#### From Tooth Doctor to Mouth Doctor

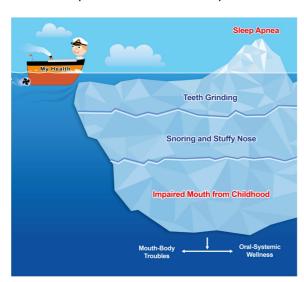
Oral diseases and conditions are associated with other health problems.

- US Surgeon General David Satcher, MD (1)

"病從口入" is a well-known Chinese Proverb: The mouth is the start of illness. I propose that the mouth is also the start of wellness. Dentists can have a decisive role in patient's total health with professional development from tooth doctors to mouth doctors.

I am Dr. Felix Liao, a general dentist in America for over 30 years, with a special interest in mouth-body connections. I am pleased to introduce Holistic Mouth Solutions, a new mode of practice that is clinically exciting, emotionally satisfying, and financially rewarding.

All mouths are not created equal. A mouth doctor's first job is to know if a particular patient has a mouth that is a health asset or aliability. Here's a brief introduction before we apply it clinically to make a positive difference for patients.





Holistic Mouth or Impaired Mouth — Which Does Your Patient Have? "Holistic" is rooted in the Greek idea of Holism or Wholeness. "Holistic Mouth" is a term I coined for one that works for whole body health in terms of ABCDE:

- Alignment of head-jaws-neck-spine.
- Breathing without the tongue blocking the airway during sleep.
- Circulation without dental infections.
- Digestion without inflammation or environmental toxins.
- Emotional balance without distress, anxiety, or depression.

"Impaired Mouth," by contrast, is one that can eat, drink, talk, and smile, but falls short of its job descriptions listed above. Impaired mouth is a health risk just as an alcoholically- or emotionally-impaired driver is a road hazard. An Impaired Mouth snores, grinds the teeth, fosters fatigue, triggers pain, scowls often, grows a pot belly, clogs arteries, fogs memory, raises costs, and

carves "sad smile lines" into the face with time.

Patients with Impaired Mouth fill dental and medical offices, emergency rooms, and hospitals. The trouble is that Impaired Mouth does not yet have an insurance diagnostic code. So doctors and dentists are not aware of Impaired Mouth as a source of medical-dental troubles at this time.



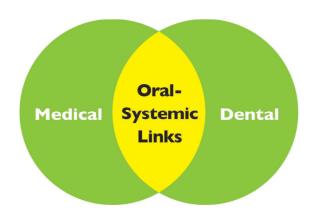
#### Holistic Mouth Solutions

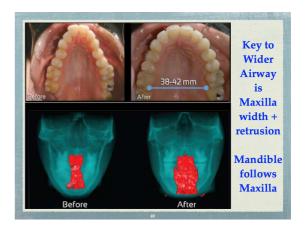
A Holistic Mouth is a FULLY functional mouth – and a necessary tool for whole body health. Conversely, Impaired Mouth handicaps the body 24/7 with medical, dental, and mood symptoms.

In my experience, whole body health improves naturally when the mouth is cleaned of infections and released from the limitations/entrapment of malocclusion. That is is the essence of Holistic Mouth Solutions.

In my office, I provide education on how to use the mouth for Digestion and Circulation, and I support Alignment and Breathing with oral appliance therapy. Emotional balance comes naturally when ABCD are in place, as you will see in the case examples shortly.

Holistic Mouth Solutions is backed by the science of Oral-Systemic Links, a growing body of scientific evidence connecting the mouth with whole body health.





## The Science of Oral-Systemic Links

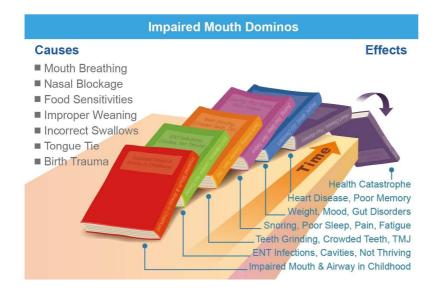
Life at birth begins with a cry to inflate the lungs and a feeding to ensure survival. From then on, the mouth shapes the face and overall health for life. The lucky ones get Holistic Mouth for good health; the unlucky ones get Impaired Mouth, which starts the domino of health troubles.

Oral-Systemic Links validates "病從口入", i.e. the mouth is the start of chronic pain and illness. For example, obstructive sleep apnea (OSA) in children has been linked to a short lingual frenulum. "Short lingual frenulum may lead to abnormal orofacial growth early in life, a risk factor for development of Sleep Disordered Breathing." (2)

Dentists trained as mouth doctors familiar with Oral-Systemic Links are in a decisive position to shape the medical-dental fate of patients young and old. For example, habitual mouth breathing can lead not only to malocclusion but also poorer school performance, aches and pains, and lower life quality (3).

