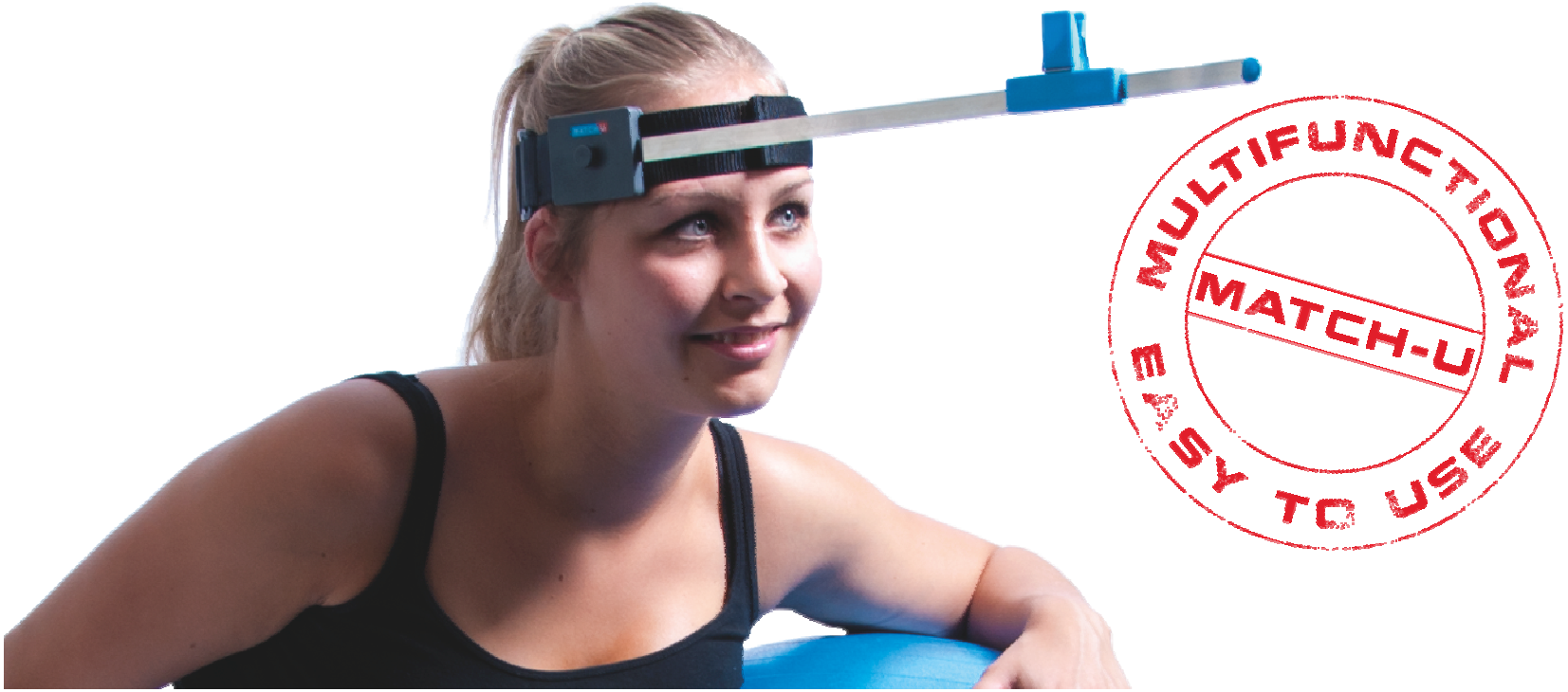
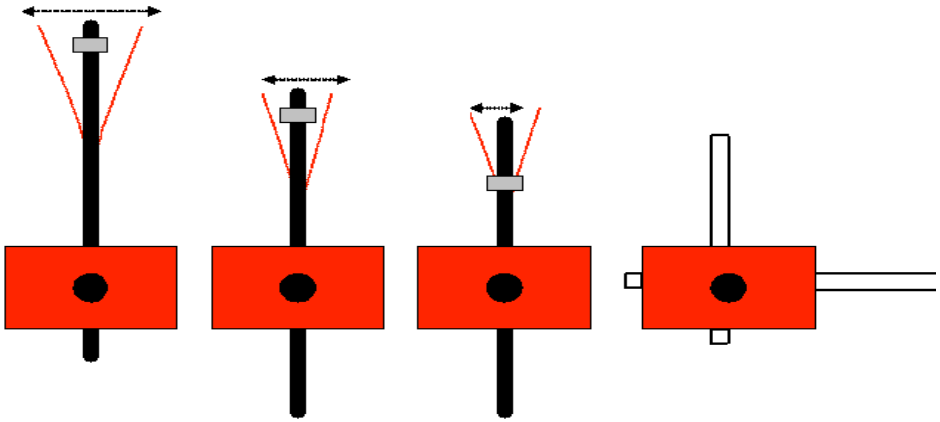
Mini Motion Training



