

The Kois Center Graduate:  
Pursuing Dental Excellence



# ARE ALL DENTISTS CREATED EQUAL?

Surprisingly, the answer is “Yes.” All dentists graduate from dental school with similar skills and knowledge. At the beginning of their careers, dentists can provide adequate care to the average person. However, dental school graduation is merely the start of a long career, and that initial equality soon comes to an end, based on the educational path your dentist decides to follow. Each individual chooses how far to grow in their profession—how good a dentist they want to become. It is your

dentist’s commitment to lifelong learning that determines what kind and level of dentistry you receive. Many dentists choose to provide good dental care that is satisfactory and meets the standard for serviceable dentistry. Another group will develop more skills to become better than average. Finally, there is a small group who choose a long, difficult journey to become the best they can be, to practice dentistry at the top level. These dentists commit to excellence.

To move beyond beginner status, dentists must regularly take classes to improve existing skills and learn new ones. Dental courses are not created equally, so it can be a challenge to find comprehensive classes with teachings based in published science, a requirement for dentists who want to develop into skilled and knowledgeable practitioners. Dentists need quality post-graduate training that will challenge them, mentors that will guide them, and strategies to implement these new skills in their

dental practice. Your dentist has found this at the Kois Center. This book is about the rigorous path your dentist chose to become that skilled expert and why their commitment to excellence is important to you, their patient. You will learn what makes a Kois Center graduate unique. Flip through a few pages to see how this dentist’s focus on excellence will help you smile and chew for a lifetime.





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The concept of the coffee table book was developed by Dr. Sam Romano and his wife Terry.

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# WHAT IS THE KOIS CENTER?

*"...a system that enables us to share information, develop new ideas and create solutions in dentistry that will leave a legacy..."*

John Kois

The Kois Center is an advanced graduate didactic and clinical program for practicing dentists. The Center features a comprehensive nine-course curriculum, with the latest advances in esthetics, implant and restorative dentistry. The curriculum is based upon the mission statement: "Enabling motivated dentists to achieve extraordinary levels, expanding knowledge and application skills in restorative dentistry."

## What makes the Kois Center special?

The Kois Center is located in Seattle, Washington, on the shore

of Lake Union. Fifteen years ago, the Center began forty miles south of Seattle in the back room of a dental office in Fife, around a table with room for only twelve students to attend each class. As word travelled about the incredible teaching to be found in that back room, dentists from around the world sought spaces on waiting lists, hoping to be one of the twelve.

The Kois Center in Seattle was built to accommodate the increasing number of dentists eager to become students, and incorporates the latest technology to maximize student learning over each three-day course. Live patient demonstrations can be broadcast directly to each of the 26 students. Multimedia electronic presentations allow rich content to be memorably shown, and students have the opportunity to practice new skills on patient simulators.

But the Kois Center is unique because it is SO much more than a physical location or a facility. The Kois Center is part of an educational network inspired by John Kois and populated by dentists who have made a commitment to a rigorous program of continuing education. This network is actually a living, maturing postgraduate educational think tank. The Center's growth is the result of the continued support and participation of those who have graduated. The collaboration of these members has created an ever expanding knowledge base at the Center and is a pathway for extraordinary professional growth.

Graduates can return annually to attend the Symposium, which includes a review of the prior year's published dental science, speakers who are pioneers in their field, and the inspiration of like-minded colleagues. As graduates

incorporate their new knowledge into their dental practices, they can apply to become Mentors, who return regularly to the Center to offer help to current students, continuing the cycle of contributing to an improved dental profession. The Kois Center can now use the knowledge of its membership to improve the curriculum of the Center, enhance the professional growth of its members and improve the dental health of the patients they serve.

The Kois Center provides an intense educational experience which allows your dentist to acquire the necessary skills and knowledge to assist you, the patient, in keeping your teeth healthy and esthetically pleasing for a lifetime.





