

Quality Results and Efficient Treatment Time

Braces are a two-way street. Dr. Stokes will do all she can to create a "superstar" smile but he needs your help. Although we have estimated the treatment time, there are many factors that are out of Dr. Stokes's control. There are five areas where you can help to keep your treatment on schedule and on course for a beautiful result.

1. **Compliance** - Occasionally Dr. Stokes will ask you to wear auxiliary appliances such as rubber bands. With good wear, as instructed, you will keep your treatment on schedule. With poor wear, your treatment will fall behind and we will not meet the expected completion date. Neither you nor Dr. Stokes would like to see that happen.
2. **Come Regularly** - Dr. Stokes will let you know when the ideal time for the next visit will be. This could be as short as one week or as long as six months depending upon where we are in treatment and what appliances are being used. Although we try to see people after school or work, these times are limited and there will be some days where school or work must be missed. Study halls or lunch hours can often be efficient times to schedule. Limiting yourself to the convenient hours will likely delay your treatment, so please try to schedule as Dr. Stokes suggests.
3. **Broken Appliances**- We ask patients to stay away from sticky and hard foods for a reason. Sticky and hard foods pull bands off and break brackets. This breakage often sets us back with treatment and we are forced to take a step backwards to previous wires. Nail biting, pencil chewing and playing sports without proper protection can also cause breakage. The more often you break, the longer you will have the braces. Please notify the office should there be breakage to the appliances as repairs take more clinical time. For the most efficient result, please take great effort to avoid these broken appliances.
4. **Poor Oral Hygiene** - There are many reasons we do not like to see poor oral hygiene. Perhaps the greatest reason is the possibility of permanent ugly white spots around the brackets after removing the appliances. With braces, it is hard to brush and there are more "nooks and crannies" for plaque to settle. This plaque can cause cavities and also ugly white spots. Plaque can also cause gingivitis with swollen, bleeding gums. Swollen gums can slow tooth movement and lengthen treatment time.
5. **Stop the Pop** - We strongly recommend cutting back on sugar-filled drinks, especially pop. People who drink pop throughout the day are constantly subjecting their teeth to sugar. The sugar interacts with dental plaque to make an acid. That acid, combined with the acid inherent in pop, does double the damage, causing cavities and white spot lesions. We have even seen good brushers who are heavy pop drinkers get some white spot lesions. If these drinks cannot be eliminated, try to at least limit them to dinner hours and brush your teeth immediately after consumption of these sugared drinks.

How a Tooth Moves

Each tooth is surrounded by a periodontal membrane. This membrane is made up of tiny fibers or ligaments that can be squeezed and stretched with tooth movement. These fibers generally extend from the tooth to the bone surrounding the tooth.

To understand how teeth move, you need to understand how the membrane and bone react to the pressure and tension created with braces.

Dentists use wires and other materials to strategically create areas of pressure and tension. This pressure and tension creates a minor initial movement of the tooth within the tooth socket. With this movement, the periodontal membrane (fibers) get squeezed on the side the tooth is moving towards and stretched on the side in which the tooth is moving from.

Cells called osteoclast come to the areas where there is pressure. In these areas of pressure, the osteoclasts serve to remove bone. This bone removal then eliminates the pressure. On the stretched side, the tension from the periodontal ligament signals osteoblasts to these sites. Osteoblasts are responsible for placing bone. As bone is placed by the osteoblasts, the tension is relieved. During the time when there is pressure and tension, some people will have some minor soreness. This is a result of the inflammatory remodeling of bone which is occurring.

Each appointment this process of creating pressure and tension is repeated. The goal is to create a light continuous force. These light continuous forces create the quickest, most comfortable tooth movements. Heavy forces can cause scarring on the pressure side, making it harder for the osteoblasts to remove bone, hence slowing movement. Forces that are too light will fail to signal the osteoblasts and osteoclasts and the teeth fail to move. For this reason, the dentist will need to periodically adjust the appliances maintaining light continuous forces to create the pressure and tension needed to move the teeth.

Typically, the early movements are the largest and create the most soreness. As treatment continues and the osteoblasts and osteoclasts are doing their thing, discomfort tends to subside. Once your teeth have been placed where we want then, your retainers hold them in their new position allowing the boney support to return to a normal and stable condition. This retainer phase is very important because the periodontal ligaments have not completely reorganized. The most successful treatment outcomes typically involve a substantial retention period.

