



SVETLANA MASGUTOVA EDUCATIONAL INSTITUTE®  
for Neuro-Sensory-Motor & Reflex Integration

# **Strengthen Your Stress Resilience and Immunity**

*with MNRI® Reflex Exercises*



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**Svetlana Masgutova Educational Institute  
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This Program was created for benefit of people throughout the world trying to fight off the pandemics of coronavirus and its emotional hardship and stress consequences. This Program focuses on the idea of optimizing the body's recovery resources for positive survival and protection, and increasing stress resilience of the nervous and immune systems that are tightly linked to physiological reflex patterns.

The novel MNRI® therapy modality, oriented upon the function of biological survival mechanisms (at the level of the extrapyramidal nerve net system and subcortical structures of the brain), becomes more important for a person in stress, trauma and recovery from diseases. When order is restored to the neuro-physiological system and links to immunity designed to aid in survival, building the strength on physical and emotional and concept level is possible.

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This publication shares the results of professional work on trauma and stress recovery, neurodevelopment and immune system support utilizing the MNRI® Masgutova Neurosensorimotor Reflex Integration program.

*More information is available at: [www.MasgutovaMethod.com](http://www.MasgutovaMethod.com)*

**DISCLAIMER:** The Svetlana Masgutova Educational Institute (SMEI) DOES NOT CLAIM THAT THESE PRESENTATION MOVEMENTS PREVENT, TREAT OR CURE COVID-19. CONSULT YOUR DOCTOR FIRST BEFORE DOING THE EXERCISES. This book demonstrates the MNRI® methods of the Svetlana Masgutova Educational Institute only on a level of general information. This book is not intended to replace the services of qualified practitioners in the field. Any application of the information set forth in the following pages is at the reader's discretion and sole risk. For those who want to have their children treated according to the MNRI® system, we recommend working with an experienced MNRI® Core Specialist who is certified through the Svetlana Masgutova Educational Institute. Practitioners are available at [www.MasgutovaMethod.com](http://www.MasgutovaMethod.com).

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# Introduction

The world faces a very serious problem — to stop the COVID-19 respiratory disease. The authors of this program and the MNRI® team believe that this challenge must be solved for human survival. Based on our knowledge and experience of work with thousands of individuals in different countries, we propose a focus on regulating the defensive mechanisms of the body-mind and its neurosensory-motor and immunological systems.

The Masgutova Method® is a research-approved, evidence-based and neurodevelopmentally driven program focused on the restoration and maturation of primary movements, reflexes, coordination systems, and skills for optimal performance of natural mechanisms, developmental processes, brain functioning, and sensory-motor integration.

The Masgutova Method® targets:

- Strengthening the nervous and immune system
- Stress resilience
- Brain connectivity and neuroplasticity, which is realized through support of neurophysiological reflex circuit functions.

The Masgutova Method® is based on the activation of reflex patterns to awaken natural, genetic sensory-motor resources and self-regenerating programs, which strengthen sensory-motor integration and memory.

This time, the method also will be focused on immune system regulation to prepare it to fight off the SARS CoV-2 virus that causes the COVID-19

disease and to support stress management.

The current mission of the Svetlana Masgutova Educational Institute for Neuro-Sensory-Motor and Reflex Integration, LLC is to provide adults, older people, teens and children simple and reliable knowledge and safe exercises to optimize the immunity, and activate the resilience of the nervous system and its plasticity, in order to establish quality of life.

This guide contains information about the role of the immune system, and how some basic reflex patterns can help strengthen your immunity, whether you are recovering from the virus or working to maintain your health. These simple exercises and techniques can also help you manage your physical, emotional stress, and worry associated with the spread of the pandemic.





# A Global Pandemic



On December 31, 2019, the World Health Organization fielded a report from Wuhan, China, describing the emergence of perplexing pneumonia-like cases that stemmed from an unknown cause. By then, dozens of people were being treated for the mysterious virus, which Asian researchers identified as a novel betacoronavirus. Some 12 days later, the coronavirus claimed its first life in Wuhan.

