Dental Implants
What a Patient Needs to Know
Dr. Jeff Lynch
mckinneydentist.com
Meet Dr. Lynch

“His ability to plan and design solutions to complex cases is a result of his constant quest to learn.”

Dr. Jeff Lynch earned his Bachelors Degree from the University of Oklahoma in Microbiology in 1986.

He then went on to earn his Doctor of Dental Surgery (D.D.S.) from Baylor College of Dentistry in Dallas, TX in 1990. He is a member of the Academy of General Dentistry and earned his Fellowship in the International Congress of Oral Implantologists.

Dr. Lynch has performed thousands of implant and related grafting procedures for the patients of Mckinneydentist.com over the years. Being able to "regenerate" lost teeth, bone, and soft tissue for our patients through Implant dentistry has added a huge degree of satisfaction to his 25+ year career. His ability to plan and design solutions to complex cases is a result of his constant quest to learn.

By utilizing the cutting edge technology and procedures that are constantly being developed, he can provide our patients with the very best care.

In addition to Implant and Regenerative dentistry, Dr Lynch also provides his patients with all other forms of Cosmetic and Restorative dentistry. He has a team of caring and experienced assistants that help him provide the caring touch patients want and desire.
Tooth Loss

Tooth loss occurs for many reasons; decay, gum disease, breakage, or other types of trauma to name a few. Losing a tooth or teeth can effect the patient in both their functional capabilities as well as creating emotional and appearance related problems. Failure to replace missing teeth can lead to bite collapse, shifting of neighboring teeth, and significant loss of the jaw bone itself!

Historically, missing teeth have been replaced by dentures, partials, bridges, or nothing at all. While these are all "okay" tools to use, they all can lead to further bone destruction and/or tooth loss.

When Dental Implants are used to replace lost teeth, they actually prevent this bone loss. They also improve chewing ability and function without compromising other teeth, and have the potential to last far longer than any of the other options.
So What is a Dental Implant?

The dental implant itself is a screw made from a titanium alloy. This is the same material that orthopedic surgeons use. The implants come in a variety of lengths, widths, and thread design. The implants that we use are designed to maximize stability in the various types of bone in your jaws.

At the top of the implant is a hole that an abutment will be screwed into. Abutments come in various shapes, materials, and serve different functions. They can be customized and designed to be the foundations for crowns and bridges. They can also be precision foundations that a hybrid denture can be screwed into. They also can be designed to snap a denture to in order to provide stability and a much more secure fit.

Dental Implant Facts

- It has been estimated that 68% of Americans age 35-45 have at least one missing tooth, and one in four over the age of 75 have lost ALL their natural teeth

- Ancient dental implants have been traced back to around 600 AD, when tooth-like pieces of shell were hammered into the jaw of a Mayan woman. Thank goodness for modern dentistry!

- Just like Rockets, dental implants are primarily made of Titanium!

- Dental implants are the only dental restoration option that preserves and stimulates natural bone, actually helping to stimulate bone growth and prevent bone loss.
Dental Implants can be used to replace from 1 to all of a person’s missing teeth. The implant itself doesn’t actually replace the tooth. Rather, it serves to support the replacement just like the original tooth root did. It can be used to support crowns, bridges, and modified versions of dentures by either snapping them in or actually screwing them down where they are not removable!

The following options that I will describe are all basically tools. These tools accomplish the end result which is getting teeth where teeth have had to be extracted. Ideally, the end result will allow the patient to chew normally, smile confidently, and not have any pain when doing either. Whether a patient is missing one or all of the teeth in an arch, there are several options to replace them.

Tool #1
Full Denture

A Full Denture is the simplest and cheapest way to replace a whole set of teeth. For an upper denture, this denture will generate some suction created by the flanges (extensions of acrylic up between the gums and cheeks) and the thick acrylic that covers the entire palate (roof of the mouth). A lower denture rarely creates suction and usually requires the patient to use some kind of denture adhesive to help hold it in place. The flanges of the lower go between the ridge (ridge of gums and bone) and cheek and also between the ridge and tongue. Chewing pressure on dentures is transmitted directly to the gums and bone of the jaws. Anything sticky or chewy will cause dentures to lift up which can allow the food to wedge under the dentures. This lifting and forcing back down during chewing can rub the gums causing sore spots. It will also cause the bone under it to resorb or dissolve. The amount of force that a full set of dentures can generate while chewing has been calculated to be only around 10%-15% of the original chewing force that the teeth had when healthy.
When a single or several teeth are missing, patients have several options for replacement. These options depend on how many teeth are missing, the location of the missing teeth in the mouth, and what opposes the spaces left by the missing teeth. One option that is always available is to not replace the missing tooth (teeth). The aftermath of this choice generally leads to the resorption (loss) of jaw bone where the teeth were, drifting of the teeth from above and around the space(s), and accelerated wear and tear on the remaining teeth. Fixing these problems after they have occurred almost always involves more complicated and expensive procedures than would have been needed had the teeth been replaced when originally removed.

