

IMPLANT DENTISTRY



Comfort and Confidence Again

NEW TEETH FOR A NEW SMILE

Wouldn't you like to eat a sandwich knowing your partial or full denture won't slip? Go to sleep each night without removing your teeth? Smile with confidence? Then dental implants may be the solution for you. Dentists have successfully performed dental



When Teeth Are Missing

Several problems can occur when you're missing teeth.

Discomfort. Many people find that their partial or full denture is uncomfortable and rubs against their gums—even to the point where they are unable to wear their denture.

Embarrassment. Gaps where teeth never grew in or were removed can be embarrassing. But many people don't want to have healthy teeth filed down to support bridgework.

Loose dentures. Many people wear dentures to replace teeth removed due to gum disease or tooth decay. Eventually, dentures may slip out in public or become painful.

Considering Dental Implants

Dental implants are an exciting option that has changed the lives of many people. But implants aren't for everyone. Read through this checklist. If you answer "yes" to any of the questions, then dental implants may be a good choice for you.



implants for many years, enabling thousands of people to eat, smile, and speak without worrying about dentures slipping or gaps showing from missing teeth. Whether you're missing one or all of your teeth, you, too, may find that dental implants can give you comfort and confidence again.

Dental Implants: A Time-Tested Solution

In use for many years, dental implants are effective, natural-looking replacements for missing teeth. After a thorough evaluation, your dentist surgically prepares your jaw and makes your **prosthesis** (substitute teeth). Your attention to oral hygiene helps determine the success of your implant.



Your Dental Evaluation

Your dentist does an evaluation to decide whether you're a good candidate for a dental implant, which implant to use, and where in your jaw to place it.



The Implant Process

Having an implant is a three-step process: your dentist performs two surgeries to place the implant into your jawbone and then creates the prosthesis.

Placing the anchors

Attaching the abutments

Creating the new teeth



Caring for Your New Teeth

To keep your implant clean and problem free, you'll need to have routine dental check-ups and pay extra attention to your oral hygiene.

How Your Mouth Feels

- Do you wear a full or partial denture that causes you pain when you eat?
- Do you wear a full or partial denture that fits badly and sometimes slips?
- Are any of your remaining teeth becoming loose or crooked?

How You Feel about Your Teeth

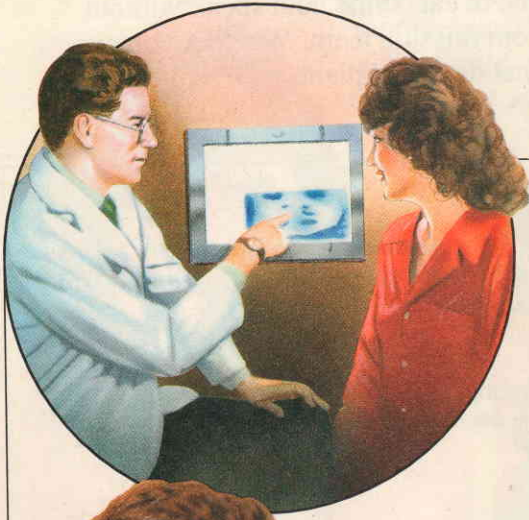
- Are you embarrassed about dentures or missing teeth when you smile or laugh?
- Do problems with a full or partial denture prevent you from eating in public?
- Does wearing dentures keep you from being socially or physically active?

Your Commitment to Dental Care

- Will you spend extra time on oral hygiene for your implant?
- Will you follow up with regularly scheduled dental checkups?
- Can you wait several months to use your implant fully and effectively?

YOUR DENTAL EVALUATION

The evaluation helps your dentist decide whether you're a good candidate for a dental implant and, if you are, which kind of implant to use and where in your jaw to place it. Your dentist gathers informa-



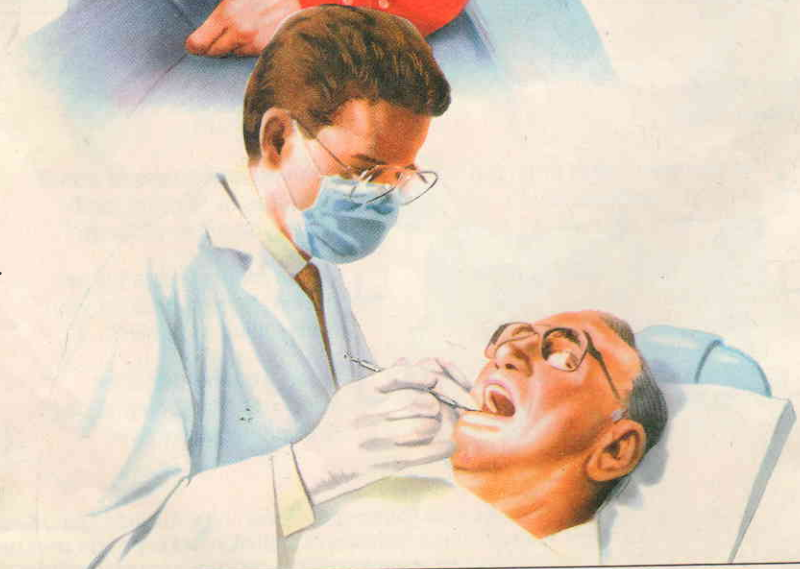
Your Dental and Medical History

To determine whether you're a good candidate for a dental implant, your dentist will ask you questions about your dental and medical history, including questions about pain or sores in your mouth and how well your denture fits, if you wear one. Your dentist may ask why you want the implant and what you expect the results to be. Your dentist also may ask about medical conditions such as diabetes or allergies, whether you take any medications, and about tobacco, alcohol, or drug use. Your dentist may request a consultation with a medical doctor.