# WHO IS JOHN KOIS?

## John C. Kois, D.M.D., M.S.D.

Received his D.M.D. from the University of Pennsylvania, School of Dental Medicine and Certificate in Periodontal Prosthodontics with an M.S.D. from the University of Washington, School of Dentistry. He maintains a private practice limited to prosthodontics in Tacoma and Seattle, Washington and is an Affiliate Professor in the Graduate Restorative Program at the University of Washington. Dr. Kois continues to lecture nationally and internationally, is a reviewer for many journals and is the Editor-in-Chief for The Compendium of Continuing Education in Dentistry. Dr. Kois is the

recipient of the 2002 Saul Schluger Memorial Award for Clinical Excellence in Diagnosis and Treatment Planning, and received a Lifetime Achievement Award from both the World Congress of Minimally Invasive Dentistry and the American Academy of Cosmetic Dentistry. He is the past president of both the American Academy of Restorative Dentistry and American Academy of Esthetic Dentistry, and a member of numerous other professional organizations. In addition, he continues to work with restorative dentists at the Kois Center, a didactic and clinical teaching program.

## Who Is John Kois?

John is not a master because he has “great hands”—an inborn talent for dentistry. He became a master through dogged perseverance and years of hard work, with an attitude that embraced challenges. He is a student every day, willing to be wrong and willing to change his beliefs when necessary. John changes the lives of those who come to his teaching center, both through his personal example and his unwavering belief that inside each student is an expert waiting to be born.

## Master clinician

*“I don’t have a problem with failure; I have a problem with not learning from failure.”*

John Kois is an outstanding clinical dentist because he views every patient and every restoration as an opportunity to excel. Yet he is not afraid to examine a failure, regarding it as an opportunity to improve and

avoid that pitfall tomorrow. His dentistry sets a standard for precision and he is recognized by his peers as a master clinician. He is the expert that other dentists seek for their own dentistry. He uses practical experience to develop systems and checklists so Kois-trained dentists can more easily and uniformly provide excellent care to their patients. It is these systems that form the core teachings at the Kois Center.

## Creative innovator

*“If you have to think outside the box, you need a bigger box.”*

John Kois is a relentless questioner: Why does this smile look so natural? Why have the teeth worn in this particular pattern? How can we make our success more predictable? He is unwilling to blindly accept conventional thinking about dentistry without rigorous evaluation. He is also willing to reject popular theories that have no scientific basis. When he saw too

many exceptions to accepted beliefs, he carefully examined his own work to better understand what was successful and why. He formed his own research center to test theories and add to the science of dentistry—entirely so dentists can make better decisions for their patients. He continues to develop innovations and instruments to make excellent dentistry easier to provide.

## Master teacher

*“Never the teacher, ALWAYS the student.”*

Have you ever been inspired by a teacher: One who saw the greatness inside of you? A teacher who helped you reach a goal that you would have never believed was possible? A teacher who could present complex material in a clear, understandable way? John Kois is that teacher. Passionate about his subject, he works long hours year after year to stay current and design new ways to teach. He is a

successful teacher because he has never stopped being a student: questioning, challenging, learning. He understands new knowledge must be used for learning to be effective, so he developed comprehensive notebooks for each student to take home to aid in implementing what they had learned.

## Visionary leader

*“None of us is smarter than all of us.”*

John believes that together we can be better than any of us could ever be separately, and his leadership has created and fostered a unique community of likeminded dentists who are committed to continuous learning. Kois Center graduates are members of a family—a think tank populated with dentists dedicated to helping each other and their patients achieve the absolute best. When a dentist completes a class, they can stay connected with peers and mentors for support and advise them on their own journey to expertise.



*“A master in the art of living draws no sharp distinction between his work and his play; his labor and his leisure; his mind and his body; his education and his recreation. He hardly knows which is which. He simply pursues his vision of excellence through whatever he is doing, and leaves others to determine whether he is working or playing. To himself, he always appears to be doing both.”*

Francoise Rene Auguste de Chateaubriand





# WHAT IS A KOIS CENTER GRADUATE?

The Kois Center is a family of dentists and dental professionals who are passionate about dental healthcare and have the discipline to pursue excellence. A heavy emphasis on community exists, and I am proud to associate with the professionals who attend the Center which promotes a culture of generosity, humility, kindness and passion for learning. These individuals are integrity-based and committed to both their patients and education. Dentists who attend the Center seek evidence-based knowledge, willing to question their

beliefs in pursuit of excellence. The Kois Center community works to provide the best, most efficient and cost-effective care to their patients and help one another to achieve this goal.