Panic rippled in Asia. Alarm reverberated throughout the world. The novel betacoronavirus was determined to have originated in a Chinese poultry<sup>1</sup> and seafood market.<sup>2</sup> (Coronaviruses are zoonotic, meaning they are transmitted between people and animals.) According to the World Health Organization, there are several coronaviruses circulating in animals that have not been transmitted to humans.

These pneumonia-like illnesses of this new coronavirus recalled the outbreak of SARS, or severe acute respiratory syndrome, which also was a coronavirus that originated in southern China in 2003, ultimately infecting some 8,100 people and killing 774 individuals.

By March 11, 2020, a little more than a month after the first case had been reported, the World Health Organization declared the novel coronavirus a global health emergency. The coronavirus was identified as SARS-CoV-2, which causes a respiratory illness known as COVID-19.<sup>3</sup> As of March 26, there were more than about 532,000 cases and more than 24,000 deaths<sup>4</sup> reported throughout the world. This new coronavirus, which had not pre-

viously been identified in human beings, revealed that it spread much more quickly than SARS and was more contagious.<sup>5</sup> The symptoms of COVID-19 include fever, aches, and shortness of breath. "In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death," according to WHO.<sup>6</sup>

Throughout the world, country borders were closed, travel bans were instituted, and quarantines and self-isolation protocols were established among many countries. It seemed as if the world had stopped. Hour by hour, day after day, the pandemic was disrupting our lives in ways we couldn't imagine in our modern world.

The virus continued to spread quickly, particularly in China, the European Union, and the United States. Panic ensued as those not yet affected wondered if, or possibly even when, they would contract the virus. According to the Centers for Disease Control and Prevention, certain groups of people are at a higher risk for getting very sick

## ORIGINS OF THE VIRUS

The coronavirus originated in Wuhan, China, in the end of December 2019. The Australian prime minister recently suggested that this virus could be a "once-in-a-hundred-year type of event."



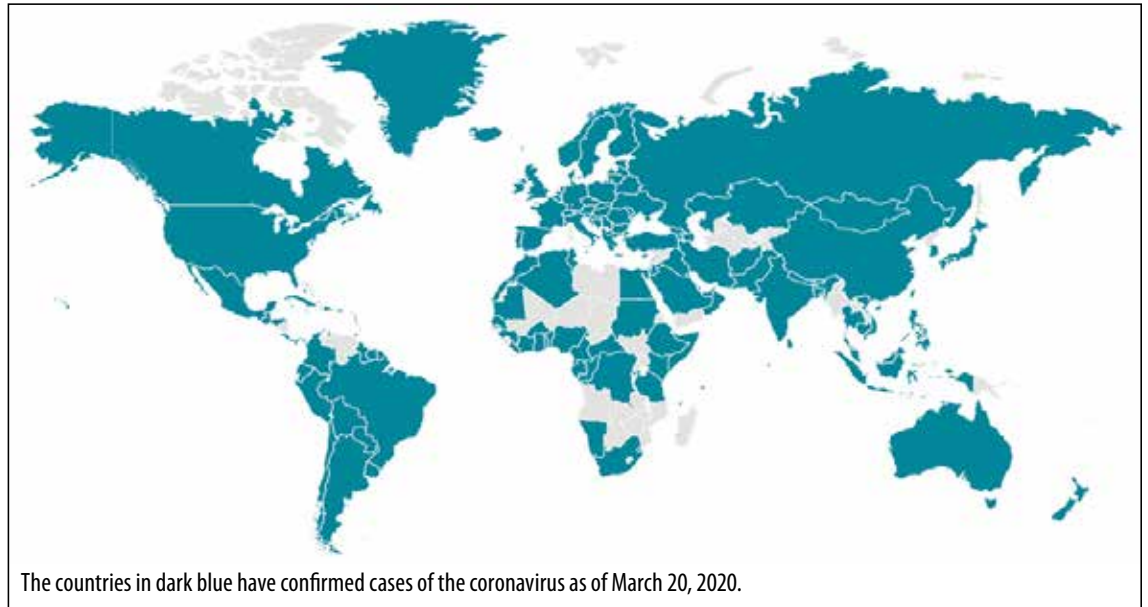
from this new coronavirus. They include:

