



MNRI® Tactile System Integration

Introduction:

Skin, our largest organ, forms the boundary between our physical being and the outside world. It also houses the tactile system, which allows the body to access tactile sensations from the outside world. The skin possesses eleven different tactile receptors to distinguish the broad array of tactile stimuli input encountered by the body. This set of tactile receptors helps to inform and prioritize incoming sensory information for the central nervous system to process. Once processed, the central nervous system directs the body's actions in response to ever-changing tactile conditions. Due to congenital issues or trauma (in utero, at birth, or anytime after birth), tactile system challenges can result, causing any one of the following conditions.

- *Hyper*-sensitive Tactile System – Also referred to as tactile defensiveness, this results in a negative, over-reaction to touch that typically would not be a problem. A person with a hyper-sensitive tactile system will often respond negatively to hugs, having their hair brushed or nails clipped, and complain about various textures, seams, tags and avoid wearing any form fitting clothes. A simple skin scrape can elicit a reaction expected for a far more debilitating wound.
- *Hypo*-sensitive Tactile System – A person with a hypo-sensitive tactile system often does not respond to tactile input that would cause most people to act. A deep cut, a hard push, or other forms of physical harm lead to little or no reaction. Tactile input important to taking action and avoiding harm, is often missed by a person with a hypo-sensitive tactile system, leaving them at risk for great harm. People with hypo-sensitive tactile systems often seeking more intense sensory stimulation in an effort to register sensation.
- Non-Functioning Tactile System – A non-functioning tactile system is simply not working.

The reactions of a person with either a hyper- or hypo-sensitive tactile systems, often seem bigger or smaller than normal conditions would dictate. Such disproportionate reactions are often an indication that an individual's tactile system is not appropriately engaged and integrated. The MNRI Tactile Integration program uses neuro-tactile techniques to stimulate different receptors in the skin, working to appropriately engage and integrate the tactile sensory system within the complete mind/body system. When the tactile system is integrated, the brain stem relaxes defensive reflexes, and opens the entire system to an experience of safety in which emotion and behavioral regulation improves and healthy motor, communication, and cognitive development can proceed.

Professionals, parents and caregivers interested in learning more about the MNRI Method and its various programs are encourage to attend this course early on, given the fundamental role it plays in emotional and behavioral regulation, and overall maturation and development. The Tactile Integration course explores in great detail the physiology and psychology of the tactile system, the developmental effects of over- and under-sensitive receptors, and the importance of an appropriately integrated tactile system to the process of integrating all motor reflex movement and patterns.

The MNRI Tactile Integration course explores:

- The general MNRI Method and role played by the Tactile Integration Program
- Tactile integration and how it relates to motor reflexes and other important body systems
- The neurophysiologic and psychological dynamics of the tactile system
- The role tactile integration plays in establishing a foundation for motor, communication and cognitive development, and emotional and behavioral regulation
- MNRI techniques designed to assess, activate, and integrate tactile sensitivities
- How to create MNRI tactile integration programs for individual clients
- How to incorporate use of MNRI Tactile Integration course content into daily client and home practice

Course Objectives:

Upon successful completion of the two-day, 16-hour Tactile Integration course, participants will:

1. Learn about the Masgutova Neurosensorimotor Reflex IntegrationSM (MNRI) Method
 - a. The innate nature of the motor reflex system
 - b. The role of a reflex and its sensory, motor, and central nervous system mechanisms
 - c. When, why, and how the brain engages in protection versus learning and development
 - d. The role tactile integration plays in motor reflex integration and advanced learning
2. Explore the neuro-physiological and psychological dynamics of the tactile sensory system
 - a. Learn to identify, explain and classify
 - Types of neurons and divisions found within the skin, while exploring how the nervous system functions as a whole to control and

coordinate the body systems

- The seven types of sensory cells found in the peripheral and central nervous systems, and the role each plays in processing sensory stimuli and establishing an individual's relationship to self, others and the general environment
- b. Learn to compare, contrast and differentiate between
 - Conscious and subconscious somatic and specialized senses and how each impacts learning in various settings and social situations
 - Subconscious somatic and visceral stimuli and gain an understanding of how stimuli variation influences learning, social/emotional and tactile development in challenged individuals
 - c. Review and discuss research regarding the relationship between individuals with challenges and tactile integration
 - d. Learn and explain the impact tactile integration can have on (1) emotional and behavioral regulation, (2) advancing maturational reflexes, (3) motor, communication and cognitive development, and (4) growth, learning and academic functioning throughout the lifespan
3. Learn to implement MNRI neuro-stimulation techniques designed to assess, activate and integrate challenged tactile systems
 - a. Review, discuss, and gain an understanding of the four general MNRI tactile technique variations
 - How each activates, re-educates and integrates tactile receptors and the proprioceptive system
 - The impact integration can have on improving function and learning
 - b. Learn through demonstration and application how to apply each of the four tactile technique variations, including lengthening and stretching, rotation, compression and traction, and deep pressure touch to:
 - Activate physiological and structural connections between skin, muscles, tendons and bones
 - Alleviate the negative physical and psychological effects of sensory stimuli
 - Reduce stress at the physiological level, alleviating stress responses that would otherwise inhibit reflex integration required for core stabilization, improvement in joint mobility, range of motion and motor coordination
 - c. Learn through demonstration and application additional tactile program techniques to:
 - Provide a kinesthetic sense of appendage length, size, and boundaries
 - Provide an awareness of the sagittal, axial and coronal planes of body coordination, coronal planes of body coordination and core integration
 - Develop the clinical skills necessary to generate body awareness and enhance spatial skill development
 - d. Demonstrate for course instructor ability to appropriately apply all tactile integration techniques presented in class
 4. Learn to use course knowledge to create and apply an individual MNRI program for clients with various challenges
 - a. Develop an individual MNRI program based on assessment results and targeted individual challenges
 - b. Explore with client family the potential impact the individualized program can have on
 - Supporting the integration of archetype motor movements, primary motor reflex patterns and other motor reflexes and body systems
 - Body structure, posture, and motor maturation
 - Motor, communication and cognitive learning abilities and emotional and behavioral regulation
 5. Explore, evaluate and develop strategies to incorporate the use of the MNRI Tactile Integration course content into daily client and home practice.

Prerequisites: No prerequisites are required; however, Masgutova recommends attending the Dynamic & Postural Reflex Integration course first, whenever possible, to help provide broader context prior to attending other foundation courses.

Course Length: The course covers a period of two days and requires a minimum of 16 hours of direct classroom instruction to complete.

Curriculum Design: The course curriculum consists of a combination of historical and theoretical lecture, case study slides and videos, technique demonstration and applied practice, and class discussion.

Course Materials: The Tactile System Integration course manual, written by Svetlana Masgutova, Ph.D., is the primary source for content presented in class. Supplementary course content draws from a variety of articles and MNRI case studies, and is referenced as needed upon presentation in class. The course manual is included as part of the course fee and is distributed to course participants at initial course check-in.

Approved Continuing Education Course for: AOTA, ASHA

Reflex Course Cross Reference: NA