Graduates have completed all nine courses in the curriculum at the Center. Once students become graduates, they have the opportunity to attend an Annual Symposium. At the Symposium, current updates based on new studies are discussed, and our community of professionals and their families have the opportunity to network

and get to know each other better. Graduates also have the privilege of being part of our referral service on the website, wherein other graduates can search for contact information and refer patients who are moving or are out of town to another highly trained and skilled dentist.

Graduates have made a serious commitment to this rigorous curriculum—sacrificing time away from families, home and their practices—challenging themselves to be the best. To achieve this goal has required questioning of tradi-

tional standards and examination of strongly held beliefs under the light of published evidence. It has also required the courage and willingness to change, when necessary, how they practice dentistry.

Above all, dentists attending the Kois Center are committed to excellence and doing their best for their patients.

  
John C. Kois





# EXCELLENCE IN DENTISTRY

## What does it mean when your dentist autographs their work with excellence?

It simply feels different when you walk into a store or an office where excellence is the standard. In an era when people are constantly bombarded with mediocrity and apathy through poor customer service and the performance of products below expectations, it is refreshing and reassuring to encounter excellence. Dental offices that consistently

excel at customer service, also have a tendency to hire carefully and provide in-depth training for their employees. These offices personify excellence.

Excellence in dentistry includes words like integrity, trust, and empathy. It means you can trust your dentist and staff to autograph their work with excellence; they aim for perfection on every procedure, every day, even when no one is watching. Decisions that will affect your oral health and well-being for a lifetime must be made in collabo-

ration with someone who is looking out for your best interest now and in the future.

Excellence cannot be static. The doctors and staff that you entrust with your dental health must continually seek new knowledge to enhance the predictability of their work and remain connected with exceptional colleagues who support continuing professional growth.

Excellence is the sum of many parts. Attention to detail and accuracy of diagnosis, along with the skilled hands of an experienced dentist,

will provide you efficient, informative, individualized treatment in a cost-effective manner. Your dentistry will be fabricated using the best materials available with a built-to-last attitude. At the Kois Center, EXCELLENCE permeates every educational and interpersonal interaction—ALWAYS! This book is an overview of how Kois-trained dentists make excellence their standard and how you, their patient, will benefit.



# NOT GUILTY AS CHARGED!

Have you ever felt a twinge of guilt when the dental hygienist asked about your flossing habits? Do you hesitate to make a dental appointment because you will have to admit how long it has been since your last cleaning? These twinges of guilt can be greatly magnified if you believe that your mouth is unhealthy or your smile unattractive—and it is YOUR fault. But the surprising truth for many is that fault and guilt have simply nothing to do with your oral health.

Some people have spent hundreds of hours and thousands of dollars

caring for their teeth throughout their lifetime, yet continue to experience new areas of decay, gum disease, or teeth that break and wear—seemingly no matter what they do. Often these people are embarrassed to seek help because they believe that the condition of their mouth is purely their own fault. Sadly, they may even describe their mouth as “hopeless.”

Your Kois-trained dentist understands that gaining or maintaining oral health depends on more than just daily flossing. They are concerned about risk because science

tells us that your resistance to getting a cavity or losing the support around your teeth is specifically related to both your ability to fight disease and to the type of bacteria that inhabit your mouth. Your dentist also knows that bite and jaw problems occur when the muscles and joint cannot adapt to imperfections in the way you chew. Some of these tendencies are determined by your genetic makeup, and some start when you are an infant. Your risk for dental problems begins even before your first birthday!

If you are one of those embarrassed

people, hesitant to seek dental care, please let go of any guilt and understand that your Kois-trained dentist will not judge you. They will thoroughly learn about your current oral conditions, determine your susceptibility to future breakdown and discuss a plan to help you successfully achieve and maintain a healthy attractive smile.