- Older adults (age 60-plus) and
- Individuals with chronic health conditions, including heart disease, lung disease, and diabetes.<sup>7</sup>

At this moment, there are no treatments for any coronavirus diseases, including COVID-19. Certain drugs are in clinical trials, and antiviral medications are being developed. There are discussions about the creation of a vaccine, but a vaccine will not be available for at least a year, and we don't know what other potential health consequences may arise if vaccines were to be developed and administered.

What was it about the coronavirus that prompted such a rapid-fire transmission? What was different about this virus versus flu strains, and what could be done to help minimize people in such fear?

The most important thing we can do at this moment is to strengthen our immune systems and prepare our bodies for the possibility that we may contract any kind of virus, including coronavirus, at some point in the future. Research<sup>8</sup> has shown that stronger immune systems are the best defense against contracting a virus. Individuals with healthier immune systems who do contract the virus may only show symptoms for a shorter period of time, even just two days, or may not feel any symptoms at all. Or if they do get sick, their symptoms may be on the milder side and their immune system can resist the disease easier and faster.



There are ways to help keep yourself healthy and physically active, and to regulate your body's interferon, a protein that helps inhibit infection replication, to fight off coronavirus (and other viruses as well). Getting ample rest and eating wholesome, nutritious foods will help support your immunity.

The neuro-sensory-motor reflex integration techniques and exercises outlined in this book also complement health regimens (please, get to know them through reliable sources). These exercises are designed to strengthen our immune systems and help regulate stress levels, so that your body is stronger and more well-prepared to fight off the coronavirus. Let's direct our minds for setting the action-goals to stay healthy through support of our immunity using the natural protective strength of reflex patterns given by Mother Nature on a genetic and epigenetic level.

# A GLOBAL PANDEMIC

Our protocol presents steps including exercises and movements in six groups:



## Part 1. Move Out of the Re-Action into Action

1. Trunk Extension
2. Head Turn-Spine Rotation

## Part 2. Activate Your Breathing = Strength

3. Breathing: Side Stretch



## Part 3. Regulate Protection and Survival

4. MORO: Invite Courage into Body-Mind

## Part 4. Strengthen Immunity

5. Six-Ended Star in Action
6. Extend Arms/Chest: "V" (Victory) with Arms
7. Elbows Up and Down: Chicken Dance
8. Arms/Elbows Up and Back



## Part 5. Stabilize Your Body and Be Flexible

9. Spinal Perez.

## Part 6. Activate Your Brain Potential, Positive Protection

10. Hands Supporting



## Part 7. Keep Open to Enthusiasm and Joy!

11. Landau

Please, move, eat properly, take care of your hygiene, keep your well-being strong with enthusiasm, and leave space for play, songs, and dances!

Sincerely yours,

Svetlana Masgutova, Ph.D

Nelli Akhmatova, Ph.D

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# What is a Virus? What is Bacteria?

Viruses and bacteria have existed on Earth for billions of years. Fossilized records for bacteria date back 3.5 billion years ago.<sup>9</sup> While scientists are not sure precisely when viruses first appeared, genetic evidence suggests that viruses may have been one of the first forms of life on Earth, pre-dating cellular life.<sup>10</sup> Bacteria and viruses were here long before us, and they are here to stay. What, exactly, are the differences between viruses and bacteria, and how can we prepare our bodies to be as ready as possible to resist them?

First, let's explore some surface-level similarities and distinctions between viruses and bacteria.

