The Breath Connection Facts
(For your orthodontist’s interest)

“There is plenty of evidence in the literature that mouth breathing has an adverse effect on the growth and development of the face and jaws. All children who are habitual mouth-breathers will have a malocclusion. The mouth breathers' maxillae and mandibles are more retrognathic. Palatal height is higher, overbite is greater in mouth breathers. Overall, mouth breathers have longer faces, with narrower maxillae and retro-gnathic jaws.

The tongue plays a large part in influencing cranial and maxillary growth. When a child is born, the forward thrusting of the tongue to express milk from the mother's breast is the force that drives the horizontal or forward growth of the maxillae. The tongue is ideally in contact with the roof of the mouth at rest and during the subconscious swallow. In this position, the tongue exerts a lateral force, which counterbalances the inward force exerted by the buccinator muscles. This is what maintains the integrity of the developing maxilla. When the tongue rests and functions in the palate the teeth erupt around the

The moment the child is a mouth breather, and the tongue drops to the floor of the mouth, the buccinators continue to push inwards and cause the upper arch to collapse. It is not possible to have the tongue rest and function in the palate and breathe through the mouth. In the chronic mouth breathing child the tongue falls from the roof of the mouth and no longer provides support for the upper arch. This results in a reduced size and retrognathic upper arch.”

Dr. John Flutter BDS(London) Dental Surgeon
Visit his website at: www.jfdental.com for more information and clinical case studies.

What can breath training do?

- Improve the health of your teeth
- Reduce the time needed to correct your orthodontic problems
- Reduce the symptoms of asthma, sinusitis, allergies, hay fever, breathlessness, anxiety etc.
- Give you a better understanding of the importance of your breathing
- Give you improved performance in sport and physical exercises.

References:
- Guyton AC Human Physiology 1982 pp 300, 500-501, 624
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- Ryberg M Effect of beta 2 agonists... Dent Res 1987 66 pp1404-1406
- O’SullivanEA Treatments for asthma may cause tooth damage BMJ 1998 317 pp317-820
- WilsonJ et al Inhaled Steroids-Too much of a good thing MJA 2002 177(6) pp288-289

www.ButeykoKent.co.uk
What dental problems can poor breathing cause?

Breathing through the mouth causes or contributes to the following dental problems: Dental decay, Gum disease, Malocclusion (teeth not fitting together properly when the mouth is shut), anterior open bite (prominent top teeth), Reduced dental arch space (narrow roof of the mouth) Greater potential for relapse of orthodontic correction. TMJ dysfunction, (where the jaw bone hinges onto the cheek bone). Bad breath problems.

How can breathing problems affect your teeth?

When the mouth is closed the tongue is normally pressed lightly upwards onto the palate, this constant small pressure ensures the correct development of the upper jaw. If however the mouth is kept open for breathing, the tongue falls to the floor of the mouth and the palate may develop with a high arch and reduced space for the upper teeth. If this kind of breathing is habitual, the face becomes more narrow or elongated compared with that of nose breathing siblings. (Champagne 1991, Rubin 1980)

By the time the tongue has grown to full size there is little room for the tongue to fit into the closed mouth. This can mean breathing through the mouth is almost a necessity.

The Long-term Consequences

The narrow palate caused by habitual mouth breathing as a child generally leads to teeth that either overlap or move forward, making a large overbite. As it is then not possible to chew, swallow or even talk properly, orthodontic work and or tooth removal are required to correct the bite. Teeth will wear unevenly if treatment is not performed early, resulting in dental work being required later in life.

Correct Breathing & Healthy Teeth

Nose breathing is also important for the health of teeth and gums even when the teeth are well spaced, because it ensures a greater supply of saliva. Saliva keeps the mouth healthy by protecting it against bacterial infection and tooth erosion from acids. (Guyton 1982) Bacteria are either inhaled through the mouth or enter with food and fingers for example. Acids arrive in the mouth via eating and drinking or as a result of gastric reflux.

Breathing through the mouth dries out the protective saliva and can easily cause dehydration, which is the most common source of salivary dysfunction. (Dawes 1987)

Dental problems & asthma medication

Breathing through the mouth and using asthma medication increases the danger of tooth decay even further because reliever medication stifles saliva production (McDerra 1998, Shaw 2000, Ryberg 1987).

Some asthma medications are acidic, which is another reason for possible damage to the teeth. (O’Sullivan 1998). Steroid puffers decrease the immune system efficiency and encourage the growth of oral thrush (Wilson 2002), clearly not promoting a healthy environment for teeth and gums.

Doctors’ Comments

"The modern Western diet of processed food contributes to bad breathing habits" says Dr. Weston Price, in his book Nutrition and Physical Degeneration.

He showed that when people who were brought up on a diet of raw and unprocessed foods and changed to processed foods, such as white flour and sugar, their children showed the classic signs of mouth-breathing such as a long narrow face and a narrowed upper jaw. They began to develop what we now call orthodontic problems with crowding and crossing of teeth, and protruding or under-developed lower jaws.

Dr. T- Children’s Dental & Orthodontic Practitioner

Since devising a mechanical system of keeping children’s mouths closed during the night, I have found that we have had to resort less and less to extracting teeth to ease over-crowding. The main problem was that once we removed the nighttime device, many children again reverted to their old bad habits and undid the good work we had done. The Buteyko method teaches children how to nose breathe all the time and has made a remarkable difference to the speed and success of the corrective procedures we have put in place. Furthermore, mouth breathing alters the pH of saliva, causes more decay and gum disease and makes my job that much harder.