Dr Sandra Short BDS SYD



Dr Sandra Short BDS SYD UNI



The Consumer's Guide To Oral Health

Everything your should know about your mouth and were afraid to ask.

[Hygiene Matters] [Other Dental Bites & Pieces]



www.dentartistry.com.au

Hygiene Matters

[P3] Healthy Gums

- [P3] Essential Care and Maintenance
- [P3] Your Responsibility
- [P3] Prevention
- [P4] Periodontal Disease or Gum Disease
- [P6] Techniques for Hygiene Treatment
- [P6] Children Facts About Children's Dentistry
- [P7] Toothpaste
- [P8] Bottled Water
- [P8] Diet
- [P10] Erosion
- [P10] Saliva
- [P11] Dry Mouth Symptoms
- [P12] Bad Habits
- [P12] Drink More Water
- [P13] Anorexia
- [P13] Fluoride

[P13] Gum Recession and Sensitivity



[P14] Gum Disease Linked to Heart Disease

[P18] Bad Breath

[P19] Bad Breath - Follow These Basics

dentar

Other Dental Bites & Pieces

[P18] Tooth Knocked Out – Trauma

[P20] Pregnancy and Healthy Teeth

[P21] Orthodontic Treatment

[P22] Root Canal Treatment

[P22] Oral Cancer

P23] Tempro Mandibular Disorder (TMD)

[P24] Ice Cream Headaches

[P24] X-rays

[P25] Snoring

P25] Sedation To Allay Fear

[P27] The Getting Of Wisdom Teeth

[P28] Dr Short Resume
[P29] Your Teeth Your Health

P30] The Significance of the Spiral



for more **information** on dentartistry and to see the latest special offers, please visit <u>www.dentartistry.com.au</u>

HYGIENE MATTERS

HYGIENE MATTERS

HEALTHY GUMS

Healthy gums are important foundations for longterm treatment success. No dental treatment will succeed without a healthy oral environment. This is the first stage of treatment. It involves diagnosis of the simple (and sometimes complex) causes of gum disease, and its treatment, ensuring a healthy foundation for all your future dental needs. If you have healthy gums and roots your teeth can be restored. Dental disease is an infection caused by bacteria in plaque.

ESSENTIAL CARE AND MAINTENANCE

The greatest cause of tooth loss in individuals over the age of 40 is gum disease. Early detection and treatment should ensure you keep your teeth for life, hence our commitment to a regular screening and a maintenance program.

YOUR RESPONSIBILITY

After the completion of your treatment it is important to remind you that it will be your responsibility to maintain the health of your teeth on a 3 or 6 monthly review program, to optimise the life expectancy of the treatment carried out and the long term health of all your teeth.

Working together this way, you can be assured of the best long term results.

PREVENTION

Prevention is for everyone. Many people who are decay free often become relaxed about the hygiene of their mouths. "I don't spend much time with my teeth and don't have any decay," is a common statement made by such people.

It is often people who are decay free that have gingivitis (inflammation of the gum tissue) and gum disease (periodontal disease) because they have not maintained regular dental care. One of the first signs of these gum problems is bleeding gums.

Your dentist can help set up a programme tailored to meet all your dental needs. This will involve professional teeth cleaning on a regular basis performed by your dentist or a dental hygienist, and practical oral hygiene advice, information and instruction that will assist you in preventing gum problems.

The dentist can not do for you what you will not do yourself!

One of the most significant signs of gingivitis is bleeding from the gums. This is not normal, and is an inevitable indication of disease. It might be noticed on the toothbrush following brushing, in the tooth paste on spitting out, or even on biting into some fibrous foods, eg. apples. In severe cases, the gums might bleed spontaneously, particularly during the night when blood may be found on the pillow.

When diseased, the gums look red and may be swollen and at the margin where the tooth emerges. There may even be some tenderness if the inflammation is severe. Pain or tenderness is not a usual symptom.



Who is susceptible to gingivitis? Almost anyone, particularly if their cleaning is inadequate. In between the teeth is a very common area for gingivitis to occur if dental floss is not used daily, and also on the tongue side of the teeth because this is a harder area to reach with the toothbrush.

Some people are unusually susceptible; eg. during hormonal changes as in young people during puberty – the so called "puberty gingivitis", and during pregnancy. Smoking makes people more prone to gum infection. Other risk factors are stress and general disease, particularly poorly controlled diabetes.

Gingivitis can occur in acute form. The best known is ANUG (Acute Necrotising Ulcerative Gingivitis) formerly known as "Vincent's Infection".

This condition is extremely painful, is identified by ulcers at the gum edge, mostly in the peak of the gum between teeth. There is a strong, characteristic smell from the mouth. ANUG happens because of poor oral hygiene, smoking, stress, poor eating habits or a combination of a number of these factors.

ANUG can be effectively treated by mouthwashes and/or antibiotics, but is likely to return if the same conditions continue. ANUG is most commonly seen today in association with HIV (AIDS) infection.

If left untreated, gingivitis may progress to periodontitis, in which the disease spreads along and around the root of the teeth, destroying the bone attachment, infecting the bone and eventually leading to tooth loosening and loss.

PERIODONTAL DISEASE OR GUM DISEASE

Do I have it? Periodontal (gum) disease affects over 80 % of us and it is painless most of the time. Please take a minute to check these symptoms and warning signs.

- Do you have bad breath?
- Do you ever bleed when you brush, floss or use a tooth pick?
- Are your gums sore, red or swollen?
- If you press on your gums, do you see pus between your teeth?
- Are any of your teeth loose?
- Do your teeth "look longer" to you? Are your gums receding?

Visit your dental professional regularly. Regular dental visits can prevent minor problems from becoming major ones. Your dental professional will be able to detect early signs of tooth decay and gum disease. If you have any problem areas with your brushing or flossing ask your dental professional to assist you. These problems can be discussed and in some cases additional cleaning aids may be suggested.

It is important not to wait until you have pain before visiting your dental professional.

Instead of wooden toothpicks, which are prone to splintering, try dental toothpicks for cleaning between the teeth. Many people prefer these toothpicks to floss because they are easier and more convenient. The only problem with them is that they can cause the gums to recede between teeth.

You don't have to floss all your teeth. Just the ones you want to keep. Most people brush for less than one minute when, in actual fact, you should be brushing for around two minutes to thoroughly clean your teeth.

If you ignore your teeth they will go away.

Did you know? During an average lifetime of 78 years, a person will spend more than 1896 hours brushing their teeth, providing they brush for two minutes, twice daily. Considering the amount of time we devote to brushing in a lifetime, choosing the right toothbrush is essential. The Australian Dental Association recommends that you replace your toothbrush every three months.

