



### INTENSIFY THERAPY TIME

Children with neurological conditions and different syndromes can experience challenges related to their ability to stand and walk.

Peadiatric pysiotherapists can facilitate a good walking pattern by giving hands-on support at the lower trunk and pelvis, encouraging body alignment and activity in the gluteal muscles.

Without this support, the children will often develop a flexor dominant gait pattern. Research within neuroplasticity suggests that repetition and intensity of training is critical for learning new skills.

However, therapy time is unfortunately limited.





### Who will benefit?

Potential Hibbot users demonstrate gross motor function equivalent to children with CP GMFCS level II-III.

A good indication to try the Hibbot is if the child can tolerate standing and/or walk with manual support at the pelvis.

### Other indications:

- No structural deformities
- Motivated to stand and walk





# YOUR THERAPEUTIC STRATEGIES

The Hibbot is a dynamic walking aid facilitating participation in everyday activities. It enables early mobilisation with high intensity gait training in an upright, weight-bearing position.

Unlike any other conventional walkers, the Hibbot stabilises pelvic and trunk instability with just enough support for the individual child.

The device stimulates activity in extensor muscles and promotes correct postural alignment and balance, a significant requirement for optimal movement function.

### A game changer

The Hibbot is the first walking aid that aims to replicate the physiotherapists' hands-on gait training, bridging a gap between therapy intervention and daily stimulation of a child's walking skills.

If we can limit crouch gait patterns from a young age, we can maintain mobility into adulthood.

RIA CUPPERS, PHYSIOTHERAPIST AND ONE OF THE CREATORS OF HIBBOT

## THE HIBBOT FACILITATES MOTOR LEARNING

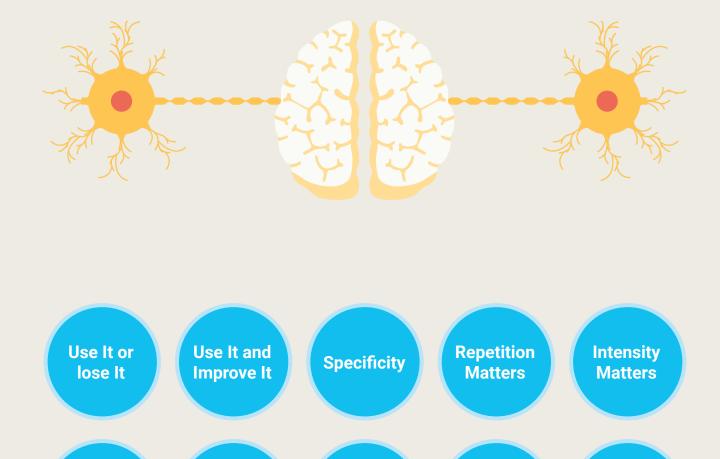
The ultimate goal is to enable children to grow and develop to their maximum ability. Regardless of their functional level. Neuroplasticity is fundamental for the learning process. Recent research show that the most effective interventions are task-specific, variable, and include interaction and functional participation, based on the children's own activity.

According to the ICF (International Classification of Functioning, Disability and Health) approach, gait training should be derived from individualised goal setting, outcome measures, include home programmes and parental education.

The Hibbot brings the effective gait training into the home environment allowing parents and other care-givers to take part in the child's therapy whilst also giving the child the opportunity to experience independence and participation.



### 10 PRINCIPLES OF NEUROPLASTICITY AND EXERCISE



Source: Principles of experience-dependent neural plasticity: implications for rehabilitation after brain damage. Kleim JA, Jones TA. (2008).

Reward

**Matters** 

Interference

**Transference** 

Research show that the most effective interventions are task-specific, variable, and include interaction and functional participation, based on children's own activity:

Rehabilitation and neuroplasticity in children with unilateral cerebral palsy. Reid, Lee & E Rose, Stephen & Boyd, Roslyn. (2015).

Age

**Matters** 

Time

**Matters** 

### EASY TO USE AND ADJUST

Neuroscientists suggest early intervention and motor learning have a direct correlation with the child and its family's participation.

The Hibbot is very easy to use and enables seamless and continuous therapeutic intervention at home and at school.

### The Hibbot grows with the child

The Hibbot grows with the child with adjustable accessories such as the brace and wheels, the children can start with early intervention and keep the walking aid until they are 125cm and 30 kg.

The Hibbot is easy to use, adjustable and it folds making it fit for transportation.



### Hibbot

User height: 60-125 cm User weight: max 30 kg

### **Product specification**

Max length	110 cm
Max height	106 cm
Wheels	
16"	16 x 1,75
20"	20 x 1,75
24"	24 x 1,75
29"	29 x 1,75

### TRAINING AND EDUCATION

Our highly-skilled specialists support and train individual users, caregivers and therapists to ensure the Hibbot is set up to optimize each individual's outcome.



### Meet Lauranne!

Lauranne is a 3 year old girl with cerebral palsy. At 18 months she could roll on the floor, sit independently using her upper limbs and stand whilst supporting herself with furniture. She heavily relied on any support due to her weakness which increased the flexion in her hips. This concerned her physiotherapist because she repeatedly over-activated the flexor muscles in her body.

With the Hibbot Lauranne gets the individual support needed to stand more symmetrically allowing her upper limbs to be free to engage in functional tasks and play. The Hibbot's support was progressively reduced as Lauranne began to activate her extensor muscles and maintain standing with her hips extended.

With practice she began to take steps and develop her walking skills using the Hibbot.

Lauranne uses the Hibbot at school and at home.

Due to the adjustable support of the Hibbot Laurranne's progress and functional development continues to be ongoing.

For us the Hibbot is the most important tool in the development of our daughter Lauranne. As her parents we immediately noticed that through its use, she gained great strength and stability. With time Lauranne has become more confident with the Hibbot and she enjoys using it when we walk with her.

Lauranne really shines when she can see she is taking steps using the Hibbot with the other children in her class. This makes us so happy! Witnessing how she is walking better and is more independent without our help.

LAURANNE'S MUM





Maddox was diagnosed with a very rare syndrome that meant that the doctors could not predict his motor development outcome. His natural pattern of movement was to sit and shuffle on the floor. To encourage Maddox to participate in standing required manual support.

Maddox has hypersensitivity in his hands and is very reluctant to hold on to anything for support.

From the age of 2 Maddox began using the Hibbot and was able to stand and weight-bear on his legs dynamically whilst playing with his favourite toys. After 3 months Maddox began taking some steps whilst in the Hibbot.

Maddox has made very big changes mentally and physically. He won't sit anymore on the ground, but likes to be upright in a standing position. He has become more conscious of the world around him and makes his own choices and clearly shows what he likes and likes not.

MADDOXX' DAD



### For more information, please contact us

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