Your Dental Examination

Your dentist carefully examines your jaws, mouth, teeth, gums, head, and neck to determine the condition of your jaws and gums. Your dentist also looks at how well your denture fits and your **bite** (the ways your teeth meet when you chew). He or she may take photographs of your mouth and make **models** (replicas of your teeth and jaws) to plan where to place your implant.



tion about your dental and medical history, examines your mouth, and takes x-rays. Then your dentist will discuss the results of your evaluation with you and give you any further information you need to help you decide if you should have a dental implant. Be sure to ask any questions you might have about the implant procedure.

Diagnostic Tests

Tests may include regular dental (**periapical**) x-rays and other tests such as blood tests. Two special x-rays may be done: **panographic x-rays** show a head-on view of your jaws and teeth, while **cephalometric x-rays** give side images of your jaw height and show whether your jaws come together properly.



Panographic x-ray



Making Your Decision

Understand the alternatives to having an implant so you can decide if implants are the best solution for you. Your dentist will discuss these alternatives with you. One is to continue using your regular denture. Or you can have conventional bridgework that will fit more comfortably than your current bridgework. Be sure to ask questions so that you're confident in your choice.

Risks and complications are similar to other surgical procedures and include bleeding or infection. Your dentist will discuss risks specific to your implant, such as sinus problems and numbness from nerve injuries. If the implant fails, it may be removed or redone, fewer anchors may be used, or you may wear a conventional partial or full denture again.

THE ANATOMY OF DENTAL IMPLANTS

The place to start in understanding how a dental implant works is by looking into your mouth. You see jaws, gums, a tongue, perhaps some teeth. . . Look a little more closely at your jaws and gums. They are specially designed to hold your teeth in place. And as long as your jawbone and gums are still relatively healthy, you may be a good candidate for a

The Anatomy of the Mouth

Your dentist assesses the status of your jawbone and gums and locates the nerves and other parts of your mouth that are uniquely placed in each individual.

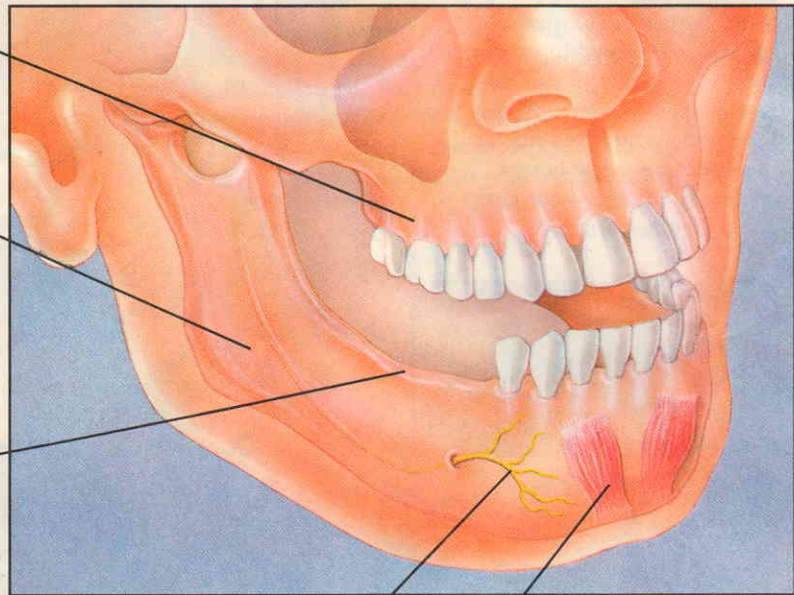
Upper jaw. The upper jaw is not as common a site for dental implants, since regular dentures are more likely to fit the upper jaw.

Lower jaw. The lower jaw is the more common site for dental implants, since more people have problems with lower dentures fitting well. The lower jaw can hold an implant better because of its greater bone density.*

Crest of the ridge. The edge of jawbone covered by your gums is where natural teeth were embedded and the implant will be placed.

Nerves. Some nerves give feeling to the lips and inside of the mouth, while other nerves provide feeling and taste on the tongue.

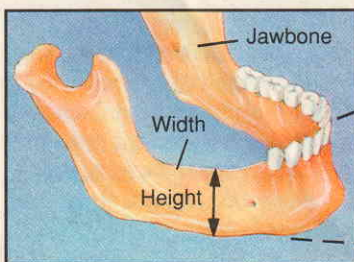
Muscles. The muscles enable your jaws to move, assisting with speech and facial expressions.