Principle



Working field

- orthopedics / surgery
- neurology
- Physiotherapy

Development

- based on demand from practice

- functional
- wide indication range
- Low cost
- Training at home

Training

- circulation
- oedema/hydrops
- cartilage
- stabilisation
- strength
- plyometrie
- coordination

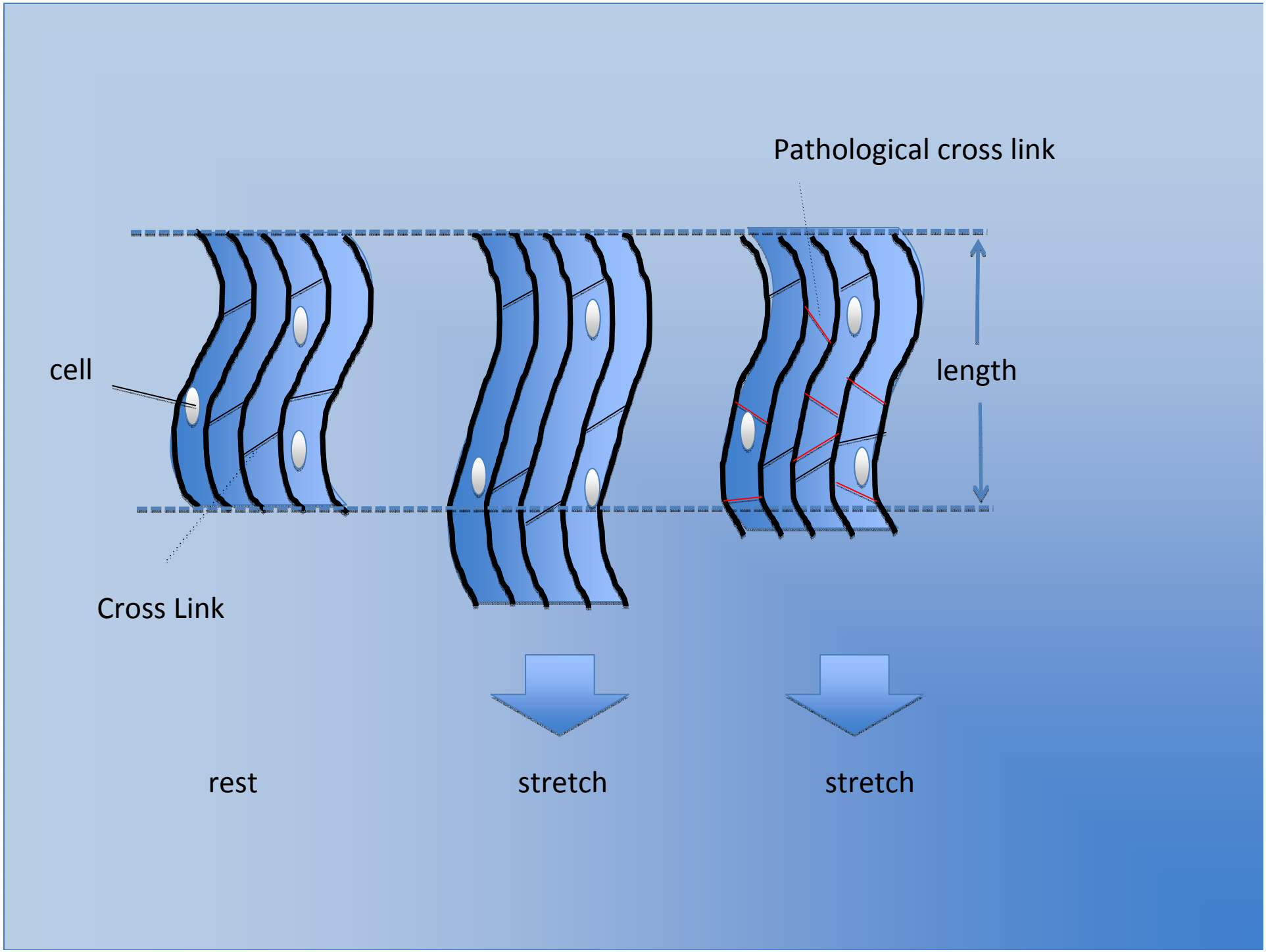
Mini Motion continuous active motion

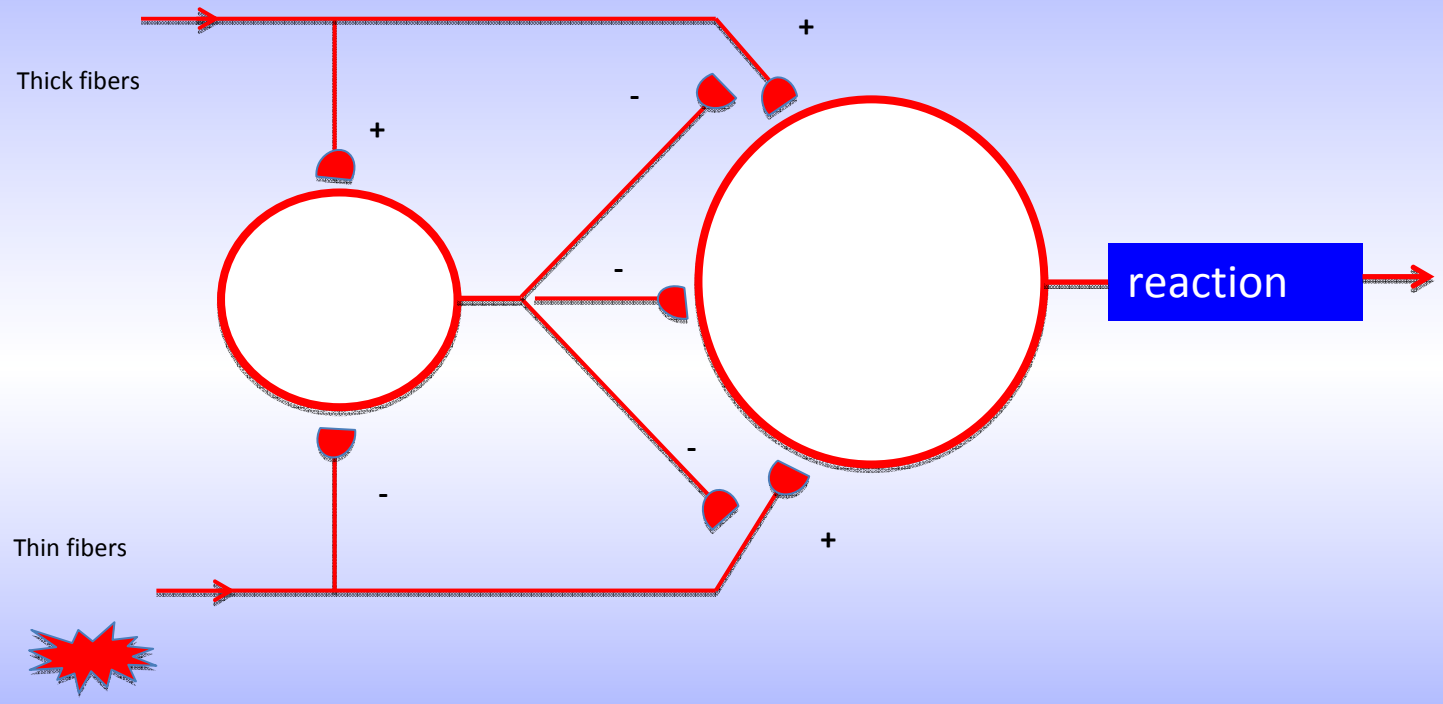
Indications:

