

Frequently Asked Questions

What to expect at each stage of the bracing process

Plan

Why do some kids need braces?

Some children are moderate pronators or idiopathic toe walkers. These are conditions that can generally be easily corrected. Other patients who require DAFO® braces have neurological or neuromuscular delays resulting from a variety of causes, including cerebral palsy, spinal bifida, Down syndrome, head injuries and stroke. Such problems are caused by damage or malformation of the neural systems that control muscle movement or provide sensory information about position and movement.

How are movement mechanics different from children without these problems?

For most of us, our bodies quickly developed the ability to stand upright. Through repeated use, the complex array of muscles and neural control systems became fine-tuned to the tasks of supporting the weight of our bodies and then to shifting that weight from one leg to the other for walking. The bones of our legs and feet position themselves in the optimal alignments for support. They are vigorously held in place by muscles, tendons and ligaments.

For the neurologically involved DAFO patient, this development has been disrupted. Muscle strength or movement has been compromised, inhibiting the development of skills needed for standing and walking. Without normal daily use of the legs and feet, muscles remain underdeveloped and weak. Tendons and ligaments are not stretched and strengthened by the activity of walking. For growth, the bones depend on weight bearing activities and on the strength of muscles, tendons and ligaments to hold their structures together. If no intervention happens, the bones can become misaligned or compromised in growth and development.

How will my child benefit from wearing an orthotic device?

Your child will be held in a more functional foot position when standing and walking. This will make the sensation and movement experienced more typical for this age. Over time, this will encourage appropriate patterns of position and movement that should improve motor skills, balance and endurance.

How does brace choice happen?

Normally you work with an orthotist and physical therapist who understand DAFO bracing. Planning for braces is a team effort (team members might be the patient, parent, physical therapist, physician, orthotist and DAFO technical support) that should be based on the patient's needs as an individual, not as a member of a group with a shared diagnosis. The plan should work in support of all other efforts to maximize strength and voluntary control.

How does a clinician assess my child?

A clinician examines your child's physical disposition and gait, looking for evidence of voluntary control and deviations from average patterns. S/he will manually manipulate the lower limbs to evaluate range of mobility and skin health. Past history, prognosis of progress expected in the coming year, patient and family concerns and physical therapy goals are all taken into account.

The clinician determines 3 key factors for selecting a brace style: position of function, level of stability and specific issues such as:

- Where can we realistically expect functional improvements?
- What brace style can give the most benefit with the least support?
- Has this patient worn braces in the past? What was the outcome?
- What will the patient tolerate?



Can we expect the patient to wear that brace style consistently and properly?

How active is the patient?

Who is putting on the brace?

Is the child's condition improving, declining or static?

Does the child have regular therapy?

Who is assessing the progress of the child?

Measure

How does the clinician measure my child's foot?

There are 2 ways of measuring a child's foot for a brace:

1. Choosing a size based on our sizing jig (Fast Fit)

In general, a Fast Fit product will offer the softest, simplest solution available. For some conditions in small children, it's an excellent place to start with orthotic intervention. To measure for these products, a clinician uses a tracing of the foot in weight bearing or a reading from a sizing jig. The sizing jig is a plastic version of a shoe measuring device; the child stands on it with heel well seated, and the clinician notes the measurement. A [printable sizing jig](#) is also available.

2. Casting the child's foot (custom DAFO)

For conditions Fast Fit products don't address feet that cannot correct easily to a balanced position, or more challenging control issues we recommend casting for a custom DAFO. The clinician (most often using a casting footplate for best results) puts stockinette material onto the patient's foot and leg, then wraps the foot and lower leg snugly with a wet fiberglass bandage. The casting tape quickly dries into a formed cast set in the patient's best position of function. The clinician removes the cast and sends it to Cascade Dafo, Inc., to create a model of the child's foot and lower leg for fabrication of the brace.

How do most children react to casting?

Generally, casting feels good. As the casting tape cures, it warms slightly. It's a snug, comfortable wrap. Children are very good at picking up emotional signals. If parents and clinicians can remain calm and positive, it will help the child considerably.

Fit

What will the clinician do when the brace arrives?

When you come in to get your new brace, the clinician first inspects the brace. Then s/he puts the brace on the patient (called donning).

With the brace on the child, the clinician will check for several things. These may include padding for bony anatomy, fit at metatarsal (met) heads, and proper alignment of arches. In weight bearing, the clinician may check met head width and toe plate length. S/he will watch the child stand or walk in the braces, if possible, ask about comfort and check for signs of irritation.

What do I need to do when the brace arrives?

The clinician should show you how to don and doff (remove) the brace. While you're in the clinic, take the opportunity to practice this.

You'll be instructed about how to manage the initial break-in period, gradually building up wear time. You'll be encouraged to check for redness on the skin when removing the brace each time you complete the wear period. If the redness doesn't go away after the brace has been off for 20 minutes, let the clinician know.

You'll also be advised to follow up with the prescribing physician; be sure to have the brace with you for the appointment. Although a new foot and ankle position may feel odd initially, it shouldn't hurt. After the break-in period is complete, the patient and family should expect the brace to offer some benefit to daily life. If that is not the case, make a follow-up appointment with the clinician.

What if it's not right?

The first stop is your physician or the clinician who dispensed the brace. Our Customer Service (for Fast Fit) or Technical Support (for custom DAFOs) staff are also available for help. Our knowledgeable support team will help you decide whether an adjustment or a redo is necessary. Please refer to our Cascade warranty for more information.

Wear

Now that we've got the brace, what should we look for?

Once you have progressed beyond the break-in period, as a family member, you are ideally situated to evaluate how well the brace is working.

Look for success. Is your child falling less? Able to walk without holding on to you? More comfortable when resting or more confident when standing and walking? If you don't see any benefit, make a follow-up appointment with your clinician.

The bracing strategy is an ongoing plan that changes as your child grows and his/her gait changes. As the child is growing, look for signs of discomfort, redness, tightness or excessive wear. Your clinician can often adjust the brace to get some more wear out of it. Or it may be time for a new brace.

Will my child become dependent on this support instead of developing strength?

All of our models are designed to reflect the dynamic nature of the human foot. Increased confidence in motor skills should encourage the child to be more active, allowing a greater opportunity for muscle strength to develop.