Worn out or shaggy toothbrushes are not effective in removing plaque from your teeth and gums. For best results, use a small headed soft bristled toothbrush.

To avoid plaque build up, it is important to thoroughly clean your teeth and gums at least twice a day. Remember, each tooth has five surfaces – a front, a back, two sides and a top. The only one sure way to prevent dental disease is to clean every surface. It is often helpful to use a disclosing solution to identify areas where plaque is being missed.

Always use a soft toothbrush and begin by placing the bristles at a 45 degree angle to the gum line of your upper teeth. Gently jiggle the brush or move it in tiny circles over the tooth and gum. It is important to spend about 10 seconds on each tooth. Move the brush systematically around the mouth brushing all outside and inside surfaces this way.



For the chewing surfaces, use a light back and forth motion.

To clean back teeth don't open wide, this pulls the cheek against your teeth making it harder to reach the back teeth. Open half way and use a small size toothbrush to get to the back.

Sometimes teeth become sensitive after your dental professional has "scaled" them or scraped off the layers of tartar (calculus). Tartar is hardened and calcified plaque which appears as a tooth coloured deposit and usually forms where the teeth meet the gum. Often this occurs behind the lower front teeth which tend to accumulate the most tartar. Removing this layer is like taking off an overcoat, and the teeth may be sensitive to cold air. Thorough brushing to ensure plaque removal will help to improve this sensitivity.

Preventative - three step guide:

- Use a fluoride toothpaste and brush your teeth twice a day, after breakfast and before retiring at night. If it is possible, dentists recommend brushing teeth after lunch too.
- Remove plaque from between the teeth every day. Be sure to clean the teeth with either floss or dental tape (available from chemists), which is a ribbon like version of conventional floss. Dental toothpicks are excellent for cleaning food from between the teeth and can be carried with you ready to be used.
- Try not to eat between meals. Plaque, a sticky invisible film present in the mouth, contains millions of bacteria, some of which produce acid when they come into contact with the sugars found in most foods. This acid can attack the teeth and if the acid is produced regularly and not removed by brushing, it will cause holes to develop in the teeth. If you brush your teeth after breakfast,

then eat 10 sweets you won't have one but 10 acid attacks in your mouth. The acid that is already present will continue to multiply each time vou eat something containing sugar. Not only what you eat but also the frequency of eating affects your oral health. Other bacteria present in plaque can produce gum disease. This bacterium excretes toxins which can seep between the gum and tooth, causing the gums to become inflamed and to bleed. Some people think that bleeding is a sign of the gums being healthy, but this is incorrect. Healthy gums do not bleed. If your gums bleed you are probably suffering from gum disease which, if left unchecked could lead to loss of teeth.

TECHNIQUES FOR HYGIENE TREATMENT

Gingivitis is early periodontal disease characterised by inflamed and bleeding gums. A therapeutic scale is a specific conservative dental therapy to treat gingivitis and to prevent the progression of this disease.

Your dentist or hygienist will instruct you in the most current and effective oral hygiene techniques for your condition. The overall success of this therapy is dependent on your commitment to your daily dental home care. It will be your responsibility to keep up with your oral hygiene to maintain the successes achieved with therapeutic scaling.

It is of the utmost importance for you to have a good understanding of what is recommended, and for you to be comfortable during the procedure. You may wish to have anaesthetic at the time. Please discuss any concerns you have. If you have periodontal disease, i.e. when the disease progresses to the point that it destroys bone, you may be referred to a periodontist.



CHILDREN - FACTS ABOUT CHILDREN'S DENTISTRY

Early age dental care. Dental health care starts as soon as babies get their first teeth. Babies' teeth should be cleaned with a clean cloth as soon as they show through gums. Parents should avoid putting sweet liquids in baby bottles, especially before bed. If a baby needs a bottle at night only water should be used. Breast milk can cause severe decay if the baby is allowed to suckle all night long.

Pit and fissure sealing. This procedure involves sealing the fine, deep grooves on the biting surface of back teeth using bonding material. Sealants are ideal for children because the back teeth are difficult to clean. The bonding material seals the tooth surface, eliminating the problem. As we get older, the tooth gets tougher and has less chance of decaying, making this sealing procedure unnecessary for adults.

TOOTHPASTE

Watch what your child ingests in toothpaste. Supervise the use of toothpaste by small children. Sorbitol is a common ingredient which may cause diarrhoea. Young children are often partial to eating toothpaste because of the nice flavour and because the swallowing reflexes of children under two years of age are not properly developed. Swallowing too much fluoride from toothpaste can result in dental fluorosis of the adult teeth. This condition can affect enamel, resulting in white to brown or black discolouration of the teeth. Fluoride is also toxic and for a 10kg child the toxic dose is approximately half the contents of a 90g tube. Excessive fluoride intake is of concern during the first 7 years of life. Only use a pea size quantity of toothpaste. There is low fluoride dentifrice for infant use which is recommended. Other ingredients which should be avoided are; triclosan an antimicrobial agent used in soaps and deodorants, sodium lauryl sulphate which can cause bladder and other cancers. (It is in most shampoos and shower gels.) And also titanium dioxide which scratches teeth.

In Neways toothpaste, the primary ingredient is stabilised chlorine dioxide (xanthium dioxide) which rapidly breaks down food films which of course feed bacteria and microorganisms.

This toothpaste contains no harsh abrasives and no sugar or fluoride. It is extremely safe for children and there is no warning label asking parents to contact the poisons information line should the child swallow it.

There is also a Neways mouthwash called Eliminator which is based on Xanthium Dioxide and it does not dry up the mouth but is great for bad breath. If these products are used together patients will find they do not wake up in the morning with the dry horrible taste in their mouth which is a result of the sodium lauryl sulphate. It reduces the sensitivity of teeth. There is also a tooth whitening product made by Neways.

Chocolate flavoured toothpaste? A report in New Scientist magazine, says that Japanese experts hoped to create a toothpaste or mouthwash based on chocolate extracts. The researchers say that there are antibacterial agents in cocoa beans. The agents could offset chocolate's high sugar content. The chemicals are most plentiful in the cocoa bean husk, which is normally thrown away when chocolate is made.

The toothbrush industry in the US is worth just under \$1 billion. There are no figures available for Australia. Today's toothbrushes are curved, arched and waved. They are rubber gripped and have slick ergonomic shapes. They have nylon bristles, are micro-textured, multi-coloured, multilevelled and multi-angled. They can be flexible or rigid. New production technologies and materials have also had a part to play in the evolving toothbrush scene but it seems the real change has been coming from consumer demands.