- fraktures (micro movement)
- immobilisation, partial immobilisation
- trauma
- operation
- arthrosis

Mobilisation

- „matrix building“
- Pain reduction


Pathological cross link
cell
length
Cross Link
rest
stretch
stretch


Thick fibers
+
-
-
-
+
+
-
Thin fibers
reaction

Training parameter

	Frequency	Time	bar length	performance
	daily	5-45 min.	long	Min. intra-articular compression
		Minor injuries = short training Major pathologies = longer training		Max. relaxation Pain free

Effects

- Trophic improvement
- accelerated wound healing
- Pain relieving: thick fiber stimulation, distraction, difficult tasks (: endorphins)
- afferent
- similar to continuous passive motion and other beneficial effects
- ....

Difference CPM and CAM

CAM	CPM

Examples

Ankle / Knee/ Hip

Back

Neck

Shoulder / Elbow / Hand

Practice

Stabilisation

Indications:

- instability
- postural syndrome
- chronic pain
- distorsion
- trauma
- operation
- manipulation

Training parameter

	Frequence	Time	Bar length	Performance
	daily	3 x 1 minute	median	Joint in de middle position, later in instable position
				In different directions

Effects

- Activation local muscles with minimum intra-articular compression forces
- At the beginning subjective feelings >Pressure, tension, fatigue, pain. These disappear over time
- Similar with rhythmic stabilisation > PNF

