

**THE SMART DENTAL
PATIENT'S GUIDE TO NEARLY
EVERYTHING**

**THE SMART DENTAL PATIENT'S GUIDE
TO NEARLY EVERYTHING**

**almost everything you
need to know to keep
your mouth healthy and
attractive all your life**

RALPH F. PARKIN DMD

Preface

You have before you an owner's manual for your mouth created by the acquired knowledge of thirty plus years of dental learning, practice and accumulated experience that has led me to an understanding of what can go wrong with your oral health, what is required to fix it when it needs fixing and how to keep it healthy so less fixing is necessary. I have spent my professional life rescuing and repairing damaged mouths and the dental care need is so high that there is no danger that I will need to go out of business due to lack of mouths to fix. If anything the need for dental care increases as each year goes by.

There is another danger that has motivated me to write this owner's guide and that is the reality that the cost of major mouth rescues is simply too large for the majority of Americans (this may be true elsewhere) to afford. This is especially true for those who live on a tight budget or those who can't

obtain credit in order to make monthly payments for their care. The cost in lost health, lost quality of life and lost years of life this will cause is a real tragedy in the making.

The cost of providing dental care continues to climb while the average income remains too low for many families to afford much more than the basic necessities. Dental insurance, for those who have it, has abdicated its original purpose of helping policy holders keep their mouths healthy, by keeping policy maximum benefits right where they were in the 1960's. The current reality is the coverage is so low in comparison to the costs of care that the objective of the dental insurance industry is solely to make a profit by keeping patients perpetually needy, never allowing them to achieve a healthy mouth, that going forward would only need routine maintenance, so the insured will need to continually pay the high price for an ever decreasing amount of actual benefit.

This book is loaded with dental health tips, ideas and cost cutting information that if applied will not only save you on your dental bills, but provide great life benefits as well. This book is not a substitute to visiting your dentist and hygienist; it is designed to assist you in doing all you as the owner of your mouth can to keep it healthy and attractive.

Let the information flow and the learning and doing begin!

Table of Contents

Chapter 1	Page
Dentist Saves Patients Life!	8
Add 6 years to your life	11
Heart Disease and Stroke	11
Pregnancy and Premature Babies	13
Soft Drinks	18
Chapter 2	
Why Teeth Get Cavities	22
Some ways to prevent Tooth Decay	28
Chapter 3	
Things Other Than Cavities That Ruin Your Teeth	34
Grinding (Bruxing)	34
Proper Brushing	38
Erosion	39
Bulimia and Acid Reflux	39
Sports Injuries	40
Chapter 4	
What You Need To Know About Gum Disease	41
Assess your Gum Disease Risk	47
Common Signs of Gum Disease	52

Chapter 5

Good Foods That Can Keep Teeth Healthy	54
---	----

Chapter 6

A Sweet and Natural Way to a Healthy Mouth	62
Xylitol	64

Chapter 7

Healthy Mouths for Babies and Young Children	72
Formation of Baby Teeth	72
Tooth decay	75
First Dental Visit	78
Thumb Sucking	78
Losing those Baby Teeth	81

Chapter 8

Almost Everything You Need to Know and Do in a Dental Emergency	84
Tooth is Knocked Out and Lost	84
A Broken Tooth	89
Something Stuck Between Teeth	91
Lost Filling	92

Crown (Cap) comes loose	95
Problems with Braces	97
Injury to Lip, Cheek, or Tongue	98
Mouth Sores	99
Oral Abscess	105

Chapter 9

Things to Consider with Oral Piercings	106
--	-----

Chapter 10

What's New in the World of Smile Makeovers?	113
Invisible Braces	114
6 Month Braces	116
Veneers	117
Teeth Whitening	118
Dental Implants	121

Chapter 11

The Almost Every Other Question Answered Chapter	126
Sleep Apnea in adults and children	126
Use of Fluoride	129
Sealing Teeth	131
Dry Mouth	133

TMJ-What is it and do I have it?	138
Chapter 12	
10 Questions to Ask Before Choosing Your Dentist	141
Conclusion	153
Acknowledgements	157
About The Author	159

Chapter 1

READ ALL ABOUT IT! DENTIST SAVES PATIENTS' LIFE!

Wow, what a story this is going to be, saving lives in the dental office. Sure, dental office personal are CPR trained and yes many have an AED device to shock your heart if necessary to save your life and they would be good people to have around in an emergency, but that is not what this chapter is all about. I am writing to you about the connection between your dental health and literally how long you live and how comfortable your life will be.

As part of every adult examination in my office my patients stick their tongues out. They are not trying to make a social statement, no they are helping me do a thorough tissue screening for any signs of mouth cancer and the tongue and the back of the throat are prime spots to check for mouth cancer along with the back of the throat. Mouth cancer doesn't get the press

that some other cancers do but don't be fooled by this: it *is* a killer.



Did you know that more people die from oral cancer (8,000 to 10,000 deaths) than from cervical cancer or melanoma, which is a serious skin cancer? Early detection is critical to reducing the death rate.

Here are the risk factors associated with oral cancer!

- Tobacco use
- 40+ years of age
- Men twice as often as women
- African Americans are more susceptible than Caucasian Americans
- Alcohol consumption
- Compromised immune system
- Damaging exposure to sunlight

What may be surprising is that 25% of all oral cancers occur in people who have **NONE** of the risk factors! A thorough oral cancer screening at each dental exam is a prudent way of helping ensure that a patient's life could be saved with early detection. A while back we discovered a small lump in the corner of a patients' mouth. The biopsy determined that cancer was present. Early detection coupled with removal of the lump and associated lymph nodes by the surgeon saved the life of a 33 year old man with a young family. Routine dental visits combined with routine cancer screenings made this a story with a happy ending. We now use the advanced early cancer detection device called a **Velscope** which uses fluorescence of the mouth to detect unhealthy tissue. Healthy tissue fluoresces and cancer cells and damaged tissue do not. Many offices provide this cancer detecting procedure at **no additional cost** with each examination. In life saving, oral cancer is just the beginning!

Do you want to add over six years to your life?

Dr. Michael Roize, University of Chicago internist has been making headlines with his “real age” program, which he designed to provide a person with a valid age reduction plan. You may have read about it or seen him on Oprah or 20/20 or you may even have purchased his book. **Maybe you were surprised that flossing and brushing ranks right up there with quitting smoking, taking your vitamins and reducing stress as one of the five things you can do to reduce your “real age”**

In fact keeping your teeth and gums healthy helps you add over 6 years to your life! How so? Just keep reading!

The nation’s number one cause of death is heart disease! One out of every two women will die of this disease. Did you know that there is a

strong connection between people with gum disease (a serious bacterial infection that destroys the attachment fibers and supporting bone that holds your teeth in your mouth) and people that suffer heart disease? The risk of heart attack and stroke is about twice as high in people with periodontal (gum) disease. It seems that certain bacteria involved in gum disease can also damage the lining of blood vessels which can cause the formation of potentially fatal blood clots. There is a protein formed in the body called C- Reactive Protein that has been implicated in causing damage to blood vessels and to the heart. It is a product of chronic infection which accurately describes gum disease. This may also help explain why approximately 50% of the heart attack victims didn't have high blood pressure.

These same heart damaging and stroke causing bacteria can also cause lung infections. Gum disease bacteria have been implicated in bacterial pneumonia and also they are apparently a cause of chronic

obstructive pulmonary disease, (COPD). The research in these areas is ongoing.

In a letter I received from Peggy Fleming in October of 2004 she stated “**stroke is the number one reason that people move into nursing homes and the third leading cause of death in the United States**” She stated further “50% of all strokes occur in people who show no symptoms.” Peggy, having had serious health problems in her own life, encourages everyone to have screenings done to possibly save their own life or the life of a loved one. Needless to say, a stroke or multiple strokes can end a persons’ life or seriously reduce the quality of its victims’ remaining months or years.

There is more!

Did you know that 12% of the babies born in the United States are born prematurely? (Before 37 weeks of pregnancy) which increases their risk of death and lasting disabilities. These include

mental retardation, cerebral palsy, lung and gastrointestinal problems, vision and hearing loss, all of which are horrible to contemplate in the life of children and for their parents! Pre-term, births have soared to become the #1 obstetric problem in the U.S. Research has shown that this can probably be avoided by simply seeing a dentist for a periodontal examination before and during pregnancy. The recommendation during pregnancy is to have a visit with the hygienist every three months which is only one more visit than the every six month recommendation for routine preventive dental care! Recently insurance companies, recognizing the health benefits for expectant mothers, are covering the additional hygiene visit.

Pregnant women who have periodontal disease may be seven times more likely to have a baby that is born too early or too small. Research shows that the bacteria that cause periodontal (gum) infections cause a faster-than-normal increase in the levels of prostaglandin and other factors that cause

labor to start early, leading to premature delivery. Getting rid of the bacteria that cause this condition through a simple procedure called scaling and root planning is the key to an on time delivery and a healthy baby. **This common dental procedure has been shown to reduce a mother's chance of having a pre-term birth by up to 84%.** The second trimester is a safe time during pregnancy to do dental procedures. After all, every mother wants to have a healthy baby!

So what are some of the signs of gum disease?

- Bleeding gums while brushing
- Red swollen or tender gums
- Gums that recede away from the tooth
- Persistent bad breath
- Pus between the teeth and gums
- Loose or separating teeth
- A change in the feel of your bite

There are currently ongoing studies looking at a possible oral health connection with such general health

areas as arthritis and Alzheimer's disease. The scientific researchers have made some startling discovers in the last decade with more to come, I am sure.

Should you now find yourself motivated to want to keep your teeth and gums healthy, and take care of the rest of your body at the same time, it's almost as simple as regular brushing and flossing. Some suggestions that will be well worth your time and effort are:

- Use a soft tooth brush and toss it when the bristles fray
- Use a fluoride or xylitol containing toothpaste to reduce cavities
- Brush gently, angling toward the gums for about 2 minutes
- Gently floss (Glide is a good brand) between each tooth
- Check your brushing with a disclosing solution or tablet (if in doubt)
- Stop using tobacco products (dentists can help)

- Watch for signs of gum disease. (see page 15)
- Be aware of habits such as destructive teeth grinding (dentists can help).
- Some drugs such as contraceptives, antidepressants and heart medicines can negatively affect your oral health by reducing saliva flow which dries the mouth.
- Regular hygiene visits and maintenance visits are some of your weapons against gum disease.

I read an insurance article recently entitled “The True Cost of a Cavity” The article explained that the average cost to maintain a restored cavity (filling) in the molar of a ten year old reaches \$2,187 by the time he or she is age 79. Dr. Max Anderson explains in the article, “There are currently no permanent materials available to treat cavities, so the lifetime cost of maintaining teeth that have been treated for decay far outpaces any out of pocket costs you might spend to prevent decay in the first place. When a patient works with his or her

dentist, cavities are almost entirely preventable.”

Add the latest information on soft drinks to the things you can do, or in this case leave out, in order to keep your mouth healthy. Be aware that the decay rate has shot way up, back to pre-fluoride days. Soft drinks are being blamed for this large upsurge in teenage and adult tooth decay. **The average consumption of soft drinks in the U.S. in 2002 was approximately 53 gallons per person per year.** That is 16 ounces per day. Realize that some people drink no soft drinks, while others drink several cans a day. Typically soft drinks consumed at mealtime are less injurious than those gradually consumed over time. Continuous sipping is considered more harmful to teeth than drinking an entire beverage at once. The acid content has been implicated as the cause of decay even more than the sugar and corn syrup in the sodas.

Most soft drinks contain one or more food acids; phosphoric and citric acids are

common, but malic, tartaric and organic acids also may be present. These acids cause tooth erosion, and irreversible, painless loss of tooth enamel. There is no question that erosion causes significant damage to dental enamel, particularly among young people. Understand that bacteria work to get through the enamel, which has little “food value” for them where as the inner part of a tooth, the dentin, seems to be more to their liking. Acid erosion makes their job a lot easier and so the decay rate skyrockets!

**SO ARE SOME SOFT DRINKS
BETTER AND SOME WORSE? I
THOUGHT YOU WOULD NEVER
ASK!**

Tap water and root beer have little to no effect on enamel. Brewed black tea and black coffee dissolve enamel several times faster than water. Cola drinks dissolved enamel 55-65 times faster than water and root beer. Non-cola drinks were 90-180 times faster at dissolving enamel than water! **IT DID NOT MATTER IF THE**

SOFT DRINK WAS A DIET OR REGULAR VERSION! Root beer appears to be the least damaging soft drink for the health of tooth enamel while non cola drinks including canned ice tea such as ‘Arizona Brand’ were worse. **Sports drinks, “energy drinks, such as Gatorade, Red Bull, and the Snapple tea products contain a greater amount of acid.** There are numerous other reasons to avoid soft drinks in our diet, such as the epidemic of diabetes occurring in America. Suffice it to say ongoing research is painting a not so pretty picture of soft drinks and health. So” a word to the wise” as they say. **What you decide to do is up to you!**

This chapter was written in the hope that it would arm you with information that would enable you to make wise decisions regarding your dental health and as you can now see these decisions have a major impact on your general health and quality of life as well. Dr. Charles Mayo of the Mayo Clinic fame, stated years ago from his observations over the course of his practice life that a healthy

mouth added ten years to a person's life. I believe that he was correct. Now you also know how to add a decade and a healthy decade, not one in a nursing home, to your life. Go for it, make those changes.