You're a Good Candidate If . . .

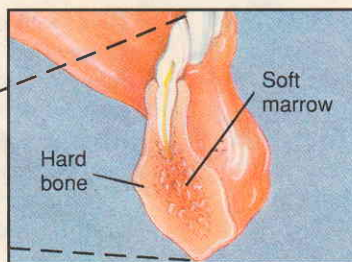
You have enough jawbone.

Your jawbone should be high enough and wide enough for the implant to fit. Sometimes bone grafts can add to bone height and width.



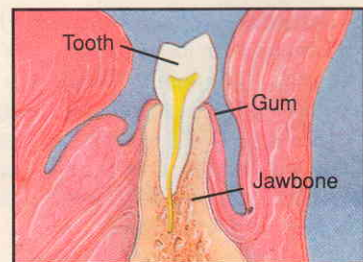
Your jawbone is dense enough.

Your jaw is made of hard bone and soft marrow providing blood for bone growth. Your jaw needs enough hard bone to hold the implant firmly.



Your gums are healthy.

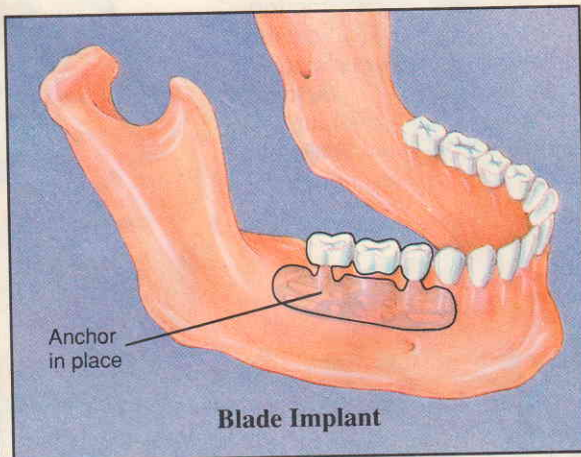
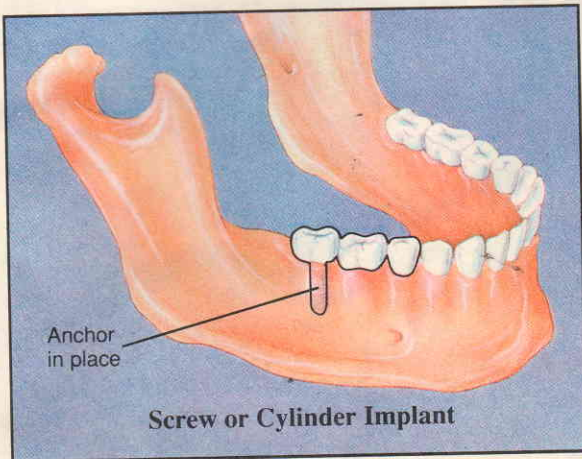
Healthy gums protect your jawbone and remaining teeth from infection. Gums also heal closely around the implant, protecting your implant and jawbone.



dental implant. Several types of implants are currently used, usually made from metal and sometimes coated with a special material to encourage bone growth. Your dentist determines which type of implant is best suited to your needs and follows a three-step process to place the implant into your jaw.

Types of Implants

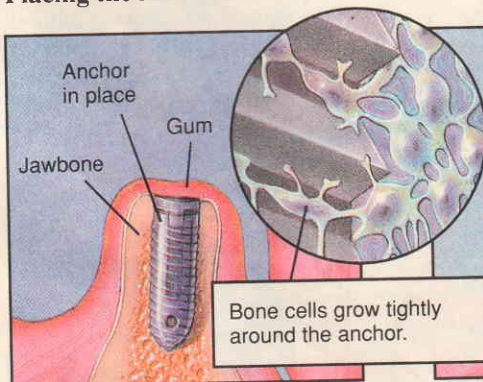
Of the many types of implants currently used, the most common is the **endosteal** (in the bone) implant, which is placed into your jawbone. Screws or cylinders are the most common type of endosteal implant. Blade implants are used when the jawbone is narrow.



The Implant Process

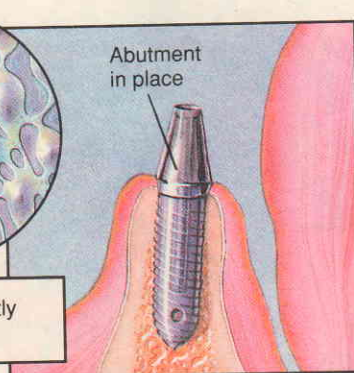
The implant process may take up to three to nine months because of the time needed for your jawbone and gums to grow around the implant and for your new teeth to be made. Procedures vary for each type of implant, but usually include two surgical steps and the restoration.