BOTTLED WATER

If your children are using bottled water for drinking they are not receiving the fluoride found in tap water therefore they will not get the protection they should from tooth decay.

Bottled water concern. It has been revealed that parents may be unwittingly depriving their children of fluoride by encouraging them to drink more bottled water. Dentists in the US have reported an increase in the incidence of dental decay despite widespread fluoridation of water supplies. Bottled water contains no fluoride, which is needed to develop stronger teeth in children and help prevent tooth decay in adults. Some bottlers have responded to dental concerns by producing special lines of water containing fluoride. For more information, ask your dentist.

DIET

Too much citrus fruit, such as lemons, grapefruit and oranges, can cause your teeth to erode along the gumline as well as causing the gums to recede.

It is important to cut down sugar. This is what the bacteria in the mouth live on and turn into acid which cause decay and gum disease.

Carbonated soft drinks and "sports drinks" are high in sugar in an acidic form. Soft drinks cause a decrease in calcium absorption. Studies indicate that soft drinks that contain phosphoric acid can impair the ability of calcium to be absorbed within your gut as well as deplete the calcium in bones. Phosphoric acid is found in many popular brands of soft drinks and can be as high as 164 mg/L, which is very high! This further confirms that beverage choice is one of the best targets to improve nutritional health in children and young adults.



White wine is also very acidic. Always have a drink of water after and wait one hour before cleaning your teeth.

Eating fruit as an alternative method of cleaning teeth does not work. Although fruit is good for you it contains natural sugar which causes tooth decay. NB: Honey is just as bad as sugar for your teeth.

Because of their potential to cause dental cavities and childhood obesity, the American Academy of Paediatrics has recommended parents limit the amount of fruit juice given to infants and small children.

Watch those Vitamin C tablets. People who chew Vitamin C tablets to protect themselves against colds risk serious dental problems because of acid dissolving their teeth. Those who chew Vitamin C tablets rather than swallow them whole, are bathing their mouths in ascorbic acid and, over a period of time, this can have devastating effects

Cranberry juice tackles gum disease. Researchers at Tel Aviv University in Israel have discovered that unsweetened cranberry juice can reduce harmful bacteria that activates gum disease. 84 patients with a history of serious gum disease were studied. Results showed 58% had some type of reduction in the build up of plaque and bacteria.

Fighting tooth decay with cheese. The British Nutrition Foundation has released a report which declared cheese prevents bacteria around gums changing sugar into acid that attacks tooth enamel. The report titled 'Oral Health: Diet and Other Factors' was written by dental and nutritional experts. Cheese and chewing gum can lower levels of acid from soft drinks, juices and fruit. The fat and salt which is contained in cheese, can stimulate acid neutralising saliva needed to fight tooth decay.

Calcium is good for gums too. A US study has found eating at least three servings of calcium rich foods a day could substantially reduce the risk of gum disease. The researchers found that men and women whose intake of calcium was less than 500mg a day were almost twice as likely to have gum disease and tooth decay. People aged between 20 and 40 were most at risk. The study involved 13,000 people and showed milk and cheese helped reduce tooth decay. Foods such as green leafy vegetables, bread and baked beans – all high in calcium also helped reduce decay levels. Calcium helps prevent osteoporosis, strengthens the jaw bone and the sockets in which teeth are placed.

Lollies and chewing gum. Just because lollies are sugar free does not mean they are good for your teeth. Sugar free lollies can be problematic if they contain certain preservatives. Numbers in the ingredients list identify which preservatives are used and the ones to look for are 300, 330, 331 and 338. These indicate that the lolly contains Citric Acid and Phosphoric Acid, which are linked to the destruction of the tooth enamel and dentine. This condition is known as erosion.

Also contributing to erosion is the habitual chewing of gum. Sugar free chewing gum has been shown to reduce mouth acid by increasing your saliva flow. Maximum benefit for your teeth, however, is best accomplished by limiting chewing time up to the point where the flavour is lost from the gum. Stomach reflux can result from long term gum chewing. Stomach reflux is when highly acidic digestive juices from your stomach come up your throat into your mouth, which leads to tooth breakdown. This can be undetectable by the patient.

Chewy lollies and bubble gum can easily attach themselves to fillings and dislodge them. However, if they come out this easily it is probably a good thing so you can have the filing replaced. Avoid lollies and sweets if you have a temporary filling.

EROSION

Essentially erosion is the action of acids on teeth causing them to dissolve. It differs from dental decay which requires the presence of sugar and bacteria – neither of which are necessary for erosion to occur. The source of these acids can be either extrinsic (something taken into the mouth from outside) or intrinsic (something brought into the mouth from the stomach).

Remember, it is very important NOT to brush immediately after consuming any acidic foods or beverages (see Diet), as we will simply brush away the softened minerals therefore aiding the erosion process. Erosion will result in our teeth shrinking in the size and shape.

SALIVA

Our saliva plays a very important protective and reparative role for our teeth. It has the ability to neutralise (buffer) the acid in our mouths and to harden (remineralise) the minerals of our teeth when acid has softened them. The simple way to assist the saliva function is by rinsing with water, bicarbonate soda and water, or by chewing some sugarless gum after consuming any acidic foods or drinks (see the section on Diet). Your dental professionals can also assist you in identifying oral health products on the market that boost the action of saliva, particularly if you have a condition known as xerostomia (dry mouth).

Saliva has a natural buffering and rehardening ability to help maintain the teeth when under an acid attack. Professional food and wine tasters, athletes replenishing fluids with sport drinks, individuals consuming soft drinks, fruit juices and cordials, and people with a tendency to gastric reflux or vomiting should delay their tooth brushing for one hour following these activities to allow sufficient time for the saliva to reharden the exposed area of the tooth. Root caries are likely to occur more quickly in mouths where saliva flow has been affected by medications, medical conditions, stress and/or medical procedures.

Kissing triggers saliva flow, flooding teeth with enamel building phosphorus and calcium. So your dentist recommends it!

DRY MOUTH SYMPTOMS

Having a dry mouth is a bigger problem than you might think. You should have your teeth examined by your dentist if you are experiencing any of these common symptoms:

- The corners of your lips are dry and/or cracked
- You have frothy (aerated) saliva tiny bubbles of saliva become visible at the corners of your lips when talking
- You have impaired speech because your tongue sticks to your palate (the roof of your mouth) when you speak, making a "smacking" sound
- Fissures (deep crevices) can be seen on the inside

surfaces of your cheeks and on your tongue

- You have a burning or tingling sensation in your tongue
- You have thick, ropey saliva (sticky glutinous strings)
- Food particles stick to the front surface of your teeth and on your gums below or above the teeth
- You have recurrent mouth ulcers
- There are white and/or red patches present on your tongue, gums and inside your cheeks
- You have bad breath (halitosis)
- Your sense of smell and/or taste diminishes
- The fit and comfort level of your dentures change
- You have difficulty in chewing food and swallowing
- Your sleep is interrupted with the need to drink water during the night
- You wake up with "cotton mouth" in the morning and need fluid to relieve it
- All of your teeth becoming generally darker either yellow or grey
- You experience an increased rate of dental decay
- You have long term nasal congestion/sinusitis.



