication reduction could be due to the therapist's influence and it is difficult to evaluate that possibility. On the other hand, there was no evidence of a detrimental effect on asthma control with reduction in medication usage and to some extent, there might have been an improvement in symptoms. Longer follow-up is needed to show that improvement in asthma control as measured by medication usage is sustained for a duration that is clinically meaningful, and that BBT has no adverse effects. Despite the lack of evidence for physiological change to account for the observed benefits, a decrease in medication use could be useful considering the possible systemic effects of ICS use [57,58].

[Read the paper...](#)

## References

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