Viral and bacterial infections have many similarities, but there are differences that warrant dis-

tinct approaches and treatments. Unfortunately, because there are some commonalities in their symptoms, coughing and sneezing, inflammation, nausea, diarrhea, and fatigue, antibiotics are often pursued as a means of treating the symptoms, irrespective of whether the underlying illness is virus or bacterial related.

**Bacteria** are single-celled microorganisms that thrive in different types of environments, including extreme cold or heat. Some bacteria exist in our intestines to help digest food or fight cancer. Most bacteria are harmless to people, in fact, fewer

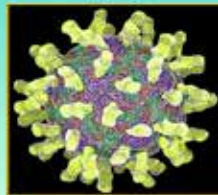


## Virus vs. Bacteria

- Colds and influenza are caused by viruses. Conditions such as strep throat and tuberculosis are caused by bacteria.
- **Viruses** are a non-living particle that contains genetic material, and hijacks your cells' ability to reproduce.
- **Bacteria** are single-celled microorganisms that thrive in many different types of environments.
- Bacteria can be killed with antibiotics because these substances target key processes in bacteria. Viruses cannot be "killed" with antibiotics.



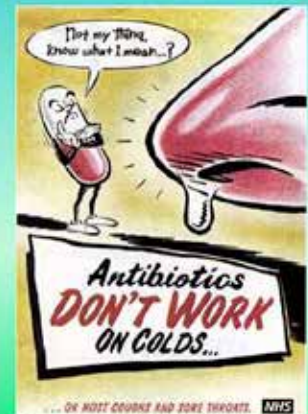
Coronavirus



Rhinovirus



Influenza virus





# VIRUS VS BACTERIA

than 1% of bacteria cause diseases in people, but there are exceptions that can cause infections, including strep throat, tuberculosis and urinary tract infections. Prolonged and excessive use of antibiotics has spawned the creation of new bacterial diseases that are resistant to antibiotic medications.

**Viruses** require living organisms, such as people, plants or animals, to multiply and otherwise survive. Once a virus infiltrates your body, it takes over some of the cells and the cells' resources, directing them instead to produce a virus.<sup>11</sup>

"For the most part, viruses go away on their own, as the immune system is more than enough to take them out," according to Frank Esper, a pediatric infectious disease specialist, in an Oct. 30, 2019, Cleveland Clinic article titled "Virus vs. Bacteria: What's Causing My Kid's Cold?"<sup>12</sup>

In the case of a virus, people all too often seek out antibiotics when they not only are ineffective

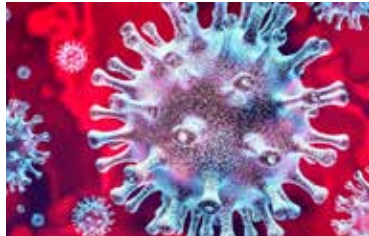
tools against treating a virus, but their overuse can destroy the good bacteria in the gut, leading to even more stomach and gastrointestinal discomfort.

"Your gut is full of bacteria — but, antibiotics do not know friend from foe," Esper says.

Viruses include chicken pox, common colds, seasonal flu (to which people have built up immunity) and of course, coronavirus. Viruses like chicken pox and the measles can travel 100 feet in the air and can stay alive on surfaces for hours, while coronavirus can only travel 6 feet from the infected person, via respiratory droplets produced when the sick person breathes, talks, coughs or sneezes.<sup>13</sup>

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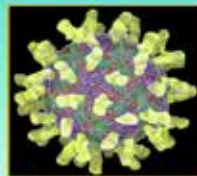


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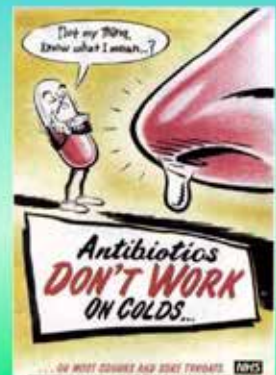
Coronavirus



