Oral-Systemic Connections:  
Dental Contributions and Solutions to Whole Body Symptoms  

Presented by Felix Liao, D.D.S.

Core Message:  Your mouth can hurt or help your overall health through Oral-Systemic Connections

Synopsis: Whole Health = Mind-Body-Mouth + Nature

Dr. Liao’s lecture will connect the mouth with America’s leading causes of death and suffering, and present Whole Health solutions.

The mouth can be a hidden source of chronic pain and illness. “Cavity Free” and “Nothing hurts in my mouth.” is not good enough for whole body health. Silent infections can metastasize to heart, brain, joints and vital organs. Malocclusion, a bad bite in disharmony with the body, can spread side effects through the whole body. Common sense says all parts of the body are connected. Anatomy shows the mouth is strategically located below the brain and atop the respiratory and digestive tracts. New science states that dental infections metastasize to the brain, joints, heart, and other internal organs. Dr. Weston Price’s research was ground breaking 90 years ago, and still true today and largely ignored. The mouth has been left off the health care map, and millions suffer from the medical-dental-chiro divide.

Whole Health is a common sense model for building natural wellness advanced by Dr. Liao that recognizes that the wellness of the Whole depends on the health of each and every part of the body and that Each body part is in turn supported by the vitality of the Whole’s mind-body-spirit physiology. Whole Health differs from piece-meal care by addressing major causes. Symptoms are body’s reaction to causes, which should include dental sources and cofactors.

The practical outcome of Oral-Systemic Connections is this: many whole body symptoms resolve when the mouth is systemically healthy. That is the clinical experience of many whole-health dentists. Holistically minded doctors and patients are increasingly aware of the pivotal role of oral health and disease. What would Dr. Price’s practice look like in 2010? What is a systemically healthy mouth?

The new Whole Health Dental criteria will include:

Alignment of head-jaws-bite-spine

Breathing without tongue as airway obstruction

Circulation without dental Infections

Diet and Daily Routines

Emotional Balance and Energy Fields

Filling Materials Biocompatible & Non-toxic

Due to time constraints, this presentation will focus on the systemic effects of Dental Infections and Misalignment. This presentation will include scientific studies and clinical cases, a Whole Health Dental Care Resource List, and Parent’s Guide to Whole Health Dental Care for Children. Please visit our website at www.wholehealthdentalcenter.com for more information. Thank you.
Dental Contributions to Systemic Illness and Body Aches:

- Dental-Cranial Misalignment
- Dental Infections: root canals and peri-odontal and jaw bones
- Dental Materials
- Dental Batteries from mixed metals in solution
- Dental Infections: gums, root canals, jaw cavitations
- TMJ and Facial Pain

Systemic Contributions to Dental Issues (See Neutral Therapy History)
- Physical or surgical scars
- Psycho-emotional Trauma
- Environmental Toxins and Chemical Exposures
- Individual Constitution
- Foreign Travels and Residency
- ElectroMagnetic Smog and Sensitivity
- Vaccinations and Long Term Side Effects of Medications: esp. for those impaired abilities to excrete toxins

Hand-Outs:
- Symptom Iceberg
- Aligned & Level: Dental Bite is Part of Postural Chain
- BioFilm Metastasis
- Parent’s Guide to Whole Health Orthodontics
- Sleep Apnea Summary
- PerioProtect for Physicians
- Resource List

Cases: may not be e-mailed to respect privacy
**Do you know someone that suffers from the following?**

<table>
<thead>
<tr>
<th>Symptoms</th>
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</thead>
<tbody>
<tr>
<td>Headaches, insomnia, tired on awakening</td>
</tr>
<tr>
<td>Depression, anxiety, mood swings</td>
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<tr>
<td>Chronic pain or arthritis</td>
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<tr>
<td>Chronic fatigue, fibromyalgia</td>
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<tr>
<td>High blood pressure, arterioclerosis</td>
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<tr>
<td>Lymes Disease, Herpes I or II, Hepatitis C</td>
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<tr>
<td>Cancer</td>
</tr>
<tr>
<td>Recurrent infections and frequent colds</td>
</tr>
<tr>
<td>Bags under eyes, premature wrinkles</td>
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<tr>
<td>Gastric reflux, heart burn, bloating</td>
</tr>
<tr>
<td>Constipation, diarrhea, irritable bowel</td>
</tr>
<tr>
<td>Diabetes</td>
</tr>
<tr>
<td>Over weight by 10 pounds</td>
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<tr>
<td>Low libido, sexual dysfunction</td>
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</tbody>
</table>