The First Surgery: Placing the Anchors



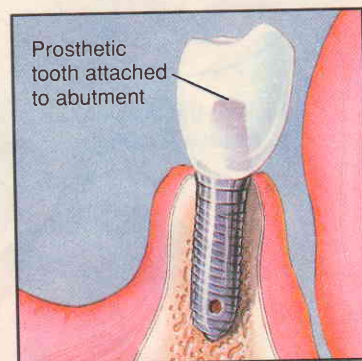
Your dentist places anchors into your jawbone. Then **osseointegration** (bone cells grow closely around the anchor and firmly hold it in place) may take up to six months to occur.

The Second Surgery: Attaching the Abutments



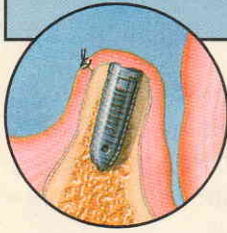
Your dentist attaches **abutments** (small metal pieces) that connect the anchors to the prosthesis. After surgery, the gums heal for a few weeks before the permanent prosthesis is created.

The Restoration: Creating the New Teeth



Your dentist makes the prosthesis and attaches it to the abutments. This usually requires several fittings, so it may take one or two months to complete the restoration process.

YOUR FIRST SURGERY: PLACING THE ANCHORS



During the first surgery, your dentist places **anchors** (screws, cylinders, or blades usually made of the metal titanium) into your jawbone. Much of the success of your dental implant depends on the time after this procedure—up to three to six months—when the anchors osseointegrate, or

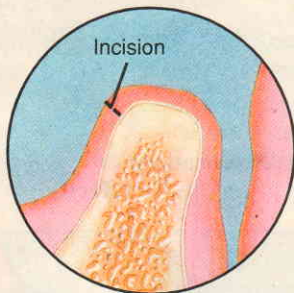
Preparing for Surgery

Your dentist will give you instructions to follow. Your dentist may ask you to wear loose, comfortable clothing and have someone drive you home. Before surgery, your dentist may ask you to help prevent infection by taking oral antibiotics, brushing your teeth, and rinsing with an antiseptic mouthwash.

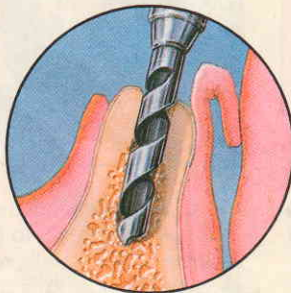


Placing the Anchors

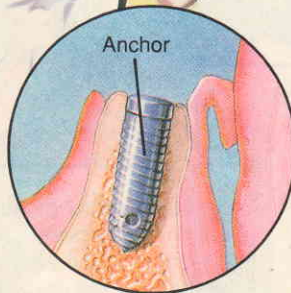
First your dentist may give you a sedative to help you relax and then a local anesthetic so that, while placing the implant, you will not feel any pain. You may hear talking or sounds and vibrations from the dental work. The surgery may take a few hours.



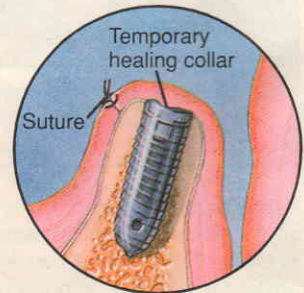
Making the incision to expose the bone



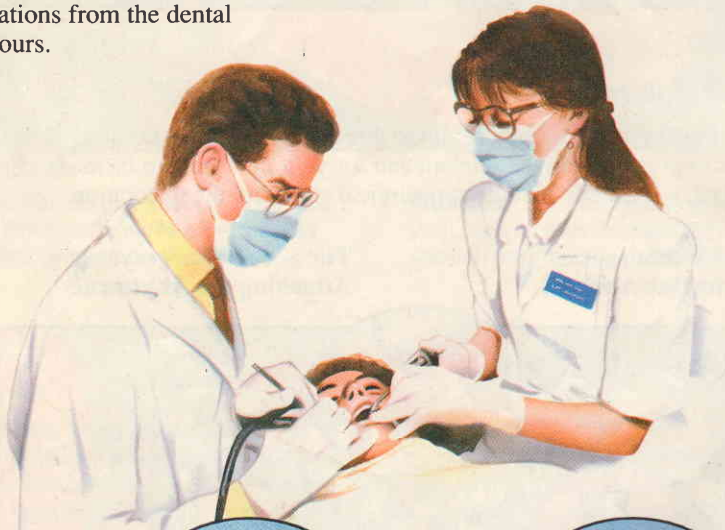
Drilling the hole



Placing the anchor



Covering the anchor and closing the gums



“take hold,” with your jawbone. You can help the anchors osseointegrate by avoiding a lot of pressure on your jaw (such as by only eating soft foods) and by regularly cleaning your gums and remaining teeth. Your patience and self-care during this time is another factor in making your dental implant successful.

After Surgery

Immediately after surgery, you'll rest awhile in your dentist's office. For a short time, you'll bite on gauze to stop bleeding. Your dentist gives you further instructions, a prescription for pain medication, and schedules your follow-up appointment.

Home care prevents infection and aids healing. You should eat a soft diet such as soup or mashed potatoes. If you wear a denture, your dentist will ask you to leave it out until your sutures are removed. The day following the surgery, begin rinsing your mouth with salt water and brushing and flossing your teeth. You may return to your normal activities right away.

