

Advanced Lightwire Functionals (ALF)

WHAT IS ALF?

ALF (Advanced Lightwire Functionals) is a non-traditional orthodontic treatment method aiming to align teeth and improve the bite without traditional braces. Using principles of cranial osteopathy, ALF advances the mandible and promotes changes in muscle function to achieve stable results in improving a patient's posture. ALF is a whole-body-and-mind approach to improve overall health and performance in every realm.

Researched and developed by Dr. Darick Nordstrom, the many benefits of ALF come from a light force that is applied in the mouth on the bones, muscles and teeth of the jaws and face. The force is along the cranial sutures, which encourages proper bone growth and formation while also stabilizing the muscles. This results in proper tooth alignment and occlusion of the teeth in the mouth. Cosmetically, the appliance is relatively "invisible" as it gently wraps around the back of the teeth and is not visible from the outside.

WHO IS ALF FOR?

Because ALF promotes proper growth and development, children as young as age 3 can benefit from treatment. Research has helped to identify many red flags in young children that pertain to a lack of proper growth and development. These early warning signs allow us to intervene as early as possible to help correct any discrepancies and get the child back on track to their ideal development. Warning signs may include: difficulty nursing, chronic congestion, enlarged tonsils and adenoids, recurrent ear infections, mouth breathing, asthma, forward head posture, crossbites, underbites, deep bites, crowded baby teeth and speech issues.

Older patients can also benefit from ALF treatment! Because it affects overall health, patients at nearly every age can enjoy noticeable and effective results. The ALF has been shown to reduce effects of poor facial development, correcting facial asymmetries and producing palatal expansion and opening airways. ALF is for anyone who wants to improve tooth alignment, both for function and aesthetics, patients with swallowing dysfunction, sleep apnea or sleep disorders, speech impediments, airway constriction/breathing problems, cranial bone realignment, TMJ disorders, poor posture and spinal alignment, or improper positioning of dental arches resulting in crossbite

Symptoms ALF can address:

- Children in early mixed dentition
- Children with crossbites or when there are no gaps between the primary front teeth
- Buck teeth, underbites (Improper development of the mandible)
- Anyone that wants to improve tooth alignment
- People with previous orthodontic treatment that included tooth extractions or headgear
- People who experience TMJ problems
- Mouth breathers
- People suffering from chronic fatigue
- Chronic headaches/migraines
- Children with enlarged tonsils/adenoids
- Anyone with sleep apnea and sleep Disorders
- Those with recurrent ear infections
- Suboptimal posture and spinal alignment
- Developmental delays
- Constricted airways and breathing problems
- Improving sensory and nervous system regulation and response
- Allergies
- Speech impediments
- Swallowing dysfunction

HOW DOES ALF DIFFER FROM BRACES?

The ALF is different from traditional braces in that it corrects tooth crowding by creating just enough room for the tongue and the teeth to fit in the mouth. The ALF also helps the jaw being the shape of the tongue rather than the arbitrary shape of a wire. The ALF expansion stops when the tongue stops pushing outward on the appliance. As if it were magic, the human mouth is designed to be large enough to fit all the teeth and tongue – naturally when teeth have enough room to fit, so does the tongue. This is the way things were naturally intended to be.

ALF is a more natural, gentle approach to guiding the body to proper growth and development. The appliance is also cosmetic (it is barely visible from the outside) and is stable if done while a child is still growing. (No need for retainers!) Rather than traditional braces, patients receiving ALF treatments are fitted with a removable appliance. The appliance is custom-made and uses a light, highly flexible wire to reposition jaws, dental arches, and teeth using the innate wisdom of the body. Treatment duration and technique vary between patients according to individual needs. Bonded composite “buttons” are often used to increase retention.

HOW DOES ALF WORK?

Before you build a house, you need to make sure that you have a stable, solid foundation. The same is true for orthodontic treatment. Before you address straightening teeth and improving the smile your body needs to be well aligned – simply put: you need to stand “straight”. ALF focuses on improving this foundation by addressing the causes of crooked teeth. There are genetic, early developmental, and functional determinants of mandibular size which then have significant downstream effects such as maxillary development, airway development and cranial growth.

CAUSES OF CROOKED TEETH

- Low tongue posture and non-functional swallowing
- Restricted airway and mouth breathing
- Cranial strains, stresses and tensions in the head and neck area possibly stemming from traumatic births or accidents
- Genetic factors
- Poor diet/“Imitation” foods (highly processed foods that lack nutrients and enzymes)

Two of the pillars of ALF include: Myofunction (OMT, Buteyko Breathing) and Osteopathy. Built on those pillars, patients ‘functionally’ develop their mandible to the optimal ‘neutral zone’. This novel approach to orthodontic systems works to integrate cranial mobility with the palate, teeth, and jaw alignment, thereby promoting better swallowing, breathing, speech, sleep and nervous system response. The gentle action of the ALF orthodontic appliance provides a safe sensory stimulus within the mouth that allows for a greater range of neurological regulation to occur, especially through the cranial nerves and the autonomic nervous system. Thus, patients wearing the ALF appliance experienced far-reaching changes in bite, body, brain, and behavior. The founder of ALF, Dr. Nordstrom has noted, “With the insertion of the ALF appliance we have seen seemingly unrelated health issues improve or completely resolve.”

The Advanced Lightwire Functional Orthodontic Appliance is the ultimate craniofacial development therapy in terms of wellness enhancement as the ALF promotes proper facial development, tooth alignment, airway enlargement, improved posture and corrected sensory impulses within the nervous system.

FOR MORE INFORMATION

WHY ALF?

Dr. Jordan has been passionate about caring for families affected by tongue and lip ties during the breastfeeding years since her own child was diagnosed with a tongue-tie in 2014. Taking every chance to learn as much as possible about the effects of tongue-ties led her to the science of Myofunctional Therapy. This is where she first learned of all the ways tongue-tie and other early indicators can affect development and growth way beyond the breastfeeding years. Problems include sleep disordered breathing and airway issues. The ALF appliance addresses many of these problems in young children. Having had her own child develop OSA, enlarged tonsils/adenoids, mouth breathing and airway issues, she knew she could help by implementing the use of the ALF appliance in her practice.

WHAT IS THE COMMITMENT?

Estimated treatment time is 18-24 months for most cases requiring visits every 3-6 weeks in our office for adjustments. Total cost will vary based on the treatment time, but typically range between \$4500-5500 per patient. Additional therapy may also be required for optimal results. (e.g. cranial osteopathy, myofunctional therapy or buteyko breathing)

Some dental insurances provide orthodontic benefits and can be utilized for the ALF appliance. Our office will work with you and your insurance to get the best benefits available to you.

REFERENCES

Dr. Darick Nordstrom, developer of the ALF

https://youtu.be/UoA_Rmtg1fg

Dr. James Bronson

www.bronsonfamilydentistry.com

Cranial Osteopathy

Cranialacademy.org/patients/FAQ



Model with upper ALF appliance