# TIME FOR A NEW WAY OF THINKING?

## Paradigm shift

A paradigm is defined as a model to follow with a set of rules and regulations (written or unwritten) that does two things:

1. Establishes or defines boundaries
2. Tells you how to behave inside the boundaries in order to be successful.

A paradigm shift: a change to a new game, a new set of rules.

Dentistry has been a very traditional profession with a long-established paradigm where the rules of the game have changed very little over the past 100 years. Accepted

practices of dentistry, with little or no scientific basis, have been and continue to be taught in dental schools and continuing education programs. This has had an unfavorable outcome on the level of dental health care, perceptions of what is needed in order to maintain dental health and what insurance companies will cover for their participants.

For instance in the 1960s, the original Crest toothpaste advertising campaign promised healthy teeth if one would brush twice a day with Crest and see their dentist twice a year. This advertising slogan became part of the dental paradigm, accepted as scientific fact

without any research to test the validity. Dental insurance companies subsequently established a policy to cover teeth cleanings twice a year. The scientific truth is some people do not need two cleanings a year while others would be better served by having their teeth cleaned four times a year. The best cleaning interval depends on your risk for disease.

At the Kois Center, we are not constrained by dental philosophies and practices just because they were taught to us years ago. We are committed to learning, growing and getting better for our patients and their care. All dental practices

and procedures are questioned as to their purpose; the rationale and basis for their use are continually being examined. We are willing to build a bigger box—or even throw away the box—if science and treatment in the best interest of our patients calls for that action. In this manner a Kois Center Graduate is at the forefront of technology and knowledge when diagnosing and treating patients with the most up to date and predictable procedures and technologies.





# PROVE IT.

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As a patient of a Kois-trained dentist, recommendations made to improve your dental health often use evidence-based dentistry. The word evidence may bring to mind a courtroom, where materials are gathered and manipulated to prove or disprove a point. Evidence-based dentistry is different; quite simply it is dentistry firmly rooted in proof and confirmation. When dentists base their practice on evidence, they are using the latest reliable research to make

decisions and recommendations for you, their patient. They use their knowledge and experience to properly apply the available evidence and may adapt their treatment recommendations based on trustworthy and responsible research.

For example, when evaluating a tooth with a large filling, your dentist knows from published studies how much weaker it is based on the size and width of the filling coupled with the strength of

your bite. The evidence gives your dentist reliable information about which teeth in your mouth are more likely to break and why. Your dentist can apply the evidence to make recommendations on how best to protect vulnerable teeth. A dentist whose practice is evidence-based uses research and will make different recommendations based on you, the patient, and your susceptibility.

In order to make appropriate decisions for your teeth, your dentist must know how to evaluate

published evidence and determine which study is applicable to your situation while staying current on new information. All protocols for treatment that dentists learn at the Kois Center are grounded in published science, and Kois Center graduates are proficient in understanding the dental literature. Course content is continuously updated to teach only the most recent science.





*"There can be many different ways to treat disease,  
but there can be only one proper diagnosis."*

Morton Amsterdam, DDS, ScD



# WHY DO YOU NEED THAT JUST TO CHECK MY TEETH?

## Comprehensive evaluation

How does your dentist know what you need? The dental examination forms the foundation for treatment decisions that can affect your mouth for the rest of your life. The exam must be thorough and complete. Your dentist collects detailed information about your mouth in many ways, each of them critically important.

The information you provide about your overall health—as well as details about previous dental treatment and experiences—provides your dentist with an informed starting point when gathering information about you. Systemic diseases and some medications can make dental problems more likely, and successes (and failures) of past treatments are important clues about your unique situation.

Complete radiographs (or X-rays) provide information that cannot be seen when your dentist looks in your mouth. Photographs and models of your teeth allow your dentist to evaluate your teeth from every angle.

The part of the dental exam where your “teeth are checked” actually is much, much more. Your dentist will make measurements of gum health, check teeth and fillings for

disease and weakness, look for worn teeth, evaluate muscle and jaw joint function, and look for oral cancer.