Parts and Pieces

Bands

These are thin bands of metal that are carefully fitted to the 6 yr. Molars (1st molars) and are cemented in place. They are the anchors for the braces. Each band has two tubes attached for the archwires and other appliances.

Brackets

Brackets are made of stainless steel (or porcelain for those who wanted clear for aesthetics). They are bonded to the rest of the teeth and act as "handles" for the archwire.

Archwire

The archwire is what actually moves the teeth. Each bracket has a groove in which the archwire sits in. They are made of stainless steel or nickel titanium and are made in varying sizes. Each size is used to do different things to the teeth and roots. The wires may or may not be changed every visit.

O-Rings

These are tiny, elastic rings used to hold the wire in the groove of the bracket. These are what we mean by "colors" of braces. Each visit, you get to choose your new colors as these need to be changed every visit. Sometimes we will need to "tie-in" with a stainless steel tie instead of the elastic o-ring.

Rubber Bands (Elastics)

Elastics are used to correct the bite. They are used in many different ways. Some patients may not have to wear elastics during the course of their treatment. For those that do, it is very important that you wear them according to how the doctor says to wear them.

Brushing and Flossing

The biggest enemy of your teeth is plaque and the most common and effective means of removing plaque from your teeth is regular brushing and flossing. Braces trap food, making it more difficult to brush. That's why we recommend brushing the teeth for three minutes, taking time to reach all areas of the brackets and bands. Flossing is now more time consuming as the floss must get under the archwire. We have provided "floss threaders" (also known as "bridge aids") to help get the floss under the archwire.

Glossary of Terms

This is a compilation of terms that you will hear throughout the course of your treatment. You can refer to this list whenever you hear a word and don't quite understand the meaning. If you still don't understand, please feel free to call our office or ask us at your next appointment. Understanding what is happening to you will help you enjoy your final results of orthodontic treatment.

Archwire - This is the main wire that fits into the brackets. It is "tied in" to each bracket with tie wires or a-rings. The archwires are what move the teeth. They come in varying degrees of strength and are made of stainless steel as well as nickel titanium (an alloy developed by NASA).

Appliances - This is what we call your braces, expander, retainer, etc.

Bands - The small, thin metal ring that we cement onto your teeth. These are merely "handles" by which we can move or hold your teeth.

Bite - This is another name for the way your teeth fit together when you bring them into a normal chewing relation.

Brackets - Brackets are made of stainless steel (or porcelain for those who wanted clear for aesthetics). They are bonded to the rest of the teeth and act as "handles" for the archwire.

Crossbite - Nature intended that all of your teeth fit in an orderly manner. That is, all of the upper teeth fitting slightly on the outside of your lower teeth. When a lower tooth slips to the outside of an upper tooth, this is what we call a crossbite.

Elastics - During phases of treatment, we may have you wear rubber bands (elastics) that are hooked from one tooth to another or one jaw to the other. These are used to help correct your bite.

Headgear - Another term for headgear is nightbrace, A nightbrace is used to change the way your face grows as well as moving your teeth in a much easier manner for you.

Impressions - We use a soft gelatin-like material which is placed in a small tray that fits up over your teeth. In a matter of a few moments, your teeth leave a print in this material, similar to your handprint in soft sand on the beach.

Malocclusion - Malocclusion = crooked teeth. Mal = bad; occlusion = relation of teeth. Usually malocclusion means teeth are chewing in a poor relationship with each other. This is the basic reason we have gone into orthodontic care for you.

Models - Models are the white plaster records of your teeth which result from making the impression we have just described, We pour the white Plaster of Paris into your mold, or impression, the plaster sets and now we have a model of your teeth

O-Rings - These tiny, colored elastics tie the archwire into the brackets. They are changed at every appointment allowing you to change your "colors."

Overbite - This is merely a term to describe the upper teeth biting over the lower teeth. Some overbite is normal. Too much overbite can cause severe problems and facial changes that are not particularly good.

Panoramic and Cephalometric X-Rays - A "Pan" is a full-mouth x-ray used to determine what position the baby and adult teeth are in as well as the presence of the 3rd molars (wisdom teeth). The "Ceph" is taken from the side and is a picture of the side of the head. This allows the orthodontist to measure the growth of your face.

Separators - These are small elastics placed between your teeth to help make room for the placing of bands. This often feels as if you have a popcorn kernel stuck between your teeth. This feeling will pass quickly as your teeth move apart.