Chapter 2

Why teeth get cavities

In this chapter I will explore the causes of tooth decay, why teeth are so susceptible to attacks from external forces, and what we owners of teeth can do to help protect them from the sources of tooth decay and help protect our wallets from the cost of repairs.

First let's discuss tooth anatomy and what it is about teeth that make them so susceptible in the first place. When our teeth were first forming down in the bones of our jaws the cells that were building the tooth started at the top portion of the tooth and began laying down the outer covering we call enamel. Depending on which tooth they were building they either made relatively smooth surfaces such as are found on the front teeth, which are designed for cutting or they made teeth with lots of hills and valleys for chewing as are found on teeth that are further back in the mouth. The further back in the mouth the more hills and valleys were formed. If you could look at the bottom of

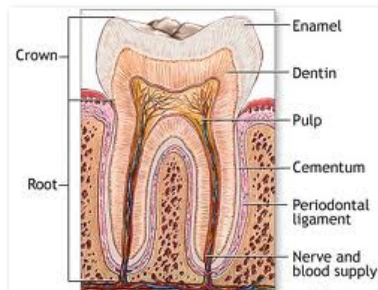
the valley you would see that the narrowest part of the valley actually dips below the surface of the tooth forming a tight fold dipping in and coming back out again. This fold of enamel varies in depth with each individual tooth. This is important as it relates to tooth decay, more to come on this.

Enamel is mainly made up of minerals such as calcium with very little edible structure. It is designed to be a very hard durable surface for withstanding the forces of wear and tear from chewing. Below the enamel is the dentin layer which supports the outer layer of enamel. Without this support the enamel loses the ability to resist forces placed upon it and will break like glass. This is also very important in the discussion of tooth decay.

The dentin, situated between the enamel and the tooth nerve, is alive with significantly more organic matter built into its structure. Dentin contains microscopic fibers that connect it to the tooth nerve which, if they are exposed, cause pain. This

also helps the nerve tissue sense hot and cold.

The nerve tissue and the blood supply for the tooth that brings oxygen and nutrients to the tooth is housed in the center of the tooth and runs down the middle of each root where it connects with the rest of the body. The hollow centers are called the root canals. See the tooth diagram below:



The diagram leaves out an important detail, the narrow folds or grooves of enamel that dip down towards the dentin. These become hiding places which are important in the tooth decay process. Know that all back teeth and some front have them; it's how the teeth were formed. In the chapter on

biofilm and plaque formation I discuss the process whereby mouth bacteria adhere to enamel which protects the bacteria from being swept out of the mouth and swallowed. It only takes a few hours to go from clean teeth to the beginnings of plaque formation as the bacteria glue themselves to the teeth surfaces. They are most successful at building this sticky matrix around the necks of the teeth where they are less likely to be whisked away by the tongue or cheeks. If allowed to stay in place, as explained in the previously sighted chapter, the acid loving anaerobic (without air) bacteria in the plaque start the release of acids which then work on the calcium in the enamel dissolving it away.

In addition to the areas around the tooth, the grooves and crevices as discussed above make excellent hiding places. The narrow folds are too small for a tooth brush bristle to penetrate and so it is no surprise that the majority of cavities occur in the valleys of the chewing surface areas of teeth. The drawing (page 26) shows the grooves and

some more advanced acid damage to the enamel of the tooth top grooves and in this case also in the side groove. Once into the tooth as far as the decay in the drawing indicates, the bacteria can now start the decay process in the dentin which has organic edible material which serves as a food source for the bacteria.



Another hiding place that works in favor of the bacteria is the edges of old fillings especially old amalgam (mercury/silver fillings). The gradual separation between the metal filling and the tooth occur over time as acids and chewing forces and the natural interaction of the several metals in the amalgam fillings break down the margins as the photo (page 27) shows.



This photo shows the decayed crevices in the center of the upper tooth and the recurring decay in the crevices around an old filling in the lower tooth. Both are hiding places for bacteria. Remember that bacteria are so tiny that they can only be seen using a microscope so areas that look small to the eye are wide open spaces for the germs. Remember, enamel is like glass when not supported by solid dentin. Decay eats the dentin softening it into a dry mush-like consistency leaving the tooth enamel unsupported, and ready to fracture under regular chewing pressure.

Research estimates that 90% of all the amalgam fillings in the mouth are re-decaying. Metal fillings expand and contract with hot and cold foods and drinks,

more than the teeth can accommodate which results in millions of cracked teeth. These cracks become hiding places for decay causing bacteria. In addition the cracks weaken teeth making them susceptible to fracturing which is the number one cause of broken teeth and the number one reason dentists put protective crowns or caps on teeth.

Here are some ways to help prevent tooth decay.

First, get really committed to keeping a clean mouth. Brush the area next to the gums on the teeth surfaces to remove the buildup of sticky smelly bacterial plaque that forms daily around the teeth. Notice the angle of the tooth brush in the drawing on the next page where the bristles are angled towards the gums.

I personally recommend electric toothbrushes, especially the sonic type brushes as I have both personal and patient experience showing better cleaning with that type brush. Few of us brush for the

recommended 4 to 5 minutes so anything that cleans quickly is a plus.



Flossing using the newer flat type floss, as found in the 'Glide brand' floss will clean the areas around the neck of the tooth that a brush won't reach. This between the teeth cleaning will prevent numerous cavities and it also helps the gums stay healthy while stopping bad breath caused from rotting food debris left between the teeth.

Using xylitol, a good tasting, natural sugar alternative, found in certain brands of gum, mints and toothpaste can also help stop the decay process. It works by being ingested by tooth-decaying bacteria that cannot metabolize it into the acids used to cause decay. (See the chapter on xylitol)



The grooves on the chewing surface of teeth are still unprotected since toothbrush bristles can't penetrate those areas leaving the hidden bacteria to dissolve the enamel folds and consume the dentin. Sealants have gone a long way to solve that problem. A dentist can apply a coating over the grooves in the valleys of back teeth after cleaning and disinfecting the tooth surface. This process closes off the access points so bacteria can't enter the tooth by way of crevices on the surface. Sealants do wear out in time and may need to be replaced after several years on the tooth. (More on sealants later)



The decay rate can also be cut way down if sodas, energy drinks and high acidic fruit juices are avoided or only rarely consumed.

Soft drinks are big business in the United States, with an annual production of more than 10 Billion 192-ounce cases. About 28% of beverages consumed by Americans are carbonated soft drinks; a 500% increase over the last 50 years. We average 1.5 to 2 twelve-ounce cans per day. As previously mentioned, this equals 53 gallons per year per person.

You might be surprised to learn that the epidemic increase in tooth decay that is present all over the country is not related just to the sugar content of soft drinks as diet soft drinks are sugar free. It turns out that the types of acids found in soft drinks are believed to be one of the main culprits

when it comes to substances that aid the acid loving bacteria by dissolving the enamel so teeth can be entered and decayed easier. Interestingly, non-cola drinks such as Sprite, Seven Up, Mountain Dew and canned ice tea were far more aggressive than root beer and all cola drinks at dissolving enamel.

So what about all of these popular sports drinks and energy drinks? It turns out that the research done on Gatorade, KMX Powerade, Red Bull and even Snapple classic lemonade demonstrated that sports drinks are much more aggressive than black tea, root beer and the cola drinks at attacking enamel. I haven't seen results for Monster yet but I wouldn't get my hopes up for better results. The varieties of acids in these drinks are there apparently to make them more palatable. Remember that the non-cola and energy (sports) drinks show the most aggressive attack on our teeth. This is perhaps a good reason not to buy them for your family or yourself as the decay rate in the U.S. population has returned to

the days before fluoride was introduced into the water supply of many cities.

In conclusion, keep the mouth clean, develop good home care habits, no excuses! Get to the point where having plaque on your teeth grosses you out. Have the routine dental checkups done preferably from a dentist who uses all the modern decay detecting methods. Replace old leaky fillings, especially the old amalgam type, with the newer, bonded ceramic, materials. Seal all back teeth and use bacteria fighting xylitol products to keep the bacteria population in check. You will have gone a long way towards having no cavities and the good news is that it doesn't take but four to five minutes a day to accomplish it all.

Chapter 3

Things other than cavities that ruin your teeth

This chapter will go into detail on how teeth are badly damaged by forces other than bacteria. A person can literally have teeth that appear to be worn out and much older than they in fact are. By allowing excessive forces to work on the hard enamel tooth surfaces the tooth's integrity is compromised; giving the appearance of teeth that are discolored, often foreshortened with jagged and chipped, generally unattractive, edges. There are several factors that can damage teeth in this way. Each will be discussed in some detail and ways to prevent the damage potential with each factor will be covered within these pages.

One of the most common ways to wear out teeth; and I say common because the vast majority of people do this to one extent or another, is the habit of grinding, or bruxing

as it is also called, upper and lower teeth together. This back and forth or side to side muscle activity rubs the enamel surfaces against each other. When this is done at night, where grinding occurs most often, the sound is an eerie, almost chalk board scraping sound or the sound of pieces of glass being rubbed together hard. If you have heard someone grind their teeth you will know what I am describing. The sound makes one believe that certainly small pieces of tooth must be breaking off inside the bruxer's mouth. Spouses wake up at night with this dreadful sound and many a sleeping grinder gets elbowed or shaken to get them to stop that noise.

The Academy of General Dentistry describes potential bruxer personality types as individuals who are naturally nervous or who have difficulty handling stress. A person who has life stresses especially those that they feel they have no control over is more susceptible to grinding. Sleep apnea, which is discussed in a later chapter, as well as emotional pain and frustration are also

implicated as causative agents. Small children are known to grind their teeth (parents are encouraged to read the information on sleep apnea, ADHD and children. Grinding seems to be a learned response to some stimulus in an individual's life. I suspect not all the factors resulting in bruxing are known.

There are signs and hints that bruxing is occurring, which if observed and caught early can prevent major damage and costly repairs; let's review them here. Upper and lower teeth, although they are designed to fit together, are not meant to be in contact with each other with few exceptions such as during swallowing and lightly during chewing. The action of grinding teeth together is detrimental to the enamel surfaces, wearing them down, causing the teeth often to crack, be sensitive, with broken or chipped edges and giving the appearance of old worn out teeth. Since bruxing is often habitual the individual may not even be aware of the habit until she/he catches themselves with clenched teeth or

notices in the mirror that teeth seem to be shorter than they used to be. The rule to follow if you are a clencher/grinder is **'lips together, teeth apart'**. If you catch yourself with your teeth together, relax and give yourself an awareness point and know you are starting to correct the habit. Nighttime grinding, which is subconscious, can be prevented with night guards. They used to be bulky devices worn over the teeth; the newer models called NTI's that dentists fabricate are now tiny in comparison and usually less costly than custom mouth guards. Store bought night guards should also work, but again they are bulky and if uncomfortable will not be worn for long. Women tend to be more aware of the effects of bruxing than men and they also tend to develop symptoms such as headaches, neck and shoulder soreness secondary to grinding and clenching. Ignoring the problem can lead to extremely expensive dental procedures designed to repair the often extensive damage done by bruxing, so don't ignore this; look in the mirror, check how large and hard your jaw

muscles feel. Upon wakening, notice times when your teeth are held tightly together and then take action to prevent further damage to your mouth.

We dentists encourage brushing, as you know, there is however a problem with brushing that can harm the sides of the teeth. Most people brush back and forth scrubbing the sides of their teeth. If the tooth brush has stiffer bristles than a soft tooth brush such as a medium or hard tooth brush the back and forth action will in time wear out the enamel close to the gumline where the enamel is thin. This exposes the underlining dentin which is full of very sensitive pain causing projections from the tooth nerve. The gums due to the rough brushing become traumatized and they recede; the teeth, especially those on the sides of the mouth, become notched and the darker appearance of the dentin shows up. These teeth tend to be sensitive to cold and to sweets; the exposed dentin can be sensitive to the touch of a tooth brush.

The solution is to always use a soft or extra soft brush. If you find that you are a scrubber, one who spends several minutes working on getting a clean feeling when you brush, your dedication is to be commended; however you will damage your teeth even with a soft brush due to the excess scrubbing you do. In this case purchase a quality electric tooth brush (I prefer the brushes that vibrate several thousand times a minute) and let the brush do the work instead of your hand. Your teeth will get clean and you will not damage them in the process.

