

# Is it Mental or is it Dental?

## Cranial and Dental Impacts on Total Health

By Raymond Silkman, DDS

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**T**he widely held model of orthodontics, which considers developmental problems in the jaws and head to be genetic in origin, never made sense to me. Since they are wedded to the genetic model, orthodontists dealing with crowded teeth end up treating the condition with tooth extraction in a majority of the cases.

Even though I did not resort to pulling teeth in my practice, and I was using appliances to widen the jaws and getting the craniums to look as they should, I still could not come up with the answer as to why my patients looked the way they did. I couldn't believe that the Creator had given them a terrible blueprint—it just did not make sense.

In four years of college education, four years of dental school education and almost three years of post-graduate orthodontic training, students never hear a mention of Dr. Price, so they never learn the true reasons for these malformations. I have had the opportunity to work with a lot of very knowledgeable doctors in various fields of allopathic and alternative healthcare who still do not know about Dr. Price and his critical findings.

These knowledgeable doctors have not stared in awe at the beautiful facial development that Price captured in the photographs he took of primitive peoples throughout the globe and in so doing was able to answer this most important question: What do humans look like in health? And how have humans been able to carry on throughout history and populate such varied geographical and physical environments on the earth without our modern machines and tools?

The answer that Dr. Price was able to illuminate came through his photographs of beautiful, healthy human beings with magnificent physical form and mental development, living in harmony with their environments.

#### WHAT IS HAPPENING?

It has been well documented and Nobel prizes have been awarded to researchers that have established the relationship between proper form and development and proper physical functioning of the body. The changes in facial structure that we observe in our children today is an extremely serious matter. I would like to explore the consequences of what is happening to human physical form.

Let's evaluate what happens to our children or adults who have faces that are narrow and long, who have lower jaws that are not developed properly, or who have a profile view showing a very weak chin. What happens when we see jaws so narrow and small that the teeth are crowded and overlapping. What happens when the cranium is underdeveloped in

various dimensions and the eyes are not level with one another?

What is the physical health legacy of these individuals going to be? What happens when we see children and adults with forward head posture—necks that are holding the head in a forward position?

There's an old saying, that someone "has his head on his shoulders." The translation: well-grounded minds require well-grounded and well-supported physical forms and bodies. Unfortunately today a lot of people don't have their heads on their shoulders—their heads are positioned in front of the shoulders.

Since a normal adult cranium weighs between 12 to 18 pounds, the musculo-skeletal strain in the neck or cervical region to support a forward head posture can cause a cascade of events leading right down to the feet. The forward head posture in most individuals creates improper spinal alignment and lack of proper curvature to the spine at critical areas.

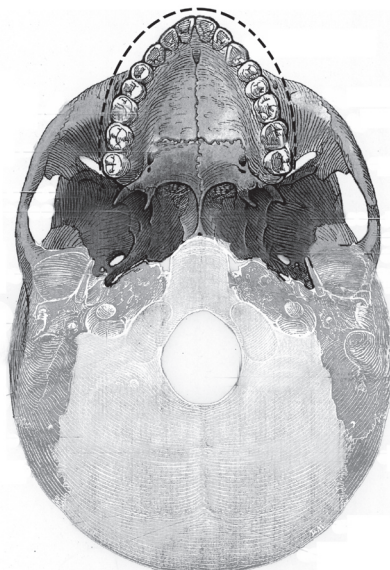
There is also an alarming trend in hip and



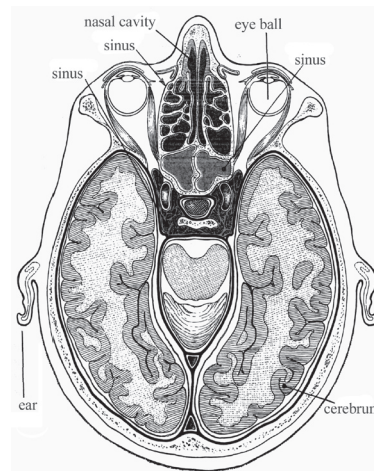
Dr. Raymond Silkman presents his fascinating slides during the dental track at Wise Traditions 2006.



