

GALILEO

Mechano-Stimulation



7 STEPS FOR
AN OPTIMAL
GALILEO
TRAINING SESSION



STEP 1

What's your personal
therapy / training
Goals?

1) CHOOSE 3 PRIMARY AND 3 SECONDARY STANDARD THERAPY / TRAINING GOALS?

- Customized to users' developmental stage
 - Skill level
 - Diagnosis
 - Tolerance

2) USED FOR PT, OT, ST AND/OR AT-HOME?

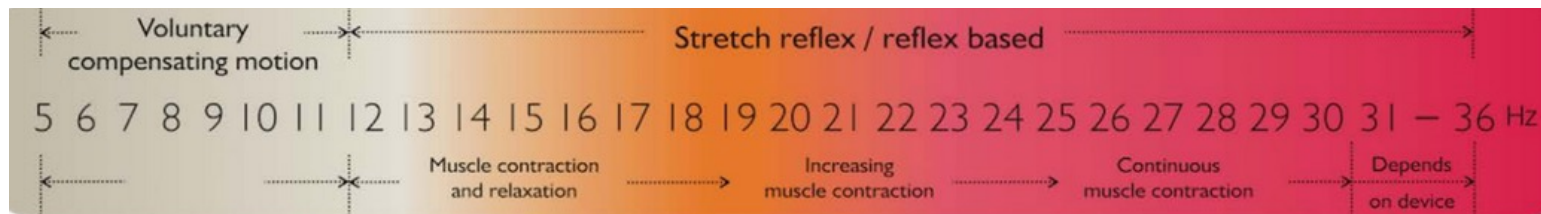
- Warm-up stretching muscles
 - Reduce spasticity
- Build muscle power, endurance & joint stabilization
- After session test outcomes with functional activities

3) ADD PROGRESSIVE EXERCISE CHALLENGES & PLAY?

STEP 2

Choose the correct
Frequency for each goal

3 different training effects



5 - 12Hz

BRAIN DOMINANT

- Proprioception
- Balance
- Tension Relief
- Muscle Relaxation
- Cool Down
- Mobilization Back

Note: 5-12Hz is most
challenging training range!

12 - 20Hz
SPINAL CORD
DOMINANT

- Stretching Muscles
 - Muscle Function
 - Contractions
 - Coordination
 - Pain Relief
 - Lymphatic Drainage
- 11- 14 Hz

20 - 40Hz
SUSTAINED MUSCLE
ACTIVATION

- Muscle Power
- Reduction of Spasticity
- Stretching Muscle Tendons
- Endurance
- Cardiovascular Training
- More Muscle Fatigue to Build Mass

Note: Decrease Amplitude
with increased Frequency



HIGHLIGHTS ABOUT FREQUENCY:

- Indicates the number of repetitions on the muscle chain per second.
- Measured in Hz - the number of wave cycles per second.
- It's important to select frequency based on your goal. This holds true for all demographics; children, adults, athletes, etc.
- Low frequencies (Hz) are the most difficult range, and therefore used the least often.
- Easiest to start at 16 - 18 Hz to warm up

STEP 3

Choose a specific Amplitude
for your body's ability

Starting at zero is the easiest. As you widen your amplitude, you increase the intensity. Choose a distance according to your capability.



Numbers indicate 1 mm in increased amplitude.



Remember: Always
maintain symmetry.



HOW THE NUMBERS ON GALILEO WORK

- Each number indicates an equivalent distance outward, towards the right and left, from the center line.
- As one increases each number position on the platform, there is a one-millimeter increase in lift up & down.
- The easiest position is closest to zero.
- As one widens their stance, intensity will increase.
- It is important to always maintain symmetry while using Galileo; this ensures one is developing good balance in the body.
- Higher intensity leads to an increase in contractility of the muscles, ligaments and improves maximum motion velocity.
- Always choose amplitude according to kids capability.

STEP 4

What Position & what Exercise activity will accomplish your goal?

LYING
PRONE
SITTING
STANDING



STEP 5

What Props will help to maximize
Body Alignment & Attention?

BENCH

STOOL

FOAM HALF ROLLS

YOGA BLOCK & MAT

PEANUT OR BALLS

ARM & LEG IMMOBILIZERS

LADDER

TOYS, SQUIGZ, ETC.

STEP 6

How Long should you train?

EARLY INTERVENTION & DECONDITIONED KIDS

- 1 minute, 5 times, each exercise
- Progress according to tolerance
- 2-3 minutes, 2 times

ACTIVE FUNCTIONAL CONTROL

- 2 minutes, 2 times, each exercise
- Progress according to tolerance
- 3 minutes, 2 times

HOME-BASED TRAINING

10 times a week doing 3 primary & 3 secondary exercise goals

STEP 7

Use Wobble Variation with Movement!

Accelerates gains by not allowing the body to adapt to the stimulus & harnesses faster brain & body changes!

WOBBLE 1 Easy	Changes 0 to +/- 2 Hz Every 1 to 4 seconds
WOBBLE 2 Medium	Changes 0 to +/- 3 Hz Every 1/2 to 3 seconds
WOBBLE 3 Hard	Changes 1/2 to +/- 5 Hz Every 0 to 1.5 seconds
CUSTOM Custom	Changes 0 to +/- 4 Hz Every 0 to 2.5 seconds



WHY WOBBLE IS IMPORTANT:

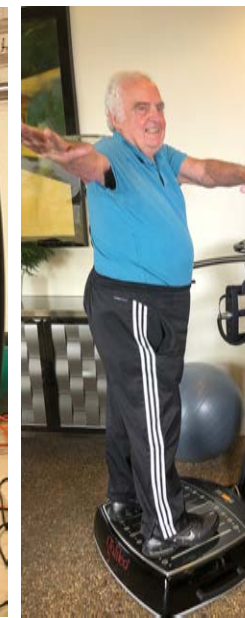
PURPOSE:

- Variation keeps the brain and body learning; as opposed to getting stuck in a repetitive pattern.
- The nervous system/muscles constantly adapt to continuous stimuli
- Wobble alters afferent/efferent neuromotor responses, giving increased benefits.

BENEFITS:

- Balance & coordination
- Range of motion
- Functional movement activities

TRAIN LIKE AN ATHLETE ALL AGES AND ALL ABILITIES



GROUND REACTION FORCED PER LEG

