

## Sleep Apnea, TMJ and Dentistry

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The most recent American Dental Association (ADA) definition of dentistry is: “The evaluation, diagnosis, prevention and/or treatment (nonsurgical, surgical or related procedures) of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body; provided by a dentist, within the scope of his/her education, training and experience, in accordance with the ethics of the profession and applicable law.”

Oral Systemic Balance® (OSB) utilizes what we have learned in our dental education ranging from basic science to techniques in repositioning, replacing and restoring teeth and gum tissue to restore and/or enhance ease and effectiveness of speaking and swallowing. And, through attention to improving ease of oral function in general, OSB extends to control of the airway and ease of breathing.

Through dentistry’s descriptions of temporomandibular disorder (TMD) related effects, as well as the medical description of sleep apnea’s association with various medical disorders, OSB appears to define the physical and mechanical impact of the mouth, jaws and related structures with the rest of the body.

OSB focuses on function and dysfunction of the parts of the body covered by the dental profession. This is because the oral structures, as expressed in the definition of dentistry, appear to control the tongue, which is the main door to the airway, the oral pharynx and airway management, which are the body’s first priorities for its survival. This is basic survival as defined in cardio-pulmonary resuscitation (CPR).

The body responds to apnea by positioning itself to allow air to flow across the tongue and through an open airway. The autonomic nervous system (ANS) will influence whatever posture or position necessary to keep the airway open and/or compensate by increasing breathing rate and blood flow (through heart rate and blood pressure) to counterbalance limitations in airway size and shape. In cases of sleep apnea, this can cause enormous wear and tear on the body.

The body’s changes to manage homeostasis are influenced first and foremost by oral function/dysfunction as it relates to the tongue. This sits squarely in the domain of dental territory with other areas of the body generally playing a secondary role. To dismiss the major impact of the physical structure on the movement, posture and position of the tongue is ignoring reality.

In terms of apnea, sleep apnea and TMD, it appears that the effect and impact of oral structures on the body are in the hands of the dental profession, as much, or more, than any other.