



Short-Term vs. Long-Term Orthodontics

When it comes to straightening your teeth, there may be several different systems available to choose from, but the actual method of moving your teeth remains the same. Gentle and continuous pressure is placed upon specific teeth causing them to move through the bone into a new position. Clear aligners, braces, and functional appliances all work on this same basic principle. Some systems can accomplish the job more quickly than others under the right circumstances. But faster is not always better, and there are limits to how quickly the teeth can be moved through the bone without causing damage to the roots.

To help you better understand some of the major orthodontic correction systems, Dr. Rich has compiled this comparative reference. Not every individual's needs will fit neatly into a particular category, timeframe, or system of treatment. Many complex cases should have a combination of orthodontic systems to offer the best possible healing and correction. However, if you've ever been curious about some of the advertised orthodontic systems you've seen on TV or in a magazine, this resource should help you better understand why a particular system or timeframe may or may not be right for your needs.

Of course, only a consultation with a well-trained dentist or orthodontist can ultimately determine what kind of orthodontic treatment is right for you and how long that treatment might take. However, a better understanding of the strengths and weaknesses of the major orthodontic treatment systems may help you make a more informed decision in situations where more than one treatment option is available.

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Functional Appliances

Of all the systems available for moving teeth and shaping arches, functional appliances are probably the least recognized by the general public. But functional appliances are an excellent orthodontic tool for creating space and stabilizing bites in adults, and guiding proper growth and tooth eruption in children.

Functional appliances are not finishing tools. They do not accomplish the fine adjustments in rotation and vertical alignment required to complete a beautiful smile. But they do create the space necessary for the other systems to work effectively in a way that no other system can.

Functional appliances resemble traditional retainers, except that they are not designed to hold the teeth in one place. Tiny screws or springs are embedded into the plastic of the appliances, allowing a slow and progressive opening that applies continuous pressure to the teeth and bone. This pressure does not just exert upon the teeth, but also onto the suture points in the roof of your mouth and in the lower jaw.

These sutures are actually capable of stretching a great deal, and allow for significant widening in the arches. It is this widening of the arches that ultimately creates the space necessary for crowded and overlapped teeth to eventually be moved into alignment. Functional appliances can also allow the lower jaw to move forward, increase the airway, and allow more room for the tongue.

For most people with significantly crowded teeth and narrow arches, a first course of orthodontic treatment with functional appliances lessens the need for extractions to create space. And for people with TMJ disorders or other bite issues, functional appliances are an essential tool in the first phases of bite realignment and vertical restoration.

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The Benefits of Functional Appliances

- Best tool for creating space and widening arches
- Easy removal for eating, drinking, and cleaning teeth
- Largely invisible

Best for patients with:

Severe crowding, narrow arches, TMJ disorders, and/or other bite issues.

The Drawbacks of Functional Appliances

- Removability makes retainers easier to lose, break, or forget
- For some patients, speech may be affected during the break-in period
- Not a finishing tool, a second phase of treatment with braces or clear aligners is often required for final alignment

Not recommended for:

Patients with significant allergies to plastics or acrylics (testing is available).



Clear Aligners

Clear aligners are a very popular orthodontic option for teenagers and adults, and for good reason. They are visually more attractive than traditional or accelerated braces systems, and they're removable for easy cleaning and more comfortable eating.

Clear aligners do have their clinical limitations, however. They are an excellent choice for the patient who already has a stable bite, minor to moderate crowding, and sufficient spacing for the teeth to move around each other. In some cases, very small amounts of enamel can be smoothed and reshaped on the sides of teeth that are a little more crowded to help facilitate tooth movement. But for people who have one or more teeth that are significantly overlapped, this kind of reshaping is not recommended.

For patients who have significant crowding and overlapping, clear aligners are not the best choice for initial treatment, but they could be a good choice for a second phase of treatment. Space could be created with the use of functional appliances, and then final alignment could be achieved with clear aligners. This works best for patients who do not require significant rotation or vertical realignment of the teeth.