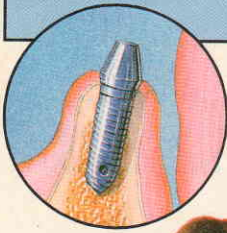
Continued professional care includes routine visits to your dentist to check on healing and osseointegration. You'll return in about a week so your dentist can remove your sutures. If you wear a full or partial denture, your dentist will place a soft lining in your denture to fit your new gum line.



Call Your Dentist If:

- the swelling around your jaws increases;
- you have a fever, bleeding, or numbness; or
- you have pain in your jaws, mouth, or sinuses that is unrelieved by your prescribed pain medication.

YOUR SECOND SURGERY: ATTACHING THE ABU



When osseointegration is complete and the anchors are held firmly in your jawbone, you are ready for the second surgery. During this surgery, your dentist will attach **abutments** (small metal connectors usually made of titanium) that will join the anchors to the prosthesis. These abutments may

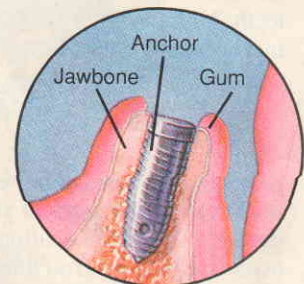
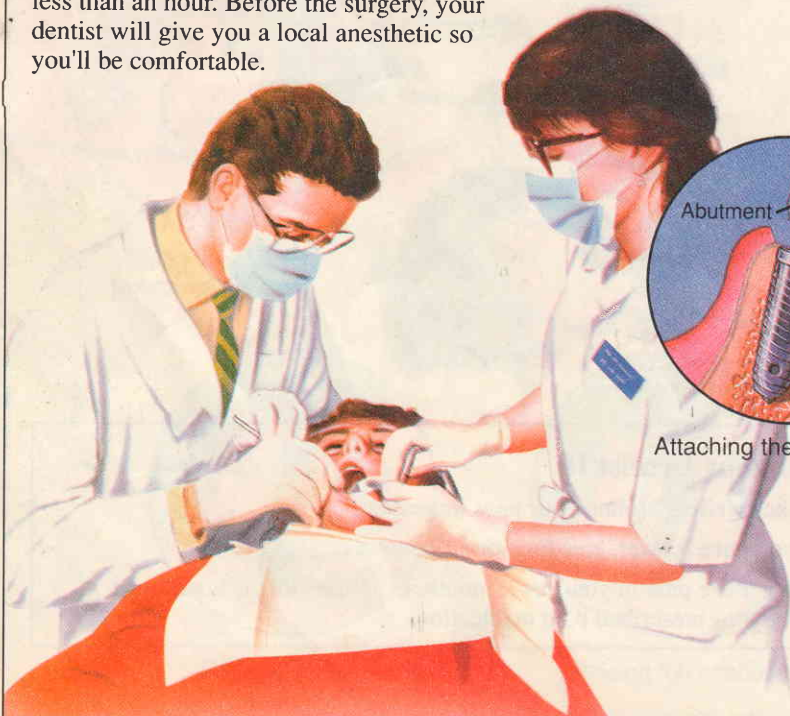


Preparing for Surgery

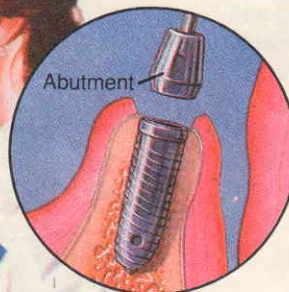
The second surgery is shorter than the first, so there is less preparation. Wear loose, comfortable clothing. Before the surgery, you may be asked to brush your teeth and rinse your mouth with an antiseptic.

Attaching the Abutments

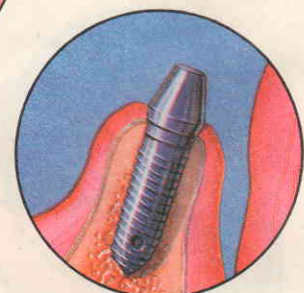
The second surgery is shorter than the first, usually lasting less than an hour. Before the surgery, your dentist will give you a local anesthetic so you'll be comfortable.