Mini motion versus rhythmic stabilisation

Mini Motion	rhytmische stabilisatie

Examples

Ankle/ Knee/ Hip

Back

Neck

Shoulder / Elbow / Hand

Practice

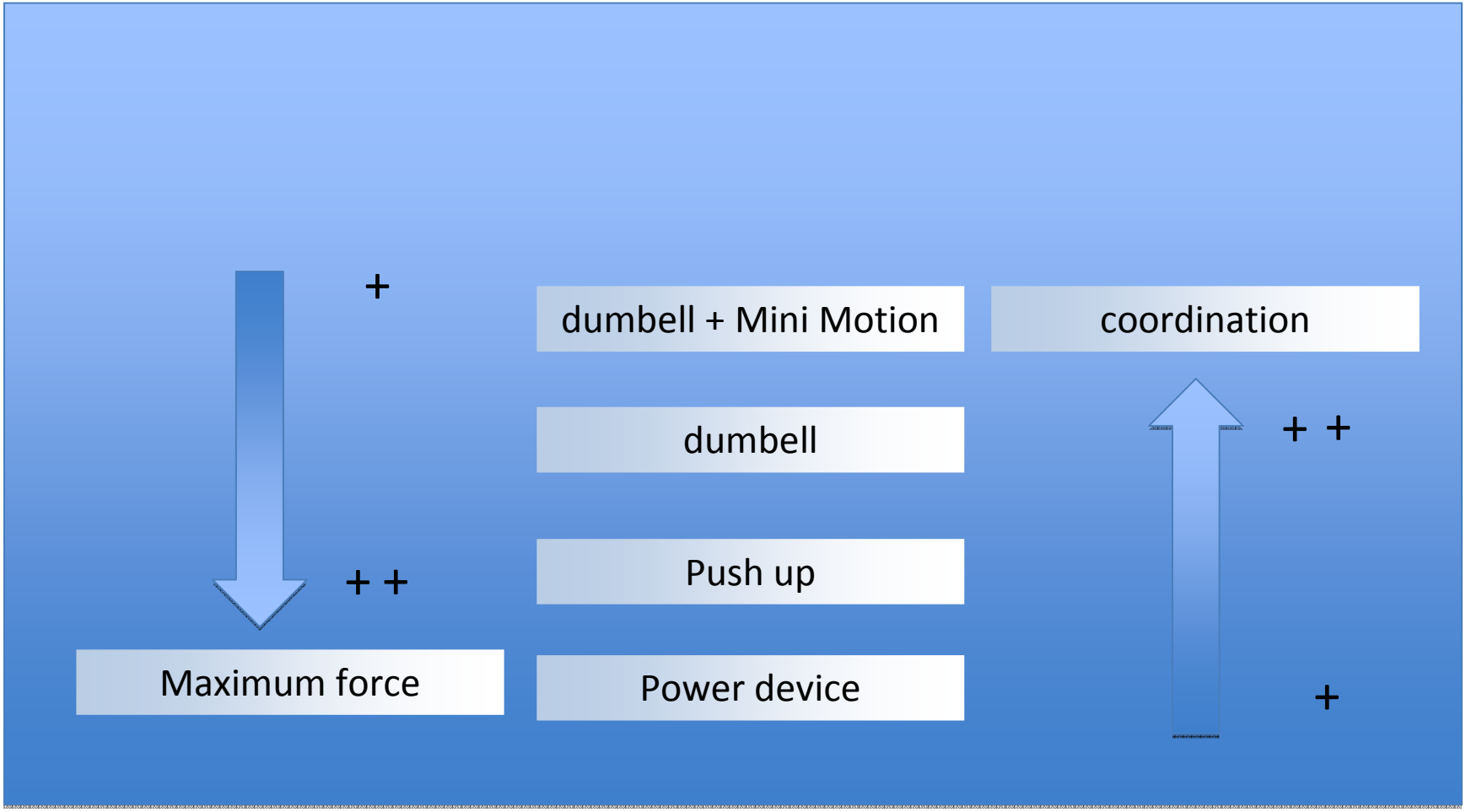
Strength training

Indications:

