

# From Noise to Quiet Neurologic responses to the ITP Kata

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The Kata is a practice that heightens awareness, movement, flexibility, strength and relaxation. It has additional multi-faceted effects and benefits. After consulting with medical and neuroscience experts, George Leonard refined the ITP Kata to provide a central and peripheral nervous system flow that transforms noise into quiet.

#### TOO OFTEN DAILY NOISE can present these outcomes:



Mind-Body disconnects; an "in the head" cortex brain dominance ("Monkey mind"); low sensory awareness of body positions, sound,

smell, touch, and temperature; a general tightness (from time and doing pressures, multi-tasking, constricted body movement); feeling unbalanced and just "off center."

The section below offers a description of typical neurologic responses in relation to each aspect of the Kata. In reviewing each aspect, you will note a corresponding description in either **RED** or **GREEN**. Red denotes the neurologic responses of overactive and overstimulated, while green denotes quiet, reflective and soothing.

#### WE BEGIN WITH GRACE:

Cortex

- Link to peripheral sensing systems to "rediscover" the body (noticing = awareness = being present)
- Initiate deliberate movements to align core
- Create waves of body relaxation through conscious choice
- Open frontal regions allowing experience of "letting go" with awareness of being grounded, with energy, and yet relaxed

Midbrain

- Enhance thalamus reception of all sensing circuits (external and internal)
- Increase activity through all motor paths

Cerebellum

- Integrate vestibular, motor, and sensory inputs
- Set homeostatic equilibrium and establish center of gravity (Hara)
- Prime brain-body readiness for more intentional movement

Medulla

• Deepen breathing to increase blood oxygen

Spinal Cord

• Handle increased sensory and motor transmission

Peripheral

• Transmit increased amounts of sensory information

### THE WATER SERIES:

Cortex

• Shift from outside world unconsciousness to inner directed movement

Midbrain

• Draw information from parietal (visual) and temporal (vestibular) cortical areas

Cerebellum

• Process peripheral sensory and central information to maintain smooth movement. Inner ear vestibular system is stimulated: horizontal (drilling), downward (pumping), vertical (scooping), stationary (spraying), and then at 45 degree angles (windmill)

Medulla

• Modulate cardiovascular, pulmonary, sympathetic systems

**Spinal Cord** 

• Active

Peripheral

• Active

# ARTICULATION SERIES (standing, sitting, and supine):

Cortex

• Enhance parietal motor and sensory areas with lessened frontal cortex "noise"

Midbrain

• Handle heavy sensory inputs

Cerebellum

- Increase processing for coordination of entire connective tissue system when upright or sitting
- Quieted when body is become supine

Medulla

• Active

Spinal Cord

• Maintain full capacity

Peripheral

• Accentuate sensory and motor activity. Receptor response heightened in ligaments, tendons, muscles, and joints to position, tension, stretch, movement, vibration, and touch.

#### **TWO-STEP AND SUN SALUTATION:**

• Culmination of action-based communication between cortex-midbrain-cerebellum-spinal cord-peripheral nervous system. Integral body, mind, heart, spirit dynamics.

#### **TENSION-RELEASE SERIES:**

Cortex

• Lessen motor and sensory areas during "release" phase

#### Midbrain

• Active distribution

Cerebellum

• Quiet after ascertaining new supine COG

Medulla

• Active

Spinal Cord

- Progressive decrease in motor activity as move up from legs to face
  - (cord reflex arc intensifies tension phase)

Peripheral

• Active sensory during tension then "turn-off" with relaxation

#### **DEEP BODY SCAN:**

Cortex

- Low level parietal sensory area
- Quiet motor strip
- Overall lessening of all cortical activity and slowing of brain waves

Midbrain

• Low level transmission and distribution of sensory input

Cerebellum

Quiet

Medulla

• Slows toward basal homeostatic activity

Spinal Cord

• Quiet motor column with progressively less sensory transmission as move from toes to head

Peripheral

• Declining sensory activity

#### AFFIRMATIONS AND TRANSFORMATIONAL VISUALIZATION:

Cortex

- Quieting of entire cortex
- Brain waves slow further
- Ability to imprint new and progressively preferential connecting paths between frontal, prefrontal, and amygdala

Midbrain

• Quiet

Cerebellum

• Quiet

Medulla

• Homeostatic activity

Spinal Cord

• Quiet motor and sensory columns

Peripheral

• Quiet sensory and motor

## **MEDITATION:**

Cortex

• Quiet overall with further brain wave slowing

Midbrain

• Quiet

Cerebellum

• Quiet

Medulla

• Further slowing of homeostatic activity

Spinal Cord

• Quiet

Peripheral

• Quiet

Is there another practice that offers such a wondrous shift in brain-body balance in such a short time?