Exposing the anchor



Attaching the abutment



Abutment in place

TMENTS

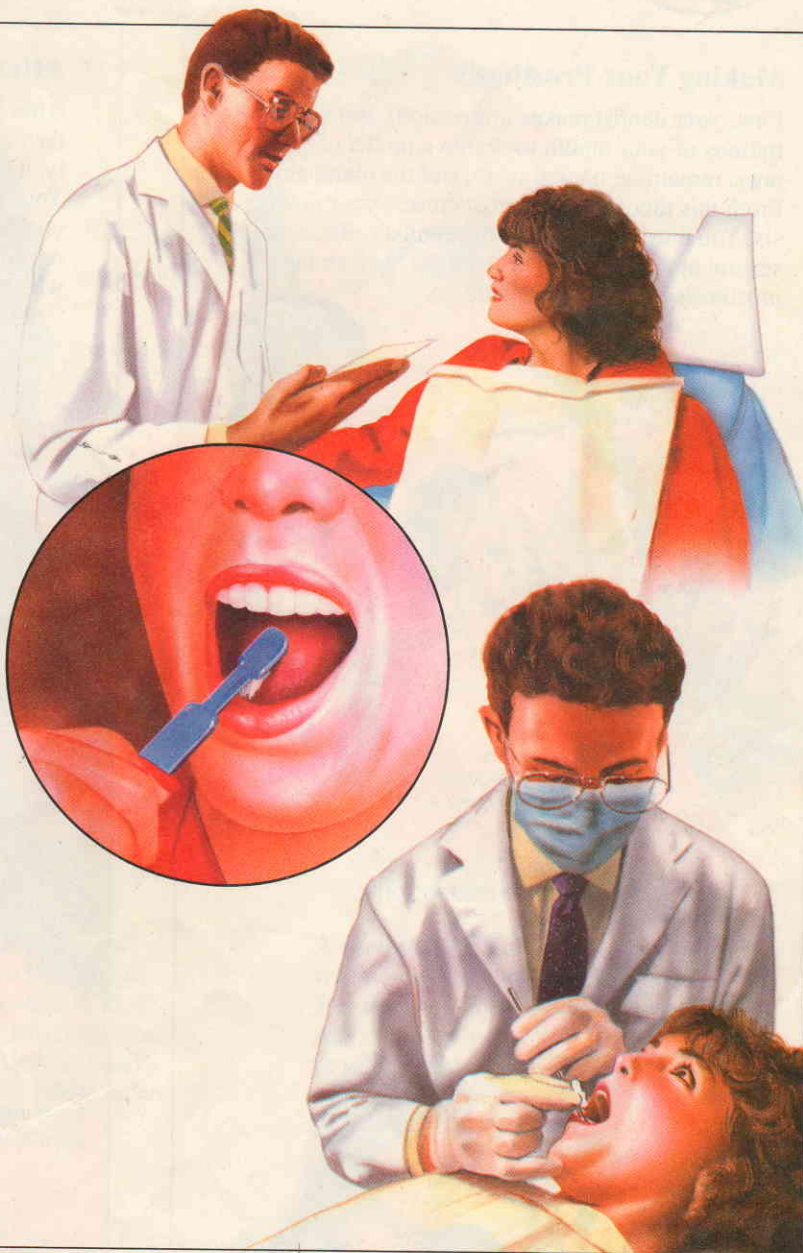
be permanent connectors, or may be temporary space holders until your dentist makes permanent abutments. After this second surgery, you'll continue with your home care and regular follow-up with your dentist. It usually takes a few weeks for your gums to heal. Your attention to oral hygiene can help speed the healing process.

After Surgery

Immediately after surgery, you'll rest a few minutes in your dentist's office and bite on gauze to stop any bleeding. Your dentist schedules your follow-up appointment and gives you instructions for taking a pain reliever.

Home care helps prevent infection and aids healing. Your dentist will ask you to clean the abutments with a small toothbrush. Continue to brush and floss your teeth and eat a soft diet. You may return to your normal activities right away.

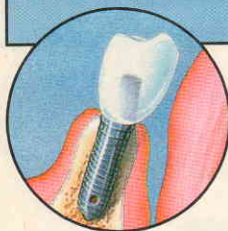
Professional care continues with a visit to your dentist a few days after your surgery to be sure your gums are healing and to place temporary plastic white teeth on the abutments. If you wear a full or partial denture, you'll return in about a week so that your dentist can place a soft lining in your denture to fit your new gum line.



Call Your Dentist If:

- the swelling around your jaws increases;
- you have a fever, bleeding, or numbness; or
- you have pain in your jaws, mouth, or sinuses that is unrelieved by your pain medication.

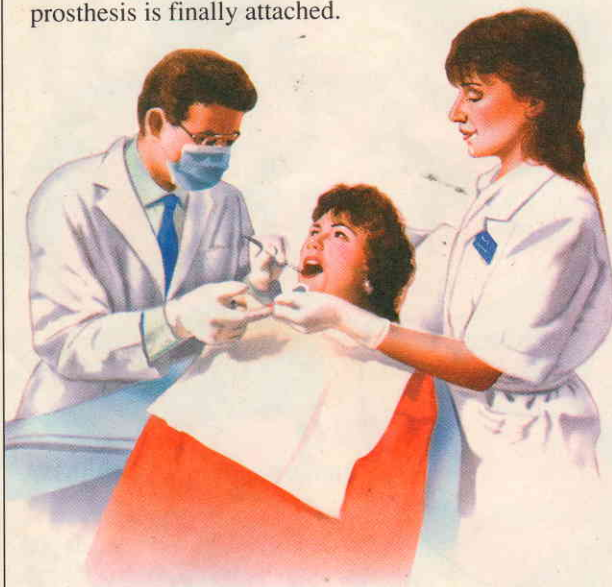
THE RESTORATION: CREATING YOUR NEW TEETH



Now that your anchors and abutments are in place and your jawbone and gums have healed, you're ready for your new teeth—also called a **prosthesis**. Because your prosthesis is made just for you, you may need to make several visits to your dentist for **impressions** (imprints of your

Making Your Prosthesis

First, your dentist makes impressions and bite registrations of your mouth to design a model of your jaws, remaining natural teeth, and the abutments. From this model, your dentist creates your prosthesis. You'll usually come to the dentist's office for several appointments and "trial fits" before the prosthesis is finally attached.