How dry is your mouth? Xerostomia (Dry Mouth Syndrome) relates to the absence or reduction of saliva or moisture in the mouth. Rapid tooth deterioration can occur when saliva is diminished or completely absent. Bad breath, recurrent mouth ulcers, fragile teeth, higher decay rate, increased gum infections and tooth loss are the result of untreated Xerostomia. Where dentists once relied on the patient's expression of mouth dryness to initiate treatment, there is more attention focused now on identifying early signs and prevention.

Xerostomia has become more common in the aged population mainly due to changes in physical and mental health along with polypharmacy – the intake of multiple daily medications.

Side effects of prescription and non-prescription medications are a significant contributing factor in the increased incidence of Xerostomia.

How we breathe also has some influence on our saliva. A normal breathing pattern generally occurs through our nostrils. Mouth breathing is a condition where breathing is deferred to the mouth, mainly from deviations in the structure of the nose.

A dry mouth also leads to chronic conditions with the aged as well as people with the eating disorders anorexia and bulimia. The athlete involved in repetitive strenuous physical activity will also experience depleted saliva production.

Severe burns and excessive bleeding also alter the saliva resulting from an imbalance in our body fluid as part of the inflammatory response. Health conditions such as rheumatoid arthritis, scleroderma, Sjogren's syndrome, lupus and diabetes can involve progressive saliva changes that result in the classic "desert" dry mouth. The use of a mouth moisturiser is a beneficial aid in maintaining a healthy mouth.

BAD HABITS

Smoking, alcohol and caffeine make up the 'dental health trilogy' and have a significant impact on the depletion of body fluid, especially our saliva.

Smoking limits blood flow by narrowing our blood vessels. Our gum tissue and bone support deteriorates from the loss of nutrients carried in our blood, and destructive plaque bacteria activity increase.

Smokers are more likely to suffer from gum disease than non smokers. Symptoms of gum disease are harder to detect in smokers as well, which means diseased gums could go unnoticed until permanent damage is done, possibly leading to loss of teeth. It can be difficult to perform gum surgery on a person who smokes because of delayed healing and the ill shaped and spongy tissue condition prominent in smokers.

Alcohol dries the mouth and promotes increased bleeding of our gum tissue. Alcohol is a known carcinogen.

Caffeine, a diuretic, alters saliva production through the action of increased sodium and water loss throughout the body.



DRINK MORE WATER

We face more challenges today, in modern society, in the pursuit of optimum dental health. Filtered tap water is by far the best source of replenishing our body fluid. Water is not acidic; it has no sugar content and represents 70% of our body weight. Choosing drinks such as fruit juices, soft drinks, coffee, alcohol, tea and sports drinks as replenishing fluids is likely to lead to poor dental health.

ANOREXIA

Anorexia can significantly accelerate bone loss. Anorexia is a condition that primarily affects young, athletic women. While exercise has been shown to increase bone mass under normal conditions, in individuals with anorexia irreversible bone loss begins at very early ages. These people have a much higher risk of bone fractures. A normal, healthy diet is thus critical to optimising bone health.

FLUORIDE

It is also a myth that fluoride prevents decay entirely. We now know fluoride really only delays the onset of decay so that people can get decay in their late teens and early 20's rather than their childhood depending on their diet.

GUM RECESSION AND SENSITIVITY

What causes teeth to be sensitive? Acids from plaque can also cause gums to recede or pull back, exposing the roots of the teeth. Once this area is exposed, the chance of sensitivity is greatly increased. As you get older, you may find that your gums are receding. This gives the appearance of getting "long in the tooth". A further problem that you may experience is a form of decay known as root caries. This occurs when the gums recede. These surfaces are more vulnerable to decay as they do not have the covering of the protective enamel.

How can I stop the pain? Consult your dental professional on a correct brushing technique. They will show you the correct brush to use (a soft one) and how to use it properly, to remove all the plaque.

Special treatment of topical agents can also provide quick relief.

Toothpaste specially formulated to reduce sensitivity may also help. By brushing gently with desensitising toothpaste, you should start to notice an improvement, in most cases within two to four weeks. If after one month of consistent use, your teeth are still sensitive, consult your dental professional.

If tooth sensitivity is so severe that you cannot bring yourself to brush thoroughly, consult your dental professional who may apply a varnish or special solution to the tooth surface. This is usually an indication of a more serious problem.

Other causes of sensitivity are inflamed or infected nerves of teeth, decay, root fracture and overloading forces eg. high fillings, grinding or denture problems.

GUM DISEASE LINKED TO HEART DISEASE

Research by the University Of Carolina School Of Dentistry in the US has shown that gum disease could be linked with heart disease and the birth of premature babies. The research indicated that gum disease could be a trigger to these serious medical problems, but was proven not to be the cause. Researchers found that bacteria from the mouth could travel through the body, damaging the line of blood vessels. For more information, ask your dentist.

According to a world first study at Sydney's United Dental Hospital, healthy gums dramatically cut the risk of heart attack, stroke and cardiovascular disease by reducing blood clot risk factors. Results of a patient trial provided strong evidence supporting a link between gum disease and an increased risk of developing blood clots, which could lead to the onset of more serious conditions.

Periodontal disease is the most common infection in the world affecting more than 50 per cent of the population at any one time.

"This condition is common and treatable." It's a simple statement to make but improving dental health can significantly reduce the risk of stroke and cardiovascular disease said Dr. Barbara Taylor, a periodontist and coordinator of the trial.

You can see from this that the health of our teeth and gums effect our whole body. This is why we at dentArtistry strive for complete oral health. Together we can achieve it.

BAD BREATH

Do you have bad breath? In medical terms, bad breath is known as halitosis and affects 50% to 60% of the population. It is generally agreed that the source of bad breath is a group of sulphur containing compounds which are produced in the mouth or nasal areas. These compounds are created by the breakdown of bacteria and are known as Volatile Sulphur Compounds (VSC).