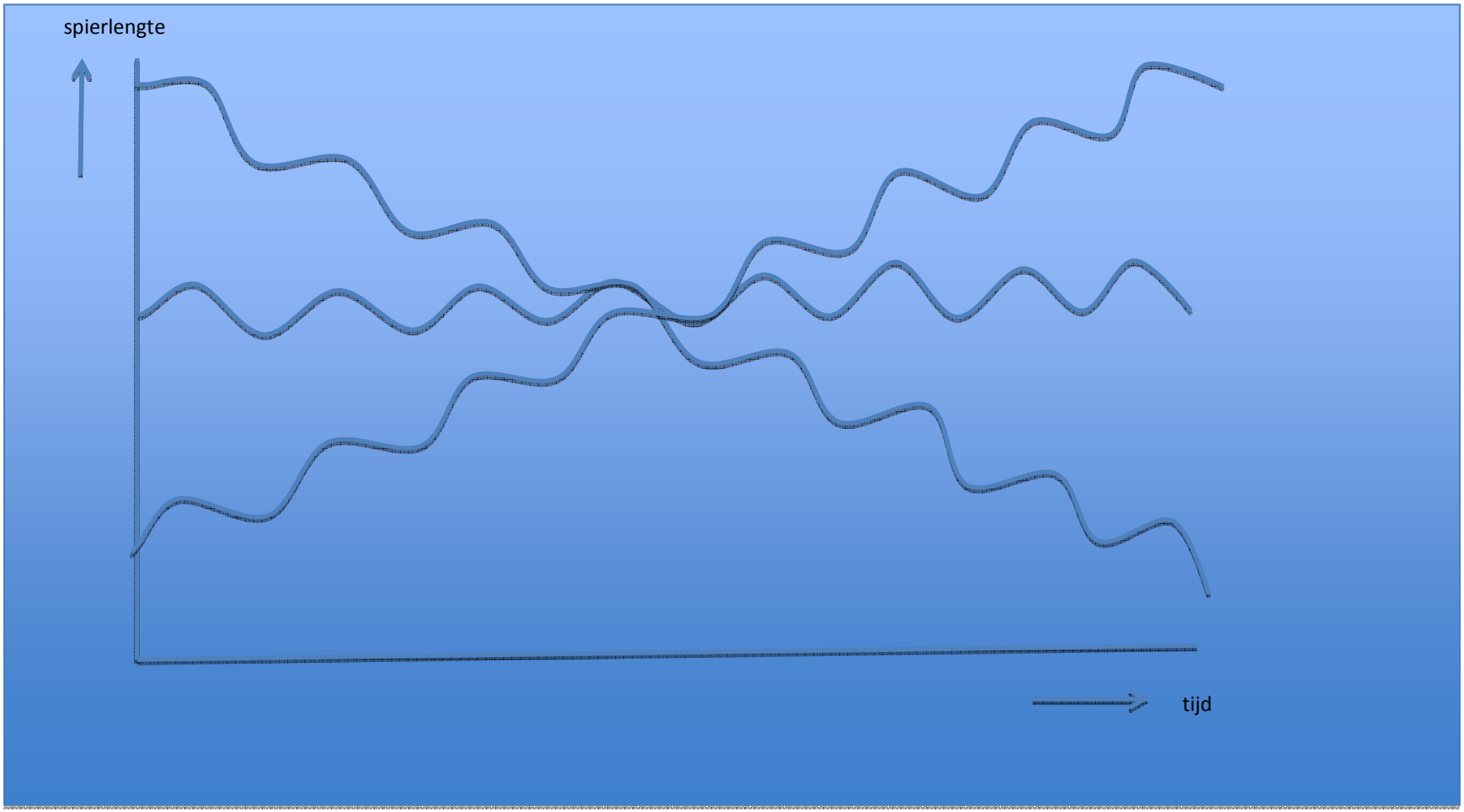
- revalidation
- orthopedic indications
- Surgical indications
- Prevention training

Variations

F.e. bench press



Eccentric-static-concentric



Liniair / Square

Training parameter

Strength - Endurance	Frequence	Time	Bar length	VAS fatigue
	daily	3 x 30 seconds	long - median	5-8

„Bodybuild“	Frequence	Time	Bar length	VAS fatigue
	3 x a week	3 x 40 seconds	long - median	8-10