Your dentist considers all of this evidence when making a diagnosis for your mouth. Once the diagnosis is made, they can recommend the best course of dental treatment for you.





# WHERE DO WE START?

## Diagnosis

*“the identification of the nature of an illness or other problem by examination of the signs and symptoms.”*

Oxford Dictionary

The human body and its workings are very complex. An understanding of good health, typical illness and disease is important, but for a Kois-trained dentist, it is just the beginning. A person’s oral condition is a mystery to be uncovered through thorough examination and careful consideration. John Kois enjoys invoking the image of actor Peter Falk, who played a detective in the

1970’s television series Columbo. Detective Columbo always gathered routine information needed to investigate a crime, but solved cases by asking deeper questions, probing for hidden meaning and connections below the surface.

Your Kois-trained dentist will gather detailed information about you and your mouth—a thorough and thoughtful search for clues. You will be astonished at the thoroughness and be intrigued by the dedication to understanding your dental condition.

The four dental risk groups, as explained in the next chapter, form a current snapshot of you and will

raise questions about your mouth. How did your situation arise? Why are your teeth worn? Why are you suddenly getting cavities? Or, how is it that you’re 50 years old and have never had a cavity? Your dentist will need to know about your past dental experience, looking for hints and evidence. Your teeth and gums tell a tale that reveals secrets your dentist can use to help you attain, or maintain, a high level of dental wellness.

Diagnosis answers the questions “What” and “So what” about you: What are the conditions currently in your mouth? So what do those conditions mean for your dental health today and in your future?

For example, a crack in one tooth may be harmless, while a crack in another tooth may cause destruction of tooth, bone and even neighboring teeth. Accurately reading and interpreting the clues in your mouth to make the right diagnosis for you is the hallmark of a Kois Center dentist.





*"There is no dentistry better than no dentistry."*

John Kois





High periodontal risk



High functional risk



High biomechanical risk



High dentofacial risk

# DENTISTRY 101

**Periodontal:**  
Gums and Bone
















**Biomechanical:**  
Tooth Structure

**Functional:**  
Jaw Joints,  
Muscles, Bite and  
Chewing Surfaces
















**Dentofacial:**  
Smile Characteristics

The four dental  
risk groups

Everyone has heard of and recognizes the four food groups and the importance of a well-balanced diet. The Kois Center uses this concept to distinguish the four areas of the mouth that must be evaluated to develop a risk assessment, make a diagnosis and provide treatment recommendations for our patients. The four dental risk groups are Periodontal, Biomechanical, Functional and Dentofacial.

RISK PROFILE			
Patient Name _____			
Date _____			
	Low	Mod.	High
<b>GUM &amp; BONE</b>			
<b>TOOTH STRUCTURE</b>			
<b>JOINT (TMJ), BITE AND CHEWING</b>			
<b>SMILE CHARACTERISTICS</b>			
<b>MEDICAL PRECAUTIONS</b>			

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RISK PROFILE			
Patient Name _____			
Date _____			
	Low	Mod.	High
<b>PERIODONTAL</b>			
<b>BIOMECHANICAL</b>			
<b>FUNCTIONAL</b>			
<b>DENTOFACIAL</b>			
<b>MEDICAL PRECAUTIONS</b>			

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# ONE SIZE DOES NOT FIT ALL.

*“Those who do not remember the past are condemned to repeat it!”*

George Santayana

Past dental disease and treatment is a very important and significant indicator of future dental health and disease concerns. After your dentist completes a thorough examination, they have an excellent understanding of your specific risk for future dental problems. Traditionally, a dentist would treat a cavity or a gum disease issue after it caused a problem or hurt. The standard model was to fix problems after they developed or caused symptoms. A different approach uses a risk assessment strategy.

This method takes you, specifically and individually, into account during the examination process in developing a plan to maintain or improve your dental condition. When you and your dentist understand that you may be likely to have a problem develop, special efforts can be made to focus on preventing that problem or catching it at a very early stage. Just as importantly, knowing that your particular risk of developing a dental disease is very low may help avoid unnecessary dental treatment.