A Removable Partial Denture is another option to replace a group of teeth. A ”partial” is a set of plastic teeth embedded in acrylic much like a full denture. The partial however has a metal frame that runs along either the roof of the mouth or on the tongue side of the lower teeth. The frame’s purpose is to hold the teeth, to create some resistance to downward forces by resting on grooves ground into the top of some other remaining teeth, and to grab onto other teeth using metal clasps or hooks that wrap around remaining teeth. Partials are a little more stable than full dentures, but they still move when chewed on. This movement is transferred to the anchor teeth and can cause them to become loose. This movement can also rub and cause sore spots. They also tend to trap food between the frame and teeth which can cause further cavities on the anchor teeth. The only good thing about a partial is that it can replace numerous teeth in several areas with just the one appliance. For this reason, we occasionally use partials as temporary replacements while better options are underway.
A Fixed Bridge is utilized when 1 or 2 teeth are missing and there are good anchor teeth in front of and behind the space. A bridge is a 1 piece restoration that fits over the anchor teeth after they are prepared (shaped) for a crown. A bridge is an acceptable restoration when the anchor teeth are already in need of crowns. It can be considered a "2 birds, 1 stone" solution when crowns are needed and a missing tooth is present. It’s not without it’s drawbacks though. Cleaning under a bridge is much more difficult than cleaning individual teeth. Floss must be threaded under the bridge to clean the adjacent surfaces of the anchor teeth. This is the most common area to develop decay and why most bridges go bad. When this happens, the tooth that gets the cavity is often beyond repair. Now this patient needs to replace 2 teeth and there isn’t another anchor tooth to use for another bridge. Like the previous removable options that were mentioned, the area under the bridge where the tooth was lost will also lose bone both horizontally and vertically, causing a space to form under the bridge.

When the potential anchor teeth are healthy, and are not in need of a crown, this can involve "crowning" these teeth when in reality, they probably shouldn’t ever need any dentistry in their lifetime. This sets them up for the problems mentioned above, where if left alone, they wouldn’t face these bad outcomes.

“I used to constantly trap food under my bridge. With my single implant and crown, it’s just like I have my original tooth back. Thanks, Dr. Lynch!”

~Mary B.
The Fixed Hybrid Denture

Dentures can be improved significantly by connecting them to implants. The implant connection can be a snap (still removable) or screwed in (called a Fixed Hybrid). The implant connection keeps the dentures from lifting up and also resists the downward force of chewing. In these cases, the more implants that the denture is connected to, the more secure and stable the teeth will be.

The Fixed Hybrid Denture is what is commonly referred to when people talk about “Teeth in a Day.” This process usually involves a series of appointments prior to actually delivering the new teeth. First, the future implant positions, sizes, and angulations are pre-determined based on a 3-D CAT scan. The new “Fixed Provisional Hybrid” teeth (temporary healing teeth) are also pre-designed and made from this scan. Then, while comfortably sleeping under the care of our Board Certified Anesthesiologist, all of the patient’s old teeth are removed, the implants are placed, and the new “healing” teeth are screwed in the same day! After several months of wear, the new permanent teeth are then made and attached giving a stable, secure, natural looking set of new teeth! This can also be done for people with existing regular dentures. What an upgrade!
The Dental Implant is a very versatile tool. Many different attachments can be screwed into it. One such attachment is called a **Locator Overdenture Attachment** which is like a snap. A special abutment (gold part in picture) is screwed into the implant and a snap-cap (blue and silver part in the denture base) is engaged in the denture underside. This allows us to firmly snap down a loose upper or lower denture to the implants which prevents it from lifting up or pushing back down on the gums. We usually use from 2-4 implants to make this work. The denture still needs to be removed to clean around, but it gives the wearer a huge boost of security and confidence, chewing ability, and comfort. This can also allow us to make an upper denture without all of the thick acrylic that covers the palate! We can also use a Locator attachment to snap a Removable Partial Denture into which can eliminate the need for the clasps that wrap around the teeth.
Tool #6

**Individual Tooth Replacement**

When utilized to replace a missing tooth or teeth, the Dental Implant acts to replace the missing tooth root(s). It supports the other parts, the abutment and crown, just like the original tooth root did. This is done without attaching to the neighboring teeth. The dental implant actually causes the bone that it’s attached to to get stronger after the loss of the tooth. It will act to stabilize the neighboring teeth unlike all other options which weaken them. Also, because the implant supported teeth are individual and not connected to any other teeth, cleaning the implant crown and the other teeth is as easy as it was before the tooth was lost. And yes, it is still important to clean the implant supported tooth. Though it can’t decay, the gums around it will still be susceptible to the bacteria that causes gum disease.
Sometimes, we’ll use a couple implants to support a Fixed Bridge. Similar to when teeth are the foundations, the implants are located on the edges of a 3 or 4 tooth gap (actually turns back into a 1-2 tooth gap since the implants themselves replace 2 of the missing teeth), and a single bridge is supported by them. This is frequently done when the lower 4 front teeth (incisors) are the only ones missing. Though this still requires special attention to cleaning under it, unlike regular teeth, further decay is not a problem here.