There are many causes of bad breath but the main ones are diseased gum tissues and tooth decay. Gum diseases such as gingivitis or the more advanced periodontitis need to be detected immediately. With periodontitis, the gum loses its attachment to the tooth, and a pocket develops. Within this pocket, bacteria accumulate which can produce VSC.

BAD BREATH - FOLLOW THESE BASICS

Bad breath or halitosis is something we have all experienced at some time, but for many people it is a daily problem.

So what causes bad breath, and how do you fix it?

Most bad breath starts in the mouth. The major cause of bad breath is the millions of bacteria that live on your tongue.

Bad breath causing bacteria also live in plaque on and around the teeth, and the breath tends to get smellier when the mouth dries out (such as overnight), hence the term "morning breath". Periodontal disease or gum infection is an important culprit. To help combat bad breath it is recommended to do the following:

- If you are unable to brush your teeth during the day, rinse your mouth with water or chew sugarless gum to stimulate saliva.
- Have regular dental checks to make sure your gums and teeth are healthy.
- Clean your mouth after you eat smelly foods such as garlic or curry.
- Eat breakfast it gets the saliva flowing and cleans the mouth.
- Higher fat and higher protein foods, such as meat and cheese, seem to contribute more to bad breath than fruit and vegetables.
- If you smoke, try to quit for fresh breath – another good reason to stop.
- Brush your tongue. The tongue brush or scraper aims to effectively clean your tongue. The cleaning should be directed towards the back of the upper surface of the tongue.

NB: Smokers should not use mouthwash with alcohol like Listerine often, this is carcinogenic and combined with smoking which is also carcinogenic, is double trouble.

Going on a diet may leave you with bad breath. Infrequent eating causes bad breath as bacteria in the mouth become stagnant. Chewing and the texture of some foods clean the mouth.

Dryness of the mouth can also cause halitosis. Saliva is a strong antibacterial substance, and without it, bacteria can grow. A dry mouth can be caused by certain diseases or as a side effect of medicines taken to treat conditions such as high blood pressure.

Sinusitis and tonsillitis cause bad breath as the mucus is attacked by bacteria in the throat or nose to produce VSC. Other diseases like diabetes and hepatitis can sometimes be a contributing factor in halitosis. Disturbances of the digestive system may cause bad breath but the stomach is not generally the main source. Eating foods such as onions and garlic will result in bad breath. The first step in treating bad breath is detection. The human nose is the most effective instrument for detecting halitosis.

Mouthwashes reduce the number of bacteria in the mouth and help reduce halitosis. They are only partially effective, and if used as the only method of combating bad breath, the improvement will only be temporary.

Sugar free chewing gum will increase saliva flow and help combat a dry mouth.

If you have any dental concerns please contact us on www.dentartistry.com.au or phone 02 9363 9823.



What does your sn



Dr Sandra Short, the dentist with the feminine touch. 14 Manning Road | Double Bay NSW 2028 | **P** 02 9363 9823 | **F** 02 9326 21

nile say about you?





Our teeth not only serve to chew the foods we eat, but they dramatically affect the way we look and feel about ourselves. Teeth help us to look younger. Our teeth, gums and bone support the facial structures and keep them from sagging and caving in. Without teeth to support our facial tissues, we would appear much older. Teeth help build our self esteem and confidence, by giving us an attractive and youthful smile.

Call us or visit our website today.





OTHER DENTAL BITES & PIECES

Information about the best way to care for your teeth is regularly reported in magazines and newspapers. There is also 'word of mouth' information that is passed around. Forget 'what you heard', be aware of 'what you read', but the best advice is to ask your dentist. Below are some issues which have attracted recent media attention.



If in pain, do something about it. These problems can be avoided by a visit to your dentist to fix the problem. Regular visits to your dentist combined with proper care can avoid problems all together.

Give your dental and medical history to your dentist.

Your dentist will ask you about any problems you may have had with your health and teeth. Your dentist needs to know because some problems may interfere with your treatment, the anaesthesia (local and general), and care after surgery. This information will help the dentist plan the best possible treatment. Tell your dentist if you:

- Bleed too much when you are injured or have surgery
- Have any blood disorders, such as haemophilia
- Have had rheumatic fever
- Have had heart surgery
- Have had radiotherapy to your face or jaws

Give your dentist a list of all medicines you are taking now or have been taking recently. This includes the "Pill" or any over the counter medicines, such as aspirin or cough medicine and any "party" drugs you may have taken.



TOOTH KNOCKED OUT - TRAUMA

What to do when a tooth is knocked out.

- find the tooth, handle the tooth only by the crown (whiter part) not the root as this can damage the delicate cells on the surface of the root
- if the tooth is clean replant immediately (use other teeth as a guide) and keep in place until you see a dentist ASAP
- if the tooth is dirty, clean with milk as the first option or saline (for contact lenses) or saliva and replant as soon as possible. Time is critical!
- if you are unable to replant immediately keep the tooth moist, using milk or Glad Wrap and store in the patient's mouth DO NOT STORE IN WATER! See a dentist ASAP as time is critical.
- Follow this procedure even if the root appears broken
- DO NOT HOLD THE ROOT SURFACE
- DO NOT SCRAPE OR RUB THE ROOT SURFACE
- DO NOT LET THE TOOTH DRY OUT
- DO NOT RINSE IN WATER FOR MORE THAN A FEW SECONDS
- DO NOT STORE THE TOOTH IN WATER
- DO NOT DELAY SEEKING DENTAL TREATMENT.

The tooth will need to be held in place with a splint for about two weeks. After this time the pulp (nerve) needs to be removed and a root canal therapy performed. It is essential that a root canal therapy (RCT) is started within two weeks; otherwise the tooth may be rejected by the body.

PREGNANCY AND HEALTHY TEETH

It is important that you visit your dentist during the first stage of pregnancy to ensure that your teeth and gums are healthy. Ask your dentist to show you how to correctly use your toothbrush and dental floss. Be sure to consult your dental professionals about the use of dental x-rays and local anaesthetic injections during the first trimester of your pregnancy.

If you experience morning sickness during the first month of your pregnancy, try to rinse your mouth with water immediately after vomiting. This will help to neutralise the acids from the stomach which can cause the tooth enamel to dissolve. Do not brush your teeth immediately after vomiting; however, as enamel softened by stomach acid is more readily removed by the abrasive action of the toothpaste and brush.

Pregnant women often experience cravings for certain foods. Sweet snacks should be avoided because they are the highest source of dental decay.

It is important to establish and maintain a balanced diet that is low in sugar and high in calcium.