A third source of damage to teeth is **erosion**. This occurs when acid comes in contact with teeth. There are several ways in which this occurs. Probably the most common cause of erosion is from acidic liquids. Within that group sodas/soft drinks are the major culprits along with citrus juices. A preventive measure is to use such beverages only during a meal and then rinse the mouth out with water afterward.

Bulimia and acid reflux also cause erosion of the enamel especially on the tongue sides of the upper teeth due to the presence of stomach acid in the mouth as a result of induced vomiting or the result of reflux of acids in the latter case. Medical and dental help should be sought after in either case to prevent further damage to the teeth and to the self-esteem of the individual.

Trauma from sports injuries, accidents and tongue bars can also damage the teeth by chipping or breaking them (see the chapter on oral piercings). Blows to the mouth, if enough force is applied, can shear off a tooth. Sports mouth guards should always be used when injury to the mouth is possible. It goes without needing additional emphasis that protective mouth devices should be worn where possible physical injury to the teeth could occur.

Biting on the tongue barbells can chip the enamel in the same way biting a small piece of unexpected bone or other hard substance can damage a tooth. If you desire to wear

mouth jewelry I recommend a small bar over a longer one and eat slowly or take them out to eat.

Chapter 4

What you need to know about gum disease!

First let me throw out some startling statistics regarding dental health in the United States. One third of the population of the U.S. is either totally edentulous, meaning they have no teeth or they have lost the majority of their teeth. This books' purpose is to help its readers save their teeth and their money. For the third of the population it is either too late or almost too late for a healthy mouth and a healthy wallet.

The reason I started with tooth loss is that gum disease is the number one reason 1/3 of Americans find themselves without all or most of their teeth. This is a sad state of affairs because **they didn't have to lose their teeth to gum disease.** Understand from the outset that gum disease, which has two recognized stages; the first stage called gingivitis for the milder, reversible form which involves only the gums and

periodontitis for the more advanced gum and bone destroying form of the disease, is a bacterial infection with known culprits.



**Here is where preventative measures
can really pay big dividends**

Home care, including flossing with the newer much easier to use flat type floss and brushing with a soft toothbrush is still the best defense against gum disease as well as eating a healthy well balanced diet which allows the immune system to do its part to repel the bad bacteria before they get a foothold. Hygiene visits are cheap and they go a long way towards preventing gum disease. There are great hygienists out there that can gently and yet thoroughly clean those hard to get to places around the teeth. Save time, dollars and needless pain and

suffering by making regular hygiene appointments timed appropriately for your specific needs. Some people need frequent visits to ward off the germ containing plaque that builds up on everyone's teeth at different rates; others can go for longer periods between hygiene visits. Ask your hygienist to set the appropriate time interval for you.

There are fantastic products designed to help keep mouths clean. There are special products to help those who can't navigate floss around their mouths; water flossers and "Rotapoints" (small flexible triangle shaped tooth pick like devices) made by the Prodentec company and various tongue scrapers (see the chapter on bad breath) just to name a few. Modern electric toothbrushes clean faster and better in a shorter amount of time, which is a benefit since few people spend the recommended several minutes with the toothbrush in their mouths. Your hygienist will advise you as to what aid is best for you; their advice is free and yet very

valuable to having a healthy yet inexpensive to maintain mouth.



The goal with gum disease is to not have it, plain and simple. To accomplish this goal does not take herculean or extreme effort, but it does require a reality check which commits you, assuming you do not want to suffer with gum disease and tooth loss, to keeping your mouth clean on a daily basis. Get to really like how your mouth feels when it is clean and don't tolerate it when it doesn't. When you do this your breath will be much fresher, your gums will be healthy and you will have far fewer cavities. Not bad for just brushing and flossing daily.

You need to know that there are several factors that increase the risk

for developing gum disease. These are listed and explained below:

- Tobacco use whether smoking or chewing affects the tissue integrity and is a key factor in developing progressive gum disease.
- Diseases such as diabetes – diabetes and gum disease seem to feed off of each other causing a downward spiral in both diseases. It is interesting that the incidence of deadly pancreatic cancer which is found in the organ that produces insulin is increased in those patients who have gum disease.
- Certain medicines and hormones cause gum overgrowth as seen in the anti-epilepsy medicine Dilantin.
- Crooked teeth, because of the increased difficulty in cleaning around them, allows plaque and tartar to form

that houses the gum disease causing bacteria.

- Leaky or defective fillings and crowns that can hide bacteria.
- The hormones of pregnancy and those in many oral contraceptives weaken the defenses of the gums causing “pregnancy gingivitis” which allows easier access for the bacteria to enter the gum tissue.

Although not all of these risk factors are avoidable, several of them can be avoided such as smoking and in many cases diabetes can be avoided through life style changes. Teeth can be straightened. During pregnancy hygiene visits on a three month schedule and very good home care will prevent gum disease which significantly reduces the risk for miscarriage and pre-term births. It has been heartening to notice ob-gyn physicians referring their pregnant

patients to dentists to certify that their gums are healthy.

The assessment questions that follow are taken from the American academy of periodontology website. The site will score your risk factors based on the answers you give to the questions. Visit the site and take the test.

Answer These Questions to Assess Your Gum Disease Risk

How old are you?

Your chances of developing periodontal disease increase considerably as you get older. Studies indicate that older people have the highest rates of periodontal disease and need to do more to maintain good oral health.

Are you female or male?

Studies suggest there are genetic differences between men and women that affect the risk of developing gum disease. While women tend to take better care of their oral health than men do, women's oral

health is not markedly better than men's. This is because hormonal fluctuations throughout a woman's life can affect many tissues, including gum tissue.

Do your gums ever bleed?

Bleeding gums can be one of the signs of gum disease. Think of gum tissue as the skin on your hand. If your hands bled every time you washed them, you would know something was wrong. However if you are a smoker, your gums may not bleed.

Are your teeth loose?

Periodontal disease is a serious inflammatory disease that is caused by a bacterial infection, and leads to destruction of the attachment fibers and supporting bone that hold your teeth in your mouth. When neglected, teeth can become loose and fall out.

Have your gums receded, or do your teeth look longer?

One of the warning signs of gum disease includes gums that are receding or pulling away from the teeth, causing the teeth to

look longer than before.

Do you smoke or use tobacco products?

Studies have shown that tobacco use may be one of the most significant risk factors in the development and progression of periodontal disease. Smokers are much more likely than non-smokers to have calculus form on their teeth, have deeper pockets between the teeth and gums, and lose more of the bone and tissue that support the teeth.

Have you seen a dentist in the last two years?

Daily brushing and flossing will help keep calculus formation to a minimum, but it won't completely prevent it. A professional dental cleaning at least twice a year is necessary to remove calculus from places your toothbrush and floss may have missed.

How often do you floss?

Studies demonstrate that including flossing as part of your oral care routine can actually help reduce the amount of gum disease-causing bacteria found in the mouth,

therefore contributing to healthy teeth and gums.

Do you currently have any of the following health conditions?

i.e. Heart disease, osteoporosis, osteopenia, high stress, or diabetes

Ongoing research suggests that periodontal disease may be linked to these conditions.

The bacteria associated with periodontal disease can travel into the blood stream and pose a threat to other parts of the body.

Healthy gums may lead to a healthier body.

Have you ever been told that you have gum problems, gum infection or gum inflammation?

Over the past decade, research has focused on the role chronic inflammation may play in various diseases, including periodontal, or gum, disease. Data suggests having a history of periodontal disease makes you six-times more likely to have future periodontal problems. Periodontal disease is often silent, meaning symptoms may not appear until an advanced stage of the disease.

Have you had any adult teeth extracted due to gum disease?

The more recent your loss of a tooth due to gum disease, the greater the risk of losing more teeth from the disease. Wisdom teeth, teeth pulled for orthodontic therapy or teeth pulled because of fracture or trauma may not contribute to increased risk for periodontal disease.

Have any of your family members had gum disease?

Research suggests that the bacteria that cause periodontal disease can pass through saliva. This means the common contact of saliva in families puts children and couples at risk for contracting the periodontal disease of another family member. Also, research proves that up to 30% of the population may be genetically susceptible to gum disease. Despite aggressive oral care habits, these people may be six times more likely to develop periodontal disease.

Could I already have gum disease and not know it?

It's possible since gum disease is a silent, often painless, attacker that you might have contracted; remember it is a bacterial infection which can be rather easily passed from one person to another through kissing including from moms and dads to their babies and infants.

Here again are the most common signs of periodontal (gum) disease to look out for.

- Gums that bleed when you brush your teeth
- Gums that are swollen or puffy and red or slightly purple and tender to the touch.
- Pus between the gums and bad breath that doesn't go away.
- Loose gums that are not tightly attached around the teeth.

- Teeth that look longer because the gums have receded or teeth that are shifting from their normal position.
- Teeth with several days of sticky plaque will routinely show signs of gum disease around them.

Good home care remains the most effective and easiest way to keep your mouth and your whole body healthier. No drugs are needed and no expensive equipment purchases are required. The tools needed are simple and easily acquired returning a tremendous benefit in quality of life and longevity as well. It is true you only have to floss and brush the teeth you want to keep. Hopefully you want to keep them all.

Chapter 5

Good Foods That Can Keep Teeth Healthy

Let's face it so much of what the American diet contains is hard on tooth health. Eating, drinking and being merry has a price attached to it. As mentioned in a previous chapter, the decay rate is now back to the high rate that was experienced in the days before fluoridated water came on the scene. Sodas get much of the blame for this increase in cavities and with good reason; however the highly processed food in the U.S. diet can take its share of the blame.



The good news is that there are foods that actually help maintain a healthy mouth. A well balanced, healthy diet not only is important for general body health it also plays an important role in keeping gums and teeth at their best. Certain foods are better at protecting oral health than others and when they are routinely added to a food plan they can be very effective aids that are good for our body, our teeth and our wallet. Let's focus on some foods to include in meals that are at the top of the healthy mouth diet.

- “Milk does your body good” was a marketing slogan and it is good for teeth also.



It's no secret that drinks containing calcium, and potassium are good

for strong bones; they are also good for strong teeth. Milk, and soy beverages such as the “silk” brand for those who are not able to consume milk products, contains protein in addition to the minerals which makes bacterial attachment to the sides of the teeth difficult.



Vitamin D works in conjunction with calcium to strengthen both teeth and gum health by increasing the body’s ability to absorb calcium. Vitamin D research points to benefits that may rival fluoride in its anti-cavity benefits.

A word of caution: Infants are very susceptible to **‘baby bottle cavities’** so even though milk is

good for infants, never put a child to bed with a bottle of anything more than water, no juices and no milk. If these liquids sit in their mouth during sleep the milk sugars (lactose) or the sugars and acids in juices will provide the bacteria present in an infant's mouths the nutrients and time needed to dissolve the thin enamel found on baby teeth. Neither mothers nor dentists want to have to fix cavities on infant mouths, yet it happens all too often. About the last thing a baby wants is someone invading the sacred territory of its mouth. A traumatic experience can be avoided by restricting the diets of children to healthy foods.

- Your mother was right **“eat your vegetables”** and she could have added eat your fruits also.



- Drinking fruit juices are not the same as eating the fruits themselves. It takes several juicy oranges to equal one glass of orange juice. A quote prominently displayed in my office states that individuals who chronically drink significant amounts of orange juice need not ask if they will get cavities, but only when and how many. This is especially true for those who sip on acid containing juices such as orange juice, lemonade and other fruit juices over long periods of time.



- The best advice if you are a juice drinker is to drink juices in moderation; they are best consumed with food. Eating fruit stimulates the mouth's production of saliva which in turn helps wash away remaining food particles that could otherwise end up as food for bacteria. Chewing fruits and vegetables mechanically rubs biofilm and plaque off teeth surfaces and the chewing action on these foods massage the gums. In addition fruits and vegetables are loaded with vitamins, nutrients and

anti-oxidants, good things for health.



- Nuts and whole grain foods such as brown rice, whole grain breads and some natural less processed cereals have nutrients such as B vitamins and minerals that help both teeth and gums stay healthy.



- If you can visualize in your mind refined foods such as pasta, rice and starchy foods such as potatoes turning into sugar, which they all do, and remember that cavity causing bacteria live on sugars, you will understand why it is important to floss and brush between meals of such foods.



Research has shown that certain sweets are less likely to cause tooth decay. One of the candies that tested well was gummi bears. Apparently the sugars are locked into the product making it less accessible to mouth bacteria. Also see the chapter on xylitol.