Side view of the maxilla.



The maxilla viewed from underneath. Note the narrow palate in this illustration.



View of the interior of the head. Note the small area in the center where the nerves and blood vessels

knee replacement surgeries and many individuals have improper or mostly flat arches in the feet necessitating orthotics in their shoes or, even worse, corrective surgeries.

What happens to people when they don't have their heads on their shoulders? What is causing this effect and why does the body support this apparently futile posture? We will answer that question.

## THE CRANIUM OR SKULL

Let's discuss the significance of the skeletal structures in the head. The human cranium is made up of roughly 22 cranial bones not including the one's responsible for sound transmission. One of the key bony structures in the cranium is the *maxilla*, or the upper jaw. The cranium also houses the extremely important glands of the endocrine system. Two of these glands the *pituitary* and the *hypothalamus* are housed in another very important bony structure known as the *sphenoid* bone residing directly and in close contact with the maxilla.

The entire brain, and all of the structures or glands housed in the cranial cavity as well as the spinal cord and all of the peripheral and accessory nerves in the entire body are covered by a continuous-membranous sheath called the *dural membrane*. In dissections, it has been demonstrated and documented that pressure or force on the dural membrane in the cranial cavity or at the brain level will create pulsation or an opposite

force at the end of the spinal cord, and visa versa.

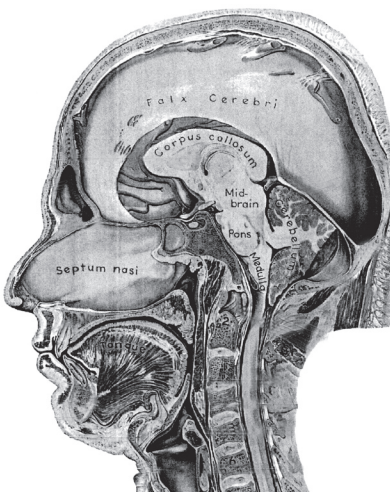
If the cranium is not developed properly, the dural membrane can become twisted and torqued, thus possibly creating nerve conduction issues hormonal imbalances or pain. You can imagine the effects that this can have on the nervous system and on an individual's overall health and well being.

Interestingly, medical research has demonstrated the presence of constant and rhythmic movement of the cranial bones at the contact areas, also known as the sutures. Just as in breathing, when the lungs fill with air and then empty, so there is a movement of cerebral spinal fluid up and down the spinal cord and around the brain. So, unlike the popular belief that "it's good to have a solid nogger," we now know that this does not mean an immovable head or cranium. The inherent motion in the cranial bones is very important to overall health. Various accidents or trauma or surgical interventions of the face and head can have a negative effect on this motion.

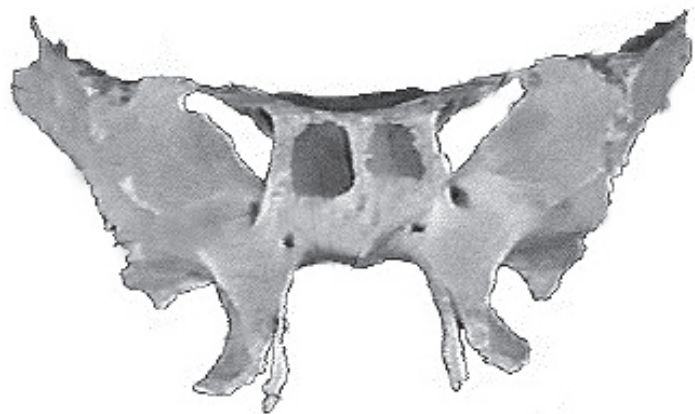
There are also various *foramina* or openings in the bones of the skull which allow nerves and blood or lymphatic vessels to pass from the cranium to the lower areas and vice versa. If any of the cranial bones is under-developed or misshapen, as often happens to be the case, then these foramina can also be malformed. For example, they may be ovoid rather than circular because of underdevelopment, which may cause an impedance to flow of circulatory or neurological vessels going through that particular foramen. Improper drainage of our waste products through our lymphatic system or lack of oxygenation or nourishment of cranial tissues and organs may be experienced as negative effects on brain function and mental clarity.