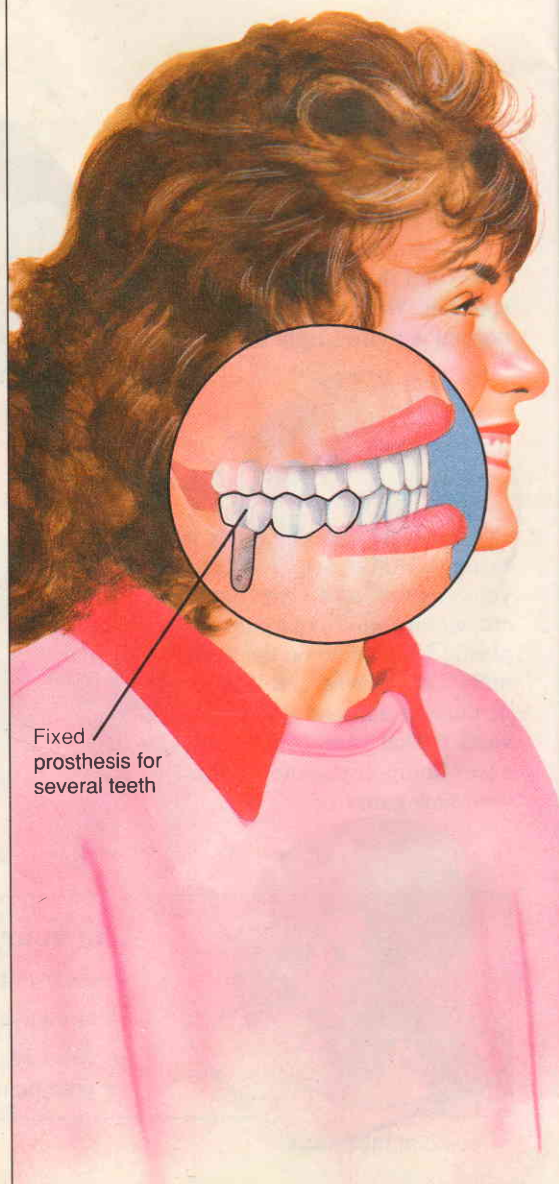
Making the impressions



Your new prosthesis

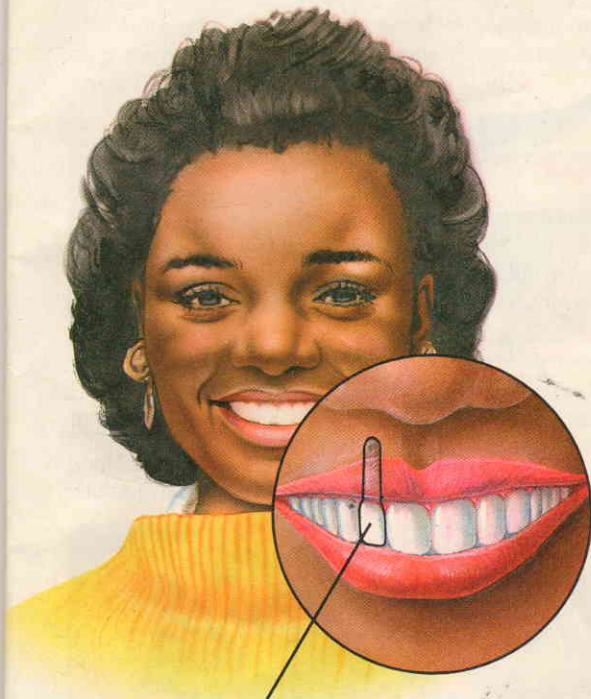
Attaching Your Prosthesis

After your dentist makes your prosthesis and is certain it will fit properly, it is attached to the abutments. Your prosthesis may be **fixed**, which you cannot take out (your dentist can remove it if necessary) or **removable**, which you can take out.