Chapter 6

A SWEET AND NATURAL WAY TO A HEALTHY MOUTH

We Americans now consume more sugar than at any time in our history. Sugar comes in many forms and we consumers may not be aware of all the sugar we are eating and drinking. We hear about the high fructose corn syrup found in soft drinks and we may at times read the ingredient labels with all the “ose” word endings such as sucrose, glucose, dextrose and maltose and not recognize all these ingredients as forms of sugar which they in fact are. The starches we consume in the form of breads, pastas, potatoes and rice, turn into sugar in our blood stream. The body has to control the blood sugar level in order to prevent the diseases that we see in un-controlled diabetic patients. . Our bodies are not designed to utilize the massive amounts of sugar that we are consuming each day and as a result the U.S. population has an epidemic incidence of obesity and diabetes.

High blood sugar levels cause the loss of circulation to hands and feet as well as loss of eye sight, etc. Blood sugar becomes blood fat and is stored in the fat cells of the body. This excess sugar also becomes the “bad cholesterol” LDL which increases the risk for heart disease.

Our dietary habits play a significant role in how healthy our mouth is and what we consume through our mouths affects the health of our body in a more dramatic fashion than previously thought. Let's explore the relationship between sugar and oral health in this chapter and then I will present a major food breakthrough that will not only feed our desire for things that taste sweet but help keep us healthy at the same time.

To begin, know that the vast majority of Americans have some form of periodontal (gum) disease. The estimates I have read are 70-80% of the adult population and I have seen gum disease in children as young as pre-teens. Excess sugar in the diet weakens the body's disease fighting ability

and it creates an acidic environment, which you will remember from the chapters on tooth decay and gum disease, encourages the growth of the destructive bacterial strains that attack the teeth and gums. Plaque formed in the high sugar, acidic environment attaches to the teeth especially near the gum line. The toxins and acids these plaque forming bacteria produce go about damaging the teeth and gums as outlined in the above mentioned chapters.

Is there any hope for the sugar lovers among us? Is it possible to have a healthy mouth, healthy body and a satisfied sweet tooth at the same time? The answer is a YES; not only a yes but an exciting, delicious and healthy yes!

Let me introduce you to the wonders of XYLITOL

Xylitol is a natural substance derived from birch tree bark, other hardwood trees, berries, almond hulls, mushrooms and corncobs. It is a naturally occurring sweetener known as a sugar alcohol. The

look feel and taste of xylitol is just like sugar without any aftertaste associated with artificial sweeteners. It can replace sugar in cooking, baking and wherever sweetening is desired.

The sugar shortages during World War II caused researchers in Finland to search for and re-discover the uses for xylitol, a low calorie sugar. Since that time it has undergone thousands of scientific studies demonstrating not only safety in use but also some of the rather amazing health benefit qualities it possesses. . These numerous clinical and field studies performed over the past 30 years have shown the efficacy of xylitol as a healthy alternative to sugar and artificial sweeteners. Xylitol tastes just like sugar but that is where the similarities end. Sugar promotes illness and disease while xylitol acts to strengthen, heal and repair the body. Sugar helps form acids and xylitol enhances the alkaline side which is acids opposite. There are books that explain the acid/ base (alkaline) connections to health and the

reader is referred to them for a further discussion on that subject.

Our own body manufactures a small amount of xylitol each day during normal metabolic functions. It is known to improve the immune system, fight aging and chronic disease factors.

So why haven't we heard about this sugar before? America and Australia have benefitted or suffered, depending on how you view it, from cheap sugar cane prices. Much of Europe, Russia, Japan and now China on the other hand, have been consumers of xylitol, first in diabetic diets and later for general consumption. Xylitol received US Food and Drug Administration approval in the early 60's. There are no known toxic levels of xylitol although some reports of initial mild abdominal symptoms have occurred which subside as the body acclimates to it. The body already knows how to use xylitol and it adjusts to the higher levels without difficulty. Xylitol is absorbed and metabolized slowly which has little effect on insulin levels.

WHY IS IT BETTER THAN SUGAR?

Unlike all the “ose” sugars which are 6 carbon sugars with 6 carbon atoms in each molecule, xylitol is a 5 carbon sugar and cannot be utilized by bacteria and fungi and is therefore not a food source for disease causing organisms. Thus the growth of plaque forming bacteria (that smelly film found on your teeth each morning) is severely hampered. All the other forms of sugar even sorbitol can be utilized by disease agents. Since xylitol promotes alkalinity, it stabilizes and neutralizes the plaque acids that would otherwise attack the teeth and gums. There is even research that points to its benefits in remineralization of teeth. In an age when tooth decay is rampant, this is great news.

Who could ask for anything more? Here we have a natural, great tasting sugar alternative that can't be fermented and therefore will not allow acid production by

bacteria; while it helps restore the proper acid/alkaline balance to the mouth reducing the decay rate significantly and then it repairs early tooth damage by remineralizing the enamel surfaces of teeth. A Finish study of 5 year olds showed that the children whose mothers chewed xylitol gum when their babies were 3 to 24 months old later in life had 70% fewer cavities. A mother's saliva which gets shared with babies by food tasting, pacifier cleaning and kisses help colonize the bacteria from the mother to the child. Xylitol reduces the cavity causing germs and makes mother's kisses "sweet". This is important news for new and soon to be new mothers in the fight against infant cavities.

Xylitol has a glycemic index (how fast it gets into the blood stream) of 7 (slow) as compared to regular sugar's index of 100 (very fast). Xylitol is a safe natural alternative sweetener for use by diabetics. Because xylitol is a natural insulin stabilizer meaning that it does not cause a rise in insulin levels when eaten, it actually helps

stop the craving for sugar and sugar forming foods such as most of the snack foods. Xylitol has 2.4 calories per gram compared to 4.0 calories per gram for sucrose (sugar). Xylitol doesn't cause the hunger cravings associated with the insulin induced drop in blood sugar (the brain can only use glucose for its energy source so it causes the cravings to get more glucose). Plus the low caloric nature of xylitol, makes it a perfect sweetener for those looking to lose weight.

Xylitol appears to be beneficial in reversing bone loss (osteoporosis), by helping the remineralization of bone mass. With all the drugs now on the market being advertised and prescribed for osteoporosis prevention in women that now have possible fracture healing and other side effects, xylitol may be "just what the doctor ordered".

Xylitol is produced in granular or powder form and looks and tastes like sugar with a slight cooling effect on the tongue. The use of xylitol orally, by chewing gum, sucking on mints and brushing with toothpaste, not only deprives bacteria of a supportive

environment for growth, but also increases the production of saliva, which is a natural mechanism for cleansing and repairing damage to tooth enamel. This one-two punch is a very effective means of cavity prevention.

The 3rd infantry Division, which deployed to Iraq for six months, returned home with more than two and a half times the number of cavities they had before deployment. Deployed service members are at greater risk for cavities because of starchy foods, sugary drinks and infrequent tooth brushing. The war fighters are at a higher risk for dental disease. The military has changed its Meals, Ready to Eat (MREs) to include xylitol-sweetened gum. It is a safe and effective way to keep service members healthy while deployed.

WHAT'S THE BEST WAY TO USE XYLITOL?

The best ways to use xylitol for its dental benefits are by chewing gum or sucking on

mints 3 to 5 times a day for a few minutes. The objective is to keep it in solution in the mouth long enough to be effective. Ideally, xylitol gum should be chewed after every meal and before bedtime. Unlike sugar, xylitol can be left in the mouth and on the teeth overnight without concern for decay. Some gums such as Trident gum contain small amounts of xylitol along with other 6 carbon sugars. Hershey's makes a xylitol containing gum called 'Ice Cubes'. Spry is a company that makes 100% xylitol sweetened products. It is found in health food stores and through several online distributors. A few of the online suppliers are: xylitolworks.com, epicdental.com and Homesteadmarket.com. Google Xylitol to view the numerous purchase options available.

Additional information regarding xylitol uses such as for fighting ear infections and other health benefits can be found at www.nexusmagazine.com. [Also check out Fran Gare's book "The sweet miracle of Xylitol"](#).

P.S. A word of caution, xylitol is great for humans but it is very bad for pets such as dogs and ferrets.

Chapter 7

Healthy Mouths for Babies and Young Children

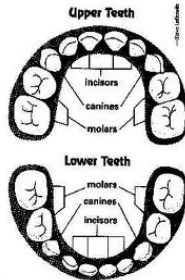
There are few if any things more important in our daily lives than the welfare of our children. A small child suffering with a toothache, unable to be consoled by his or her parents, can be a heart wrenching time indeed. This chapter is designed to give you as a parent all the information you need to keep your child's teeth healthy and cavity free so you won't find yourself pacing the floor late at night with a crying child in your arms.



Let's start at the beginning; a baby starts to develop the first set of teeth called primary

or baby teeth before it is born. The teeth start to show through the gums at about age 6 months to a year. There is great variation when this process begins and ends, however usually by age two all the baby teeth have worked their way through the gums and are visible. A common side effect of the “teething process” is discomfort and a slight fever. Parents have used chilled teething toys and numbing gels to provide babies with some relief. Over the counter baby pain meds should only be used by following the recommended dosages for the product.

When all the teeth are in place there should be ten upper teeth and ten lower teeth which consist of 4 front teeth (incisors) two canines (the teeth that are enlarged in vampire movies) and four molars which add up to the ten teeth in each arch. The diagram on the next page gives a visual representation of what a full set of baby teeth should look like.



Baby teeth are designed to provide the necessary chewing ability of a child while the face grows sufficiently to accommodate the second set of teeth that are already being formed. The formation of the second set of teeth, the adult teeth, starts very early in a child's life with the adult incisors forming during their second year. Childhood illnesses that result in fevers can and often do affect the formation process causing the enamel area under construction during the fever to be malformed. This can be corrected after the teeth have fully erupted into the mouth. Areas of the country that have high fluoride naturally occurring in the water will see discoloration of the tooth enamel, leaving permanent tan and brown blotches on the teeth and if enough fluoride is

present will cause the enamel to be chalky. It is wise to check with the water department in your area to determine the fluoride content in the water, natural or added. The recommended amount of fluoride has dropped from one part per million to seven tenths of a part per million.

If you are opposed to fluoride use, hopefully you are using xylitol products (see the chapter on xylitol). I suspect that fluoride is in so many liquids now that going fluoride free might be nearly impossible. My observation is that though the fluoride controversy lives on, its use has reduced or at least slowed the decay process. Note that the FDA warning label on each tube of fluoride containing tooth paste states that it should not be used for children under the age of 6 years.

WARNING: Keep out of the reach of children under 6 years of age. If you accidentally swallow more than used for brushing, get medical help or contact a Poison Control Center right away.

Tooth decay in children is the most common chronic infectious disease that affects them. To prevent this from happening to your children start very early with these home care practices:

It is recommended that you gently rub the gum areas of infants with a soft damp cloth twice a day. This can be a challenge since infants seem to feel that their mouths are their own private territory. This is good practice time to get baby used to oral care so he/she will allow you to later on brush their teeth.



At some time as the teeth erupt you will want to change from a damp cloth to a very soft child's tooth brush. During this change over time you can also introduce a small pea sized or less amount of non-fluoride

toothpaste. I recommend the pastes for children containing xylitol to fight decay bacteria. Gently brush the fronts and tops of the teeth (those portions of the teeth most visible, where most of the cavities are formed.)



Night time is the most important time to brush prior to putting the child to bed. The saliva flow is reduced at night and the teeth are more susceptible to plaque buildup and the onset of cavities.

It is critical that sugar containing juices as well as milk and formula not be given to a baby at bed time. The night exposure to such fluids can cause severe tooth decay especially to the upper front teeth. This is also called baby bottle tooth decay and is

very preventable. Having to do major dental procedures on an infant is not easy on the infant, the parent or the dentist.

Here are some additional things you can do to keep you child cavity free:

Be an example to your child by having them watch you brush and floss. Children mimic what they see, sometimes to our embarrassment. They are more likely to want to brush if they see you doing it also.



Take your child to see the dentist usually starting at 18 months to 2 years of age. This is a time when the dentist can evaluate the eruption of the teeth, the jaw position and possibly spot future problems. If you have been involved with their home care this will

be a ‘get to know you’ visit. A word of caution, if you are fearful of the dentist yourself it would be best to have someone, perhaps the other spouse bring the child to the dentist. You do not want to pass your fears onto your child.

Certain habits such as thumb sucking or prolonged pacifier use can cause significant orthodontic problems. If you have the challenge of a child who thumb sucks as they get older the book “David Decides” may be helpful in breaking the habit.



The last thing you want a child to feel like is that he or she is somehow defective. Thumb sucking habits can affect a child’s self-image and as the above photo shows it can cause major orthodontic problems.

Parents have bacteria in their saliva that if they are not careful can be transmitted to their children. Kissing babies, sharing eating utensil, cleaning off pacifiers and other items with their mouths can transmit decay causing bacteria to the infant. I am not suggesting that parents not kiss their baby, but it is best not to kiss them on the lips.



Also being good at personal oral home care can keep the bacterial count low; here is where using xylitol gum and mints along with the brushing, tongue scrapping and flossing can be a help.

