



The Concept of Dental Health versus Disease Care

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Healthcare can be divided into three distinct categories:

PRIMARY PREVENTION: this is pre-pathogenesis and is prevention of disease before it occurs.

SECONDARY PREVENTION: this is limitation or stopping a disease from further progression.

TERTIARY PREVENTION: is reconstruction or rejuvenation of the defects caused by disease or replacement of destroyed or diseased parts.

In dentistry **Primary Prevention** should include all those measures such as plaque control, diet evaluation counseling, fluoride treatment to prevent the basic disease from occurring in the first place.

Secondary Prevention, that of limiting disease or destruction is the treatment of teeth with restorations that protect the teeth from breaking, interceptive periodontal treatment, and many times bite correction via orthodontics or restorative dentistry to prevent tooth fracture or tooth wear.

Tertiary Prevention would be more advanced periodontal therapy, endodontics, periodontal prosthesis, occlusal treatment for teeth with advanced tooth wear (more than 20% loss of tooth structure due to wear) orthodontic treatment, reconstructive oral surgery, implants and full mouth reconstruction or rejuvenation.

THREE PRIME DENTAL DISEASE PROCESSES

It is often stated that tooth decay and gum disease are the most common diseases known to man. This is because they are both chronic degenerative diseases that are primarily caused by bacteria and the waste products of bacteria feeding on the sugars and carbohydrates in the mouth.

Tooth wear has reached an epidemic proportion in our society. Associated with advancing tooth wear are muscle and bone problems with imbalance created in the oral system. How has this happened?

The vast majority of dentists focus on fixing teeth. When teeth 'decay', minerals are taken out of the teeth making a hole in the tooth. The major focus of dentistry in the 50's through the 90's was on fixing or repairing teeth. My take is that dentists have been so busy repairing and re-repairing the teeth of their patients that they didn't concern themselves with gum disease, let alone tooth wear.

Orthodontists straighten teeth so they will look good, but few orthodontists concern themselves with the fact that the teeth function within a system, and so there is a great deal of relapse of orthodontic treatment when patients reach their late twenties and thirties.

In fact, most orthodontic (tooth straightening) is done on adolescents between the ages of 12 to 18. Since 98% of orthodontic treatment is done **without** the jaw joints in a stable position there is a very high percentage of post-orthodontic cases that have either relapsed or have TMJ problems or severe tooth wear by the age of 40. A high percentage of post-orthodontic patients suffer advanced tooth wear by the age of 35-40.

When orthodontics is completed without bite stabilization first, patient's teeth wear out early or they have TMJ and muscle pain. In many other cases post-orthodontic patients suffer from severe damage to the TMJ joint itself.

As teeth wear, the entire oral system undergoes early destruction and patient's faces age rapidly. A person can look up to 20 years older when the oral system begins to destroy itself. The lack of balance in the system leads to conflict within the system; teeth collide, muscles reach stages of imbalance and faces age in this process.

Let's start with this. The mouth is a system. The function of the mouth is primarily breathing, eating and swallowing. There are bones, muscles, nerves and soft tissues that are all a part of this complicated system. The jaw joint, called T.M.J, (temporo-mandibular joint) is the only joint in the body that both hinges and slides. That makes this joint alone very complex and adds even more complexity to the oral system.

When the oral system is NOT IN BALANCE it begins to destroy itself. This is true for every system. A system is a set of elements that function together and are dependent on each other. When one

component of the system is failing or is not functioning properly the entire system begins to self-destruct.

When the teeth do not fit together properly, the muscles and joints, or teeth or bone that supports the teeth begin to break down. If the teeth begin to wear they lose their normal form and thus function. As teeth wear through the enamel (the hardest substance in the body) they begin to wear faster, as dentin (the inner substance of a tooth) wears 7 (seven) times faster than enamel.

As teeth flatten and lose their natural biologic (God-made) form, it takes greater and greater forces by the muscles of the face to chew food and speak and swallow. In time, not only is further destruction done to the bones that support the teeth or the teeth themselves, but we see significant changes in the face. The facial muscles, because they are out of balance, causing more rapid aging of the face as the bones, muscles, and nerves lose their form and function.

Premature facial aging is a common process. Of course other factors cause pre-mature facial aging. Smoking has to be a major cause of facial aging.

Factors associated with facial youth:

White teeth
Long central incisors
Long cuspids (eye teeth)
Facial balance. Upper, middle and lower third of the face in
Balance. (1/3—1/3—1/3)
An unstrained, easy smile.
Straight teeth
Smile showing a full compliment of teeth.

Factors associated with facial aging:

Discolored teeth
Short, flat, anterior teeth, upper and lower
Severely worn teeth
Face shows strain, especially around the eyes
Smile is strained and generally not in balance
Crooked, uneven teeth
Smile showing few, if any teeth

Many times patients with oral systems that are not in balance suffer headaches, facial pain, neck and back pain. Millions suffer from

headaches. 80% of these headaches are related to muscle imbalance and overload of the muscles of chewing and also the facial muscles.