## THE MAXILLA

This bony structure provides visible structure to the whole mid-facial area. Eleven of the cranial bones directly contact the maxilla and the rest of the cranial bones have an intimate contact with the bones directly in



Side view of the head showing the tongue and the nasal cavity.



The complex sphenoid bone, positioned behind and above the maxilla.

contact with the upper jaw or maxilla. Therefore the position and size of the upper jaw has quite a lot to do with proper cranial development and facial esthetics.

The entire floor of the *orbit* or eye sockets, where the visual globes or the eyeballs are housed, is made up of the upper jaw or maxilla. When the maxilla is not well developed, and the face is long and skinny, the eye sockets do not develop properly; the eyeball cannot develop as a sphere, but may take on a football shape. The resultant developmental pattern can create various ophthalmic issues such as astigmatism or myopia. We can treat astigmatism with corrective lenses but the treatment does not really address the root of the issues.

#### AIRWAY OBSTRUCTION

The most serious consequence of under development of the maxilla is *airway obstruction* and *mouth breathing*. Eighty five percent of the nasal airway is made up of the maxilla, which provides the floor of the nasal cavity and houses all of the nasal sinuses typically referred to as the sinus cavities. Therefore, an individual with a narrow or improperly formed maxilla will have extremely narrow nasal passages, which limit flow of air and breathing capabilities, and will thus experience difficulty in having proper sinus health and drainage.

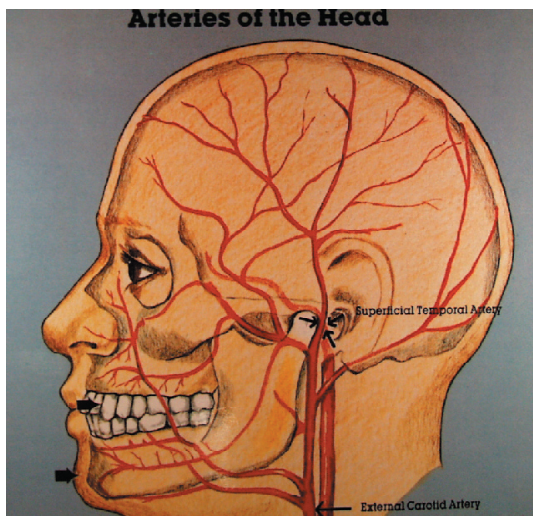
It is an important fact that the soft tissues develop to their genetic size, even when the bones do not! You might think of the head as a box that must house all of the structures that the genetic code needs to express and that will develop, but lack of proper dimensions to the cranial bones and the cranial cavity causes overcrowding, overlapping or deviation of some soft tissue areas. This can be illustrated by the example of overpacking a suitcase.

An example of this “overpacked suitcase” in humans occurs in the nose. How often have you heard someone say, “I have a deviated septum”?

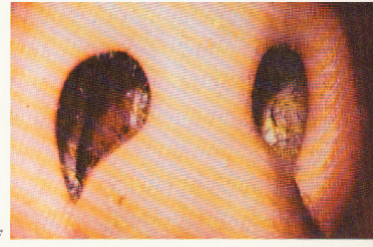
The septum is the cartilaginous tissue membrane that separates the two nostrils vertically. Imagine this soft tissue developing to its normal size, but the maxilla remains under-developed. The developing septum has to express its dimension somewhere, so it has two choices—it either deviates or bends to one side or the other (the deviated septum) or it grows through the maxillary suture and creates the condition known as *palatal tori*. These are bumps or ridges in the middle of the palate and most people have them to some degree or another.

A deviated septum blocks proper nasal air flow causing the individual to take up mouth breathing most of the time. There are a variety of other soft and hard tissues conditions associated with the nasal cavity such as polyps, enlarged turbinates and muscosal conditions that also serve to restrict air flow.

