



502 Jefferson Highway N.  
Champlin, MN 55316  
763 427-1311  
[www.moffitrestoratedentistry.com](http://www.moffitrestoratedentistry.com)

## UNDERSTANDING DENTAL IMPLANTS

### Comfort and Confidence Again

#### NEW TEETH FOR A NEW SMILE

Do you avoid laughing aloud, smiling, or eating in public because your denture may slip or a space left by missing teeth may show? If so, dental implants may improve the way you feel about your teeth. No matter how many teeth you're missing, dental implants may make it possible for you to eat and speak with comfort and confidence again.

#### When Teeth Are Missing

You may have spaces in your mouth where teeth were lost or removed or never grew in. Although these spaces may be embarrassing, traditional dental restorations aren't always the best solution. You may not want to sacrifice the structure of surrounding good teeth to bridge a space. Or, removing a complete or partial denture at night may be inconvenient. Added to this is the discomfort and possible embarrassment caused by a denture that slips.



#### Consider Dental Implants

If you want a dental restoration that looks and feels as though it's really part of your mouth, dental implants may be right for you. Used successfully for many years, dental implants anchor **prosthetic** (artificial) teeth into your jawbone to provide a secure, stable fit. Implants can meet your individual needs whether you're missing all, a few, or only one of your teeth.

#### Working Together

Your dental implants may be positioned and your **prosthesis** (artificial teeth) constructed by one or more dentists. Your **surgical specialist** (an oral surgeon or periodontist) prepares your jaw and places the implants, which will hold your new teeth in place. Then your **restorative dentist, Dr. Moffitt**, (a prosthodontist or general dentist) makes your prosthesis. Your commitment, both during and after the implant

process, is also important. For the best long-term results, you'll need to have regular checkups and practice good oral hygiene.

### Are Implants for You?

Dental implants can improve the quality of life for many people, but they aren't for everyone. Use the checklist below to help determine how you feel about your dental health. The more boxes you check, the more likely it is that dental implants will be a good choice for you.

#### **How Your Mouth Feels**

- Do complete or partial dentures cause discomfort when you eat?
- Do you wear a denture that slips or fits badly?
- Are the teeth holding your bridge loosening or moving?

#### **How you Feel About Your Teeth**

- Are you embarrassed about missing teeth or dentures when you smile or laugh?
- If you have a complete or partial denture, do you sometimes carry it in your pocket or leave it at home?

#### **Your Commitment to Dental Implants**

- Can you wait three to nine months for the entire implant process to be completed?
- Are you willing to spend extra time caring for your dental implants?
- Will you follow up with regular dental checkups?

## **YOUR DENTAL EVALUATION**

Knowing your dental history helps decide if you're a good candidate for implants. A dental exam and tests help determine where the implants should be anchored in your jaw. After developing a treatment plan, we will present you with the information you'll need to decide if implants are right for you.

### Your Dental and Medical History

We are likely to ask why you want dental implants. What results do you expect? If you wear a denture, you may be asked how it fits and if it causes you pain. It is also important for us to know if you have any medical conditions, such as diabetes or bleeding problems. You also may be asked if you smoke or take certain medications, two things that can slow healing.

### Your Dental Exam

The structure and health of your mouth, jaws, head, and neck will be examined to achieve a baseline of your anatomy. The shape of your mouth and **bite** (the way your teeth meet when you chew) will also be studied at this time. We also makes **models** (plaster molds) of your upper and lower jaws to reveal their exact alignment. If you wear a complete or partial denture, we may also evaluate the way it fits in your mouth.

### Diagnostic Tests

X-rays and other types of imaging tests provide information on the health of your teeth and jaws. A **panographic x-ray** provides a view of your entire mouth and can indicate bone problems. Scans produced by **x-ray tomography** may help us determine whether or not you have enough jawbone to support a dental implant. If you have an ongoing medical condition, such as diabetes you may also have blood tests to make sure your condition is under control before treatment begins.

### Your Treatment Plan

After the evaluation, Dr. Moffitt will discuss a treatment plan with you. If dental implants are likely to work for you, the overall cost and time frame for the procedure are outlined. You'll also be told about any dental work or special surgical procedures you may need before the implant process can begin.

### **Special Surgical Procedures**

If your mouth isn't ideal for dental implants, your Dr. Moffitt may suggest ways of improving the outcome.

