## How Potential for Obstructive Sleep Apnea Can Impair Beauty

By Arthur M. Strauss, DDS

Over the years I have been discussing Obstructive Sleep Apnea (OSA) as a description of a structural condition, which is seen as a sleep condition rather than a structural condition during sleep. I believe that studying the same structural relations associated with OSA, while we are both awake and asleep can and will provide a better understanding for how the functions.

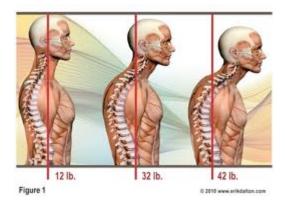
Medicine's principles of CPR (cardio-pulmonary-resuscitation) sequence of "Airway-Breathing-Circulation" illustrates, although closely tied together, that the airway, essentially the jaw-tongue-throat anatomic and functional relationship comes first. It controls airflow and ease of, even potential for, breathing, as well as its affect from and effect upon by the rest of the body.

I have also noted that my understanding of science has led me to conclude that the design function of the body is "to keep itself alive", and it compensates for structural compromise to airflow through the throat by:

- Clenching and/or grinding teeth (more often during sleep)
- Increased adrenaline secreted as in the "fight or flight" response to increase muscle tone
  and activity support the above actions, breathing, circulation and more
- Posture changes (poor posture while awake and postural changes while asleep)

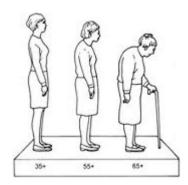
Compensation impact on our concept of beauty is:

- The tooth clenching and grinding is associated with TMJ issues of pain and poor posture.
   Worn teeth from grinding often decrease facial support leading to wrinkles and frown lines from jaw and facial muscle changes.
- The increased frequency and intensity of the "fight or flight" or "Stress Response" is in actuality "Stress", Stress increase impairs beauty and health!
- Posture change, as forward head posture, which continues impacting total posture, not
  only predisposes us to musculoskeletal pain (adding to the stress response),
  compression of the rib cage, lung capacity and even vital organs below. As illustrated
  below has a positive impact on increasing the airway in allowing the jaw and tongue to
  fall forward as influenced by gravity while sitting or standing while awake.



For every inch your head moves "forward", the head "gains" 10 pounds in weight and the muscles in your upper back and neck have to work harder to keep the head (chin) from dropping forwards onto your chest.

This increases with aging as does OSA and, I believe, osteoporosis relation to the airway management chronic "stress response" from the adrenal gland component upon the other glands of the endocrine system upon the body's ability to absorb and assimilate calcium. Note the illustration below:



This detracts from our concept of beauty, yet appropriate dental intervention focusing on Oral Systemic Balance to maximize the dental relationship to ease of breathing, can, likely prevent or minimize this as it addresses much of the origin of OSA.