

# Does Childhood Mouthbreathing Cause ADHD?



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It's a common misconception that a child who mouth breaths will eventually grow out of the habit or get orthodontic work to rectify the problem. The concerning reality however is that mouth breathing is sign of developmental issues that relate to normal oral, airway and facial growth.

What more is that experts are uncovering the long-term [health](#) issues such as ADHD symptoms and sleep disorders that all relate to improper jaw and breathing patterns in growing children. More kids are now showing positive to ADHD tests than ever and up to 9% are being put on ADHD medication.

## **Normal breathing patterns**

In normal oral airway development, humans are designed to breathe through their nasal passages. Whilst mouth breathing is seen in a growing number of children, the health risks associated with childhood mouthbreathing indicates the restoration of nasal breathing as early as possible.

The nasal passages are designed to slow the flow allowing for warming and humidifying of air before travelling to the lungs. Gases are saturated with water vapour by the time they reach the trachea. Mouth breathing provides cold, dry air and as a result the lungs will have difficulty providing maximum oxygenation for the body.

Over the long term it can deprive every cell of the body including the [brain](#) and major organs of crucial oxygen.

## **Childhood teeth development**

The jawbones are designed to house all of the facial structures including the mouth, teeth, airways and associated soft tissues. Normal development of the mouth (meaning straight teeth) means that airways have also developed. The connection between [dental](#) function and breathing begin right from birth.

When we swallow, the tongue exerts pressure on the roof of the mouth and widens the palate. People who breathe out of their mouth don't swallow as often become the mouth tends to be dry, preventing normal growth of the roof of the mouth.

This leads to serious consequences of underdeveloped jawbones such as long face syndrome, narrow mouths and receded jaws. These facial deformities are often corrected with regular braces to fix lack of dental space – however the goal is normally straight teeth, which if not performed early enough, doesn't always equate to a normally developed face.

## **Breastfeeding & palate formation**

Breastfeeding is directly related to the development of a baby's jaw and airway. Evidence has shown that newborns who are breastfed rather than bottle-fed have reduced problems with airway restriction and better dental health later in life, which is linked to the type of "sucking" done in infancy.

The reason is that breastfeeding plays a crucial role is the swallowing action of the tongue and creating the vacuum that acts to shape a babies palate. A child that bottle-feeds uses a pacifier or has a thumb sucking habit may disrupt the flow of air through the airway will be impacted and there is risk of developing obstructive sleep apnea.

## **Mouth breathing and sleep apnea**

Children with crooked teeth and underdeveloped jaws are now so common it is basically considered normal. A lack of space in the upper and lower jaws leads to dental crowding and

overcrowding of the tongue, leading it to fall back easily while you sleep causing snoring and sleep apnea

Sleep apnea is also brought on by nasal problems, where the roof of the mouth can get pushed up in a lying position, causing the septum to buckle. Inflammation and swelling in the nose due to allergies and rhinitis will cause nostrils to cave in easier and add to sleep apnea [stress](#).

### **Sleep disorders and ADHD**

The US Center for Disease Control and Prevention reports that more than 5 million children aged 3-17 have been diagnosed with attention deficit hyperactivity disorder.

A study that analyzed more than 11 thousand children over 6 years has revealed that children who suffer from sleep disorders, including sleep apnea, were 50 to 90 percent more likely to develop ADHD-like symptoms than normal breathers.

The research is linking kids with sleep disorders and higher incidence of behavioural and emotional issues such as hyperactivity, aggressiveness, depression, and anxiety. Experts have hypothesised that lack of sleep can damage brain neuron development which may link to ADHD.

Another theory says that kids who don't sleep well are being diagnosed with ADHD like symptoms because they simply haven't slept enough.

### **Myofunctional orthodontic treatment**

The restoration of nasal breathing during wake and sleep may be the only valid complete correction of sleep-disordered breathing.

Oro-facial muscle training and re-education of normal oral-nasal functions, alongside orthodontic treatment is a way of childhood dental bite problems that takes. Daily facial muscle training, termed 'myofunctional therapy', has been reported to help eliminate abnormal breathing during sleep, including detrimental mouth breathing and should be considered when the diagnosis of crooked teeth, malocclusion or mouth breathing is made.