Tubes - These are found on the bands located on the 6 yr. Molars of braces. The tubes are long and rectangular into which the arch wire rests.

Tiewire - These are little wires that fasten your archwire into the brackets. They are twisted, leaving a small "pigtail," or twisted wire which is then tucked under the archwire. Sometimes, in eating or brushing, this may become bent out and poke your cheek. If this happens, push it back towards the tooth so that it won't poke anymore.

Wax - We provided you with wax in your ortho supply kit to help with the discomfort from the braces. From time to time, it may become necessary to use the wax to help your cheeks and lips heal.

Appointment Scheduling

Maximum flexibility in our appointment schedule has been designated so as to minimize patient waiting time and to ensure timely dismissal at each appointment. Please help us by understanding that certain appointments will be required during normal work/school hours to maintain effective results.

All long appointments are scheduled mid-day to allow plenty of time to complete all of the necessary steps for that long appointment. If there is breakage or appliance damage, we will need more time for these procedures; therefore, they must be rescheduled for earlier in the day.

If you are unable to keep your appointment, or if you find you will be late for your appointment, please notify us as soon as possible in advance so that we may reschedule your appointment. Keep in mind that failed and cancelled appointments delay treatment progress significantly.

As always, we are committed to quality orthodontic care, building our patient's self esteem and including you as a partner in the treatment process. Your involvement is important to us. We are always happy to answer your questions.

Tooth Brushing and Braces

You and your orthodontist are now a team. You both want the same thing ... a beautiful smile with healthy, white, straight teeth. We will do our best to straighten your teeth but you are the one who must keep them healthy and white. We all know that brushing is the key. Now that you have braces, proper brushing will take extra time and effort. When your braces come off, you want your teeth to look their best so start today to be your smile's best friend.

Plaque is the problem

Plaque is a sticky, white substance that collects on your teeth. It is made up of bacteria, food and saliva. If plaque and trapped food are left on your teeth and around your braces, they can cause swollen gums, bad breath, marks on your teeth and cavities. Plaque also can discolor your teeth and make them look yellow. Don't let any of these things happen to you. Brush often and properly and visit your dentist for regular checkups.

How and when to brush

You should use the kind of toothbrush and toothpaste Dr.Stokes recommends. Brush after every meal, especially if you have eaten anything sticky or sweet. If you cannot brush right away, be sure to at least rinse well with water until you can brush. It is a good idea to carry a special travel toothbrush when away from home. What is most important is that every day you vigorously brush your teeth and braces until they are spotlessly clean.

Approximately three minutes is recommended.

If you use an electric or battery operated toothbrush, you should brush for one extra minute as these are typically set for two minutes. This takes extra time so most patients do it at night before going to bed. Whatever time you choose to do this extra brushing, make absolutely sure your teeth and braces are as clean as you can get them.

Applying pressure

One of the biggest problems people have while brushing teeth is not applying enough pressure with the toothbrush. Just "lightly" brushing your teeth will not remove all plaque and debris. Remove every trace of plaque and trapped food from all the surfaces of your teeth: front, back, top and under your wires (our assistants will show you how to do this). Pay very close attention brushing the gum line because plaque left there will make your gums sore and swollen, which will make brushing even more difficult. This also is the time you should use dental floss, special brushes, mouthwashes and fluoride mouth rinse, if recommended by Dr. Stokes. After brushing, you should rinse thoroughly. Swish the water all round your mouth and teeth. Then, inspect your teeth and braces carefully to make sure they are spotless. Do this by looking closely in a well-lighted mirror. This is very important because you cannot feel plaque but you can usually see it. You may have to brush and rinse two or three times before all the plaque is gone. This may sound difficult but remember, they are your teeth and you want to have them for the rest of your life

Fluoride Facts

Information taken from the "Oral Health Fact Sheet" submitted by the Bureau of Oral Health Services in Columbus, OH

What is Fluoride?

Fluoride comes from minerals in the ground. It is found in water, soil, plants and in many foods and drinks. You need fluoride for good health.

How does fluoride work?

Tooth decay can be stopped and even reversed by fluoride. Each time you eat or drink foods that have sugars or starches, the germs in your mouth make acid that cause tooth decay. The acid attacks the teeth and dissolves some of their minerals. This happens many times during the day. Fluoride repairs these small spots of decay by putting new minerals in the teeth to replace those that are lost. This stops the decay before it spreads inside the teeth. The repaired teeth become stronger from fluoride.

Where can I get fluoride?