A mouth is much more than teeth. Jaw and tongue size and position affect snoring and sleep apnea. Neck pain, fatigue, and hypothyroid are often the price of malocclusion. Silent mouth infections and inflammation can undermine medical care. These are some of the oral contributions to systemic symptoms.

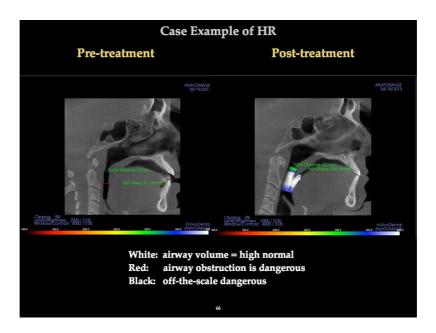
The dentist is in the best position to educate the parent, make diagnosis and give recommendations on how to build better health through the mouth. A sample of the science of Oral-Systemic Links supporting Holistic Mouth Solutions is listed in the Appendix.



## **Examples of Holistic Mouth Solutions**

Holistic Mouth Solutions is not just Oral Appliance Therapy, but also diet, lifestyle, sleep hygiene, head-neck-spine alignment work, and myofunctional exercises to establish healthy swallowing patterns. Here are a few examples:

• Patient HR, age 51, was on CPAP for medically diagnosed sleep apnea. He wanted to try oral appliance after getting a new girlfriend. His overnight sleep and daytime sleepiness improved



within one week, and was stable one year later.

• Patient RH, age 17, came to see me after grinding through her night guard. She was tired and losing her tennis matches. She stopped grinding her teeth and winning her tennis matches after oral appliance therapy and her face developed fully. Now she is a professional model and loving it.



• Patient KS, age 39, felt tired every morning, and tired and anxious during the day. She came to replace her amalgams and was skeptical of my diagnosis that her mouth was too small for her tongue. She had 4 teeth extracted for orthodontics in high school. "The effectiveness showed in the first week, as I began sleep through the night and dreaming. After just over 3 months of wearing the appliance, virtually everything I was trying to fix by removing the mercury had been resolved by opening my airway. I never knew that I was being deprived of the oxygen I needed to thrive... Thank you Dr. Liao!"

CJ, patient KS' husband, agrees, "I am sleeping better because she no longer tosses and turns and sound like a walrus. She now sleeps better and quieter and through the night. During the day, she thinks better, remember things, and her eyes are whiter, and her skin looks nice. I am so impressed that she has had such great results in such a short time."

#### Medical Recognition

"Oral appliance is recognized as first line treatment for mild to moderate obstructive sleep apnea (OSA), and as second line treatment for severe OSA", as recognized by American Academy of Sleep Medicine since 2006. (4)

Steven Y. Park, MD, is an ENT specialist who wrote a wonderful book called *Sleep Interrupted*. From Dr. Park's blog of 9/24/2014 (5): "Oftentimes, I recommend a referral to a dentist to treat obstructive sleep apnea. Most patients will ask me, 'How is a dentist going to help me?' My answer is that since obstructive sleep apnea is mainly a problem from small jaws and crooked teeth, they have a variety of different ways of helping you to breathe better and sleep better."

Getting the mouth out of inflammation and into Alignment and Breathing for deep and refreshing sleep is a mouth doctor's best service to patients. Imagine a dentist not using a high speed drill

or needle, and still have patients thank you in disbelief that their aches and pains, fatigue, and depression are gone; that their energy is back; that they look radiant again.

You, too, can turn patients with Impaired Mouth toward Holistic Mouth by acquiring the necessary training.

## Impaired Mouth As A Cause of Medical-Dental Problems

If malocclusion is such a systemic problem, where does it come from and what can be done? The answer is Epigenetic Orthopedics, or how the dental-facial skeleton is formed by factors beyond just genes. The DNA Appliance Certification Seminar Part I covers this topic.

If Obstructive Sleep Apnea is such a big medical and dental problem, what can a dentist do? The answer is Pneumopedics, non-surgical remodeling of the upper airway with DNA Appliances, which are biomimetic appliances that copy natural form for biological functions. Pneumopedics is the topic of DNA Appliance Certification Seminar Part II.

## Invitation To DNA Appliance Certification Seminars

You can help turn Impaired Mouth into Holistic Mouth with Holistic Mouth Solutions. I invite you to become a certified provider of DNA Appliance Systems by taking both Part I and II of my DNA Certification Seminar. This is best way to become a mouth doctor in the shortest time at the least cost. All the case examples will be discussed in detail in the seminar.

#### Part 1 Craniofacial Epigenetics (choose one set of dates)

January 21, 22, 23, 2016, June 2, 3, 4, 2016 November 3,4,5, 2016

# Part 2 Airway Remodeling for Snoring and Sleep Apena (Pneumopedics) (choose one set of dates)

April 21, 22, 23, 2016, September 15, 16, 17, 2016

All seminars will be held in or near my office in Falls Church, VA, halfway between Dulles and Reagan National Airport.