Breathing through the nose creates an avenue of air that’s moisturized, humidified and even somewhat filtered. Furthermore, when we breathe through our nose, the air passing through the nasal airway and contacting the turbinates—shelf-like bony structures—is slowed down. This allows the proper mixing of the air



The arteries in the head. If the passages for these arteries run through skeletal openings that are too narrow, many detrimental effects can occur.



A deviated septum or overgrowth of the soft tissue in the nose can cause blockage of the nostrils, leading to mouth breathing.

with an amazing gas produced in the nasal sinuses called nitric oxide (NO). Nitric oxide is secreted into the nasal passages and is inhaled through the nose. It is a potent vaso-dilator, and in the lungs it enhances the uptake of oxygen. NO is also produced in the walls of blood vessels and is critical to all organs.

#### MOUTH-BREATHING

Let's evaluate the differences in mouth breathers and nose breathers. The consequences of mouth breathing can occur from the moment of birth because all infants are obligate nose breathers. That is the mechanism by which breast feeding and breathing can occur simultaneously. If a baby has obstructed airways, he may turn away from the breast due to lack of air and prefer a bottle, which allows him to consume his food more quickly.

A mouth breather will not be humidifying the air, or slowing it down to allow the proper mixing of NO with it. The lungs will have difficulty providing maximum oxygenation for the body with this dry, unhumidified, unfiltered and, most importantly, NO-lacking air. This constant and chronic condition affects the cardiovascular system and the heart because the smooth muscles that line all of the arteries react to this poorly oxygenated air with a kind of tightness, a kind of permanent tension, which can be very stressful and depleting to the body. Furthermore it has been clinically shown that blocking NO production in healthy individuals results in moderate hypertension and reduced heart output as well as shortened bleeding times by activation of platelet blood-clotting factors.

Due to the lack of proper oxygenation, the ability to deliver fully oxygenated blood to the cells is also much reduced. Thus mouth breathing has a negative effect on every cell in the body as it deprives them of oxygen. Overall wellness and health requires proper oxygen as every particle of our being requires oxygen. Cancer cells, by the way, are anaerobic by design.

Other manifestations of mouth breathing include snoring and cessation of breathing (also known as sleep apnea), some types of headaches, hypertension without other known clinical causes, bed wetting, chronic ear or sinus infections, TMJ pain, sleep disorders and dark patches under the

eyes.

#### VISUAL DIAGNOSIS

Much valuable information can be obtained by looking at and studying the faces of traditional peoples with proper physical development and form. I am deeply grateful to Dr. Price and all of the photographers and cinematographers who have provided us with such valuable clues and information.

We can tell a lot about an individual's physical development just by looking at the face. One of the things I look at in profile view is the nasal-labial angle. In a well developed person, this angle is an acute angle, that is, less than 90 degrees. A nasal-labial angle that is obtuse, that is greater than 90 degrees, is a sign that the maxilla is not well developed or positioned in the front-to-back dimension of the skull. The proper development of the maxilla is absolutely critical to the formation of the entire head and to the health of the entire body—and not just physical health but spiritual and emotional health as well.

In the photograph below we see an individual with a nasal-labial angle of about 110 degrees, a sure sign that the maxilla is underdeveloped. As a consequence, he will not have an optimal development of the rest of head. Predictably, he has a narrow palate and in this case, he has had four premolar teeth extracted.

Another sign of poor facial development can be detected in the eyes. When someone is looking straight at you and you can see the sclera or white of the eye, that is a tip off to a very, very under developed upper jaw and mid-facial area.

Another area of interest is the soft tissues and skin. Sagging and wrinkles are minimal or non-existent in people with good physical development as they age. Their faces don't sink back into their craniums. Wrinkles happen when the scaffolding—the bony structure—becomes diminished in comparison to the muscles and skin.

As I mentioned, the soft tissues of the body grow to their genetic size, even when the bony structures do not. The skin, the tongue, the tonsils and the nasal tissues grow to their genetic size but when the nutrition is



An obtuse nasal-labial angle is a sign of poor development of the maxilla.

missing, the bony structures are compromised. So the face will have an excess of skin and musculature, the tongue and tonsils will be too large for the mouth. Nasal bumps can also result—the nasal tissues are out of proportion to the facial structure so they protrude. People who have proper facial development do not have nasal bumps.