**Syptom Iceberg**

According to Dietrich Klinghardt, MD, PhD

- **Infections**
- **Chemicals**
- **Diet & Food Allergens**
- **ElectroMagnetic Radiation**
- **Heavy Metal Burden**
- **Biomechanical Imbalances**
- **Psycho-Emotional Distress and Scars**

**Illness → Wellness**

**Dental Contributions**

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To schedule a consultation call:

**Whole Health Dental Center**

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Falls Church, VA 22043  
(703) 385-6425
Aligned Bite = Balanced Body
Dental --> Systemic Infections:
Gums, Root Canals, Jaw Cavitations

Sites of Primary and Secondary Biofilm Infection

Sites of Primary Infection:
- Subvenous catheter
- Mouth
- Artificial hip implant

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Parent’s Guide to Whole Healthy Orthodontics

To help children grow into fully-actualized young adults with brains and beauty, early diagnosis is essential. Cranium means skull bones that make up the head. Cranially-oriented orthodontics is best started between ages 7 - 9.

In my practice, many adult patients come to me for chronic headaches, neck and back pain, TMJ and ever-complicated dental problems that are the life-long result of unrecognized and untreated cranial-dental-facial distortions. How can the same be prevented for your children or grandchildren? How can we help them grow into adults with winning looks, smiles, and positive feelings from within?

Orthodontic issues rarely exist by itself. Crowded teeth, over-bite, under-bite all reflect distorted cranial architecture below. Teeth are surface makers rooted in jaw bones, which are connected to cranial bones that house the brain and the 12 cranial nerves supplying the eyes, ears, nose, face, throat, and are linked posturally to the gut, hips, knees and feet.

The kids with the best forms will be the fittest for survival. Crooked teeth and narrow jaws don’t make winners. The Law of Form and Function says twisted cranial-facial bones will adversely affect academics, sports, health, and life well beyond crowded teeth. Conversely, optimal brain performance happens when bones of the cranium (skull), face, and jaws are properly positioned and connected. Well-formed dental arches not only mean good looks and winners, but also better school performance. It is no accident that Dr. Nancy Etcoff, a pediatrician, wrote a book called Survival of the Prettiest.

Early recognition and timely intervention is critical. Timely treatment in many cases means pre-puberty: girls before age 8 and boys before 10. This allows the dentist to coordinate treatment with puberty growth spurts. Below is a checklist to help parents recognize the leading indicators of cranial-dental-facial.

1. Medical Clues: ages 0-7

   ____ Allergies, mouth breathing, dry lips
   ____ Headaches
   ____ Earaches, recurrent ear infections or stuffiness
   ____ Frequent colds, inflamed tonsils
   ____ Broken nose or head trauma from falls or accidents
   ____ Attention deficit or hyperactivity
   ____ Prolonged struggle in birth canal
   ____ Early yeas: colicky, spit-ups with feeding

(Turn page to continue)
2. Appearance:

- Forward Head (ear hole ahead of shoulder point in profile)
- Uneven ears or eyes
- Narrow nostrils, deviated nose
- Small (weak) chin
- Slumped posture
- Dry or parched lips
- Deep chin cleft
- "Gummy" smile
- Overly long "horse" face
- Overly broad flat face
- "Fish mouth" lips in profile

3. Dental Clues: ages 1-7

- Teeth grinding before age 6
- Thumb sucking persisting
- Open bite (space between upper and lower front teeth for thumb or tongue)
- Crowded front teeth, upper or lower
- Crooked (rotated or turned) front teeth, upper or lower
- Deep bite (upper front teeth overlaps more than half of lower front teeth)
- Cross bite (any lower front OR back tooth/teeth)
- Midlines mis-matched, upper compared to lower
- Premature loss of baby teeth without space maintainer care
- Clicking or popping jaw joints
- Jaw opening-closing: zig-zagging/deviated instead of straight-smooth

Beauty and brain are rooted deep in bone. The biological framework for optimal brain and natural beauty is Cranial-Dental-Facial harmony. A properly trained and whole-health-oriented dentist can facilitate the growth of children into fully-potentiated adults.