For more tips on how to ensure that a child has a healthy mouth take the opportunity to

visit the Academy of General Dentistry website www.KnowYourTeeth.com

All the baby teeth have a permanent tooth that will replace them over time. Starting at around the age of 6 years the front lower incisors begin to loosen and fall out. The new permanent incisors usually come in behind the loose baby incisors, which has the tendency to panic mothers since it looks like the child is growing a double set of teeth.



This is normal and as long as the baby teeth loosen and fall out will not cause a problem. Space needs to be available for the permanent teeth to move into place as the baby teeth drop off. Many orthodontic problems can be avoided if space is

maintained during the changeover process to allow teeth to erupt without crowding.

Those regular six month dental visits can spot future crowding problems and prevent them from happening.



The six year molars are the first molars and as the name implies they usually come in around age 6 years although a wide range of eruption times exist. They come in behind the last baby tooth. By age 7 or 8 things quiet down in the switch from baby to permanent teeth. At age 10 to 12 the process picks up again and the baby molars are lost as the new pre-molars take their place and the second permanent molars

start to be visible in the mouth. During this time decay risk is great and preventive measures including sealants on posterior teeth and fluoride varnish, which is a less toxic product, applied by hygienists to the teeth are beneficial in preventing cavities.

Chapter 8

Almost Everything You Need to Know and Do in a Dental Emergency

Important information on what you can do in a dental emergency can make the difference between successfully handling the situation or having a miserable traumatic time, especially should an emergency occur while you are on a long awaited vacation. So here goes, **WHAT TO DO IF YOU OR SOME ONE HAS A DENTAL EMERGENCY!**

Knocked Out Front Tooth with Swollen Lip Injury



Teeth get knocked out as a result of a blow to the mouth which can happen during an argument between two people such as the two brothers, patients of mine, whose disagreement ended in fisticuffs. Sports activities, auto accidents and other accidental incidents that cause a blow to the face can knock out or break off a tooth. If a tooth has been knocked out, first find the tooth, usually it is a front tooth and often it is still in the mouth, although you might need to hunt outside the mouth for it. There will be some blood so get over it. This is an emergency and time is critical; tell yourself you can do this.

Looking at the tooth, determine which side faces outward. If the tooth has fallen on the ground or has debris on it rinse it off gently without any scrubbing. The tooth has small fibers that held the tooth securely to the bone of the jaw and they have been torn away by the force that knocked the tooth out of its boney socket. Now and this is important, place the tooth, root first, back into the hole it came out of. If it is your

tooth and you are alone either feel your way to put the tooth back in or get to a mirror. Time is important here, you are trying to keep the tooth alive. It has the best chance of survival if it is placed and pushed back where it belongs. The blood supply and nerve connections have been severed and can re-attach if done quickly. Once you have accomplished this get to the dentist to have the tooth supported by adjacent teeth so it can be stabilized while it re-attaches to the fibers that held it in place so the nerve and blood supply have a chance to reconnect.

If you are unable to re-insert the tooth and it has been rinsed put it in your mouth by your cheek (remember it's yours and it's been in your mouth all along) and get to the nearest dentist fast. Another option, if this is a child with a lost permanent tooth, milk is a good substitute medium to place the tooth in while you and the child head for the dentist.

Tooth Knocked Out and Lost



What if you can't find the tooth! You have looked everywhere and it has disappeared or in the case of severe trauma the tooth has been swallowed. Focus on stopping the bleeding with direct pressure over the socket, where the tooth used to be; a gauze two by two, small cloth or a damp tea bag works well for this purpose. Cold compresses to the injured front of the face will help reduce swelling and slow bleeding while giving the injured party something to do on the way to the dentist. Sometimes stitches are needed if the gum has been torn so go to the dentist and (s)he can help. Later you can get options to replace the tooth. It isn't the end of the world even though it is traumatic at the moment.

You may also be called upon to reassure the individual who has experienced this traumatic event that you can help and that

fortunately the body knows how to heal itself and in the case where a tooth is lost modern dentistry can replace the missing tooth eliminating disfigurement and embarrassment.

As a result of the injury a knocked out tooth that has been re-inserted and has re-attached itself to the bone may discolor and turn a darker color. This is very common because the iron pigments in blood which show up as a bruise when we bump ourselves or receive a blow to our skin are also found inside the injured tooth and unlike our skin the pigments get stuck inside the tooth and remain there causing the tooth to discolor. With patience, the tooth color can be bleached back to the desired color or a veneer can be bonded over the tooth to correct the tooth shade.

Not all teeth that have experienced a traumatic event survive the experience. If the blood supply was interrupted too long the tissue inside the tooth dies and can get infected. The treatment for this problem is

to have the dentist perform a root canal treatment which cleans out the inside of the tooth in what dentists call the canal and replace the now non-vital part of the tooth with a special material that seals the tooth against infection and allows the tooth to remain in place. These teeth sometimes will also need to be bleached to correct any shade darkening. If the tooth is able to reattach, the results tend to be long lasting and solve the problem that started with a traumatic event.

A Broken Tooth



Not all teeth that receive a sharp blow get knocked out. Some break off instead of

being knocked out entirely. The good news you don't have to hunt for the tooth and you don't have to re-insert it, but you do have to determine where on the tooth the break or fracture occurred. If the cracked off portion is small the repair is usually simple and time is not as critical. If however the fractured portion is significant, say half of the tooth is gone, the nerve can be exposed and the tooth will be very sensitive especially to any breathing that draws air over the exposed area of the tooth. An exposed tooth nerve will bleed; usually the bleeding from inside the tooth is minor. Be sure to keep the mouth closed. Apply a cold compress to the lips to reduce swelling if the front of the mouth has been injured. A dentist needs to be consulted immediately to determine what procedure will be needed for this tooth. I do not personally recommend hunting for broken tooth pieces. With the modern bonding materials that we use chips are not needed nor used in repairing the broken area so it looks like new again.

A tooth that has received a blow may be knocked out of its position, but not out of the mouth. Look at it and see if the tooth appears to be out of position. You might be able to move it carefully back into position or again a quick visit to the dentist may be in order to reposition the bumped tooth and to determine that a root fracture has not occurred which will show on an x-ray. I have literally re-attached teeth that have had root fractures and had the teeth survive such a severe blow. The human body has an amazing ability to heal itself given a chance to do so.

What if You Get Something Stuck Between your Teeth?

The solution depends on what is stuck. As an example food, especially stringy foods such as meats and fibrous vegetables can get lodged between teeth. This is common in back of the mouth where the molars are found and even more so if the teeth either do not touch each other or only touch lightly, allowing food to wedge between

them and get stuck. Floss will usually remove the stuck particles of food, however not always. Try tying a small knot such as what you tie with the first part of tying shoe laces and then pass the floss between the teeth and slide the knot portion gently back and forth to dislodge the stuck food. Using sharp objects such as needles and pins should not be used as they can damage the gums and cause pain and bleeding. As mentioned in another chapter Prodentec makes a product called 'rotapoints' that are good at dislodging food particles and are a viable substitute to flossing for those who can't or won't floss.

Having said this there are some things such as popcorn hulls that may be hard to remove without the help of a hygienist and if that is your situation, don't be embarrassed just call your dental office and the hygienist can come to your rescue.

What if floss gets stuck, frays badly or breaks when you attempt to floss your teeth? There are a few possible reasons for

this to occur. First an old filling may have broken or been pushed out of place by decay and a sharp edge is cutting the floss. An existing filling or other restoration such as a crown may have a sharp edge. The solution to these problems requires the expertise of a dentist.

A Lost Filling

A lost filling can certainly be an un-invited situation. Fillings are subject to fracture or to falling out completely, usually related to their being undermined by the decay process. Some of the newer bonded fillings can have the bond fail and the filling which is tooth colored can be lost. There is currently an epidemic of cracked teeth, which from years of observation, appears to be closely related to the inequality of expansion and contraction of teeth and filling materials, this seems to be especially true in the case of amalgam (mercury/silver) fillings. If you place a material in the middle of another material and the expansive nature of the one in the

middle far exceeds the expansive ability of the outer one the outer material is going to break and that is what billions of teeth are doing in response to metal fillings. It is similar to water flowing into the cracks in rocks, when the water freezes it has to expand and the rock around it breaks. Amalgam fillings expand more than teeth, enough so that cracks and fractures are now common place.

What to do? First avoid chewing on that side. Now if the tooth is sensitive temperature changes will aggravate it and cause pain. Think body temperature or close to it for foods and liquids when eating or rinsing. A sensitive tooth will usually be irritated by air temperature changes, it will be obvious to you in this case to breathe through your nose. Avoid sweet, sour and salty foods as well. I have read recommendations to use sugarless gum to fill in the vacant spot in the tooth. I personally haven't tried it or recommended it, it may work. There are over the counter products that may work also to cover the

hole left by the lost filling. Ask a pharmacist for recommendations based on what they carry. It is not easy to work in your own mouth although I have seen some foolhardy dentists try; a word of caution as you attempt to cover the open area with over the counter products. See your dentist; prompt attention can save you the cost of a root canal treatment. Even if the tooth is not sensitive, do not delay getting the tooth fixed as the deep inner part of the tooth is exposed.

What if a Crown, also Called a Cap, Comes Loose?

This could be a permanent crown that you have had for several years or more likely a temporary crown that was placed with temporary cement while a permanent crown is being fabricated for you. The crown (or temporary crown) covers a tooth with its enamel removed. The crown keeps the tooth protected from outside irritations such as temperature changes from food and drink and even cold air as well as sweet and sour

foods. The crown also locks in the position of the tooth side to side and top to bottom so the tooth will not move out of place, so it is important that it be there. In the situation where the crown has come off; first of all do not lose it, as long as it is in one piece it can be put back on temporarily until you can get to the dentist. With the crown in your hand carefully rinse it out on the underside and see if you can determine the correct position that it normally sits in. This may take a few tries to get it right. Once you know how it fits on the tooth get some toothpaste, gel is better, and place a small amount of toothpaste into the crown and place it back on the tooth and seat it all the way down. This will hold the crown on for a while. This may have to be repeated occasionally until you see your dentist. Even better than tooth paste is denture adhesive, the paste kind; utilize it the same way as the tooth paste for a better hold. **Above all do not use any type of “super glue” even if you are tempted to try it, don’t do it!** The stuff is toxic and can give you an awful tooth ache as the nerve dies.

If the crown is lost or broken, get to the dentist fast, especially if the tooth is sensitive. There are not many solutions I can offer other than keeping the mouth closed. If the tooth is causing pain over the counter pain medicines can help. If the tooth is not sensitive you may be tempted to not get the crown replaced as quickly, but remember the tooth no longer is touching other teeth and it will move causing additional problems and costs by procrastinating. The tooth no longer is protected from the decay causing factors present in the mouth. Have a crown recemented or remade to protect the tooth and also to keep it useful for you.

For Patients in Braces



There are a few emergencies that occur with some frequency. Breaking off a bracket or loosening a band while eating is tops on the list. Most of the time the bracket remains attached to the wire and poses no particular problem other than it stops any movement the tooth was making as a result of the bracket forces on the tooth. Occasionally the bracket comes loose and should be removed and saved so it can be replaced. I have not read of any emergencies connected to swallowing brackets, although certainly it has happened some time, somewhere. Bands, which are often the last item in the back of the mouth will occasionally come loose although more likely the bracket attached to the band will break off, this can expose the sharp end of the orthodontic wire and scratch or poke the cheek. Orthodontic wax can be used to cover the wire temporarily until the bracket or band can be replaced. It is not recommended that the wires be cut, although I have seen cases when it has been done. Wires can be swallowed, need I say more. Small ligature wires tied to individual teeth can move out

of position and bother the lips or cheek. These wires are relatively soft and while looking in a mirror can be pushed back out of the way with a little help from your fingernail. To avoid slowing down the orthodontic treatment and possibly incurring additional costs promptly call the treating dental office or if in another city call an office to see if they can replace the loose bracket or band.

Injuries to Lips, Cheeks and Tongue

These usually result in bleeding and bruising. Here is what to do to: The bleeding is controlled by applying direct pressure to the damaged area. Cold moistened compresses with pressure applied directly over the affected area and held for several minutes works in most cases. A moistened tea bag has blood clotting factors that also help stop the bleeding. When dentists remove teeth such as wisdom teeth the patient is told to bite down on gauze two by twos using direct pressure to reduce and in time help the body

stop the bleeding. This is not as easy to do with tongue injuries as you might imagine however it can also be done. Stitches may be required in soft tissue injuries so go to the dentist or emergency room to have the area evaluated.

What to do About Mouth Sores

Canker sores also known as mouth ulcers or aphthous ulcers, those painful sores are found mainly inside the mouth. They are not contagious and are thought to be caused by injuries and irritations to the oral tissues. They appear as cream colored areas with red outlines. They are very painful and can make eating and swallowing miserable.