#### THE TMJ AND THE LOWER JAW

When we look at the skull from the profile view we observe the temporo-mandibular joint, the TMJ. Most joints will go through normal hinge motion, and some of them like the shoulder and hip joint will have a rotational motion that is more complex. However, in these joints, the two bony members stay in contact with one another throughout the motion of the joint. The TMJ is unique in that it is designed to provide both hinging, and sliding motion. In order to accomplish this compound hinge-and-sliding movement, the TMJ has a disc that slides in concert with the lower jaw or mandible. When the lower jaw is not positioned forward enough, the TM Joints do not develop very well, and the discs can get jammed behind or in front of the joint. They can even become perforated and cause some of the “clicks and pops” that can be heard when people open and close their mouths. Immediately behind the TM Joints we also have the ear canals and important vascular and neurological structures, which can become impinged upon as well.

What we call an overbite or overjet should really be called an underbite, because it is caused by the *mandible*, the lower jaw, that is too far back, not the maxilla that is too far forward. But when children come to the orthodontist with what the public calls an overbite, they are often treated by removing some of the teeth in the upper jaw and then with a device known as neck gear or headgear to pull the maxilla back. The thinking is that the apparatus will stunt the growth of the maxilla and allow the lower jaw to grow and catch up, or that the maxilla has grown too far forward and must be pulled back.

But the maxilla is already stunted due to poor nutrition and so you can

imagine how this type of treatment may cause more compression, more jamming of the bones in the head with possible detrimental whole body effects. The correct treatment for this condition is to widen the palate with an appliance so the lower jaw position can be corrected forward and allow proper physiological form and function as our ancestors have enjoyed throughout the millennia.

#### MORE VISUAL CLUES

When children or adults are not breathing properly they tend to develop dark patches and bags under their eyes. This is due to lack of adequate circulation as well as venous blood pooling in these areas.

Kids that are mouth breathers will always have chapped lips and typically the line separating the inner lining of the lip and the outside lining, known as the vermilion border, will be visible. Also mouth breathers in profile tend to have very weak chins and elongated faces. Typically these individuals will suffer from chronic sinusitis or sinus infections, colds, respiratory problems and lung-related issues.

Typically children with bags under their eyes have short attention spans because they do not have good circulation and oxygenation of the head and can tire easily. They are literally suffocating.

Furthermore, they don't sleep very well—they are always tossing and turning and they wake

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#### EXAMPLES OF POOR FACIAL DEVELOPMENT



Narrow face, mouth breathing, sclera showing under the eyes.



Over bite or over jet, dark areas under the eyes, weak chin.



Narrow face, circles under eyes, nose bump, tendency for face to sag.

up tired. Your body recuperates during sleep and sleep is especially important for teenagers. Teenagers need to go to bed before 10:00 pm because certain brain cycles designed for recuperation of the body kick in at around that time. These cycles will be interrupted if sleep mode is delayed to after 10:30-11:00 pm. The recuperation and rebuilding necessary to cope with stressful daily activities will then be compromised. These are the tired, sleepless kids who tend to have a diet high in sugar, *trans* fats and grains. They may end up labeled as ADD or ADHD and treated with drugs.

Airway capacity is the biggest and most important part of the well-being of a human being. It is important to stress the fact that breathing through the mouth and breathing through the nose have extremely disparate effects on the body. We are not designed to breathe through our mouths. The body is able to live by breathing through the mouth, but it suffers greatly for doing it.

#### INTERNAL STRUCTURES

The structures that hang off the mandible or lower jaw include the tongue and the nasal pharyngeal areas, which eventually lead down into the lungs.

Other structures that can affect the airways further back in the throat area or the pharyngeal airway space are the tonsils and adenoids. About 85 percent of the children I see in my practice have extremely large tonsils and do you think they can breathe very well? It is not possible to breathe very well when tonsils, which are typically supposed to be almost unnoticeable, are so inflamed that they are almost touching and practically closing off the airway in the back of

the throat, right where air is supposed to pass on its journey towards the lungs.