## Appendix

A sample of scientific evidence supporting Holistic Mouth Solutions:

- Heavy snorers have a 2.25 odds ratio for diabetes. (6)
- 83% of drug-resistant hypertension (>140/90) patients on average of 3.6 anti-hypertensive drugs have obstructive sleep apnea. (7)
- 64.4% of men with obstructive sleep apnea has erectile dysfunction. (8)
- Odds ratio for acute heart attack is 13.6 with presence of periodontal pathogen *P. Gingvlis.* (9)
- Oral Herpes Simplex Virus (HSV1) is a bigger risk factor than the "Alzheimer gene," with a hazard ratio of 2.25. (10)
- Adjusted relative hazard for cancer mortality is 2.0 with moderate sleep apnea, and 4.8 with severe sleep apnea. (11)
- Sleep disordered breathing, malocclusion, and TMJ disorders as a triad may co-present as undiagnosed cranio-facial underdevelopment." (12)

- Malocclusion can distort C1/C2 to perpetuate pain anywhere in the postural chain. (13, 14)
- Children with good jaws perform better in school, and have fewer pain and ear-sinusthroat infections. (14)
- EEG spikes 4 seconds before sleep bruxing (teeth grinding) event, and heart rate spikes 10 seconds after said event. (15)
- Hypertension is linked to periodontal disease: Odds ratio = 3.05. (16)
- Oral appliance therapy results in a systolic drop of 13 and a diastolic drop of 8 in 38 hypertensive patients: 150/93 to 137/85. (17)
- Oral appliance drops AHI 50% in 4 weeks in OSA patients and reduces blood pressure. The reduction is comparable to CPAP in a randomized controlled trial. (18)
- Mouth-breathing is a major cause of malocclusion. (19)
- Full physical and spiritual health is associated with fully developed and balanced facial skeleton, wide jaws, and straight teeth. (20)
- Epigenetic orthodontic solutions are available for sleep apnea even in adults. (21)

#### References

- 1. *Oral Health in America: A Report of the Surgeon General.* David Satcher, MD. U.S. Department of Health and Human Services, Rockville, MD. National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.
- 2. Huang et al. Short Lingual Frenulum and Obstructive Sleep Apnea. Int J Pediatr Res 2015, 1:1.
- 3. Fonders, Dental Distress Syndrome Quantified, Fonder A (1987) *Basal Facts*, 9(4), 141-167; free pdf: <a href="http://www.holisticdentist.com/pdf/ddsquantified-fonder.pdf">http://www.holisticdentist.com/pdf/ddsquantified-fonder.pdf</a>
- 4. Kushida CA, Practice Parameters for Oral Appliances—AASM Practice Parameters, *SLEEP, Vol 29, No. 2, 2006.* American Academy of Sleep Medicine
- 5. Steve Y. Park, MD, blog of September 24. 2014: <a href="http://doctorstevenpark.com/tag/alf">http://doctorstevenpark.com/tag/alf</a>
- 6. Al-Delaimy WK, et al, Am J Epidemol 2002, March 1; 155(5): 387-93.
- 7. Logan AG, et al, Journal of Hypertension: December 2001, Volume 19 Issue 12 pp 2271-2277.
- 8. Santos, et al, Rev Port Pneumol. 2012 Mar;18(2):64-71. Epub 2012 Feb 9.
- 9. Stein JM, et al, J. Periodontol 10/2009l 80:1581-9.
- 10. Letenneur L, et al. PLoS One. 2008; 3(11):e3637
- 11. Nieto, et al, Am. J. Respir. Crit. Care Med. July 15, 2012 vol. 186 no. 2 190-194
- 12. Singh GD, et al, Dialogue, 1, 22-24, 2012.
- 13. Guzay Call me?, The Quadrant Theorem. (1980) Doctors Dental Service, Chicago, IL.
- 14. Fonder A, Dental Distress Syndrome Quantified, (1987) *Basal Facts*, 9(4), 141-167; free pdf: <a href="http://www.holisticdentist.com/pdf/ddsquantified-fonder.pdf">http://www.holisticdentist.com/pdf/ddsquantified-fonder.pdf</a>
- 15. Bader. et al. Sleep (1997) 20(11)982-990.
- 16. Desvarieux M, et. al. Journal of Hypertension 2010, 28:1413–142.
- 17. Yoshida, Int J Prosthodont. 2006 Jan-Feb;19(1):61-6.
- 18. Gotsopoulos H, et al, Sleep. 2004 Aug 1;27(5):934-41
- 19. Handbook of Facial Development, by Enlow D, Moyers R, Merow W. Saunders, 1976
- 20. Nutrition & Physical Degeneration, by Weston A. Price, DDS, Price-Pottenger Nutrition Foundation, 2008
- 21. Epigenetic Orthodontics in Adults, by Drs. G. David Singh & James Krumholtz, 2009, Smile Foundation, www.SmileFoundation.com