Your dentist’s recommended treatment and preventive regimens will be based on exactly what you need—not some predetermined list that is applied to everyone. This is

critical in designing dental care that will help you reduce your risk of future dental problems.

In an effort to clarify where you may be most at risk, the dentist will classify your risk as low, medium or high in each of the four dental risk groups using the dots green, yellow or red. Green is **Good**. Red is **Bad**.

## What is my risk profile?

Your risk profile is actually a lifetime report card for your dental health. This is a summary of your mouth’s current condition and potential problems. Any area that does not have a green dot would be an area where you could be at risk for further problems.

## How does my dentist do that: reduce my risk of future problems?

Your dentist will choose treatments that give you the best chance of keeping your smile, your teeth, and your oral health for your lifetime! Kois Center principles teach dentists how to fix one area of your mouth without harming a different area. For example, when a Kois-trained dentist fixes your smile, they will choose a method that does not harm your gums. When your dentist thinks about risk reduction, it means they are planning for the long term—your lifetime—instead of using techniques that only help your mouth for a few years.





# GOT BONE?

## Periodontal disease: gum and bone support for your teeth

Periodontal disease, commonly referred to as gum disease, is a chronic, often silently destructive disease. It is a complex disease initiated by certain types of bacteria that live below the gums and which, by using modern technology, can actually be identified! These bacteria can trigger a series of events that ultimately lead to the loss of bone around your teeth. If periodontal disease advances to the point where your teeth get loose or move, tooth loss may be the outcome.

It is very important at regular dental examinations that your mouth be examined for the pres-

ence of periodontal disease. Your dentist needs both accurate X-rays and precise measurements taken around your teeth to determine the level of health and bone support. Kois-trained dentists are passionate about understanding the science and susceptibility behind periodontal disease. They are using scientific breakthroughs in technology to diagnose and treat this disease. Armed with thorough, individual data collection, your dentist can explain whether periodontal disease is present in your mouth and if you are at risk for future periodontal disease. Other factors or risk modifiers like your family history, medical conditions, ethnicity, and smoking can also influence the response to the bacteria in your mouth. Your dentist will make recommendations to treat your disease

and follow up with suggestions to help you avoid further breakdown.

The presence of untreated periodontal disease has also been linked to other conditions. Research shows a connection between periodontal disease and an increased risk of coronary artery disease, stroke, diabetes and pre-term, low birth weight babies. Improving your periodontal condition can have a positive affect on several other aspects of your health as well as improving the quality of your life for years to come.

## Reducing your risk of gum destruction

Reducing your risk for future gum and bone loss is dependent on controlling the destructive bacteria in your mouth. Recommended

treatments can be varied based on the findings by your dentist from their thorough evaluation and will be tailored to meet the needs of individual patients.

Tobacco use greatly increases the risk of periodontal disease; tobacco cessation strategies may be employed to help you quit smoking and thereby improve your prognosis. Consistent monitoring and maintenance of blood sugar will also have a positive effect in patients who have diabetes.

Your dentist has many treatment options, based on scientific evidence, to customize a plan that will help lower your risk of periodontal breakdown and help you maintain periodontal health.



# NOT ANOTHER CAVITY!

## Biomechanics

Teeth can break down for many reasons. Although everyone is familiar with tooth decay, it is only one part in the determination of biomechanical risk. Decay has traditionally been considered a simple process caused when plaque (a bacterial colony) on the tooth surface was exposed to sugar. Over a period of time acids generated by the plaque weakened the enamel surface, eventually leading to a cavity. Today we realize that this process is much more complex and is actually affected by many other factors. Many prescription medications cause a decrease in salivary flow. Dry mouth, which seriously compromises the body's ability to flush the mouth of food and debris, buffer mouth acids, and remove plaque from the teeth. Some systemic diseases,

like bulimia and gastroesophageal reflux (GERD), increase mouth acidity, as do a wide variety of popular beverages. The acids literally melt away the tooth structure and can quickly and severely destroy the teeth.

