AKTIVELINE

The Neurology behind Dynamic Seating?
Wow 20 minutes too look at neurology in dynamic seating? Let’s Get started!!!!

We know that in healthy adult posture sensory and motor systems regulate one another.

In Cerebral palsy and many other neurological conditions these mechanisms are disrupted.
Introduction

We’re going to look at 5 mechanisms
The stretch reflex and spasticity
Vestibular system (balance)
Tactile (Sensation)
Respiration
Pain
The stretch reflex and spasticity
Muscle Tone

Resistance causes muscles to stiffen

Persistent high tone spreads from resisted muscles to nearby muscles
Vestibular System (Balance)
Balance System

Keeps body oriented during changes in gravity

Protects us when gravity changes suddenly (startle reflex)
Skin Sensation

Is there to detect injury

Therefore can stimulate muscles to respond to threats
Pain
Pain - Gut Transit

57% of children with cerebral palsy may have constipation. It’s closely linked to inability to ambulate.

Consipation is known to increase muscle tone!
Breathing
Breathing

A powerful and automated neurological system

Can be mechanically blocked by poor static seating

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Any Questions?