Early recognition and intervention carries the following life-long benefits:

1. Avoiding extraction of permanent teeth or jaw surgery in many cases
2. Feeling and looking like a winner
3. Growing into full potential academically, athletically, and socially
4. Preventing cranial-dental-TMJ problems and associated costs (see next page)
5. Living a healthy and enjoyable life with far fewer health complications

Early recognition means an orthodontic assessment should be made by age 6 for girls and 7 for boys. For a consultation appointment, please call (703) 385-6425.
Mind-Body Expressions of Mercury Toxicity

<table>
<thead>
<tr>
<th>Psychological Signs</th>
<th>Somatic Signs</th>
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<tbody>
<tr>
<td>Unexplained Irritability</td>
<td>Numbness &amp; tingling in extremities</td>
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<tr>
<td>Constant or frequent depression</td>
<td>Frequent urination overnight</td>
</tr>
<tr>
<td>Unexplained chronic fatigue</td>
<td>Cold hands + feet in moderate weather</td>
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<tr>
<td>Brain fog</td>
<td>Bloated feeling most of the time</td>
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<tr>
<td>Sudden anger or unexplained hostility</td>
<td>Constipation on a regular basis</td>
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<tr>
<td>Difficulty making simple decisions</td>
<td>Tremors of limbs or facial twitching</td>
</tr>
<tr>
<td>Jumpy, jittery, nervous</td>
<td>Frequent or recurring heartburn</td>
</tr>
<tr>
<td>Constant death wish or suicidal intent</td>
<td>Unexplained itching, skin rashes</td>
</tr>
<tr>
<td>Frequent Insomnia</td>
<td>Constant/frequent metallic taste</td>
</tr>
<tr>
<td>73%</td>
<td>67%</td>
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<tr>
<td>72%</td>
<td>65%</td>
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<td>36%</td>
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(From a survey of 1320 respondents who had completed questionnaire used in treatment or consultation for heavy metal toxicity, as published in It's All In Your Head: The Link Between Mercury Amalgams and Illness, by Hal A. Huggins, D.D.S.)
Dear Doctor:

Periodontal infection poses a serious risk for many medical conditions under your watch: cardiovascular disease, stroke, diabetes, pancreatic cancer, arthritis, and premature birth with low birth weight, and more. Please consider the following issues and answers:

- **Prevalence:** periodontal disease is the most prevalent infection to afflict your patient. Two out of three Americans ages 35 – 44 have periodontal disease (World Health Organization, 2003), and 90% among those ages 55 – 64.

- **Causes:** ineffective home care, and human nature. The culprit is a biofilm of salivary protein attached to teeth surface below gum line. Also people just don’t have all day to fuss over brushing and flossing. Still, the consequence of gum inflammation is real and can be morbid.

- **Pathogenesis:** Under the conditions of stress, acidic or reduced saliva, bad diet, and poor oral hygiene, dormant pathogens multiply and the biofilm morphs into a hot bed for periodontal inflammation. Micro-ulcerations under the gum line become pumping stations through which periodontal infection and spread systemically.

- **New & Proven Solution:** PerioProtect, is a FDA approved medical device made by certified dentists to treat periodontal disease. The customized trays have a seal that directs peroxide and V-mycin under the gums to breakup the sub-gingival biofilms. SEM shows 99.98% of pathogens are gone in 17 days with PerioProtect.

- **Medical Relevance:** 60-80% of biopsies of arterial plaque contain viable oral bacteria *p. gingivalis* and *actinobacillus*. Periodontitis is linked to coronary artery disease by angiography (Auer et al, Circulation, 2006) and carotid plague by FDG-PET imaging. “Periodontal disease correlates with and may be predictive of macrophage infiltration within carotid plagues.” (Tawakol et al, Circulation, 2006).

Please help reduce your patients’ systemic risks with periodontal infection control. You can either refer them to www.PerioProtect.com, or give them the pamphlet enclosed.

PerioProtect is preventive dentistry and proactive medicine. Please give me a call at (703) 385-6425 with any questions or concerns. Thank you very much in advance.