The easiest way to get fluoride is by drinking water. Many people in Indiana drink water that has enough fluoride in it. If you do not know if your water has enough fluoride in it, ask your doctor. They can help you have your water tested. If your water doesn't have enough fluoride, your dentist or doctor may prescribe fluoride tablets or drops for your child.

Using toothpaste is an easy way to get fluoride too. Most toothpaste has fluoride in it. Use toothpaste that has the seal of the American Dental Association on the tube. This means that the toothpaste has been shown to prevent tooth decay. Children under age 6 should use a small dab of toothpaste, about the size of a pea. Make sure your child does not swallow toothpaste or their adult teeth could come in with white spots or stains on them.

You can also get fluoride in mouth rinses and at the dental office. Not all children need the same amount of type of fluoride. Ask your dentist or doctor about the best ways for your child to get fluoride.

FOODS TO AVOID

Braces are pretty durable but can be damaged. Breaking off brackets can extend the time that you have your braces. Whenever we have to make repairs, it slows down the treatment. Use *common sense* when eating or chewing things. If you think it could break off a bracket, don't eat it ... and certainly don't chew on pens or pencils.

AVOID ALL HARD, STICKY OR CHEWY FOODS SUCH AS:

- **#1 MOST IMPORTANT-GUM!...** This means ALL gum! Including sugar- free!!! It gets stuck in your brackets, around bands and wires. **ABSOLUTELY NO GUM!!!!**
- **ICE ... A thousand times NO.** It will totally destroy your braces and your teeth.
- **PIZZA CRUST, HARD ROLLS, BAGELS ...** The hard crust bends wires and knock off brackets
- **DORITOS, TACOS, TOSTITOS, CHEETOS, FRITOS, ETC ...** Will cut spacers. Will form a hard ball and break/bend your wires.
- **CARAMEL CANDY and STICKY FOODS ...** Milk duds, laffy taffy, carmel corn, starbursts...Sticky goo will pull off wires and feeds the bacteria in your mouth.
- **BEEF JERKY, SLIM JIM..** Tough as nails
- **SUCKERS, HARD CANDY ...** Loosens bands and knocks off brackets
- **NUTS...** No nuts of any kind
- **RIBS, CHICKEN WINGS, ANY MEAT YOU EAT OFF BONES ...** Knocks off brackets.
- **PENS AND PENCILS...** Favorite exam time snack breaks everything!
- **POPCORN...** The little shells get between the gums and band and will hurt like crazy.
- **RAW FRUITS AND VEGETABLES...** Hard as rocks. Will break everything! Biting into foods such as raw carrots, apples or corn-on- the-cob can break off the front brackets. To avoid this, cut these types of foods into bite-size pieces

Section4: Emergencies

Loose bracket:

With a toothpick or tweezers, take off the colored o-ring. Then take the bracket off of the wire and put it in a baggie. Call the office to inform us of the needed repair, noting which tooth it is. It might be necessary to have you come in right away to repair it. Bring the baggie with the bracket with you.

Long, poking wire:

If a wire is too long in back and is causing discomfort, try clipping the wire with (clean) toenail clippers. If you have wire cutters, that will work best. If you cannot clip the wire, place wax over it to relieve the discomfort and then call the office for an emergency visit.

Poking tie wire:

Sometimes steel wires are used instead of a-rings to tie in a wire. If the tail of this wire is poking you in the cheek, simply take a pencil eraser or back of a spoon and push the wire back towards the tooth where it will not cause any more discomfort. If the cheek is sore from the wire, place wax over the whole bracket until the cheek has healed.

Missing O-ring:

It is not necessary for you to call us unless the wire is disengaged from the bracket. Disengaged means that the wire is not seated in the groove of the bracket like the rest of the brackets. This is especially important towards the end of your treatment.

Loose band:

A very rare occurrence but if a band does come loose, place wax over the band to minimize discomfort. Call our office to let us know and to schedule an emergency visit to repair the band.

Tending to Soreness

Your braces may cause some discomfort during the first few days of treatment and after some adjustments. There are several things you can do to minimize this problem:

1. Eat soft foods for the first few days.
1. Use a warm saltwater rinse as needed.
2. Take a pain reliever such as Motrin, Advil, Tylenol, etc. as needed.
3. Use wax to relieve discomfort from the bands or brackets that are "cutting" into the cheek or lip. To do this, pinch off a small amount of wax, press it between your fingers then mold it to the band or bracket.