Bone Graft	If your jawbone is not big enough to hold the implant, bone grafting may increase jaw height or width. Bone may be taken from other areas of your jaw or from your hip. After the new bone is packed around your jaw, the gum is closed and the bone begins fusing with your jaw.
Tissue Regeneration	To encourage proper healing after a bone graft, an artificial membrane may be placed along the bone edge. This membrane slows soft tissue growth, giving the new bone time to fuse with your jaw.
Sinus Lift	If your upper jaw ridge is too low, the implant may puncture the sinus cavity. This can be avoided by lifting the sinus membrane and adding height to your jaw with a bone graft.

### Risks and Complications

The possible risks and complications of dental implants include the following:

- Bleeding, infection, numbness, or injury to nearby muscles
- Injury to a nearby sinus cavity
- Incomplete healing of the bone around the implant, leading to implant failure

### You Have Alternatives

If dental implants aren't right for you now, consider your alternatives. You can keep your current prosthesis as it is or have it adjusted for a better fit. Or, you can have a new prosthesis made. If you're missing only one tooth, a bridge may be a good option.

## ANATOMY OF DENTAL IMPLANTS

Dental implants work by mimicking the structure of natural teeth, so the condition of your mouth can affect the success of your implant procedure. Like natural teeth, most dental implants are secured in the jawbone. If your mouth is healthy, you're likely to be a good candidate for dental implants.

### A Healthy Mouth for the Best Results

Your upper and lower jaws provide support and structure for your teeth and face. If you have enough healthy jawbone, you may be a good candidate for dental implants. The bone should be high and wide enough for the implant to fit. Your jaw should also have enough hard bone surrounding its soft center (**marrow**) to hold the implant securely. Healthy gums help protect your jawbone from infection by healing tightly around the implant.



**The upper jaw** is a less common site for dental implants because traditional dentures usually fit well here.



**The maxillary sinus** is above the upper jawbone and may be near the area where implants are placed.



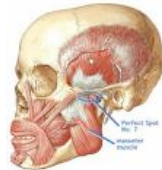
**The lower jaw** is the more common site for dental implants because traditional dentures often fit poorly here.



**The crest of the jaw ridge** is where your natural teeth were embedded and where the implants will be placed.



**Nerves** give feeling to the lips and the inside of the mouth. Nerves may be near the area where implants are placed.



**Muscles** allow you to move your jaws, speak, and make facial expressions. Implants may be placed near muscles.

### Implants Are Like Teeth

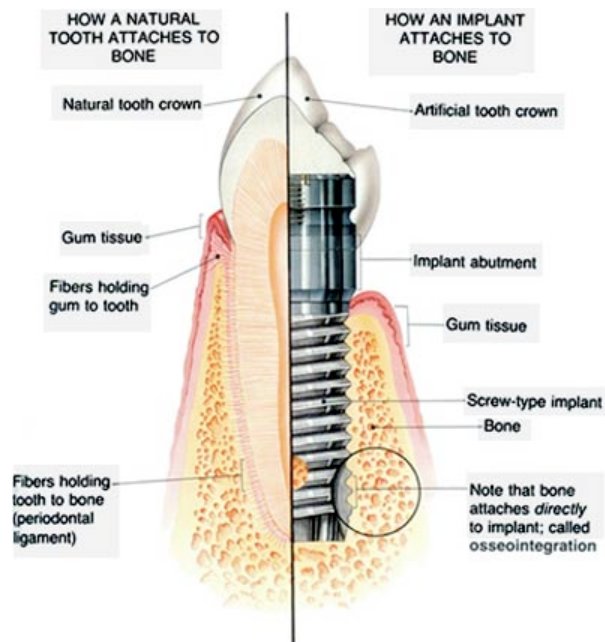
Your natural teeth are stable biting and chewing surfaces because they are supported by your jawbone. This will also be true of your dental implant. Successful dental implants become firmly embedded in the jaw, providing a chewing surface almost as secure as that of natural teeth.

### Roots Hold Crowns

The crowns of your natural teeth are held in place by roots. Roots not only secure your crowns, they also help keep your jaws healthy by stimulating the growth of new bone. This provides good support for your teeth.

### Implants Hold a Prosthesis

The prosthesis is held in place by implants, which are usually made of titanium. Because this metal is well accepted by the body, titanium implants rarely cause reactions. Like the roots of natural teeth, implants also stimulate new bone growth in your jaw.



### Implants Have Different Shapes

An implant may be threaded like a screw or may be cylindrical in shape with a slightly rough or textured surface. Implants often have small holes at their lower ends. Over time, bone grows into these surface irregularities (osseointegration), locking the implant in place.

## **A PROsthESIS TO FIT YOUR NEEDS**

Using dental implants, a new prosthesis can be made to fit your individual needs. No matter how many teeth are being replaced, the basic process is the same only the number of implants changes. If you are replacing a complete set of teeth, though, you may have the option of either a removable or fixed prosthesis.