These structures also become swollen due to food allergies, especially allergies to pasteurized dairy. Every time I've had a kid and a mom convinced that they should stop everything pasteurized and processed and then eventually go to raw dairy products I have seen some reduction in tonsillar size, although this doesn't happen overnight.

(Interestingly, I have had two cases of children of children who stopped having epileptic seizures as soon as they had their extremely massive tonsils taken out. Please note that I usually do not recommend removal of organs and body parts.)

Almost invariably a narrow or under-developed maxilla can cause the effect of holding back the lower jaw or the mandible. This improper positioning of the mandible and its inherent retrusion causes a lack of physical and physiological space for the tongue and the pharyngeal tissues, which again will provide an impedance to the airways, causing breathing difficulties and lowered oxygen uptake by all of the tissues.

The most important orthodontic appliance that you all have and carry with you twenty-four hours a day is your tongue. People who breathe through their nose also normally have a tongue that postures up into the maxilla. When the tongue sits right up behind the front teeth, it is maintaining the shape of the maxilla every time you swallow. Every time the proper tongue swallow motion takes place it spreads up against maxilla, activating it and contributing to that little cranial motion, that cranial pumping that we discussed earlier. Individuals who breathe through their

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#### HUMANS RECOGNIZE PROPER FACIAL FORM

While very few people have heard of the work of Weston Price these days, we haven't lost our ability to recognize proper facial form. To make it in today's society, you must have good facial development. You're not going to see a general or a president with a weak chin, you're not going to see coaches with weak chins, you're not going to see a lot of well-to-do personalities in the media with underdeveloped faces and chins. You don't see athletes and newscasters with narrow palates and crooked teeth.

Unfortunately the trends in cosmetic facial and body enhancement procedures make one believe that all can be bought with money and surgery, but a word of caution: avoid implantation of objects or removal of organs as they interfere with normal and natural processes of the body, mind and soul. Great research has demonstrated that cells communicate with one another via a form of light and surgery tends to disrupt these light pathways, also called meridians or chi pathway.

mouths have a lower tongue posture and the maxilla does not receive the stimulation from the tongue that it should.

When the tongue doesn't fit inside the jaws or dental arches it retracts back into the throat and pushes on the floor of the mouth. The result is something that looks like a double chin, even in women who are very thin. When we begin palate-widening procedures, this problem disappears—without plastic surgery.

And then what happens when orthodontists treat these problems by removing teeth? If he takes out eight teeth, out of a total of 32, the patient ends up missing one-fourth of his teeth. What are the consequences of this? Can you take out 25 percent of anything that's supposed to be whole and expect it to be okay? I consider the teeth as organs and do not recommend the removal of teeth for tooth crowding or orthodontic treatments.

And what happens when a child is given head gear or neck gear, when you put a force on a cranium to pull it back? There can be serious consequences.

#### THE FINAL ANSWER: ADAPTIVE CAPACITY

Our bodies have an adaptive capacity to deal with shortcomings. Those of you who have studied CPR know about the ABCs of resuscitation. The A stands for airways and what are you supposed to do when someone needs assistance? You tilt the head back to open the airway. Similarly, when the airways are chronically blocked, the body tilts the head back. But humans cannot walk around with their noses up in the air for too long. The eyes must be parallel with the horizon, so the body then leans the head forward. Forward head posture in essence is a chin lift procedure with the eyes corrected to the horizon in a vertical or standing position.

That's where that characteristic forward head posture comes from. This chin-lift, head-tilt-forward posture helps open up the airways. As I mentioned, craniums on adults weigh 12-18 pounds, Imagine a bowling ball. If I carry the bowling ball close to my body, I can carry it without

becoming tired, but if I carry the bowling ball out in front of my body, what happens? I am going to suffer from fatigue. So then, in order to balance the head tilted forward, I may extend my butt out a bit, which creates a misalignment of the hips, but helps to balance the extra forward weight of the ball. How many people do you know that have hip and lower back problems? Most of those people also have airway problems. Also, there are limbs attached to the hips—we call them legs—so when the hips go out of alignment, the knees have to adjust to this weird hip posture.