Felix Liao, D.D.S.
Dental Answers for Snoring and C-PAP Machine Intolerance

51% of American admit sleepiness interferes with work, one-third do not get a good night’s sleep, and 23% of married couples sleep apart. Snoring is not only annoying and divisive, it can progress into life-threatening Obstructive Sleep Apnea (OSA, Lindberg, American Journal of Respiratory & Critical Care Medicine, 1999).

Apnea means absence of breathing, and the obstruction comes from the tongue plugging the throat. People with OSA are 23.3 times more likely to die from a heart attack than those without OSA. Moderate to severe OSA patients have a 15 X risk of motor vehicle accidents (Horstmann, Sleep, 2000).

The father of sleep medicine states: “Cardiovascular disease, stroke, and sudden death head a long list of sleep-related ills and deaths: weight gain, GERD, asthma, diabetes type II, impotence, fatigue, and traffic fatalities” (Dement, JAMA, March, 1993). Known predictors of Obstructive Sleep Apnea include:

- Large neck: size 17 for and size 15 for women
- Reports of gasping or loud snoring by bed partner
- Overbite, tongue with scalloped border, sagging under chin
- Narrow upper jaw and receded upper jaw

Whole Health Dental Center screens for sleep disorders because they are treatable and preventable. The tongue is not the culprit, but a victim pushed into the throat by small jaws, crowded teeth, deep overbite, and uneven head bones. (Click TMJ -Dental-Cranial Distress)

Snoring can be easily helped by oral appliance therapy (OAT) plus positive lifestyle changes can help. An Oral Appliance keeps the lower jaw forward and the tongue out of the throat during sleep. Gentle dental arch expansion appliances can make room for the tongue to take its normal position naturally. To assess your need level, please click Epworth Sleepiness Scale. More on Oral Appliance Therapy: www.somnomed.com.

The diagnosis of OSA is made by a medical doctor using a sleep test. Confirmed OSA is treated with C-PAP machine. However, many patients cannot tolerate C-PAP machines. In mild-moderate cases, Oral Appliance Therapy (OAT) can be a comparable alternative to C-PAP (Gostsopoulos, Sleep, 2004). OAT is filed as a medical claim, provided that the medical necessity is established by sleep test. Click www.mysleeptest.com for a sleep test done right in your own bed (recommended).

A mouth with enough room for the tongue is vital to sleep and wellness. For a consultation how dental and lifestyle answers can help your snoring and C-PAP intolerance, please call Whole Health Dental Center: (703) 385-6425.

- 1/3 of heart disease patients and 65-80% of stroke patients have OSA
- 80% of OSA patients going for sleep tests have Erectile Dysfunction
- OSA patients get diabetes 5 times more often compared to general population: 15% compared to 3%
- Excessive daytime sleepiness is key symptom in men; depression and morning headaches in women
- OSA patients are 2 times as likely to be in car accidents, and 3-5 times more likely to suffer serious injury
- Restless legs, limb movements, and teeth grinding are often found in OSA patients
Resource List for Whole Health Dental Care

1. The Smoking Tooth Video & Mercury Meets The Brain: International Association of Oral Medicine & Toxicology: www.iabdm.org
3. It’s All in Your Head, The Link between Mercury Amalgams and Illness by Hal Huggins, D.D.S. Huggins Applied Healing, 5082 List Drive, Colorado Springs, CO 80919 1-866-948-4638
5. Let the Tooth Be K now: Are your teeth making you sick? What you need to know in order to find a Biological Dentist. 2nd Edition, by Dawn Ewing, RDH, PhD, ND. ISBN#0-9669404-1-5 www.dr-dawn.net
13. Holistic Moms’ Network: Holistic Moms Network is a national non-profit organization connecting parents interested in holistic health and green living. www.holisticmomsnetwork.org
17. Centre for Biofilm Engineering: www.biofilm.montana.edu
19. Radical Medicine, by Dr. Louisa Williams: Marin Naturopathic Medicine, 2144 Fourth Street, Suite B, San Rafael, CA 94901
22. Pottenger’s Cats, by Frances M. Pottenger, Jr., MD, ISBN #0-916764-06-0 Price Pottenger Nutrition Foundation (619)-574-7763