effects

- strength endurance
- Muscle building
- coordination component

Examples

Ankle/ Knee/ Hip

Back

Neck

Shoulder / Elbow / Hand

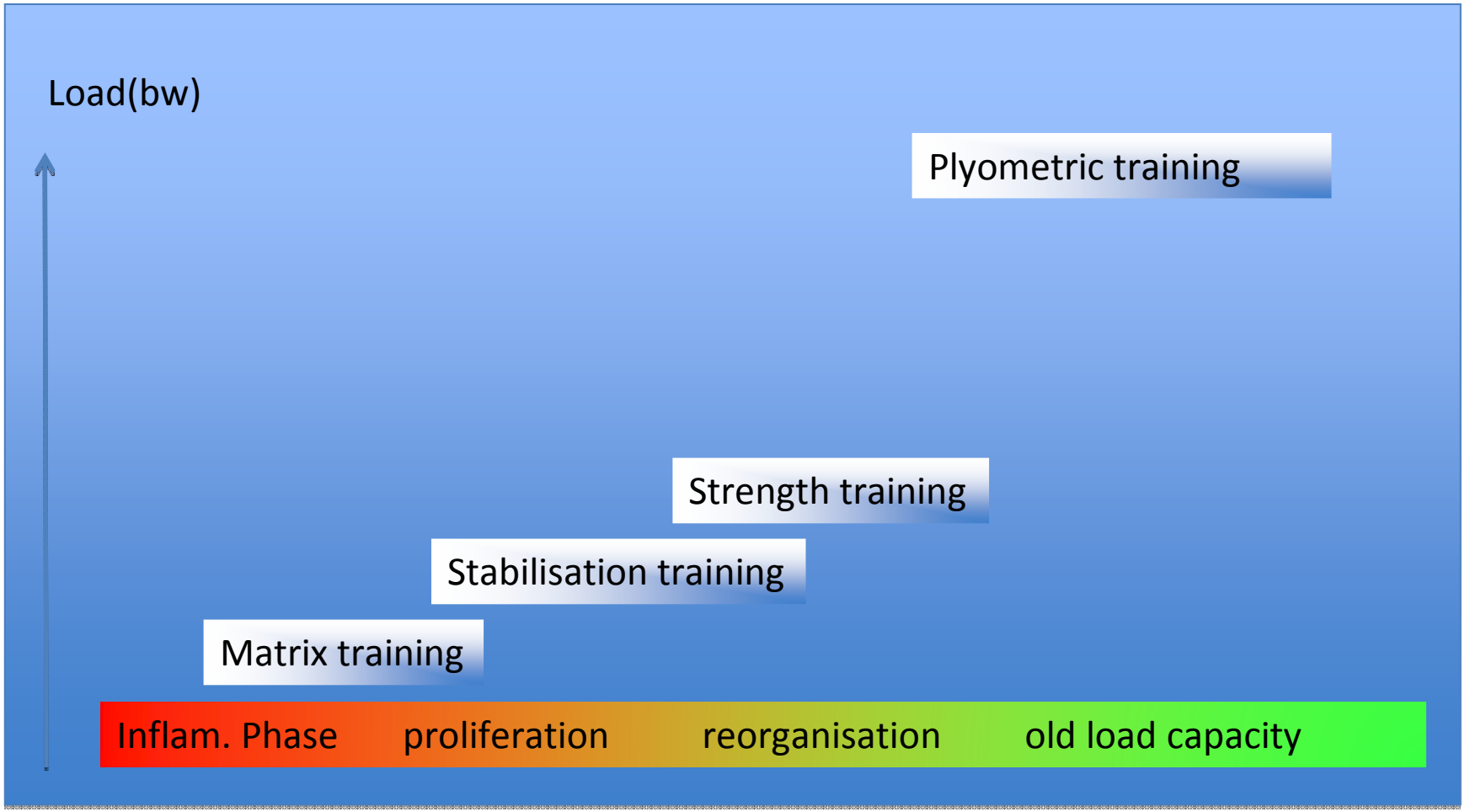
Practice

Speed training/plyometrie

Indications:

- Sports rehabilitation
- sports
- Prevention training

Overview load



Training parameter

Endurance	Frequence	Time	Bar length	Group
	2 x a week	3 x 10 seconds	median -short	sporters, Trained patients

Sporter / inactive

sporter	inactive

Effects

- Tissue training
- stretch shortening cycle

Stretch shortening cycle

- Saving energy (eccentric) and then release.
- Functional
- Injury risk for untrained people > To fast buildup.