Clear aligners can achieve a small amount of rotation and vertical realignment through the use of button-like brackets and rubber bands, but they simply cannot exert the same kind of pressure in the same directions that traditional brackets can. Even in cases where only one tooth requires significant rotation or vertical realignment, traditional braces are still a faster and more effective option than clear aligners.



The Benefits of Clear Aligners

- Nearly invisible
- Easy removal for eating, drinking, and cleaning teeth
- Shorter break-in period

Best for patients with:

Minor to moderate crowding, no significant overlapping, and a stable bite.

The Drawbacks of Clear Aligners

- Removability makes the aligners easier to lose, break, or forget
- Teeth can stain if you drink anything other than water while wearing them
- Not effective when primary teeth are present; most patients must be 18 or older

Not suitable for patients with:

Significant allergies to plastics or acrylics, TMJ disorders, severely crowded or overlapped teeth, and/or teeth that require significant rotation or vertical realignment.



Traditional Braces

We've all seen what braces look like – silver brackets with wires all the way around. There are several systems that offer tooth-colored brackets made from porcelain or composite materials, but these systems are far from invisible. The choice for traditional brackets will probably never be based on how attractive they are, but ultimately on what they can do.

The truth is that braces can do everything that clear aligners can do, and then some. It's true that braces cannot do what functional appliances can do to create space and widen arches. But for teeth that require significant rotation or vertical alignment, braces are the only tool that can really get the job done. They may not be the prettiest option for patients who need this type of treatment, but they are the fastest and most effective way to achieve this type of tooth movement.

Traditional braces can be used in any case where clear aligners or accelerated bracket systems might also be an option. In some cases, treatment time might even be nearly the same. But for people with significant bite discrepancies, TMJ disorders, or rotational concerns, traditional braces are often the best choice for primary or secondary treatment.



The Benefits of Traditional Braces

- Best tool for tooth rotation and vertical realignment
- Allows for continuous tooth movement, even while eating and cleaning teeth
- Cementation eliminates risk of losing or forgetting to wear appliances

Best for patients with:

Severely rotated teeth and/or teeth that require significant vertical realignment.

The Drawbacks of Traditional Braces

- Eating and cleaning teeth with braces on can sometimes be more difficult
- Breaking in period may be longer and initially include more discomfort for the cheeks and lips
- Least invisible option available

Not suitable for patients with:

Very minor crowding or overlapping.

Stainless steel or nickel allergies.



Accelerated Braces

Accelerated braces are very similar to traditional braces in the ways that are most noticeable to the patient. They are still braces with wires, and they work in essentially the same manner, but their promise to complete treatment in a four or six-month time period depends more on the amount and type of correction required rather than on any significant advancement in the bracket system itself.

Accelerated braces can be slightly different in size, shape, and application than traditional braces, however. The brackets tend to be slightly smaller, and because accelerated braces are best suited to healthy patients with minor to moderate crowding, the brackets can often be applied to the backs of the teeth for true invisibility.

Accelerated braces focus mostly on the front six or eight teeth on the top and bottom of your mouth. They do not fix bite discrepancies and are not recommended for patients with TMJ disorders. However, for patients with minor to moderate crowding in the front who also require some rotation and vertical realignment, accelerated bracketing systems are faster and more effective than clear aligners.



The Benefits of Accelerated Braces

- Best tool for anterior tooth rotation and vertical realignment
- Allows for continuous tooth movement, even while eating and cleaning teeth
- In many cases, brackets can be cemented onto the backs of the teeth for a truly invisible look

Best for patients with:

Minor to moderate anterior crowding with or without rotational or vertical realignment issues.

The Drawbacks of Accelerated Braces

- Eating and cleaning teeth with braces on can sometimes be more difficult
- Breaking in period may be longer and initially include more discomfort for the cheeks and lips
- Teeth can be quite sore initially
- Least invisible option when cemented onto the front of the teeth

Not recommended for patients with:

TMJ disorders or other bite concerns, significant crowding or overlapping, narrow arches.