It is recommended not to use toothpastes containing sodium Lauryl sulfate which is a foaming agent that is known to irritate the mouth. This ingredient in many toothpastes results in canker sores for a significant number of people.



Fever blisters and cold sores, are usually found on the lips. They can be a painful emergency especially if you have an important meeting or social occasion to go to. The majority of Americans have the herpes simplex virus which is implicated in many of these mouth sore outbreaks. Once the virus has damaged the area, mouth bacteria take advantage of the created wound to add their insult to injury which increases the pain and prolongs the healing time. If your dentist has a diode laser it will quickly reduce the pain and speed healing.

I know many people who get cold sores, especially with winter sports and from the effects of sunlight during outside activities year round. Stress has also been implicated as a cause of viral outbreaks in the mouth. This photo is typical of their location and appearance.



If you suffer from cold sores/fever blisters wouldn't you love it if I could tell you how to get rid of them quickly? Sure you would, but I know what you are thinking ...might be expensive. Nope! I will tell you how you can speed up healing time for a few dollars. Go to the store and find a laser pointer, the ruby red type laser light pointer that speakers use to draw your attention to projected photos and power point presentations. Shine the laser pen right on the cold sore for 30 seconds. No more, no less, and most of the time it will be gone in 2 days. I know what you are thinking...this can't possibly work, so I will give you some facts and stats—check them out yourself!

“The Effect Of Low Level Red Laser Light on the Healing of Oral Ulcers”.by Ellis Neiburger, DDS this article can be found at

www.chairsidemagazine.com

This article investigates the difference in healing times of oral ulcers (mouth sores) between using a laser light for 30 seconds and waiting for the ulcer to heal on its own. Results pointed to 88% of painful mouth (or lip) sores (aphthous stomatitis, herpes, and those caused by traumatic episodes...you know, you are super stressed out about a delayed flight, or you bite your lip, or you accidentally nail yourself with a tortilla chip) healed to comfortable levels within 2 days versus untreated lesions taking 5 to 10 days for similar results. The laser light that was used in this particular study was a generic penlight laser purchased at a local dollar store for one dollar. The laser spot was 3 mm in diameter and most of the lesions treated were 1-3 mm in diameter. Over 90% of patients reported being pain-free after one day of laser treatment, whereas the control group who just let the sore heal on its own, 90% reported some pain for at least 5 days. The report did say that 30 seconds is the optimal time, and that longer exposure

time seems to retard healing time. The author says that low level laser treatment has been known for many years, but is not publicized or promoted. Why? Simple.

If a prospective firm wanted to market a “commercial low level laser” for therapeutic purposes the price would have to reflect all the testing, FDA approval and insurance required putting the device on the market and they could not compete with the equivalent product at dollar store prices. So now you are privy to this very inexpensive treatment that has been known to work for many years, but kept under wraps.

Another tried and true method to stop cold sores and fever blisters is to apply ice to the spot at the first sign that a sore is starting to form. Keep the area very cold, but without causing frostbite, for about 90 minutes. This will work to stop the sore from developing better than very expensive prescription topical medicines.

For aphthous ulcers which have a cream white center and red around the edges (see pictures on page 102) and are known to be very painful, there is a ‘mouth bandage’ paste material that covers the ulcer and promotes healing by covering the area while reducing pain with a topical anesthetic. One brand that I have used with patients over the years is **Orabase with benzocaine**. This can be purchased at most drug stores. It is a viscous material that can be applied by placing a small amount of it on a fingertip or cotton applicator which is then placed over the ulcer to cover it.

Another aid in the healing of oral ulcers is the use of vitamin B-12. Research is ongoing and the initial results look good. Research subjects took 1,000mcg orally at bedtime for 6 months with fewer ulcers, less pain and faster healing.

**The Last Topic for this chapter is an
Oral Abscess**



This is an infection found around roots of teeth or in the case of a periodontal abscess between the teeth and gums. Abscesses are serious infections that need immediate attention. An abscess is potentially life threatening since the infection can grow and spread causing a bacteremia which can enter the blood stream and damage distant organs such as the brain and heart. As the abscess grows the face around the abscess begins to swell and puff out so it is visible to the eye. Allowed to expand an abscess can restrict breathing in the lower jaw and enter the veins that are in the nose and gain access to the brain. There are patients in intensive care units of hospitals struggling to survive because of an oral abscess. Don't mess with this, get seen **ASAP**.

Chapter 9

Things to Consider with Oral Piercings

Body adornment, whether by tattooing or piercing to make a fashion statement, a lifestyle expression or to affect ones self-image is a common practice today. Should you be thinking of adding a piercing to your oral anatomy this chapter will give you important information to help you make wise choices and help keep you out of trouble with whatever might be your choice of mouth jewelry.



Tongue piercing is currently the most popular form of oral piercing; should you decide to have your tongue pierced there are several considerations you must make.

First, who will do the piercing? Have a professional piercer do the piercing; do not mess around with anyone else. A professional will use sterile, single-use, disposable, needles. They also know where to pierce and where not to. You don't want to risk damage to nerves or muscles.

A little about the anatomy of the tongue; if in the past your dentist numbed your lower left or right jaw you noticed that only the right or left half of your tongue , not the whole tongue, was numb. This is because the innervation for much of the body is bilateral, having left and right side nerve paths. This is important since you don't want to damage the tongue nerves that control the muscles and sensory organs found in the tongue. For that reason a properly placed tongue piercing is positioned in the direct center between the two halves of the tongue as shown in the photo and in front of the attachment that connects the tongue to the floor of the mouth.. Piercings into the muscle of the tongue are definitely discouraged as

potential permanent damage could result. The tongue is a very important organ for speech, taste, swallowing and food positioning during eating, impairing its function would cause serious problems.



The initial selection of barbell jewelry includes using quality surgical stainless steel to reduce the possibility of allergic reactions to metals. The barbell must be of sufficient length to allow for the tongue swelling that occurs as it attempts to heal itself from the wound caused by the piercing. Early healing is quite fragile; the cells need to be undisturbed for about two months so proper repair of the puncture can occur. With this in mind the jewelry is best left in place during that time period. This presents a problem in cleaning the barbell which collects bacteria filled plaque.

Rinsing several times a day with a non-alcoholic, anti-microbial mouth wash for about one minute will help the body's infection defenses fight off harmful bacteria that would otherwise take advantage of the wound. Alcohol mouth washes should be avoided as they dry out the mouth. The use of alcohol and peroxide containing mouth washes are discouraged in general as they are oxidizing agents with oral cancer connections along with the use of tobacco products.

The length of the barbell needed for the initial placement into the tongue presents problems often seen by dentists with their tongue pierced patients. The piercing is new and the owner of the piercing is inexperienced with it. The barbell gets in the way and gets bitten, which often chips teeth. Teeth can be chipped or fractured while a person is eating, talking, sleeping and from the habit of chewing on the barbell.



Playing with the piercing poses a danger to the gums and soft tissues of the mouth. The end of the barbell rests against the soft tissue that covers the tongue side of the teeth especially the anterior teeth. The gums cover the bone that supports the teeth. Playing with the new mouth jewelry damages these soft tissues as the piercing bumps into them or is rubbed back and forth across the inside of the mouth. Before long the gums are stripped away causing the bone beneath them to recede. This loss of bone compromises the support for the teeth as shown in the photo below where the gum has been laid back to show the bone loss.



After the initial healing it is recommended that a smaller barbell be used to help avoid the problems associated with longer barbells. After first washing hands, the jewelry should be removed for cleaning purposes and dentists recommend that the jewelry also be removed when eating, sleeping and when engaging in active or strenuous activities. The piercings can be brushed similar to tooth brushing and the tongue should also be cleaned.



Lip piercings have similar recommendations and precautions with the additional challenge in fighting infection as a result of that portion which is outside of the mouth.



The inside of the lip jewelry must be smooth and flush with the inside of the lip to help avoid rubbing and abraiding the soft gum tissue on the outside of the teeth. This makes them more of a challenge when placed; another reason to have a professional do the piercing.

The Association of Professional Piercers has a website, www.safepiercing.org, which is a good source of further information on the subject. The contents of this chapter provide the reader with insights and understanding necessary to have oral piercings if desired and to avoid as much as possible the problems associated with them.

Chapter 10

What's new in the world of smile makeovers?

You are probably already familiar with the traditional braces that you see when kids teens and adults smile. There have been numerous changes in orthodontic techniques that I won't go into in this chapter. The growth of the face in adolescents is affected by the number and position of the teeth in the mouth. When the teeth just behind the canines were removed in many cases the facial profile suffered leaving a chin and nose relatively pronounced while the lips were flat due to loss of lip support. This was not a very attractive result even though the teeth were straight. Now there are fewer patients who are having multiple extractions done in order to provide room for what was the traditional orthodontic technique.

Are invisible braces for you?

Invisible braces (aligners) are one of the hottest new treatment options for patients who want the attractive smile they have always dreamed about, but couldn't stand the thought of wearing braces. **Good news!**



With the advent of computer aided diagnostics/computer aided manufacture (CAD/CAM) the quality of the aligners has gone way up and the cost has come way down. In the past the laboratory expense paid to the manufacture of the aligners used in the technique was prohibitive, usually adding a couple thousand dollars to the cost of the care.

The benefits of invisible braces are first they are invisible as the name implies. The teeth are easily cleaned because the aligners (clear mouth trays) are removed so brushing and flossing can be accomplished as usual. The process of straightening teeth is done with clear aligners that periodically are changed, gradually moving the teeth into the desired position. There is no hard pushing of teeth with this technique; the teeth are simply encouraged to reposition themselves with light forces applied to them through constant wearing of the aligners. For adults who want straight attractive teeth and can't stand the thought of the metal smile, invisible braces are ideal. For some patients in traditional braces, getting used to the braces against their lips and cheeks is a struggle. If you are certain you will wear the aligners faithfully, (this means 22 hours a day) this may be the way for you to go.



For teens, this technique is also a possible option. They have to have their twelve year molars in and they have to be very reliable and totally self-motivated when it comes to wearing the clear aligners or I would recommend against it. Aligners only work when they are worn! For that reason most of the invisible braces treatment is done for adults. The commitment and motivation for adults needs to be the same. **Don't start the process unless you are 100% sure you will wear the aligners and can make and keep three week appointments until the teeth are all straight and you love the smile.**

There are certain smile corrections that the aligners can be successfully used for. That being said, they are not for every orthodontic problem so an evaluation is needed to determine if you are a candidate for invisible braces.

What about the 6 month braces?

This popular technique using traditional metal or tooth colored braces focuses on the

front teeth to correct problems that affect the appearance of your smile. The back teeth are usually left untouched. Because it is a fast technique usually averaging 6 months active care followed by the wearing of retainers it is the technique of choice for many patients. It also tends to be the least expensive method to obtain an attractive smile. Many adults who didn't have their teeth straightened when they were living with their parents, often due to a lack of interest at that time on their part or where tight household budgets made the cost prohibitive are having their smile redesigned using the 6 month method.

What are veneers and why might I want them?

Ladies are familiar with acrylic nails that change the shape and color of their fingernails. Veneers change the shape and color of your teeth. They are as close to instant orthodontics that we have come to so far. The difference is that veneers, which are made of special porcelain materials and

are bonded onto the surface of the teeth, last for many years under normal use and since the teeth are not continuing to grow as fingernails do, they do not need frequent replacement. You, with the help of the dentist, can pick the shape, length and color of your teeth. Veneers are best done in multiples of 4, 6, or 8 in order to match the shape and tooth colors perfectly.

Teeth whitening, who can benefit and is it safe?

Do you want to take years off the appearance of your teeth? If so then the new teeth whitening procedures using a form of hydrogen peroxide may just be what you need. Dentists struggled for years attempting to successfully whiten teeth. The recent breakthroughs have made whitening easy and much more affordable.

There are several over the counter products that seem to work reasonably well. Teeth whitening tooth pastes seem to give the least dramatic results and are primarily designed

it seems to help maintain your current tooth color or a very slight improvement. The strips seem to work, they are somewhat pricy and they may not reach all the teeth you want to bleach.

The easiest, quickest and most effective way to whiten teeth is with an in office professionally performed tooth whitening process often called power whitening. There are several companies that promote their particular brand of whitening gel. The one that advertises the most isn't necessarily the best, they just spend more money marketing their product, and that cost is passed on to the consumer, so buyer beware.

The whitening process works as the whitening gel passes into the enamel and removes the pigments in the tooth while it travels toward the inner parts of the tooth. Depending on how dark the teeth are, the time involved to bleach out the color will vary. The reason the in-office whitening procedure works so well is due to the increased strength of the gel that can be

safely applied to the teeth without affecting the gums around the teeth. Care is taken to only apply the gel to the teeth and no other areas.