A baby's teeth grow soon after a woman becomes pregnant. They continue to develop throughout the pregnancy. At four months into the pregnancy, calcium and phosphorous is needed to help the baby's teeth calcify. Towards the end of the pregnancy, more calcium is needed and can be obtained from eating calcium rich foods like dairy products. Drink tap water which contains fluoride to strengthen the baby's teeth.

Newborn babies do not have the bacteria in their mouths which can cause tooth decay. Their first teeth will come into the mouth around 6-10 months of age. Bacteria can be passed on to the baby by their parents through food tasting, kissing and/or cleaning a dummy in their own mouths.

You can reduce and delay the transfer of bacteria to your baby by thoroughly cleaning your own teeth. Eating sensibly and reducing the number of times a day that you eat sweet foods and drinks will help prevent decay for you and your baby.

The key points to remember when pregnant are regular dental check-ups, good oral hygiene habits, balanced diet, avoiding sweet foods and soft drinks, increasing calcium intake and changing your toothbrush regularly.

During pregnancy many people believe they lose calcium from their teeth and that is the cause for a higher decay rate. This is a myth! Once teeth are formed it is not possible for them to lose calcium this way. However during pregnancy women get cravings and eat junk food. They also eat at night and more frequently without brushing and flossing. The more often you eat the lower the ph of the mouth (more acid) thus promoting decay. There is a hormonal response of the gums during pregnancy which causes an exaggerated response to plaque. The condition is called pregnancy gingivitis. It is characterised by swellings of the gum and increased bleeding. The aim is to keep the teeth as clean as possible to avoid the condition.

ORTHODONTIC TREATMENT

Very crooked teeth may require orthodontic treatment. Orthodontics use braces and other devices to apply pressure to your teeth over time to gently move one or more teeth into their correct positions. Today, braces are available in a variety of materials including tooth coloured ceramics and clear plastic stints (like mouthguards) that are less noticeable than traditional stainless steel braces.

Getting the story straight. If your teeth are in the wrong position in your mouth, are crooked or have gaps between them, then your dentist may recommend orthodontics as a solution.

Like all facets of dentistry, orthodontics has continually been changing and improving with new technologies and in response to patient requirements.

Computer software, for example, is now available to assist your dentist to map how far your teeth need to move to achieve the result you're looking for. Invisalign uses computer technology and a series of clear plastic stints to move teeth invisibly.

After orthodontic realignment of teeth there is a tendency to relapse. This is more pronounced in some cases than in others. Ask your treating dentist how long the teeth will be stable after treatment and what long term strategies should be undertaken to hold the teeth in position.

Thumb, finger or dummy sucking should be discouraged after the age of four years as the forces on the top teeth cause these teeth to be pushed forward and outwards while the lower teeth may be pushed back. An open bite (where the upper and lower front teeth cannot meet) can also occur from these habits. This situation is made worse as the tongue tends to fill the gap between upper and lower teeth, and



These habits cause much anxiety for parents and many battles at home between child and parent. However, children will cease the habit when they want to and not when parents ask. Fortunately, peer pressure is helpful, as few children go to school with a dummy. Children should be rewarded for not sucking thumbs or dummies and there are techniques available that can be of assistance in helping the older child cease the habit. Advice from your dentist is always available.

ROOT CANAL TREATMENT

This is the treatment for an infection of the pulp (nerve) or abscess of a tooth. Heavily filled teeth may have nerve involvement that is not evidenced on your x-rays. We can best assess this when the old fillings are removed and a clearer view of the depth of decay or old fillings can be appraised in terms of the need for root treatment. However, it is not always possible to predict which teeth will require RCT. X-rays do not show this infection in the early stages.

International research suggests a 7% incidence of root canal therapy if "unfilled teeth" are treated in an elective procedure and a 30% incidence of root canal therapy if heavily filled teeth are rebuilt to achieve long term strength.

Possible Complications of Root Canal Therapy

- Instruments can break especially in narrow curved canals. These can sometimes be retrieved however, if they cannot, the treatment is likely to fail.
- The canal preparation may perforate the root either laterally or in between the roots. This can also lead to failure of treatment.
- It may be impossible to clean the complete canal due to the size and shape of the canals and accessory canals. Therefore infection may recur.
- The tooth may discolour.
- There is sometimes post operative pain up to a few weeks after the procedure.
- The tooth structure will be weak and will require a crown.
- If the tooth needs re-treatment, the chances of success are only 60%.
- If the root has a fracture, which cannot always be seen, the tooth will fail.

ORAL CANCER

Over 850 cases of head and neck cancer, including cancers of the tongue, floor of mouth, oropharynx and lip cancers, were registered in NSW in 2001. In that same year, 355 individuals with head and neck cancer died. Males were found to be 3 times more likely to be diagnosed with head and neck cancer than females and 4 times more likely to die from the disease. In 2000, there were over 1800 cases of head and neck cancers Australia wide. The 5 year survival rate for oral cancer (all stages, all grades) remains at only 50% in NSW, probably because of the advanced stage of the disease at presentation. Two thirds of oral cancers are estimated to be preventable by avoidance of recognised risk factors.



Alcohol and alcohol based mouth washes like Listerine are dangerous carcinogens if used continually especially when combined with other carcinogens like smoking.

An average of 181 people died each year from oral cancer in NSW between 1993-97, a 43% increase compared with 1973-77. By contrast, average mortality from cervical cancer fell from 140 to 111 deaths annually in the same two 5 year periods, due to the uptake of mass population screening. Cancer research institutes in both the United States of America and United Kingdom recommend regular oral cancer screening in individuals aged over 50 years, but currently in Australia, in the absence of recommendations by the National Health & Medical Research Council, routine oral cancer screening is only being offered by a minority of health care professionals. Dentists, however, are uniquely placed to undertake screening for oral cancer at routine recall examinations.

In most developed countries, oral malignancy is a rare finding in primary dental care practice; indeed, the presence of malignancy is reported to be as low as 1-1.5 cases per 100,000/year and on this basis it is very unlikely that most dentists will see more than 1 or 2 cases in a lifetime. It is clear that a vigilant approach should be adopted for every patient if malignancies are not to be overlooked.

Carcinomas may present as ulceration and sarcomas can mimic a number of more common conditions including periapical lesions, periodontal disease, natural movement or tilting/ displacement of teeth or facial asymmetry.

Careful history taking can often reveal a recognised risk factor for oral cancer which may or may not be relevant to lesions seen in the mouth. For this reason, any such screening should include a lifestyle enquiry (use of tobacco, alcohol, betel nut etc) and a regular review of the patient's medical history. Smokers should be encouraged to seek professional help with smoking cessation.

Many straightforward oral conditions like white patches and ulcers have been linked with malignant change. It is crucial to establish the diagnosis with the help of an expert opinion, and then to monitor these conditions carefully.