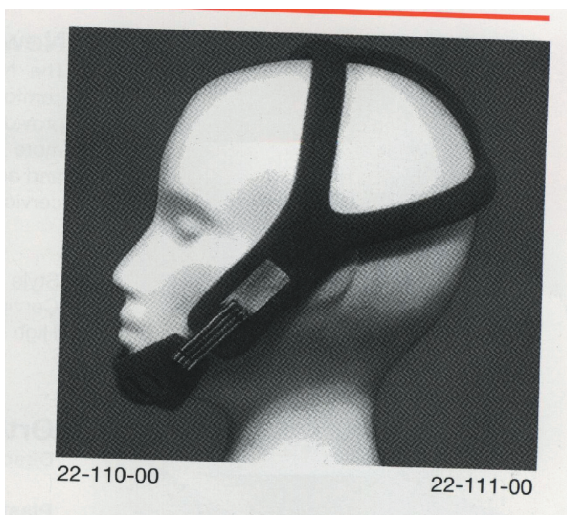
These adjustments are all very subtle. One doesn't wake up and feel that he or she is going to walk differently. Can you imagine that all of these issues and events can start with a baby who is chronically breathing through its mouth.

So airway capacity is the most important hallmark of the well-being of a human being. If you have good airway capacity, you will go through life with a strong immunity to illness.

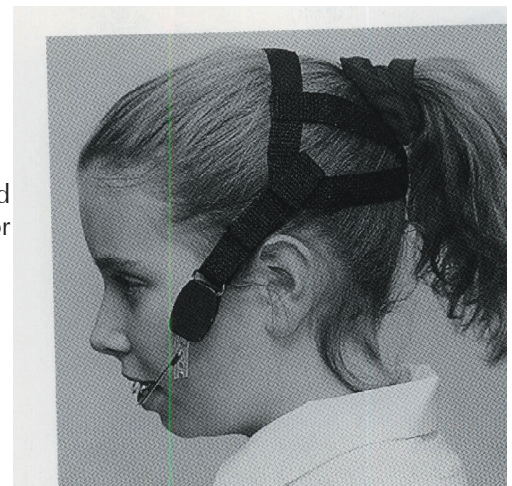
#### SYMPATHETIC OVERLOAD

When the bones in the head are under-developed or misaligned, the soft tissues are over-crowded and unable to assume their normal shapes and positions and the air way is obstructed. When, in addition, the diet is not nourishing and lacks proper fats, the nervous system also suffers.

Let me explain: as you may know, there are



Types of apparatus used to pull back the upper or lower jaw.





two types of autonomic nerves, sympathetic and parasympathetic. The parasympathetic nervous system works to calm us down and to heal. The sympathetic nervous system is the part used when one needs to get out of a dangerous situation. It operates when we are under a lot of stress, and we are not meant to be under constant physical stress. When the sympathetic nervous system is activated it places the body and mind in an alert mode and this mode and the constant stress depletes the bodily reserves and nutrients.

Sympathetic nervous system overload also occurs when the airway is obstructed and the input or sense to the nervous system is akin to a hand or choker around the neck. What type of response do you think the nervous system will have? It's on high alert at all times. This is why kids who are mouth breathers have a strong gag reflex, for example. For them, the mouth is the source of air as well as the source of food, and the mouth was not designed to perform both of these functions. So kids and adults who are mouth breathers have strong gag reflexes, sometimes so strong that they can't get near their mouths without difficulty, not even with their own toothbrushes or eating utensils. This, of course, precludes certain psychological issues that can also create a strong gag reflex but can be ruled out during an assessment.

So mouth breathers tend to have amped-up sympathetic nervous systems, always on alert, and they have a hard time getting their physical

or mental bodies to relax. Many have found an avenue of dealing with this issue subconsciously, namely exercise and physical exertion. This is because during physical exertion large volumes of air are inhaled, which may give the body the input it needs to make up for the lack of proper oxygenation during rest periods.

