# Article information:

Effects of mouth breathing on facial skeletal development in children: a systematic review and meta-analysis - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7944632/>

# Article summary:

1. Mouth breathing in children is closely related to facial skeletal development and malocclusion.

2. The mandible and maxilla tend to rotate backward and downward in mouth-breathing children, and the occlusal plane becomes steep.

3. Mouth-breathing children commonly experience airway stenosis and a labial inclination of the upper anterior teeth.

# Article rating:

Appears strongly imbalanced: The article is written in a biased or one-sided way, and the information it provides is not trustworthy enough to be considered a reliable source. You should consult other sources to find reliable information on the presented issues.

# Article analysis:

The article titled "Effects of mouth breathing on facial skeletal development in children: a systematic review and meta-analysis" aims to assess the impact of mouth breathing on facial skeletal development and malocclusion in children. The study conducted a systematic review and meta-analysis of relevant literature to analyze various parameters associated with the effects of mouth breathing.

One potential bias in this article is the inclusion criteria for the studies. The article states that only children under 18 years of age with maxillofacial deformities due to mouth breathing were included. This narrow inclusion criteria may introduce selection bias, as it excludes studies that investigate the effects of mouth breathing on facial skeletal development in children without maxillofacial deformities.

Additionally, the article does not provide information about the search strategy used to identify relevant studies. It only mentions that an electronic search was conducted in several databases, but it does not specify the keywords or search terms used. This lack of transparency makes it difficult to assess whether all relevant studies were included in the analysis.

Furthermore, the article does not discuss potential confounding factors that could influence the relationship between mouth breathing and facial skeletal development. For example, genetic factors, oral habits, and nasal obstruction are mentioned as possible causes of mouth breathing, but their potential impact on facial skeletal development is not explored. This omission limits the comprehensiveness of the analysis and leaves room for alternative explanations.

The article also lacks discussion on potential limitations of the included studies. It does not mention whether there were any limitations in study design or methodology that could affect the validity of their findings. Without considering these limitations, it is difficult to fully evaluate the strength of evidence presented in this article.

Moreover, while the article presents statistical results indicating differences in various parameters between mouth-breathing and nasal-breathing children, it does not provide clinical significance or practical implications of these findings. The reader is left wondering how these differences translate into real-life consequences for affected children.

Additionally, the article does not present any counterarguments or alternative perspectives. It solely focuses on the negative effects of mouth breathing on facial skeletal development and malocclusion without considering potential positive aspects or benefits. This one-sided reporting may lead to an incomplete understanding of the topic.

Furthermore, the article does not discuss potential risks or adverse effects associated with interventions aimed at addressing mouth breathing in children. It is important to consider both the benefits and risks when evaluating treatment options for this condition.

In conclusion, while the article provides some insights into the effects of mouth breathing on facial skeletal development in children, it has several limitations and biases that should be taken into consideration. The narrow inclusion criteria, lack of transparency in the search strategy, omission of confounding factors, absence of discussion on study limitations, and one-sided reporting are notable weaknesses. Future research should address these limitations to provide a more comprehensive understanding of the topic.

# Topics for further research:

* Genetic factors and facial skeletal development in children
* Impact of oral habits on facial skeletal development in children
* Nasal obstruction and facial skeletal development in children
* Limitations of studies on mouth breathing and facial skeletal development
* Clinical significance of differences in facial skeletal parameters between mouth-breathing and nasal-breathing children
* Risks and adverse effects of interventions for mouth breathing in children

# Report location:

<https://www.fullpicture.app/item/03a1decc641d5ccafc8efdce15ab4b08>