Some people have more resistance to breakdown than others. Another very important factor is the state of life a person is in.

Anabolistic Stage of Life

The anabolistic stage of life lasts until the age of about 35. In this stage of life, the body reacts to stress by building up. Of course this also varies and depends on the host resistance of the individual person. I like to say that some people are made out of STEEL, some CELLULOID, and some GLASS. That is some of us are just more fragile than others. Some of us have more resistance than others, yet all of us are impacted by the state of life we are in.

Catabalistic Stage of Life

The catabalistic stage of life is after the age of about 35. In this stage of life, the body reacts to stress by breaking down. I remember a secretary who was a patient of mine. She was always overweight, always seemed under a high degree of stress and never could quit smoking. She died of a massive heart attack at the age of 40. She ate McDonald's like food every day.

In my 35 years of caring for patients, I have witnessed dramatic reversals of patient's attitudes towards fitness, health and wellness. It never seemed to make much sense to me to spend a great deal of time, effort and money to have a wonderfully restored mouth when one is unwilling to quit smoking or change other destructive eating or stress related habits.

Here's what research has shown us. We can be 19.2 years younger than our chronological age or 19.2 year older than our chronological age. In other words we can extend our life by nearly 40 years.

In the book *Human Life Styling*, McCamy talks about the ***Four Horsemen of Health.***

DIET

EXERCISE

STRESS REDUCTION

ECOLOGY

All four play a significant role in not only the quantity of our lives (how long we live) but the quality of our lives.

The oral system is a vital system to our overall health and well-being. Other than enhancing our self-esteem, and appearance, the oral system functions to enable us to breath, to eat, to speak. Many of us make our livings based on how we look, how we smile and how we speak.

The mouth is also the primary sex contact and thus important in procreation as well as our ability to chew and function. Often, patients come into our practice complaining of chronic headaches and are taking many medications on a daily basis for pain.

Remember that pain medications mask the symptoms, but don't correct the problems. Imbalance in facial form and function leads to imbalance in neck and back muscles. Usually these imbalances show in the face, but not always.

As teeth wear, they lose their natural biologic form and then function. As the form is lost, the function is diminished. Since it happens so slowly, few recognize it happening.

The Mouth as a System

A comprehensive examination of your oral system will include an **ORAL CANCER SCREENING**. Dentists are the highest trained professionals to understand the soft tissues of the mouth. What is normal and what is abnormal. Each time you visit a dentist or hygienist an ORAL CANCER SCREENING should be completed.

The most common reason people lose teeth past the age of 35 is gum infection and diseases that attack the supporting structures of the teeth. A thorough **PERIODONTAL RISK ASSESSMENT** should be completed. We call this the **DENTAL FITNESS PROGRAM**. The good news is that dental decay and gum disease are almost 100% preventable by you. A PERIODONTAL RISK ASSESSMENT helps us determine with you the degree of health or disease present in your mouth today.

It seems to me that **prevention** of any disease would be the most important place to begin. If any damage has been done, then **limitation and preservation** of what remains is of secondary importance. When a great deal of damage has occurred to teeth, to supporting structures of the teeth or bones, to muscles and joints that move the jaws and thus

teeth, then **restoration or rejuvenation** to as nearly an optimal state of form and function would be a worthy goal.

Most dentists and most patients truly lack an awareness, understanding, or importance of the oral system. Dentists and dentistry has not yet reached the level of comprehension of the fact that when one part of the system begins to break down or lose form and the function, that the entire system is impacted negatively.

The system and thus the patient look older, and indeed they are. As in any system that is dependent on its parts for form and function, when one part of the system begins to break down or wear excessively, it impacts the entire form and function of the system.

Dentists, dentistry, and thus patients alike focus on the teeth. The teeth can be the end point of muscle or bone imbalances that are structural issues.

On the other hand, when teeth do not fit in harmony with muscles, nerves, bone and joints, then the teeth can be the instigator of form and functional changes within the entire system.

Many patients **adapt** to the bites they developed as they grew up. Many other patients have had orthodontic treatment completed in a way in which the finished position of the teeth themselves was not in balance with the nerves, muscles, bones and joints of the face.

Tooth wear, muscle and joint problems and pain are the predictable events that occur in these patients. Orthodontic patients that have their finishing bites in harmony with the muscles, nerves, bones and joints will remain stable and comfortable.

So, when we do a comprehensive examination and discover, then diagnose, then design any preventive or corrective treatment options, we are always concerning ourselves with the limitation of progress of disease which is evident by evaluating the form and function of the entire oral system.