The process is safe and does not hurt the teeth. As the gel nears the inner part of the tooth it turns into water. The nerve in the tooth can be irritated causing the tooth to be hypersensitive for about a day, then it calms back down and the teeth are significantly whiter.

Can you over whiten your teeth? It is interesting what people can be addicted to. Those few who crave ever whiter teeth do go to extremes and end up with translucent teeth that appear to have a grey less attractive appearance. My recommendation is to whiten your teeth, knowing that they will appear younger, but don't overdo it. They never will look as white as a sheet of paper.

Bleaching trays with take home gel is another method that will in time whiten

teeth. The downside is the cost of the trays if custom made and finding the time to wear them long enough and often enough to achieve the desired results. Having said this there are certain types of stains such as fluoride and tetracycline stains that are tenacious and require time and patience to whiten. This is also true for very dark colored teeth.

Where ever possible I recommend the professional whitening method because it actually gets done and the results are appreciated by those who have gone through the process.

The good news about dental implants

Implants have come a long way since the first attempts were made to replace missing teeth with artificial root substitutes. The ability to comfortably anchor a loose denture in the mouth so a person who previously felt like a dental cripple could again enjoy a meal without pain, frustration or having to avoid the foods they wanted to

eat but couldn't because their false teeth were loose and moving around, pinching them as they tried to eat is obtained by implants.



Titanium alloy implants are man-made root replacements that are surgically inserted into either the upper or lower jaw. The dental implant acts as a root, which can be attached to a replacement tooth or can be used to help secure a denture. Implants come in various sizes and traditional implants involve multiple surgical stages and often require months of waiting while the implant integrates with the bone. The traditional implants include separate components that need to be connected together in order for the implant to function.

If you are thinking about opting for dental implants, allow me to introduce you to mini dental implants. These newer implants have taken the implant market by storm. So, why do people opt for mini dental-implants instead of the conventional dental implants? The reasoning is simple the ease of placement always surprises patients and they cost less compared to the conventional implant systems. Also they often can be used immediately to support a denture or missing tooth. No waiting for months for them to attach to the bone of the jaw. They are threaded into place and hold fast from the beginning.

Since the mini implants are single unit narrow versions of the conventional systems, the costs associated with implanting and making them functional is significantly lower. Researchers estimate that by opting for mini dental implants, you will be able to save approximately one half the cost of traditional implants. The cost of a conventional implant system can be anywhere from \$2,500 to \$3000 or more.

Like the traditional implants, the mini dental-implant is manufactured from titanium, a material that is compatible with and accepted by the body. A tiny round opening is placed in the gum where the implant is to be threaded; yes threaded just like placing a small screw into wood, the implant is threaded into position ready to support a crown or to stabilize a denture immediately. The ease with which these implants can be placed in the mouth adds to the popularity of the procedure. To stabilize a lower denture we insert 4 implants. To stabilize an upper denture we usually use 6 implants and then we remove the plastic roof of the denture which greatly enhances the taste of food and the enjoyment of eating.



What are the other advantages that are related to mini dental-implants?

Once you start using them, there will be no restrictions in the type of food that can be chewed. Very often, dentists give long lectures to new denture wearers on how to avoid particular types of food. With mini implants in place there really are no food restrictions and no foods a denture wearer can't enjoy. Ah, Freedom!!! You will know that your teeth won't move up and down when you are talking with someone and they sure won't fall out if you happen to sneeze either.

Mini dental implants are now being successfully used to replace missing teeth. They can be placed in tight spaces where other implants simply couldn't fit. A missing tooth that otherwise detracts from a winning smile can now be permanently replaced without needing to involve adjacent teeth that bridging would require or the need to wear a removable device of any kind.

Chapter 11

The Almost Every Other Question Answered Chapter

Let's start with sleep apnea. This is also known as obstructive sleep apnea (OSA) and is a common disorder that has major health consequences. The obstructive part of the name comes from the closing of the airway in the throat as the tongue moves back against the back of the throat during sleep and blocks the intake of air; that is the apnea part of the name. The collapse of the airway causes the person afflicted with OSA to struggle to breathe and disrupts the normal sleep pattern. The individual tends to snore loudly, then stops breathing followed by gasping for air. This is repeated again and again with the effect of loss of deep sleep, leaving the person tired and sleepy during the day. The decreased amount of oxygen to the body affects the brain and the heart leading to high blood pressure, risk of stroke and heart attack, rapid heartbeat, diabetes and includes

memory loss and diminished concentration. The long term effect is life threatening with an estimated 7 to 10 year shorter life expectancy.



In an article entitled “Snoring and Bruxism in children entitled “It is not all just noise” Dr. Chris Hansen states that parents should watch for ‘Heavy mouth breathing, teeth grinding, snoring and breathing stoppages.’ He further states “...a large number of children (diagnosed) with ADHD or inattentive behaviors were later shown to have an underlying sleep disordered breathing problem. It is a distinct possibility that if more attention were paid to the underlying sleep issues there would be less reliance on stimulant medication to manage their behavior.”

Here is a screening quiz Dr. Hansen offers: **DOES YOUR CHILD HAVE ANY OF THE FOLLOWING SYMPTOMS?** (With a few exceptions adults can also take this quiz)

- Is there continuous loud snoring?
- Are there short episodes of not breathing?
- In children is there a failure to thrive (poor weight gain)?
- Chronic mouth breathing?
- Enlarged tonsils and adenoids (frequent sore throat infections)?
- Problems sleeping, bed wetting, restless sleep, sleep walking?
- Excessive daytime sleepiness?
- Frequent headaches?
- Problems paying attention, aggressive behavior, hyperactivity that can lead to problems in school?

Sleep studies are done through your physician. Mild to moderate sleep apnea

can be improved with devices called mandibular advancement splints which are made by dentists.



They come in several different designs and are a reasonable alternative to CPAP machines and are even used in cases of more serious OSA cases where the CPAP machine is not tolerated. If you find yourself answering yes to the quiz questions check with your physician and your dentist, it could save your life and certainly made life more enjoyable.

THE USE OF FLUORIDE

This remains a controversial topic after all these years. The reason is that fluoride is a poison that in very small doses seems to delay the onset of observable cavities. The cavities I had in my preteen and teenage

years are now occurring with my patients in their twenties. They still get cavities but the onset is slowed down. The benefit of retarding the onset of cavities and the age in which cavities appear means fewer filling replacements over a tooth's life time; a definite benefit both health wise and financially as well.

Fluoride toothpastes carry a warning from the Food and Drug Administration stating that Children under the age of 6 should not use fluoride containing tooth pastes and ingestion of greater than a pea sized amount by a child should be reported to the local poison control agency.

The issue here is safety. Children's toothpaste would be much safer without fluoride. I have recently investigated the availability of a children's toothpaste to find one without fluoride but with an active ingredient that would fight tooth decay and not just a flavored paste without anti-cavity benefits. I found such toothpaste designed for children that meets all the criteria.

It is loaded with xylitol, a known cavity fighter and it tastes good (banana/strawberry) and kids can even swallow it with complete safety! We promote the use of xylitol containing toothpastes for kids and also adults. These toothpastes are great cavity fighters and don't need fluoride to accomplish this task. Xylitol is very safe. (See the chapter on xylitol).

What's all this talk about sealing teeth; should I get my children's teeth sealed?

In the chapter on cavities I discussed the anatomy of the back teeth with all the grooves that dip into the enamel and how decay causing bacteria hid out there and start the decay process. What if you could seal over these grooves so bacteria no longer could hide there? The result would be fewer cavities on the chewing surfaces of the

teeth. Well that is what sealants, which are a flowable plastic material, do. The tooth surfaces of back teeth are best sealed as soon as they erupt into the mouth.



The first permanent molars arrive at about age 6 followed by the premolars about age 11 and then the twelve year old molars. These teeth can be protected with sealants. Primary teeth benefit from sealants as well and they are usually in place by age 2. Sealants last many years and can be seen on adult teeth in patients who had sealants placed as kids. With the advent of diagnostic lasers that detect decay in teeth with a special laser light

and air abrasion units that can clean out very small areas placing sealants have become an even better decay preventive measure.

The Dry Mouth Dilemma, what causes it, what can be done?

Saliva, which is produced by salivary glands, both large and small, in our mouths, is primarily made up of water with small amounts of enzymes used in food digestion and lubricants that keep the inner lining tissues of the mouth from sticking together and being irritated. The mouth was meant to be moist for proper function of movement, eating and speaking. Saliva also helps reduce the bacteria that cause tooth decay and gum disease.

Dry mouth, also called xerostomia, affects about 30% of the population although it isn't often discussed. Symptoms range from an occasional dry or sticky feeling in the mouth to chronic severe dryness that causes dysfunction and pain. Everyone has experienced brief moments of dry mouth. I remember such occasions prior to public performances during my short lived piano career. You will also remember occasions when your mouth was unusually dry as a result of stressful situations.

In more severe cases you may find swallowing, talking and eating difficult. Your throat may be sore and your voice can be hoarse. People with dry mouth are at greater risk for tooth decay as the natural washing action of the saliva is decreased allowing the bacteria filled biofilm to flourish which

increases decay, gum disease and bad breath.

There are several medical causes; everything from the effects of chemotherapy and radiation treatments for cancer to literally hundreds of prescription and over the counter medications such as allergy medications, antidepressants, hypertension and heart medications, diuretics, anxiety medications, muscle relaxants and sedatives. Dry mouth is more common in the elderly as the majority of people over the age of 60 take one or more prescription medicines, however it can occur at any age. Individuals who are diabetic or who have suffered a stroke seem to have reduced saliva flow as do those who have the auto immune disease Sjorgren's Syndrome . Dehydration is also a factor in dry mouth.

Some help for dry mouth.

There are several things to do or not to do if you have dry mouth and what you decide to do with this information depends on the severity of the dry mouth you experience and also if it is occasional or chronic (always present).

First work to stimulate the natural flow of saliva. This can be aided by being well hydrated and by using xylitol gum and mints which encourage salivary glands to secrete saliva. (See the chapter on xylitol). Sipping on water can help but it does not replace the lubricating and digestive portions of saliva. There are oral moisturizing products such as Biotene, Therabreath and Saliva Sure on the market that might also be beneficial.

Things to avoid are the following: products that dry the mouth; alcohol, including alcohol containing mouth washes, caffeine, found in hot beverages and sodas, which is a diuretic that promotes fluid loss and over the counter tooth whitening products. In addition foods and beverages that are high in carbohydrates or those that cause drying such as many snack foods and sticky or are acidic products, citrus candies, sports and soft drinks, should be avoided.

With early awareness and proper treatment based on the severity of the dry mouth a person can lead a full, comfortable and normal life.

What is TMJ and how do I know if I have it?

TMJ is the abbreviation for temporomandibular joint. If you have a Jaw you have two of them a left and a right joint connected together at the chin. The question actually refers to a dysfunction of the jaw joints that is known to cause numerous symptoms, chief among them headaches including migraines, neck and back pain, clicking and popping jaw joint(s), vision and hearing problems and numerous secondary symptoms. Pain and suffering from TMJ related problems can be severe affecting the quality of life and the ability to interact with others.

To check for joint related problems look for the movement of the joints on opening and closing the mouth. Look at a mirror and see if the jaw opens and closes in a straight line or does it shift or turn in order to fully open. Next, check for muscle size and firmness of the muscles involved in jaw closing and clenching. Large, hard, defined muscles at

the corner of the jaw down and in front of the ear are an indication of heavy clenching which is a major cause of jaw related headaches. Many people are unaware of a clenching habit. Some wake up in the morning with a jaw that is hard to open at first; this is due to clenching during the night. Others have sustained injuries to the jaw in auto accidents, sports activities, or blows to the face that have damaged the joint itself. The clicking grating or popping sound heard or the vibrations felt as the jaw is opened and closed relates to damage done to the components that make up the jaw.

For those who suffer from TMJ related symptoms there are treatments that can bring relief and in many cases healing of the joint. There are various types of mouth splints to protect the join. I prefer those that use the body's natural defenses to block clenching by allowing only the front teeth to touch when it is worn. This prevents the large jaw closing muscles from clenching which in turn has a very positive effect on TMJ related symptoms. Something as basic

as not chewing gum can benefit jaw joint health.

Treatment ranges from preventive measures, splint therapy to joint surgery options and should be evaluated by a dentist or oral surgeon. Stress is a factor in TMJ problems and gender differences play a role as more women develop symptoms of the disorder than men.

Chapter 12

“10 Questions to Ask Before Choosing Your Dentist!”

The selection of a dentist and dental team to take care of an individual's or a family's dental needs is a challenge many face, especially when they move to a new area. Most people really do not know what questions to ask a prospective dentist. This can be a source of concern and even be intimidating to a person seeking a good dentist. Not knowing what to ask may cause a person to delay even starting the process of finding the right dentist.

As a practicing dentist with over 27 years experience, I know that time delays can lead to unwanted dental problems. I am writing this chapter in the hopes that it will be of help to you in choosing a dentist.