Monitoring is most successful when patients are actively involved and feel that they can easily and quickly report changes or concerns.

Delays – it is worth remembering that a late referral for a suspected malignant lesion may cause the patient unnecessary pain and suffering through the delay in obtaining treatment.

TEMPRO MANDIBULAR DISORDER (TMD)

Headaches can be the result of stress everyone is aware of this. However the jaw and paranormal muscle activity may be the cause. Dentists refer to this as Tempro Mandibular Dysfunction (TMD). Grinding, clenching, sucking cheeks and biting objects can be paranormal, repetitive, habitual actions responsible for increased muscle activity which in turn can cause damage to the teeth i.e. worn or cracked teeth, inflamed joints (which can degenerate further over time) and muscle spasm. There are some simple conservative things that cost nothing, that can be done to break this cycle of parafunction:

Do not sleep on your jaw. Sleep on your back if possible. If not sleep with the pillow under your forehead so that the jaw is free.

- Keep your teeth apart and lips together at all times during the day.
- Watch your posture! Head up and away from relaxed shoulders. Chin tucked in.
- Keep to a soft diet while there is pain or muscle spasm.
- Restrict your intake of stimulants e.g. coffee, sugar, some drugs
- Take two 20 minute breaks a day to relax. Use moist heat over the affected area.
- If this doesn't work see a dentist.

NB: Your upper and lower teeth should not be together. They should only touch when you swallow or chew, (approximately no more than 2 minutes per day) otherwise they should be slightly apart your mouth relaxed and lips sealed.

ICE CREAM HEADACHES

If you've ever suffered an 'ice cream headache', brought on by eating something cold, then you're not alone. Approximately 30% of people suffer this reaction, triggered by the sudden change in temperature that results when ice cream, or any other chilly food or beverage, is placed in your mouth. When the substance touches the roof of your mouth, the sudden cold causes, your body to rapidly compensate. A nerve reaction swells the blood vessels in your head in an effort to compensate and heat up vour brain. It's this swelling of blood vessels that causes an ice cream headache, otherwise known as "brain freeze" or "frozen brain syndrome." Fortunately, the intense pain in your head only lasts for 30-60 seconds and can be avoided by keeping cool foods away from the roof of your mouth. Ask your dentist for more information.

X-RAYS

Don't shy away from x-rays. Your dentist takes x-rays of your teeth because they help in discovering and diagnosing any problems you may have. Many problems in the mouth can't be seen by your dentist. A digital image or an x-ray film will assist them.

The majority of dentists in Australia use film to take their x-rays, but the popularity of digital imaging is increasing. Digital systems offer some basic advantages, such as greatly reduced radiation exposure; faster processing; images that can be manipulated and stored on your dentist's computer; there are also environmental benefits because chemical film processing has been eliminated.

The need for an x-ray depends on such factors as how susceptible you are to decay; whether there are other problems in the mouth; whether the position of the teeth needs to be altered; and for planning restorative treatment.

Adults need x-rays at least every two years to check for decay and gum disease. You should not be concerned about radiation from x-rays because your dentist follows very strict guidelines to ensure your safety.

We all know radiation is harmful however with modern x-ray machines and speed film the dose we get from dental x-rays are minimal. To get this level into perspective it is best to compare it with background radiation. Dental x-rays are equivalent to less than 5 days background radiation. CT chest, abdomen or pelvis is equivalent to 4 years background radiation. A long distance flight for an 8 hour sector, due to altitude the radiation dose is equivalent to one year background radiation. Around the world flight is equivalent to four years background radiation. Current recommendation of the radiological council in Australia is that a shield is not necessary for dental x-rays. The shield in fact may concentrate radiation in the thyroid region through scatter. The only exception is for pregnant women where the foetus should be protected.



SNORING

Peaceful, healthy, better sleep. Your dentist may be the last person you'd think of to ask for help with snoring. If you are one of the many whom for years have had to suffer all the bad effects of snoring or sleeping next to someone who snores, then your dentist may be able to help.

Just imagine what it would be like to experience and enjoy uninterrupted, deep, rejuvenating sleep and to awaken fully refreshed and to look forward to your day. Now, with the latest developments in sleep disorder techniques, your dentist may be able to provide a clever but simple solution.

You will notice that people who snore or who sometimes stop breathing while they sleep, lack energy and look tired and unhappy. They may have to take short naps during the day or just fall asleep even when they are driving. They may have rapid mood swings, memory loss and other unwanted changes that become apparent over time. This condition is called sleep apnoea. It is a serious condition, because of this it should be discussed with a health professional.

The design of your throat unfortunately is not ideal because it is not held open or supported by bone structure. As you sleep, the muscles and soft tissue in your throat and mouth relax and this may cause a partial or even a complete blockage of your airway. When your reflexes attempt to get enough air into your lungs for your heart, your brain and your body to function correctly, the speed of the air in the narrower space has to increase and this makes the soft tissues in your throat and mouth vibrate. As a consequence, you start to snore.

Sometimes your dentist can solve this by making you a small stint, something like a double mouth guard, to wear at night. It will either stop your jaw falling back or bring it slightly forward to increase your airway space and so eliminate or at least reduce your snoring. It may be a simple as that.

SEDATION TO ALLAY FEAR

Sedation can help overcome fear. Many people avoid going to the dentist because of the fear of dental procedures. Conscious sedation can provide anxiety relief and often overcome fear.

Sedation is the use of a drug which relaxes the central nervous system enabling treatment to be carried out by the dentist, while still allowing the patient to communicate.

Your dentist will use the simplest form of sedation which will enable successful treatment to be given. For example, some patients respond well to nitrous oxide and oxygen (laughing gas) while others respond better to a valium type drug.

There are many ways of being sedated and your dentist will discuss with you what treatment best suits you. Before sedation can be offered, your dentist will take a full medical history and may liaise with appropriate medical practitioners if necessary. The simplest form of sedation is your dentist explaining the treatment and helping to allay any fears that you might have.



Inhalation Sedation

Nitrous oxide and oxygen sedation can be administered through a nose mask making you feel warm and relaxed. This technique is also known as Relative Analgesia (RA) and works particularly well with children. Your dentist simply places a small mask on the nose and varies the amount of nitrous oxide through a special machine until you are comfortable and relaxed.

Inhalation nitrous oxide gas can be given during dental treatment. This has very little side effect and the patient can go home as usual.

Oral Sedation

Oral sedation is another option to help alleviate fear. This is achieved simply by your dentist prescribing a medication which will make you drowsy and relaxed. This technique can also be used in conjunction with nitrous oxide for deeper sedation.

