

Timothy Ives will highlight the importance of breathing in his lecture, Breathe Better to Live Better, at the British Dental Conference and Dentistry Show (BDCDS). Timothy is a registered dental hygienist, international speaker and, since 2017, a qualified breathing practitioner.

The effects of breathing on health

Dental hygienist Timothy Ives explains why he became a breathing practitioner: 'I became a breathing practitioner after a business partner informed me that I was a mouth breather, which explained the issues I was having at the time with a blocked nose and allergies.

'Breathing is the key to many healthrelated issues such as asthma and rhinitis, which are causing huge problems globally. These conditions can be treated and/or prevented through very simple means and over a period of time, reduce the need for medications by changing the way people breathe.'

It was estimated that in 2019, 262 million people suffered from asthma, and 461,000 deaths were caused by the condition.¹ Research² has shown that breathing exercises may have a positive effect on lung function, quality of life and hyperventilation symptoms in asthmatic adults. Equally, children with asthma symptoms and dysfunctional

breathing were shown to benefit from breath retraining.³

Timothy says: 'Most people may not realise that facial development, including the development of the airway, maxilla and positioning of the teeth, is dependent on how you breathe. Those who breathe through their nose usually keep their lips together and their tongue up in the roof of the mouth. Those that breathe through their mouth experience the opposite and are potentially putting themselves at risk of respiratory problems and the need for orthodontic therapy later on.

'Breathing through the nose means a wider palate and airway.'

Old habits die hard

Mouth breathing is an unhealthy habit that many people have, and as well as a restricted airway, it can cause snoring, chronic fatigue, brain fog and halitosis. Mouth breathing can be caused by nasal congestion, enlarged tonsils and the shape of the nose and jaw.

Timothy goes on to share some of the

topics he'll discuss further during his session: 'In my lecture I will help delegates with simple tricks to assess patients' breathing effectiveness, and then start them down the process of healthy breathing. It may be tricky for adults to switch to a healthier way of breathing, but once they do a lot of people don't go back.

'For children, it's easy to help them change their breathing behaviours. For babies, it can take seconds and only minor interventions. Bottle-fed babies commonly start mouth breathing, whereas breastfeeding can encourage the tongue to move to the roof of the mouth.'

One study⁵ did find a reduction in the prevalence of mouth breathing when breastfeeding was performed for up to two years. Another paper⁶ found that breastfeeding for 24 months or more, as well as exclusive breastfeeding in the first six months, was associated with nasal breathing development.

It's all in the breath

Within dentistry, the way the teeth and mouth are formed can determine whether the patient develops oral health concerns. For instance, mouth breathing during childhood may affect the craniofacial and dentofacial development.

Timothy continues: 'People breathe through their mouths up to three times as fast as those who breathe through their nose – breathing quickly is actually quite unhealthy compared to slow breathing.

'This is all related to how the body supplies oxygen to the brain, muscles and vital organs. The concentration of CO_2 determines whether haemoglobin releases oxygen from the blood. The more CO_2 that's present in the blood, the easier it is to release oxygen where it's needed.

'The faster you breathe, the less available ${\rm CO}_2$ you have. Slowing down is the key to breathing well – it starts with posture, then the brain must be retrained to function with less oxygen. I'll be getting people involved during my lecture so we can try techniques and turn it into a bit of a hands-on workshop at the same time!

'I hope to show delegates a method of how they can measure the quality of their breathing. They can then explain this process to their patients. I also run a course for dental professionals on how to help patients with their breathing if anyone wants to know more.'

Timothy will also be providing support to dental professionals recovering from COVID-19. He says: 'For context, there is a dental hygienist and dental therapist Facebook group for those suffering with the long-term effects of coronavirus. A year ago, the group had about 50 members; now it's gone up to 144. We know that hundreds of dental professionals have had COVID-19, but what's also worrying is how many people now have the lingering after-effects. Breathing techniques will help stop people panicking when they can't breathe, by teaching them that they don't need to breathe as often as they'd expect'.

Don't miss Timothy demonstrating the ways that dental hygienists and dental therapists can breathe more effectively at the BDCDS 2022, so not only can they improve their health but also the health of their patients. It really is as easy as breathing!

The next British Dental Conference and Dentistry Show will be held on Friday 13 and Saturday 14 May 2022, Birmingham NEC, co-located with DTS. British Dental Conference &

Dentistry Show

Birmingham

13-14 May 2022 | NEC | Hall 5

birmingham.dentistryshow.co.uk

British Dental Association

CO-LOCATED WITH

Dental Technology

Showcase

the-dts.co.uk

'Mouth breathing is an unhealthy habit

that many people have; it can cause

snoring, chronic fatigue, brain fog

and halitosis. [It] can be caused by

nasal congestion, enlarged tonsils and

the shape of the nose and jaw.

For more information, visit www. thedentistryshow.co.uk, call 020 7348 5270 or email dentistry@closerstillmedia.com. Register at: https://bit.ly/3q5SsPl.

References

- 1. World Health Organization. Asthma. 3 May 2021. Available at: https://www.who. int/news-room/fact-sheets/detail/asthma (accessed 28 January 2022).
- Santino T A, Chaves G S, Freitas D A, Fregonezi G A, Mendonça K M. Breathing exercises for adults with asthma. Cochrane Database Syst Rev 2020 doi: 10.1002/14651858.CD001277.pub4.
- 3. Hepworth C, Sinha I, Saint G L, Hawcutt D B. Assessing the impact of breathing retraining on asthma symptoms and dysfunctional breathing in children. *Pediatr Pulmonol* 2019; **54:** 706–712.

- 4. Healthline. Mouth breathing: symptoms, complications, and treatments. Available at: https://www.healthline.com/health/mouth-breathing#symptoms (accessed 27 January 2022).
- 5. Savian C M, Bolsson G B, Botton G *et al.* Do breastfed children have a lower chance of developing mouth breathing? A systematic review and meta-analysis. *Clin Oral Investig* 2021; **25**: 1641–1654.
- 6. Limeira A B, Aguiar C M, de Lima Bezerra N S, Câmara A C. Association between breastfeeding and the development of breathing patterns in children. *Eur J Pediatr* 2013; **172:** 519–524.

https://doi.org/10.1038/s41407-022-0859-1