

BENEFITS OF STANDING

- Build overall core strength and head control
- Improve muscle memory and motor control to help your child learn to stand with less support
- Develop strength and endurance to stand longer time periods
- Standing may help build capacity to stand unsupported and take steps with assistance in the future
- Keep your child's body healthy as they grow improved digestive health

BONE DENSITY

Children who participate in a standing program can help reduce their chance of boney fractures by building up the density of their bones. Research shows standing at least 60 minutes daily is needed to maintain good bone density for prevention of fractures. Standing for multiple episodes a day that total up to 60 minutes is a beneficial way to gain bone density benefit.

Damcott et al 2013

Paleg et al 2013

Alekna et al 2008

Katz et al 2006

Gudjonsdottir et al 2002

Stuberg 1992

RANGE OF MOTION

Standing can help your child maintain their flexibility as they grow. Standing is one way to fit stretching into your child's daily routine. Maintaining flexibility will make daily activities such as bathing, dressing, getting into and out of a wheelchair and walking easier as children grow. Research shows that children need to stand at least 45 minutes at one time to gain the benefits of improving or maintaining their muscle range of motion.

Macias et al 2015

Paleg et al 2013

Gibson 2009

TW Pin

"Standing helped my son Easton get stronger after his shunt revision and brain bleed."

Lisa Johnson - parent of Easton
(meningitis. CP)

HIP INTEGRITY

Hip surveillance: Your doctor may be monitoring your child's hip development. As part of a comprehensive hip program, research supports standing with hips apart, also known as hip abduction. If your child stands with hips moved outward in a position of hip abduction standing may help prevent secondary hip integrity issues such as hip subluxation or hip dislocation. When standing with hips outward, children can also maintain hip flexibility; making daily cares such as dressing, and bathing easier for parents. Research shows children need to stand 45 minutes a day with hips in 15-30 degrees of hip abduction to maintain hip integrity.

Macias et al 2015

Martinsson 2011

Hagglund G et al 2005, 2014



STANDING PROGRAM

STANDING PROGRAM

Your Physical Therapist has recommended your child begin a standing program, but you may be wondering why your child needs to initiate a standing program, and how it will help your child develop. If you are apprehensive about using a stander, this brochure will answer some of your questions and help you explain to family members the “why” of standing.



*We have been using a stander with RJ since he was one. Standing has helped him with his hip development, strengthening his whole body and keeping his GI moving (which makes everyone happy!)
Jess and Mike, parents of RJ
(hydrocephalus, CP)*

REFERENCES

Alekna V, Tamulaitiene M, Sinevicius T, Juocevicius A. Spinal Cord. Effect of weight-bearing activities on bone mineral density in spinal cord injured patients during the period of the first two years. 2008 Nov;46(11):727-32.

Damcott et al. Effects of Passive versus dynamic loading interventions on bone health in children who are nonambulatory. *Pediatr Phys Ther.* 2013;25:248-255.

Gibson S, Sprod J, Maher C. The use of standing frames for contracture management for nonmobile children with cerebral palsy. *Int Journ Rehab Research.* 2009, 32:316-323.

Gudjonsdottir B, Stemmons Mercer V. Effects of a dynamic versus a static prone stander on bone mineral density and behavior in four children with severe cerebral palsy. *Pediatr phys Ther,* vol 14 (1). Spring 2002;38-46.

Hagglund G. et al. Prevention of dislocation of the hip in children with cerebral palsy. 20-year results of a population-based prevention programme. *Bone joint J* 2014; 96-B:1546-52.

Katz D. et al. “Can using standers increase bone density in non-ambulatory children?” *American Acad of Cerebral palsy and Devl med,* 2006.

Macias L. The effects of the standing programs with abduction for children with spastic diplegia. *Pediatr Phys Ther.* 2015;17(1):96.

Macias L, Bagur C., Girabent M, Stuberg W. Standing Programs to Promote Hip Flexibility in Children with Diplegic Cerebral Palsy. *Pediatr Phys Ther,* 2015; 243-249.

Paleg G, Smith B, Glickman L. Systematic review and evidence-based clinical recommendations for dosing of pediatric supported standing programs. *Pediatr Phys Ther.* 2013;25:232-247.

TW Pin et al. The effectiveness of passive stretching in children with cerebral palsy. *Devl med and child neuro* 2006, 48:855-862.

Rivi E., Filippi M, Fornasari E, Mascia M, Ferrari A, Costi S. Effectiveness of standing frame on constipation in children with cerebral palsy: a single subject design. *Occup ther Int.* 2014, 115-123.

Stuberg W., Considerations related to weight-bearing programs in children with developmental disabilities. *Phys Ther* 1992;35-50.

Wort UU, Nordmark E, Wagner P, Duppe H, Westbom L. “Fractures in Children with cerebral palsy: a total population study”, *Developmental Medicine and Child Neurology.* (March) 2013.

Zing

zingstanders.com

EasyStandli

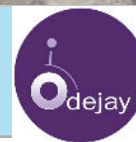
easystand.com

**Proudly distributed in
Australia by:**



EARLY INTERVENTION STANDING

a parent's guide



www.dejay.com.au
info@dejay.com.au