Examples

- trowing
- Sprinting
- shooting
- Back-rotation

Ankle / Knee/ Hip

Back

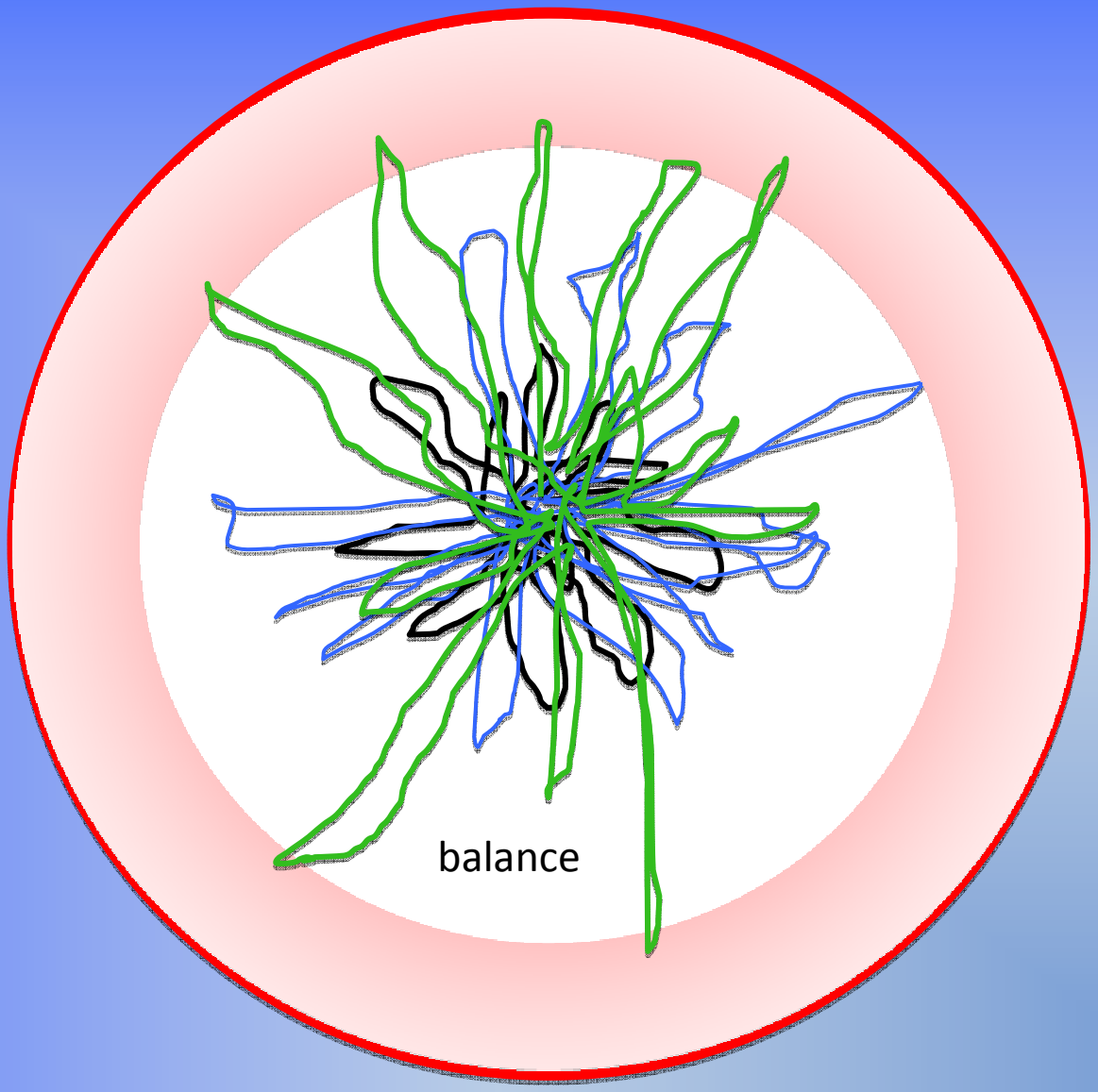
Neck

Shoulder / Elbow / Hand

Practice

Coordination

- Balance-exercises


balance

Dual tasking

- „stops walking when talking“
- „executive function“

Cross over

- examples

Precise movements

- Example
- Impingement
- golf

Examples

- Squat
- Lunge
- Dead Lift
- Pullover
- Legpress

Practice

Sport rehabilitation

- Example
- mountainbiking
- tennis

Sitting professions

- postural syndrome
- Example