I have compiled a list of questions to ask that I believe will be helpful in your search for the 'right' dentist. Before you can start asking questions however, you need to

narrow the field of possible choices available to you by one or more of the following:

Location: Many people want a dentist to be reasonably close to their home or office location, say within 5 miles or so. Obviously this is for convenience and is certainly a consideration. The majority of my patients live or works within my geographic service area. So, if possible, staying within the limitations of your geographic area can make sense. This is especially true if you or your family members will need repeated visits to the dental office such as is required for orthodontic care (braces or invisible aligners). By the way more and more orthodontic care is being provided by general family dentists now.

Referral: Ask a friend or co-worker if they can recommend a good dentist. This is not a bad way to **narrow the field**. Do not discount the experiences a friend has had with a dental office. A good dental office knows that patient referral is vital to their success and they are focused on making

dental visits a friendly, safe and comfortable experience. Their reward is positive recommendations from their patients to their friends and acquaintances. Ask a person why they recommend their dentist and listen for the answers, there should be several good reasons including those I mentioned above as well as doctor and staff taking the time to answer questions, review procedures and the feeling that s(he) was important and the doctor and staff's attention was focused on them.

First impressions: If you are looking through the yellow pages you will notice most dentist ads look alike. Sure some ads are larger or smaller but I think you would agree they are not much help in making you feel you have found the dentist for you. This is true for Google and Yahoo searches as well. Websites can be similar to the yellow pages or they can really give you a flavor of the practice depending how the site is set up and what the purpose of the site is. Browse the site and see if you feel comfortable with what you see. Some dentists try to wow you

with an image of God's gift to dentistry, on a rare occasion they are but often they are putting on a show for their own benefit. Avoid them would be my recommendation.

Here is a suggestion that will help **narrow the field** for you. Select an office that is of interest to you and call them! Talk with the receptionist who answers your call. Is she happy you called? Is her voice smiling as she speaks with you? Ask any questions you might like at this time. **Do they treat children? How long would it take to get an appointment? What are their office hours, etc? Were your questions answered? Were you offered an appointment that worked with your needs and schedule? A good receptionist by the way, will always offer you an appointment. Evaluate how you were treated over the phone?**

I firmly believe that dental team members treat patients and prospective patients the way the dentist treats his or her staff! If you

were treated well that is a good indicator that the dentist cares enough to treat his staff well and will treat you with care and kindness as well.

Make the appointment and get ready to meet the doctor and staff members. Your initial opportunity to visit with the doctor should not be while you are upside down in a dental treatment chair! Every person is different, with different wants and needs and some even have fears, which since I used to be a “Chicken” patient myself, are understandable, so the initial interview should be in less stressful surroundings.

Now the 10 Questions to ask! First, ask yourself from your initial interactions with this dental office, including the examination and the consultation (it should be a sit down one on one discussion of findings and exact treatment needs):

- 1. Do you feel that you are amongst friends, people that care about you**

and treat you well? Do You? Is this the place you would be comfortable receiving dental care now and into the future? Might you be willing to refer family and friends to this office?

- 2. Are you completely certain that the dentist has your best interest at heart, or stated another way is he or she watching out for you?**
- 3. Do you feel that when the doctor is with you that you have his or her full attention: that you are the most important person in the world to him or her at that moment? It is important that you feel important. After all, it is your dental health and dental wellbeing that is at stake here!**
- 4. You will have specific questions regarding your personal dental situation that only you will know. Be sure you get the opportunity to ask them and be able to gather all the information**

you need to make decisions, after all a doctor's main responsibility is to be a teacher before being a healer.

- 5. Are you in agreement with the dentist as to what constitutes proper dental care for you?** The decision to buy dentistry needs to be 100% your own. You should not feel pressured like you are dealing with the proverbial used car salesman. (My apologies to any salesman!) A dentist's responsibility is to present you with the problem(s) found at your consultation, if any, and then outline for you what can happen if the problem(s) is not addressed in such a way that you can see what s(he) sees and are motivated to act to fix the problem(s). A good dentist is always striving to help you keep your mouth (teeth and gums) healthy and attractive. Does the dentist demonstrate that s/he cares about you and has your best interest at heart?

- 6. Does the proposed treatment for you match identically with the treatment the doctor would purchase and perform for a member of his or her own family given identical dental circumstances?** You might want to ask this question.
- 7. Does the practice offer convenient hours for you such as Saturday appointments if you work during the week?** Some dentists brag to their colleagues about how few days they actually see patients. Seems crazy I know but true. The better their schedule fits yours the easier it will be for you to schedule appointments. Ask about convenient times.
- 8. Are you willing to do your part to ensure the successful outcome of your treatment? Are you willing to make and keep your dental appointments?** Some dental procedures take more time than others.

Will you finish what you start? Most dental problems are caused by bacteria that focus on either the teeth or supporting structures (gums and bone) and if not dealt with will continue to slowly destroy what they are feasting on. Be committed to completing care and not just going from dental emergency to another dental emergency. The savings in time, money, pain and embarrassment is huge.

9. Will you be treated in a gentle caring manner? You want your care to be as gentle and pain free as possible, don't you? I sure do! If you are concerned it is perfectly appropriate to ask to speak with patients who have received similar care about how it was. **Was the procedure well tolerated and as pain free as possible?** This is especially true for a dental procedure with which you don't have prior experience. Again ask to speak with someone who has experienced the procedure.

10. Does the office have financial options such as interest free financing programs to help make dental care more affordable? This may seem like an odd question to ask yourself however it is important. Dental insurance isn't what it used to be. The cost of dental care has risen over time and dental insurance has remained 40 years behind, sad but true. Consider dental insurance as a contribution toward your care as in reality often that is all it is. It is important that the doctor and his office staff are able to discuss payment options with you so you will not worry about costs. If you already suspect you have significant dental needs ponder your financial options in advance. What you don't handle now will simply get worse and more expensive as the days and months go by; a word to the wise.

Bonus questions:

- 11. Are you certain that you consider the dentist to be the expert in regards to your mouth?** You and s(he) are going to have to work together to accomplish your desired care. Be sure that the comfortable doctor/ patient relationship has been established. You are employing the doctor as the foremost expert when it comes to your oral health.

- 12. Has the doctor kept up with the latest advances in dental care, such as the new super low exposure digital e-rays, diagnostic lasers, intra-oral cameras, mercury free fillings, the latest quick adult orthodontic treatment as well as the invisible braces and the new affordable mini dental implant procedures?** There are new advances in Oral Cancer detection devices such as the **Velscope** that quickly and painlessly detect changes in the mouth that could be serious Advancements are always

being made and good doctors keep up with what is happening.

I know that some of these questions deal with your feelings. Do not discount them. Hopefully this chapter has been an eye opener for you and you now feel more comfortable that you can find **the dentist** for you and your family. Occasionally you will find introductory offers such as the “**get to know each other**” offers that allow residents in the service area to easily and economically visit their practice. Take advantage of these offers to check out the practice.

Hopefully this information will help you in your search for the dental office that is ideal for your needs.

Conclusion: Taking action using the knowledge you have gained

Assess your current dental health situation; where you are now and what you would need to change or improve to get your oral health to its optimum state. You may find that you have not had a dental checkup in several years which will make evaluating your current condition more difficult. Most dental problems do not hurt or cause obvious pain until they are in their advanced stages. As example a small cavity can easily go un-noticed in the early stages of tooth decay. The tooth may start occasionally to be sensitive to temperature changes which may also go un-noticed or only momentarily reach conscious level and then be forgotten again. Gums may occasionally bleed when brushing and we think nothing of it. It is just one of those things that get overlooked; a little symptom, a little warning that goes un-noticed.

On observing in the mirror, you may notice that the teeth look rough on the edges or

they may suddenly appear to be smaller or now the teeth look longer than the last time a smile inspection was done. If it has been too long since your last dental examination, schedule one and stress to the dentist that you want to have a healthy mouth all your life. With the information you gain from that visit you can then make a plan based on getting healthy first and then working on any esthetic concerns you may have.

A few things everyone with teeth ought to do on a daily basis are a regiment taking about 5 minutes focused on keeping the mouth clean. Keeping the bacterial count low goes a long way toward dental health and it is easy to do and costs next to nothing. Start in the evening by flossing between each tooth rubbing the surfaces gently. For those who can't floss due to dexterity problems remember there are alternatives including water flossing devices. Next, brush, preferably with an electric tooth brush, my personal preference as mentioned earlier is to use one of the vibrating sonic type models. Tongue scrapping if done gently

using an oxygenating gel (a number of companies have chlorine dioxide containing products and others have antimicrobial agents to kill off the bacteria found among the hairs on the top of the tongue, (yes, tongues have hair called papilla) is a part of the cleaning process to remove the accumulated biofilm and nasal discharge that falls on the tongue. Follow this with a non-alcohol, low chemical content mouth wash to reduce odor causing bacteria and notice the next morning that the dreaded 'morning breath' is virtually nonexistent. Remember you cannot kill off all the oral bacteria or the yeast population would take over and that would be bad. You certainly are allowed to brush after meals where possible and it is a good idea to rinse the mouth after consuming sugary foods and beverages. Take some xylitol gum or mints with you to enjoy during the day to add their benefit to a healthy mouth.

I have complete faith in your ability to accomplish your goal of having a healthy attractive mouth and a much healthier body

all your life. Raymond Aaron, author and mentoring coach, has as his daily affirmation the following: **“I choose to live in abundant health to the age of 120.”** Why not make it yours as well.

ACKNOWLEDGEMENTS

This book would not have seen the light of day had it not been for the combined efforts of several amazing people who encouraged its creation; committed the author repeatedly to its accomplishment; believed in its purpose and its value to those who would read and benefit from the information contained in its pages and who never gave up on the author. Their expertise in creating a vision of what could be accomplished, plus their knowhow on the details of putting a book together were invaluable.

Special heartfelt thanks goes to Laura Waage and Christiana Carter for their help in goal setting, their technical and motivational expertise and belief in the author during the process of writing the book. Their quality coaching kept him focused on the project and taught him to be able to eat the elephant one bite at a time.

Dee Brown has been the person who worked on setting up the various components of the book. She never complained about the additional tasks placed on her in addition to her many other responsibilities. The author is most grateful for all the details she took off his plate as the book progressed.

The author acknowledges, with gratitude, the input in the form of questions from patients and his able dental staff members, whose insightful thoughts and interest related to areas of dental health helped formulate the content of this book.

Last but not least a big thank you to family members, especially Nathan and Mariah for their willingness and patience in proofing the content of the chapters for clarity and proper grammar. Any remaining errors are certainly the authors.

About the Author



Ralph Parkin received his Bachelor's degree from Brigham Young University in 1973; his Master's degree from the University of California at Davis in 1975 and his Doctor of Dental Medicine degree from Washington University in 1978. After spending two valuable years as a young dentist with the United States Public Health service Indian Health Service working with the wonderful people of the Navajo Nation, he moved his family to Colorado Springs where he is in private practice as a general dentist. He is a long time member of The Academy of General Dentistry, The American Orthodontic Society and the Colorado Prosthodontic Society. He is the father of

five children and is approaching his 40th wedding anniversary to his lovely wife Sheila.

He has seen literally tens of thousands of patients with all types of dental problems, dental questions and concerns. As he worked to solve problems for them, he observed that patients were often not succeeding in gaining and maintaining good oral health care. Their home care was failing them, causing them to have minor to major dental problems. This ran the gamut from gingivitis (puffy gums that bleed easily when brushed or flossed) to complete toothlessness. They experienced pain, embarrassment and inconvenience. He realized that whatever they were doing wasn't working for them. They didn't set out to have toothaches and end up toothless, having to glue their false teeth in their mouth every day. But it happened and continues to happen to tens of millions of Americans and more are joining this unfortunate group every day. They are

losing the “battle to keep their teeth for a lifetime” and they didn’t need to be losers!

You might say he and his excellent staff are on a crusade to help, where ever they can, reduce the number of people who lose teeth due to gum disease and tooth decay. This book is part of that effort. With the belief that knowledge plus action is power, this book intends to put knowledge in the hands of its readers and encouragement to take action with the reward of a far more healthy, comfortable and enjoyable life.

In addition, if there are new products or techniques that help solve dental problems quicker, easier and for less cost he wants the reader to know about it. Dr. Parkin and his dental team have developed a website www.greatdentalhealthproducts.com dedicated to patient education. The website contains numerous articles and video clips on specific topics related aspects of dental health and frequently asked questions. The reader is encouraged to take full advantage of the information contained on that site.

Currently on our blog page (home page) we have included several articles and videos on a procedure that meets all the criteria for a great new solution to the problem of replacing lost teeth. Mini dental implants are revolutionizing the practice of implant dentistry and that is exciting news for patients who have lost teeth. We welcome your feedback, so feel free to comment on this site.