“With my implant Bridge, I can (once again) eat apples and corn on the cob. Thanks Dr. Lynch!

~Ben R.
Diagnosis and Treatment Planning

The diagnosis and planning stage of Implant Dentistry is very important. The Dr. must take many things into consideration in order to get the best results. We must know information about the bone, the gum tissue, the neighboring teeth both next to and above, and any oral habits such as grinding in order to properly plan the case.

Some of the most important information is gathered using what’s called a CBCT, or a dental CAT scan. This unit, which McKinney Dentist has on site, allows us to see the teeth, bone, and vital structures in accurate 3D. This lets us know how wide and tall the bone is where the implant needs to go. It will also show us things like major nerves, sinuses, and other tooth roots that will affect the implant placement process.

Sometimes, when replacing several or all of a patient’s missing teeth using implants, our in-house lab technicians will make a device called a scan guide. This is a device that the patient wears in their mouth when taking the CAT scan. It shows us on the scan where the new teeth will be positioned relative to where the underlying bone is. This is needed to determine implant position and angulation. Our computer software allows the Dr. to virtually place the implants, and pre-select the exact size and shape of the implant to be used before the implant surgery!

We also use things like intra-oral and extra-oral photographs of all of the teeth, plaster models of the teeth, and detailed gum and pocket measurements to make sure no detail is missed.

After reviewing all of the information gathered, the Dr. and his team will review the findings with you and discuss the best way to get you the best result possible. This is often done in a separate consultation from the fact gathering appointment. This is your chance to ask questions so you can fully understand the process. We want you to know what to expect as far as procedures, appointment time and time between appointments, the number of appointments to expect, and of course the costs involved in the entire process. We believe a well educated patient is best able to make the best decisions for their dental health and we’re there to help you do that!
Am I A Candidate?

This is probably one of the most frequently asked questions. The answer is almost always YES!!!

We find that many patients have been told that they aren’t candidates because they need some kind of bone grafting in order to create enough jaw bone width or height to place the implant properly. At Mckinneydentist.com, this isn’t a problem. It’s something we do all the time. We utilize growth factors that your own body makes to help the grafting process. We concentrate these growth factors at the beginning of the appointment and utilize them to help healing of the bone and gum grafts.

If you’ve ever been told that you couldn’t have implants because your bone is too thin, we may have a different answer for you! If you’re suffering with loose fitting dentures or have gaps that cause difficulty chewing or keep you from smiling because you’ve been told you’re “not a candidate,” you might be in luck!

Now I must say that not everyone is a candidate. If you have certain medical conditions like uncontrolled diabetes, severe bleeding disorders and very high blood pressure, the process isn’t safe for you. Also, some medications used to treat cancer create healing problems that we can’t overcome.
How are implants placed?

The basic procedure to place an Implant involves preparing the location that the implant will go and gently inserting it into the site.

#1 - At the time of the extraction.

When a tooth being removed is going to be replaced with an implant, most of the time the implant will be placed into the tooth socket at the same time. After the tooth is removed in a way that preserves the surrounding bone, the socket is prepared for the pre-determined sized implant to securely engage in the remaining bone. A bone preserving graft will be done that’s mixed with growth factors concentrated from your blood. This fills the remaining root socket where the implant doesn’t go. Then a barrier will be placed to protect the implant and graft. The bone will grow to the surface of the implant and it will be ready to build a crown on in about 3-4 months.

If the bad tooth has left a socket with damaged or missing bone, sometimes we’ll use a titanium barrier to cover the implant and bone graft. This provides protection for the graft and implant while it heals.

#2 - After the tooth has been gone.

When the tooth has been gone and the bone is wide enough to receive the implant without a bone graft, the implant can often be placed without making an incision or reflecting the gum tissue. A small punch is used to access the bone under the gums. The implant site is gently prepared and the implant is placed into the site. This is done with numbing and feels a little like getting a filling with only slight vibration being noticeable.