### Types of Protheses

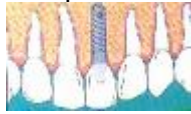
Depending on your needs, a prosthesis can replace one or more teeth. The number of implants you'll need depends on whether you're having a partial, complete denture, or single prosthesis made. The more teeth being replaced, the more implants your prosthesis requires. These implants are placed to follow the shape of your jaw.



- **Partial Prosthesis** - This type of prosthesis can replace two or more teeth. It is the most commonly performed implant procedure, and may require only two or three implants.



- **Complete Denture Prosthesis** - This type of prosthesis replaces all the teeth in your upper or lower jaw. The number of implants varies, depending on the type of prosthesis you choose.



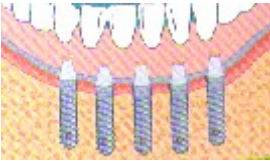
- **Single Prosthesis** - This type of prosthesis is used to replace one or two missing teeth. Each prosthetic tooth attaches to its own implant.

### Choosing a Complete Denture Prosthesis

A prosthesis that is used to replace a complete set of teeth may be **removable** or **fixed**. You and Dr. Moffitt may discuss which option is best for you. With a removable prosthesis, you can take your teeth out of your mouth to make cleaning easier. With a fixed prosthesis, your new teeth can only be taken out by a dentist. In some cases, a fixed prosthesis may offer increased stability for more effective chewing.



With a **removable** prosthesis, your new teeth can be joined to the abutments by a connecting device, such as a clip bar. This type of prosthesis may use two to four implants per jaw.



With a **fixed** prosthesis, your new teeth are fitted to a metal frame, which is then secured to the abutments. A fixed prosthesis may use five to six implants, which are placed to follow the contour of your jaw.

### The Implant Process

The implant process is a three-step procedure. The first two steps are surgical. The third step involves making and attaching your new teeth.

- During your first surgery, the implants are placed.



- During your second surgery, the abutments are attached.



- During the last step, your new prosthesis is attached.



## **YOUR FIRST SURGERY**

During your first surgery, the implants are placed in your jawbone. Much of the success of the entire implant process depends on how tightly your jawbone grows around the implants (osseointegration). You can help the implants “take hold” by avoiding pressure on your jaw and by keeping your gums and teeth especially clean over the next three to six months.

### Preparing for Surgery

Most dental implant surgeries are performed in a dental office. Be sure to wear comfortable clothes and arrange for a family member or friend to drive you home. Depending on the type of anesthesia used, you may be told not to eat or drink for several hours before your appointment. Before surgery, you may be asked to take oral antibiotics, brush your teeth, and rinse with an antiseptic mouthwash to help prevent infection.

### During Surgery

You may have medication to help you relax or to make you sleepy. Then, you’ll be given an anesthetic to numb the area where your surgical specialist will be working. You may hear sounds or feel vibrations during the surgery. If you are uncomfortable at any time, tell us. The entire procedure may take a couple of hours.

- Making the Incision – A small opening is made in your gum, exposing the jawbone. This incision will be stitched closed after the implant is in position.
- Preparing the Bone – A precise hole is slowly and gently drilled into the bone. The hole is deep and wide enough to hold the implant.
- Placing the Implant – The implant is twisted or gently tapped into position. Then a temporary cap is placed over the implant and the gum incision is closed.

### After Surgery

After surgery, you'll probably rest awhile, bite on gauze to stop any minor bleeding, and hold a cold pack to your face to reduce swelling. You can go home as soon as you feel able. At home, follow your aftercare instructions about taking pain medications and antibiotics. Drink only clear liquids for the rest of the day. By the next morning, you may be able to eat soft foods.

### **Caring for Your Mouth**

Use a soft-bristled brush to clean both your teeth and gums. Be sure to follow any special instructions on cleaning near your incisions. To aid healing, you may be asked not to wear your complete or partial denture for the next several days.



Use a small, soft toothbrush to gently clean the area near your incisions.

### **When to Call Your Surgical Specialist**

Call your specialist if you have any of these signs:

- Extreme swelling near your jaws or under your tongue
- Fever or ongoing bleeding
- Pain in your jaws, mouth, or sinuses that isn't relieved by your prescribed medication.

### Follow-up Care

Over the next several months your mouth will be routinely monitored and examined for how well your jaw is healing. If you wear a complete or partial denture, Dr. Moffitt will place a new lining in it so you can wear it during the rest of the healing process.



