

[Am J Orthod.](#) 1981 Nov;80(5):536-45. [Links](#)

Resistance to nasal airflow related to changes in head posture.

Weber ZJ, Preston CB, Wright PG.

The relationship] between mode of respiration, cranial posture, and craniofacial morphology has been the subject of many articles in recent years. Some authors postulate that mouth breathers extend their heads backward in an effort to increase airway patency. The purpose of the present study was to determine whether artificially induced extended head posture decreases the resistance to nasal airflow. The experimental sample comprised fifteen male students with normal vertical facial proportions and no histories of chronic mouth breathing. In the sample, head posture was assessed by measuring the craniovertical angle by means of an angle finder. Nasal resistance units were calculated from the parameters of nasal airflow and differential pressure across the nasal airway during the complete respiratory cycle using an equation analogous to Ohm's law. Readings were obtained in both the normal and 10-degree extended head posture position, and the results were compared. No association could be found between an extended head posture position and a decreased resistance to nasal airflow.

PMID: 6946709 [PubMed - indexed for MEDLINE]