#### LONG-TERM CONSEQUENCES

People who are not well oxygenated and who have poor posture often suffer from fatigue and fibromyalgia symptoms, they snore and have sleep apnea, they have sinusitis and frequent ear infections. Life becomes psychologically and physically challenging for them and they end up with long-term dependence on medications—and all of that just from the seemingly simple condition of crowded teeth.

In other words, people with poor facial development are not going to live very happily. They're always going to be in and out of treatment, hopefully with a more holistic alternative practitioner—but you can take all the herbs in the world, you can take all the homeopathic medicines for these conditions, but the truth is, you cannot have proper function without the proper structure. If you don't have the proper form how do you expect proper function even with the best alternative care?

So, as you can see, airway capacity is extremely important and many times when we do the procedures that widen the palate, correct the head tilt and allow a person to breath through the nose, that person suddenly becomes happy. It is amazing to see the things that happen when we take steps to expand the palate and the upper jaw. The patients go through a literal expansion, but they also open up in many ways—they open up their hearts and their personalities and relationships change. They become more pleasant, more contented. A lot of amazing things can come about just from changing the shape of the maxilla for a human being.

#### WELL-FORMED AND HARDY

My friends think I am nuts but I can stare for hours at photographs of



Breathing difficulties can lead to the tiring head tilt forward position.



well-formed individuals and just marvel at the beauty of proper physical form and function and the capabilities for hard work and functioning that these individuals tend to have.

Let's ask a question: who can perform better in jobs or sports with very difficult physical requirements and conditions? Generally you will find the well-developed (that doesn't mean large muscle mass), well-formed individuals who are capable of such physical feats and they tend to come from rural or isolated areas or from families that have consumed more traditional diets and therefore had much better development than the average city child growing up these days. Many of these individual are people who come from other parts of the world and are involved with professional sports and or jobs we consider menial, such as doing our gardening, housework and construction work, and even raising our children—people who are able bodied and capable.

Therefore if we are looking for the magic period to help a child grow into an individual with amazing physical capabilities then we must acknowledge that the most important developmental period is *preconception* and the nine months *in utero* or in the womb—this is when the foundation is laid for living a full 120 years. The parents should prepare themselves well in advance of conception by eating a nutritionally supportive diet, based on the principles discovered by Weston Price, and continue that diet during pregnancy. If, through out the individual's life, such nutritional practices are continued, then the possibility to have excellent physical form and function is highly likely, with great rewards to that individual. Please take into consideration the fact that over that last 100 to 120 years in this country, many events and conditions have slowly weakened the offspring born in each successive generation. Modern medicine classifies some of the physical symptoms encountered in the younger generations as genetic; however, even though there may be genetic aberrations occurring due to toxicity of the environment, these symptoms are a reflection of the improper human development due to poor nutrition.

The people who were born in the 1920s, 30s and 40s tended to drink and smoke. They had teeth extracted, root canals and metal fillings, yet

they are generally not the chemically sensitive individuals we see in our population today, young people in their twenties who can't handle even a little but of lavender scent in the room.

## SOURCES OF ENERGY

We must also briefly discuss other sources of input or energy besides diet needed to create proper physical form and mental function. There is a concept that views a human being as a sort of battery or capacitor. We are the sum of all that goes into us, not only our physical diet but also input of an emotional or spiritual nature, including our connections to one another, to nature and animals, to art, to the Creator and also, most importantly, to ourselves.

A connection that more than 90 percent of individuals lack is our connection to the earth. Historically, humans have had some form of physical contact with the earth and its electro-magnetic field. We worked on the land and collected our sustenance with our feet or bodies in contact with the earth and without the interference of man-made materials and building structures. So it's important to literally stay connected with the earth by walking barefoot outside and letting all of our senses recalibrate themselves to what our body knows as normal.

Finally, we get energy from our belief systems and from our beliefs about ourselves. When something goes wrong, do we berate ourselves or do we see our troubles as important lessons given to us because we are worthy to receive them?



Examples of excellent facial development. Note the broad middle portion of the face, well-developed lower jar and smoothness (lack of sags or circles) under the eyes. These individual illustrate the full expression of our genetic blueprint.