## **YOUR SECOND SURGERY**

You're ready for your second surgery when your jawbone has firmly healed around the implants, usually three to six months after placement. This procedure attaches the abutments that join the implants and the prosthesis. In some cases, a temporary

abutment is set into position, and a permanent abutment replaces the temporary abutment later.

### During Surgery

You'll be given an anesthetic to numb the area where your surgical specialist will be working. Temporary abutments may be used if swelling in your gums needs to go down before an appropriate, permanent abutment can be attached. The second surgery is usually shorter than the first, often lasting no more than an hour.



### **Exposing the Implant**

A small incision is made in the gum, exposing the top of the implant. The temporary cap is removed.

### **Attaching the Abutment**

The abutment is twisted into the implant.

### **The Abutment in Place**

In most cases, a permanent abutment is placed at this time.

### After Surgery

After surgery, you'll rest and bite on gauze to stop any minor bleeding. You may be given a prescription for pain medication and scheduled for a follow-up visit. Follow your aftercare instructions about when to begin cleaning your abutments. Gently cleaning around the base of each abutment helps prevent infection.



### **When to Call Your Surgical Specialist**

Call your specialist if you have any of these signs:

- Extreme swelling
- Fever or bleeding
- Pain in your mouth, jaws, or sinuses that isn't relieved by your prescribed medication

## MAKING YOUR NEW TEETH

Dr. Moffitt begins making your prosthesis when your gums have healed around the abutments, usually two to four weeks after surgery. Several visits may be spent analyzing the new structure of your mouth. Then, it may take several more weeks or months to create the prosthesis.

### Forming Your Prosthesis

First, we will make impressions (molds of your teeth, abutments, and jaws) and bite registrations (imprints of how your teeth fit together). Then, these molds are used to create a model of your mouth. Your new prosthesis will be built from this model.



### **The Prosthesis in Place**

The prosthesis is attached to the abutment with a screw.

### Fitting Your Prosthesis

You'll have several "trial fits" before the prosthesis is finally attached to the abutments. With a fixed prosthesis, this fitting process may take a little longer. Once the prosthesis is in your mouth, Dr. Moffitt will make any final adjustments necessary to provide you with a pain-free, stable bite. You may be told to avoid eating hard or crunchy foods for a few weeks after your prosthesis is in place.

### **When to Call Your Restorative Dentist**

Call our office if you have any of these problems:

- You have pain in your jaws.
- Your bite feels wrong.
- The implant feels loose.
- The prosthesis feels loose, chips, or breaks.

## CARING FOR YOUR NEW TEETH

Once your dental implant is in place, you can chew in comfort and smile with confidence again. Your new teeth can serve you well for many years if you keep your mouth healthy and take care of your implants. This means taking the time to clean all your teeth regularly and keeping appointments with your dental specialists.

### Brushing Your Teeth

Brush your teeth, prosthesis, and abutments after every meal and at bedtime. You can keep your whole mouth healthier by brushing your gumline, especially around the abutments.

## **Fixed Prosthesis**



Brush your fixed prosthesis as thoroughly as you brush your teeth.



Brush the back of your prosthesis and the abutments.

### Removable Prosthesis



Remove your prosthesis and brush it both inside and out.



Brush your gums and abutments while the prosthesis is removed.

### Flossing Your Teeth

With dental implants, flossing is needed to clean areas your tooth brush can't reach. Floss between your teeth and behind your prosthesis at least once a day. For best results, floss up and down along the length of the abutment.

### Fixed Prosthesis



Floss the abutments from the front, sides, and back.

### Removable Prosthesis



Floss around the abutments while the prosthesis is out of your mouth.

### Special Cleaning Aids

Dental implants create many hard-to-reach surfaces in your mouth. Try **foam-coated floss**, an **interdental brush**, or a **rotary toothbrush** to make cleaning easier. Our dental team can show you the right way to use each of these cleaning aids.

### Ongoing Dental Care

Your prosthesis should be checked once or twice a year to clean the abutments and make any needed repairs. At least once a year, have the stability of your implants and the health of your jaws and gums assessed by Dr. Moffitt.

### Feeling Secure Again

Once Dr. Moffitt is certain that your prosthesis is stable, you'll be able to eat almost anything you want. But to keep from damaging your prosthesis, don't chew on ice, popcorn kernels, or other hard objects.

### **A WINNING SMILE**

It takes time and commitment to make dental implants successful. Dr. Moffitt and his dental team provide their expertise and careful attention to detail. Add to this your dedication to good oral hygiene and regularly scheduled follow-up care and, together, you have the makings of a winning smile.