Every one of us falls into one of **FOUR BASIC CATEGORIES:**

YOUTH

EARLY ADULT

LATE ADULT

ELDER

YOUTH

Dental decay is basically a childhood disease that (normally) stops at or around the age of 23! **A YOUTHFUL** patient is a person who has had little or no decay, and no gum disease. A youthful patient has no tooth wear, no headaches, and a relaxed unstrained face and a full complement of teeth.

EARLY ADULT

An early adult from a dental standpoint is a person who has had either considerable decay and fillings or crowns, or maybe a root canal or two, and could have even lost a tooth. This person may have early to even moderate gum disease and may even show some loss of bone supporting the teeth. In an **EARLY ADULT**, there may be signs of disease and potential problems but perhaps not many symptoms. A sign is something a trained dentist can see. A symptom is something, you the patient is aware of. Such as sensitive teeth or gums, or noticing that your teeth are wearing.

In a truly health centered practice, the dentist and the patient are interested in stopping the progress of disease and returning the mouth to as near biologic health, in form, function and beauty as possible.

It is always far easier and less expensive to **PREVENT and PRESERVE** than it is to **REHABILITATE**.

LATE ADULT STAGE

Please understand, I am using this terminology, not in relationship to your age, but rather to the age of your oral system. In the **LATE ADULT** stage we see the evidence of frank disease.

We see the system breaking down. We either see more advanced gum problems with increased loss of bone that supports the teeth, or we may see many teeth that have been filled over and over and thus the teeth have lost their biologic form. We may even see a person with many crowns that have been put in the person's mouth to a bite that was already worn out. We may see changes in the jaw joints.

Many times we will see faces looking older because the entire facial system is in imbalance. The muscles, nerves and joints are not in harmony, and thus many times we see aging around the mouth and eyes that make the person look older than they really are.

Often times in the **LATE ADULT STAGE** we see rather severely flattened teeth. Often the lower 1/3 of the face is no longer intact. The lips get smaller and the lower third of the face diminishes in size.

In a high percentage of people we also see flattened back teeth or front teeth and in most instances see both.

As individual's teeth wear, the teeth obviously get shorter and less and less visible when smiling.

In the LATE ADULT STAGE, there is much evidence of the progression of disease, as the system continues to break down. Mouths and thus faces continue to move further and further away from biologic health.

Of course we all age, but it isn't necessary to age faster facially and physically than we have to. The late adult is the stage when **REJUVENATION of the ENTIRE SYSTEM is required to return the person to as near BIOLOGIC HEALTH as is possible.**

It is simply amazing to me, as a practitioner of biologically based, health centered dentistry, the impact that a healthy oral system has on the entire well being of people.

Individuals actually have cusps on their teeth again which enables them to select, chew and swallow the healthiest foods for them, which not only increases quality of life, but also increases quantity of life. As Charles Mayo stated:

“Preventive Dentistry can extend human life 10 years!”

Patient's who have their oral system back in biologic harmony look better, speak better and feel better about themselves. They have more confidence, more comfort and better function. It is the way the oral system was designed in the first place. Nothing is better than what God has created in nature. In short, they look more alive.

THE ELDER STAGE

From a dental standpoint, the **ELDER STAGE** is when a person has lost all their natural teeth and is dependent on plastic dentures to chew their food and to function. Biologically, the dental ridges that support dentures weren't designed for this and in many instances if the person lives long enough, they won't be able to even use their dentures to eat with.

Dentures actually destroy the bone that supports them, and people with dentures have 1/10th the chewing power than those with natural teeth. Denture patient's faces age, as the muscles atrophy (get smaller from less use) and the bone atrophies (goes away because of the unnatural stresses put on the bone by dentures). This is most evident with lower dentures.

Thankfully today, we have dental implants. All denture patients should have implants placed underneath their dentures as early as possible. Implants act like roots of teeth and preserve bone from atrophying (going away).

Today, people don't expect to lose their teeth. In many people, as they live longer, the evidence of their oral system breaking down accelerates.

Intelligent, health-minded people, who understand the profound ramifications of the oral system are:

FIRST, seeking the help and guidance of health-minded PREVENTIVE ORIENTED DENTISTS. The old adage "**An ounce of PREVENTION is worth a POUND OF CURE**", applies here.

SECOND, it makes logical sense to find out what stage one is in. What preventive, preservative measures can be taken to stop the progress of disease and **Protect and Preserve** as much biologic health, form, function and beauty as is possible.

THIRDLY, if there has been a great deal of tooth loss, or teeth are severely worn down, restoring the teeth and supporting structures to their natural biologic form will increase your ability to chew and function dramatically, and restore balance back to your oral system which will help you feel more alive, look better and dramatically increase your self esteem.

"The ONLY INTEREST of the dentist/physician should be the best interest of the patient."