If the bone is too thin for the implant to be properly positioned and still be completely surrounded by bone, grafting will be needed. The amount of grafting necessary will determine if the implant can be placed at the same time the grafting is done. Sometimes it can go in and the exposed part of the implant can be covered with a graft. Other times, the graft is done by itself and allowed to heal before the implant can be placed.
#3 - Single Stage vs. Two Stage

A single stage procedure refers to leaving the head of the "healing cap" exposed in the mouth. The healing cap is a screw that goes into the top of the implant and forms the collar of gum tissue that the new tooth will emerge through. This is often done when the implant is securely placed in good bone and no grafting is needed and sometimes when the implant is immediately placed in conjunction with the tooth’s extraction. This implant will be ready to take impressions of with no further procedures, thus the term "single stage".

A two stage procedure refers to placing the implant under the gums and allowing them to heal over the top of the implant. This is done when the implant doesn’t have a lot of bone to engage to and when significant grafting takes place in conjunction with the implant placement. After the implant has had a chance to integrate with the bone, it is exposed and an impression can then be taken and a healing cap will be placed.

Does getting an Implant hurt?

The amount of pain associated with Implant placement varies from patient to patient. As far as the procedures go, the area being treated will be numbed to the point that there should be no pain at that time. We use long acting anesthetics and use appropriate pain medications to control post operative pain before it starts hurting. Usually, the extraction portion of the procedure will have the most discomfort, with each progressing procedure getting easier.
The total cost of Implant supported replacement of missing teeth varies from patient to patient. Over the life of Implant supported teeth, they provide better chewing, better appearance, and much better durability than any of the other replacement options. For example, a fixed bridge might last 8-15 years. Sometimes it can then be replaced with another bridge when it wears out or decays, but it then exceeds the cost of the original Implant option which should last much longer and not have the "collateral damage" that a bridge can cause.

Can you connect a dental implant to a tooth with a bridge?
Though some dentists will try to do this, the long term results will end with both the implant and the tooth losing bone. The tooth attaches to the bone with an elastic-like fiber called the periodontal ligament. This acts like a shock absorber and allows the tooth to move. The implant doesn’t have this ligament and is rigidly attached to the bone. No movement at all. The combination of the mobile tooth and immobile implant causes bone loss around both.

How much does it Cost?

“The ability for me to go out in public and never worry about my teeth slipping or falling out is priceless ...
... my only regret is that I didn’t do it sooner. Thank you McKinney Dentist and Dr. Lynch for giving my smile and my life back”
Robin P. McKinney
What if my sinus is in the way and the bone is too thin?

The maxillary sinus is an air filled space on either side of the nasal cavity. Often the sinus drops down leaving a layer of bone which isn’t thick enough for an implant to be placed. In these cases a sinus lift is done. The sinus is lined by a sinus membrane very similar to the lining of your nasal cavity. When there is enough bone to place the implant and obtain some initial stability, the Dr. prepares the implant site for the implant and stops right below the bottom of the sinus. Then the sinus membrane is gently pushed up or lifted, and the space between it and the upper jaw bone will be filled with a bone mineral graft. The implant will be placed into it and the gums will be sutured over the top of the implant. When the bone is very thin between the mouth and the sinus, the Dr. will open a “window” in the side of the sinus and lift the sinus membrane from the side “trap door” window. The implant will be placed several months later in the newly formed thick bone.

What is the bone graft material made of?

When doing bone grafts, we use several different materials depending on the needs of the procedure. All of the graft materials we use eventually turn into the patients own bone. Some convert quickly while others convert more slowly. In almost all of our bone grafting situations, we utilize the patients own growth factors mixed into the grafts. These help speed healing and promote more rapid vascularization (blood vessel growth).

Often, we use the patients own bone. This can be gathered from the implant site itself, or from a donor site which is usually from a lower wisdom tooth area. This bone is the best and will convert into new bone quickly. However, it’s not great for maintaining its shape in areas where we are trying to build new bulk.

We also use human cadaver bone mineral graft. This graft material is the calcium containing mineralized portion of human bone. The bone is freeze dried and treated to remove any parts that made it unique to the donor. This means there no chance of disease transmission or rejection like that of a donated organ. The other material is similar to the human bone graft but it’s from a cow instead. This type of bone is used when we need to provide a slower conversion to the patients own bone and when we need to maintain shape. This is what we use most of the time when we place the implant at the same time that we extract the tooth.
If you or someone you know are missing teeth, would like a new smile, a more stable bite, or just simply have questions about implants, we’d love to meet with you.

We’d also like to offer you a “no-charge” exam, consultation, and 3D Cat Scan.

(This is a $500 value)

Call Today - 972-547-6453

Feel free to contact us at dentalimplants@mckinneydentist.com

Please click on the video below to hear from one of our patients who has benefitted from implants

mckinneydentist.com