

### **How Do Clear Aligners Work?**

For most patients, clear aligners have many advantages over traditional metal braces.

You can eat all the foods you enjoy, brush and floss the same way you always would, and smile just as widely as ever while your aligners get to work straightening out your pearly whites. However, having properly aligned teeth isn't just about that dashing smile; it can also reduce your risk of excessive tooth wear over time, as well as make it easier for you to remove plaque from your teeth. Plaque accumulation can lead to gum disease and tooth decay.

To answer the question, "how do aligners like Invisalign work?" we need to first discuss the difference between these types of nearly invisible braces and their traditional metal counterparts.

## **How Do Clear Aligners Differ from Traditional Braces?**

If you're considering teeth straightening options, you've no doubt questioned which you should choose between clear aligners like Clearcorrect and conventional braces. In most cases clear aligner treatment is just as effective for straightening your teeth as traditional metal braces. However, the nearly invisible braces approach is ideal for social and active lifestyles, particularly among adults and self-conscious teens. People may not even notice you're wearing the clear plastic aligners.

Unlike traditional braces, you can remove the trays to brush and floss your teeth without worrying about the issue of trapped food that sometimes occurs with metal braces.

Traditional braces use metal and wires that may irritate the inside of people's cheeks. Clear aligners are made of a smooth plastic that is comfortable for extended wear.

## So, Exactly How Do Clear Aligners Work?

The first step is to get an examination from your orthodontist. During the exam, the orthodontist will decide if you are a good candidate for treatment, based on your individual needs. There is more than one type of aligner, and if clear aligners are right for you your orthodontist can choose from an array of providers, not just Clearcorrect. The most important factor in determining your outcome is the skill and expertise of the provider, not the brand of clear aligner used in the process.

## What Happens If You're a Candidate? How Clear Aligners Work:

If you're a good candidate for Clearcorrect or a similar type of aligner, your orthodontist will want detailed clinical records, including photos of your face and teeth. An X-ray and scan of your mouth will also be arranged. The records are then sent out to the Clearcorrect lab where a 3D model of your teeth is created. Your orthodontist will design your personalised treatment plan and then order your series of trays.

When you receive your trays – called aligners – you will need to wear each one for usually two weeks at a time. Your teeth in each tray are a little straighter than your last aligner tray. On average, teeth move about 1/10mm with each tray. The difference between your current alignment and the slightly different impression of your teeth in your new aligner puts pressure on your teeth. Over the two week course of wearing the tray, your teeth will begin to move to match that tray. The light pressure from the series of trays is how clear aligners like Clearcorrect work over time.

#### You May Have to Use a Few Attachments

Most people may need to use attachments on their teeth. These are small bumps of plastic material that are the same colour as your teeth. They provide a gripping point for your aligner to easily grip into place and remain there. They also help to place pressure on your teeth to help straighten them. They put pressure on certain parts of your teeth to help the aligners move the teeth up, down, side-to-side and around.

Some patients may need to wear rubber bands with their aligners, similar to the requirements of metal braces. The bands work to put extra pressure on certain teeth and/or to correct your bite. It's all a part of how aligners such as Clearcorrect work as a teeth straightening solution.

#### Interproximal Reduction (IPR)

Many patients will require space to be made available due to overcrowding or teeth need to be reshaped to create a better final appearance. Interproximal reduction (or IPR for short) is the process of creating very small amounts of space between teeth.

IPR is often used to avoid the need for extracting teeth. Your Orthodontist will 'polish' in between the teeth in order to remove a small slither of enamel. This is usually done with a polishing disc or other mechanical device. The process is completely pain free and the most you'll feel is some vibration.

Your enamel doesn't contain any nerves, so there's no need for any anaesthetic – it's much like filing a nail. It's also very quick and takes just a few minutes per tooth. During the treatment a gauge may be used to measure the gap between your teeth, to make sure just the right amount of enamel has been removed.

As only a minimum amount of enamel is removed, teeth are left with enough enamel to continue to remain healthy. However, it may be beneficial to use an alcohol-free fluoride mouth rinse to help keep enamel strong.

## How Long Do You Have to Wear the Aligners?

One of the big benefits of clear aligner systems is that you can remove the aligners to eat, drink, brush and floss. They're easy enough to clean, too, just with your usual toothbrush. So, you should wear the aligners for approximately 22 hours a day to allow your teeth the best chance to move to their final, straighter position.

The treatment time can be as little as 6 months, but obviously times can vary depending on the severity of your case. Some severe cases or where several extractions have been necessary the treatment time can be over 18 months. The treatment times are usually shorter than using traditional braces as the aligners are constantly being changed and the teeth are always receiving aligning forces – by changing the aligners regularly according to your schedule, you yourself are reactivating the appliances! Your orthodontist will work closely with you to come up with an individual treatment plan for your needs.

# What Happens After the Final Trays?

When you are done wearing the final trays, you will receive retainers. These plastic retainers look similar to the treatment trays but are made of a different long lasting material. The purpose of the retainer is to help keep your newly-aligned teeth in place. You may need to wear the retainer for a few days on a full-time basis after which you can then cut back to wearing it just while you sleep at night. On occasions a thin section of metal wire or ribbon is bonded to the back surfaces of the teeth, called a bonded retainer, as well as using the removable ones. Your orthodontist will advise you if they feel this is appropriate for your case.

The important thing to remember is that you need to look after your trays. An article in the Journal of Clinical Orthodontics reports that researchers discovered that some patients drink (other than water) while their aligners are still in. This traps sugars in your mouth, which in turn feed decay-causing bacteria. You need to remove the trays when eating and drinking to avoid trapping sugars and allow saliva to act as your natural tooth cleaning system in order to promote good oral health. In fact, provided you do not do this on a frequent basis, many people undergoing aligner treatment give themselves a "night off" from the aligners if they have a night out planned with a lot of drinking and eating – keeping them out for a few hours once in a while is unlikely to have a detrimental effect on the overall treatment and also it reduces the risk of losing the retainers "on a night out". Don't do this more than once a fortnight though please!