



# BalanceTutor™

Rehabilitation like never before



## Clinical Applications

- ✓ Weight bearing encouragement
- ✓ Specific single and group muscle activation
- ✓ Multi task locomotor performance
- ✓ Spatiotemporal neuromuscular coordination
- ✓ Automatic postural adjustment ability
- ✓ Improvement of compensatory step
- ✓ Force control optimization
- ✓ Sensorimotor and vestibular system
- ✓ Sensation, muscle strength, joint stabilization and coordination

## Unique Features

- Easy and fast set up
- Programming manual/automatic postural perturbation
- Vast range of rehabilitation protocols
- Measurement and recording of center of pressure (COP)
- Motivational and customized rehabilitation video games
- Objective evaluations and documentation of patient's progress



**Q:** What is missing in traditional physical rehabilitation?

**A:** Traditional physical rehabilitation is based mainly on proactive training (self-initiated actions). Clinical research has shown that in addition to proactive training, **reactive training must be targeted**. Traditional tools and methods simply can't target reactive response training due to major safety issues and a lack of sophisticated treatment customization.

**Q:** Why is the BalanceTutor leading a new era of physical rehabilitation?

**A:** The system's unique technology for the first time allows training reactive postural control response while standing or walking at different gait phases. This is not treated in traditional practice. Together with proactive training the system allows for optimal rehabilitation outcome and recovery.



# BalanceTutor

Breakthrough clinical concept.

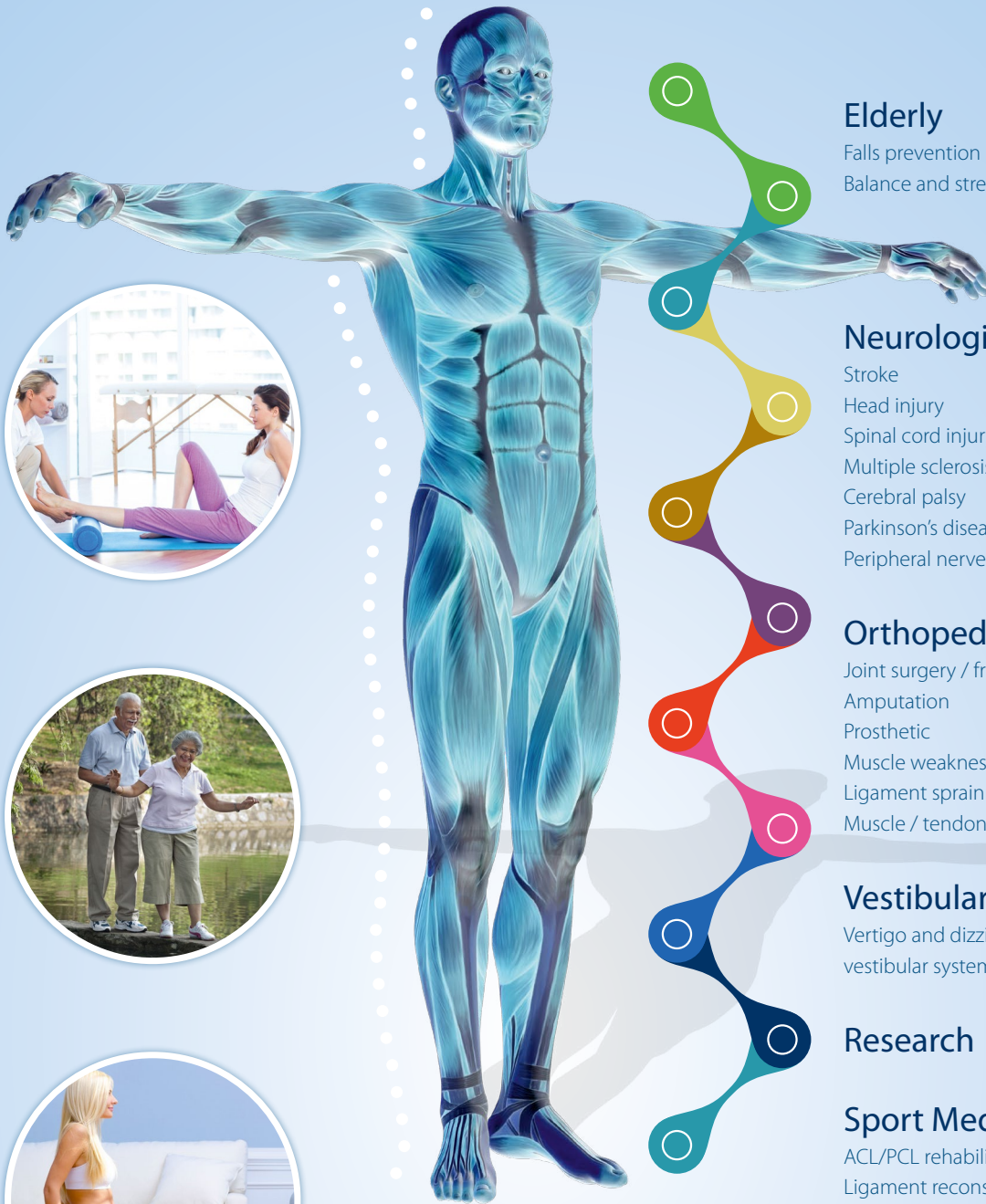
The balancetutor's new technology allows the therapist to create postural perturbation such as a slip or a trip. Its advanced technology utilizes the platform's movement in a medial/lateral and forward/backward direction while the patient is standing, walking or running allowing customized postural control practice in the specific gait phase that the therapist chooses to focus on. This allows for a vast range of physical therapy indications. It is the only rehabilitation system that employs an advanced 4D perturbation patented treadmill, multiple force and movement sensors and customized motivational video games.

**Q:** What is postural perturbation?

**A:** A postural perturbation is a sudden change in conditions that displaces the body posture away from equilibrium.

**Q:** What is reactive postural control response?

**A:** Reactive postural control response is an automatic "like reflex" response which is initiated by **unexpected** postural perturbation in order to maintain balance and can be improved through practice for example a compensatory step following a slip or a trip.



## Elderly

Falls prevention  
Balance and strength training

## Neurological Rehabilitation

Stroke  
Head injury  
Spinal cord injury  
Multiple sclerosis  
Cerebral palsy  
Parkinson's disease  
Peripheral nerve injury

## Orthopedic Rehabilitation

Joint surgery / fracture  
Amputation  
Prosthetic  
Muscle weakness  
Ligament sprain  
Muscle / tendon strain

## Vestibular Rehabilitation

Vertigo and dizziness caused by vestibular system disorders

## Research

## Sport Medicine

ACL/PCL rehabilitation  
Ligament reconstruction  
Muscle / tendon strain  
Muscle strengthening  
Automatic response training  
Joint stability and muscle coordination



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