The aging of our population and increased life span also increases the risk for tooth breakdown. Exposed root surfaces, more common as we age, are softer than enamel and therefore more cavity prone. Teeth are enduring eight and nine decades of chewing forces, thus making them more subject to wear, fracture and decay. Extensive prior dental work can result in weaker teeth, without adequate tooth structure to support needed restorations.

Individuals who have multiple areas of decay, large fillings, or have lost teeth in the past due to

lack of tooth structure are at higher risk for future breakdown. These individuals may need further investigation to eliminate the cause of their susceptibility, including dietary monitoring, salivary flow examination, and acid level monitoring.

## Biomechanical risk reduction

Once the risk level is known, a Kois-trained dentist will determine why the risk is elevated and develop a plan for eliminating or reducing the factors that may result in continued breakdown. Prevention of future decay may be accomplished by using the most effective forms of fluoride or anti-bacterial rinses. When consumption of sugary foods, soft drinks or other acidic beverages contributes to risk, dietary

counseling and modification may be indicated. Management of systemic problems can be coordinated with an individual's physician.

When decisions are made to restore teeth, the biomechanical risk is minimized by conserving, or keeping, as much tooth structure as possible. Many new materials and techniques can be quite conservative. This minimizes trauma to the nerve inside the tooth, decreasing the chance that the tooth will need root canal treatment in the future. Sometimes, despite the best that dentistry has to offer, a tooth will simply be too weak to predictably restore and is best removed. Fortunately, dental implants offer a reliable replacement for missing teeth as they do not decay and can be part of a strategy to reduce the risk of future problems.





# MY TEETH ARE WORN!

## Function/joint, bite and chewing surfaces

The key questions in bite evaluation is “Can this person chew comfortably, without pain in his jaw muscles, joints or teeth? Has he noticed any changes like wear or chipping of his teeth in the last five years?” The chewing system is very complex and early signs of disease are subtle. Coordination among the two jaw joints, the chewing muscles and the teeth is necessary for healthy function. The long-term health of this system is dictated by the harmony among these three components and their ability to adapt to changes over time.

When the body cannot accommodate excessive force in the chewing

system, the weakest link in the system will be affected. In some instances the jaw joints may become tender and, over time, can result in irreversible changes to the joint. Sometimes the muscles will be overworked, causing muscle pain and headaches. When the teeth are affected, they become loose or worn—**teeth that are aging faster than the person.**

Unfortunately, it can take years for some signs and symptoms to appear. Tooth wear, in particular, may not be noticed until significant loss of tooth structure has occurred, because the wear may be slow and tolerable in the early stages. If the disharmony can be caught soon enough though, extensive rebuilding treatments may be avoided.

## Functional risk reduction

Due to the subtle nature of functional problems, it is essential that this risk be identified and managed at an early stage of the disharmony. A well-trained dentist can determine if the condition occurred in the past or is currently destructive. Once a proper diagnosis has been made, destructive patterns can be altered, often halting the ongoing breakdown.

The cause of the destructive patterns will be identified, then treated or managed to allow both teeth and dentistry to last as long as possible. Kois-trained dentists may use a removable appliance to determine how best to treat the

excessive forces. Once the cause is determined, the risk for future wear or pain can be reduced by reshaping the teeth to correct the bite or possibly repositioning the teeth so the jaw joint, muscles, and teeth are in harmony. Final dentistry can then follow, in the newer, more comfortable position.

Some people squeeze, clench, or grind their teeth even with excellent tooth and jaw alignment. For most people with this condition, the greatest damage occurs during sleep. In this situation, risk reduction can be achieved by the use of a nighttime appliance to protect the teeth.



# SMILE, PLEASE!

The final area of oral health that your dentist evaluates is dentofacial, which examines smile characteristics and how your teeth look in your face. Kois-trained dentists understand this is the starting point for all esthetic dentistry. Your dentist has been trained to understand the elements that are necessary for a beautiful and healthy smile. Your risk is determined by how much your front teeth show in your happiest smile, the size and shape of the teeth, and their color. Your dentofacial risk is determined by all these components.