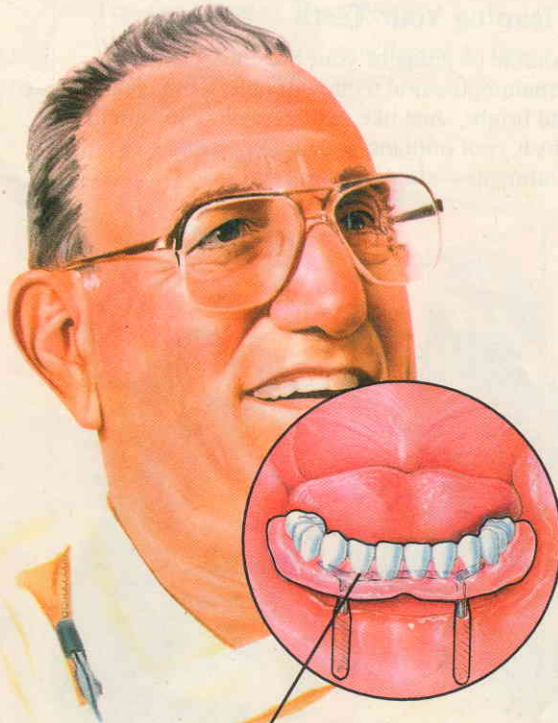


Fixed prosthesis for several teeth

teeth, abutments, and jaws) and **bite registrations** (imprints of how your teeth and jaws fit together). It may take a few months for your dentist to create the prosthesis and fit it to the abutments inside your mouth. Once you begin to use the prosthesis, your dentist may still need to make further adjustments.



Fixed prosthesis for a single tooth



Removable prosthesis for a full denture

A **fixed prosthesis** can replace one, several, or all of your teeth. Your dentist will attach a single tooth directly to the abutment. To replace several or all of your teeth, your dentist creates a prosthesis and attaches it either to the abutments, or to an abutment and a natural tooth. You may have several "trial fits" before your prosthesis is permanently attached.

A **removable prosthesis** is often used when many or all of your teeth are missing. The prosthesis can be attached several ways: clips, o-rings, and magnets are the most common. You'll be instructed how often to remove your prosthesis for cleaning. You can also remove it at night.



Call Your Dentist If:

- you have any pain or discomfort in your jaws or mouth;
- you feel the "bite" is not right or the prosthesis is loose; or
- the prosthesis chips or breaks.

CARING FOR YOUR NEW TEETH

It's great to be able to chew with comfort and have a confident smile! And you can keep on smiling, eating, and speaking with ease for many years to come if you take care of your dental implants and your mouth. Good oral hygiene not only keeps your implants in top

Cleaning Your Teeth

Routine cleaning of your prosthesis and any remaining natural teeth will keep them clean and bright. Just like natural teeth, you should brush your implants—both the prosthesis and abutments—after every meal.



Comfortable Chewing Again

Once your dentist is certain the prosthesis is stable, you'll be able to eat almost anything you'd like. But to keep from damaging the prosthesis, don't chew on ice, pencils, other hard objects, or sticky food such as caramels. To protect the abutments, don't put anything metal (except silverware) in your mouth.

Special Aids for Cleaning



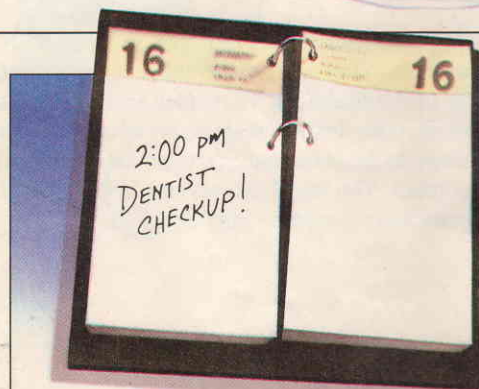
A small toothbrush or special interdental brush can be used to clean the abutments.



Use a brush with a bent handle to reach behind your teeth to the abutments.



Use a special floss with a foam coating or a floss threader to clean around your gums, abutments, and prosthetic teeth.



Routine Checkups

At least twice a year, your dentist will check your prosthesis to see how well it fits your mouth, make repairs, and clean the abutments. Your dentist also will assess the stability of the anchors and the health of your jaws and gums.

shape. It also keeps your gums, jaws, and remaining natural teeth clean and healthy. Caring for your new teeth means taking a few extra minutes every day to clean them regularly and having routine dental checkups.

Tips for Brushing Your Teeth

Brushing your teeth sounds simple—but sometimes it's easy to miss cleaning around your abutments. Here are some tips to improve your brushing skills.

Fixed Prosthesis



Brush fixed prosthetic teeth as thoroughly as you would brush natural teeth.



Reach with the brush behind the teeth to brush the back of the abutments.

Removable Prosthesis



Remove your prosthesis and brush both the inside and outside.



Brush around the gums and abutments while your prosthesis is removed.

Tips for Flossing Your Teeth

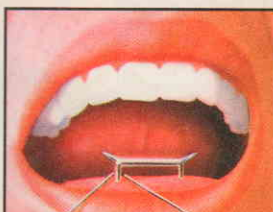
With a dental implant, you'll need to floss even more than before. Here are some special instructions.

Fixed Prosthesis



Floss around the abutments from the front, sides, and behind.

Removable Prosthesis



Floss around the abutments while the prosthesis is removed.



Your Special Instructions

Your dentist may have special instructions for you. Or you may wish to write down your questions, notes, or dates of follow-up visits.

WORKING TOGETHER FOR YOU

It takes a dedicated team made up of both you and your dentist to make your dental implant work. Your dentist's expertise in surgery and prosthetics and your commitment to oral hygiene mean that you can chew and smile with comfort and confidence for many years to come.



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