Oral, valium type sedatives can be taken the night before and one hour before treatment. This cannot be used in children or adolescents. Patients should not drive.

Intravenous Sedation

If you choose sedation, you must not eat or drink for at least six hours before your appointment. You should not smoke for least 24 hours before the appointment. It is a good idea to dress warmly in cold weather and wear gloves, as this helps make the veins easier to find. Contact lenses should not be worn due to the possible drying effect of the drugs used. It is important that your dentist knows of all medications you are taking, and also any changes to your medical history including all known allergies. You must be accompanied by a responsible adult and driven home in a car or taxi. Public transport is not an option after sedation.

Intravenous sedation is a technique whereby drugs are usually injected into an arm vein until the desired effect is achieved. You normally remember very little but can still co-operate with your dentist and wake up relaxed and calm. Your dentist will use a local anaesthetic after the sedation and may also inject a pain killer if the procedure involves surgery.

Instructions will be given to you and your escort after the sedation and dental treatment is completed. You will be advised how to care for your mouth; and not drive vehicles or operate machinery for at least 12 hours after sedation. You must not leave the surgery until told by your dentist.

Intravenous sedation, now called "twilight anaesthesia", is commonly used for most day care surgery procedures in medicine. This combination of drugs is very safe. The patient is conscious but sedated and has amnesia afterwards. Recommended for all surgical procedures like difficult extractions or implant placement or whenever the patient is too fearful to undergo dentistry without it.

Sub Mucosal or Intra Mucosal Sedation

Sub mucosal or intra muscular injection of a sedative. This is a simple cost effective way to alleviate fear. Patient should not drive home.

New techniques of sedation are being developed at many centres throughout the world. Some sedative drugs can be squirted into the nose, injected into the mouth or given through skin patches. The main emphasis of modern sedation is to allow dental treatment to be carried out on anxious patients in the safest possible manner, and research is continually being carried out to improve drugs and techniques.

THE GETTING OF WISDOM TEETH

Quite often there is little space at the rear of the jaw for wisdom teeth to come easily through the gums. If the jaw does not have enough room for the wisdom tooth to come through, the tooth will become wedged or impacted. Some impacted wisdom teeth remain buried and cause no trouble. However, other impacted wisdom teeth may cause severe problems. If one or more of your wisdom teeth causes problems, your dentist may recommend that it be removed. It should be removed soon so that pain, infection or other problems do not get worse.

If there is an infection around the tooth, your dentist may delay surgery while the infection is being treated. Your dentist may recommend early removal of one or more wisdom teeth because there is not enough room for the tooth to push through; or you need orthodontic work, and the remaining teeth would be crowded by wisdom teeth, making existing problems worse.

An impacted wisdom tooth will start to push through the gum, and an infection can start around the top of the tooth. Infection and inflammation can cause pain, swelling and jaw stiffness. Swallowing may be painful. The infection can cause bad breath.

If a wisdom tooth is not removed, a cyst can form around the tooth and may displace the tooth. This can destroy bone and damage other teeth and the gums.

Food can also become trapped between the wisdom tooth and the molar next to it. This can cause cavities in both teeth. Any infection is serious and needs treatment to avoid systemic complications.

If you have any dental concerns contact us on 02 9363 9823 or www.dentartistry.com.au.



In 1975 Dr Short graduated with a Bachelor of Dental Science from Sydney University and the following year completed six months postgraduate studies in New York under Dr Leonard Linkow, the inventor of implants.

In 1989 Dr Short established her current practice in Double Bay. She has always been interested in cutting edge technology and in 1990 was part of the initial team from Australia to be trained in the USA and Canada in the use of lasers in dentistry.

1992 saw Dr Short lecturing at Westmead Hospital on the use of lasers in dentistry and acting as the clinical instructor of laser dentistry for two years.

Dr Short has had an involvement in humanitarian work. In 1993 she travelled to Vietnam and set up a dental clinic in Ho Chi Minh City for street children.

The following year, 1994, she gained Dental Board accreditation for the use of anaesthetics in the dental surgery and became a councillor of the Australian Dental Association (NSW branch) for the next four years.

Dr Short completed study in dental implant surgery and bone grafting techniques conducted by Dr Carl Misch of the USA in 2000. Dr Misch is one of the foremost researchers on dental implants in the world.

In 2002 the Exceptional Practice Group of Australasia was formed and Dr Short was a founding member. The group comprises the top 50 practices in Australia and New Zealand.

In 2003 Dr Short gave a lecture at the annual conference of the Cosmetic Surgery and Cosmetic Physicians Society of Australasia on the Gold Coast.

In 2005 Dr Short gave a lecture to postgraduate students at the University of Western Ontario, Canada in cosmetic dentistry. She then tutored in Implant Dentistry Level IV ASID. Dr Short also appeared as a Cosmetic Dentist on Australia's Top Model in 2005.

DISCLAIMER The opinions expressed in these pages are my opinion based upon 30 years of experience. Other dental professionals may hold differing opinions on some issues.

I base my opinion on continual education and scientific research. I belong to the Exceptional Practice Group of dentists who strive for excellence.

YOUR TEETH YOUR HEALTH

Our teeth not only serve to chew the foods we eat, but they dramatically affect the way we look and feel about ourselves.

Teeth help to keep us healthy by allowing us to eat and chew the foods we enjoy. Teeth help us to look younger. Our teeth, gums and bone support the facial structures and keep them from sagging and caving in. Without teeth to support our facial tissues, we would appear much older.

Teeth help build our self esteem and confidence, by giving us an attractive and youthful smile.

Investing in your oral health is an investment in your overall wellbeing. Aren't you worth it? $\protect{``}$

THE SIGNIFICANCE OF THE DENTARTISTRY SPIRAL

The spiral represents the marriage of beauty and science, which is the core of dentartistry. My purpose is to create structures with harmony and balance of proportions using the sciences of mathematics and biology to give form and beauty.

It is thought the human brain perceives beauty at its lowest level. This perception does not involve cognitive thought. It is instinctual. The Fibonacci series of numbers is a sequence of numbers relating to one another with definite proportions called phi ratio or the golden proportion (1:1.618).

It is the phi ratio which is found in nature giving proportions we find beautiful eg. the arrangement and placement of leaves on a stem, petals on a flower, the proportions of the human body, in architecture eg. The Parthenon etc. This golden proportion subconsciously triggers our emotions and appeals to our senses.

The spiral is formed geometrically based on the golden triangle. At dent**A**rtistry we study form and shape as it relates to teeth and the face and apply this clinically to give you a perfect smile. ¤