The dentofacial diagnosis helps you and your dentist select the

appropriate treatment for your individual esthetic needs. Understanding a person's dentofacial risk makes natural-looking, esthetic results more predictable. The materials that your dentist uses depend on how much tooth and gum are displayed when you smile. Smiles that "show everything" require materials that have a higher esthetic value but may not be the strongest. Those who show less may be able to use a material that is stronger with less need for cosmetic value. Many other decisions are also based on your dentofacial risk: Do the teeth need to first be moved into the right place so that conservative veneers

are an option? Is tooth whitening alone enough? Is cosmetic gum surgery needed? Should the front teeth be longer or shorter?

## Cosmetic risk reduction

Predictably improving a smile—and therefore reducing dentofacial risk—requires understanding where the teeth must be positioned in the face, how the teeth should be shaped for visual harmony, and if gum tissue contributes to the unfavorable appearance.

Crooked teeth may need to be placed in their proper position. Orthodontics or braces may be

necessary, although in some cases teeth may be restored esthetically to appear in better alignment. Creating harmony and balance between teeth and gum tissue on both sides may necessitate gum tissue alterations.

Your dentist's training at the Kois Center and understanding of facial esthetics assures that you will receive the most predictable esthetic treatment options available, whether you seek a more youthful smile, cosmetic dentures, or the rebuilding of worn-down teeth.





# HOW LONG WILL THIS LAST?

What comes to mind when you hear that something is built to last? Maybe it is the Pyramids where huge stone blocks have endured the hot desert winds for 5,000 years, or perhaps you think of the finely honed walls at Machu Picchu—still standing after 600 years. Both of these famous landmarks were painstakingly constructed by people whose goal was perfection

and longevity. They were carefully hand-built using the best tools available at the time in combination with traditional craftsmanship.

How long should my dental work last? While the durability of your dental work is influenced by your individual risk for dental disease in each of the four dental risk groups, your dentistry will last longest and have a much better prognosis when

it is expertly created using the finest dental materials.

Your dentist learned these same timeless fundamentals at the Kois Center and employs them to design and craft your dentistry. They have learned techniques to create restorations that will perform for a long time and serve you well. These are restorations that are esthetically pleasing and function

in a natural, comfortable manner. Since nothing lasts forever, they have planned ahead for the time when a repair may be needed so you can continue to smile and function for many years.

This is dentistry that is predictably long-lasting—clearly built to last.





# MOVING FORWARD.

This book was written to provide information about a special dental practice: the practice of a Kois-trained dentist. And it was written for you, the dental consumer, so you can become familiar with the concepts that your dentist will use to address your dental concerns.

Your dentist will gather all the necessary information to determine what treatment choices you may have. They will show you how the different risk groups fit together and influence each other in your mouth. You will see where your mouth is in the red risk zone and be

offered strategies that move each category towards the green, or lower, risk.

No two mouths are identical. Each has unique needs and unique risks for dental disease. Thanks to their training, this dentist has the skill to understand what you need. They

will develop a plan for your mouth: a plan that will fit together well, improve your oral health and lessen your risk for future dental problems.

A plan, from start to finish, that is defined by EXCELLENCE.





## DEDICATION

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I would like to take this opportunity to thank all the individuals involved in making this book possible: the membership for their responses to our surveys, the committee members and their wonderful ideas, the Kois Center for their continuous and immediate support, and the photographers who unselfishly allowed us to use their work. I am truly appreciative to all of you. I also want to express my sincere appreciation to Rob Warnick, the graphic designer who made this book so beautiful to view and to Jean Martin and Nancy Hartrick whose tireless drive to get it right pushed me way beyond my own abilities and to a level that I never dreamed was possible. John's familiar phrase, "None of us is smarter

than all of us", has taken on greater meaning and significance with the completion of this book.

To my children, Austin, Grant, and Carson who have been patient with me these past several months while preparing this book and my mother, Mary whose unconditional love has made all things possible, I am deeply grateful.

Finally, I would like to thank John Kois for seeing things in me that I did not see in myself. Your friendship and devotion are inspiring and humbling.

Sincerely,  
Michael Palmer, DMD

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