Rhinovirus



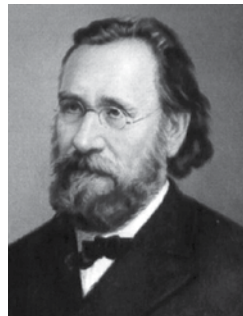
Influenza virus



# Immunology as the Science of Immunity

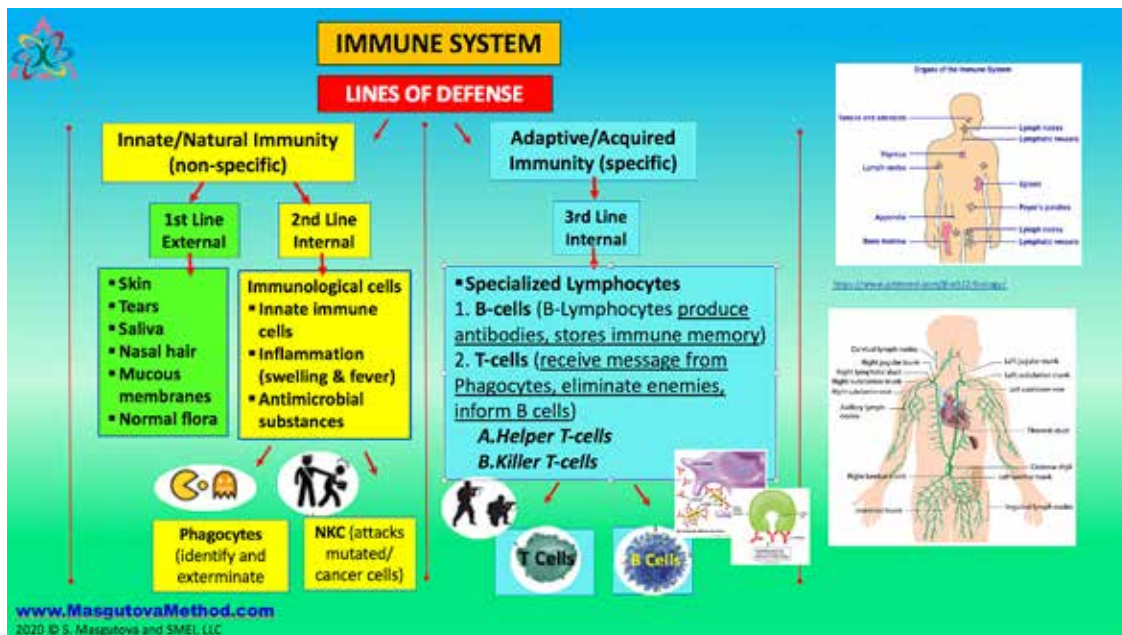
Immunology is a branch of biomedical science that studies different aspects of the immune system of the entire organism.

The Russian biologist, I.I. Mechnikov (1845-1916), greatly impacted developments in studies on immunology. He began his scientific research after suffering a devastating loss in his life when his first wife was so sick with tuberculosis that he had to carry her to church in a chair for their wedding. The following five years, he did all he could to save her life but she passed away. He remarried, but five years later, his second wife contracted typhoid fever. Remarkably, to save his wife and himself, Mechnikov inoculated himself with relapsing fever as a scientific experiment to find out whether it was transmissible by blood. His relapsing fever was severe, but he recovered,



as did his wife. He set up a private scientific laboratory to explore other deeper questions about immunology.

Among his achievements, he is credited for discovering phagocytes, or immune cells that protect organisms by ingesting foreign particles or microorganisms, after conducting experiments on the larvae of starfish. He inserted small thorns from a tangerine tree into starfish larvae, and watched as mobile cells surrounded the thorns. These were white blood cells, gathering at the site of inflammation, and he theorized that this process could also help attack and kill harmful bodies such as bacteria. His theory of phagocytosis explained how inflammation is part of the self-defense system found in both vertebrates and invertebrates. He was honored with the Nobel Prize in 1908 for his discovery of phagocytes.



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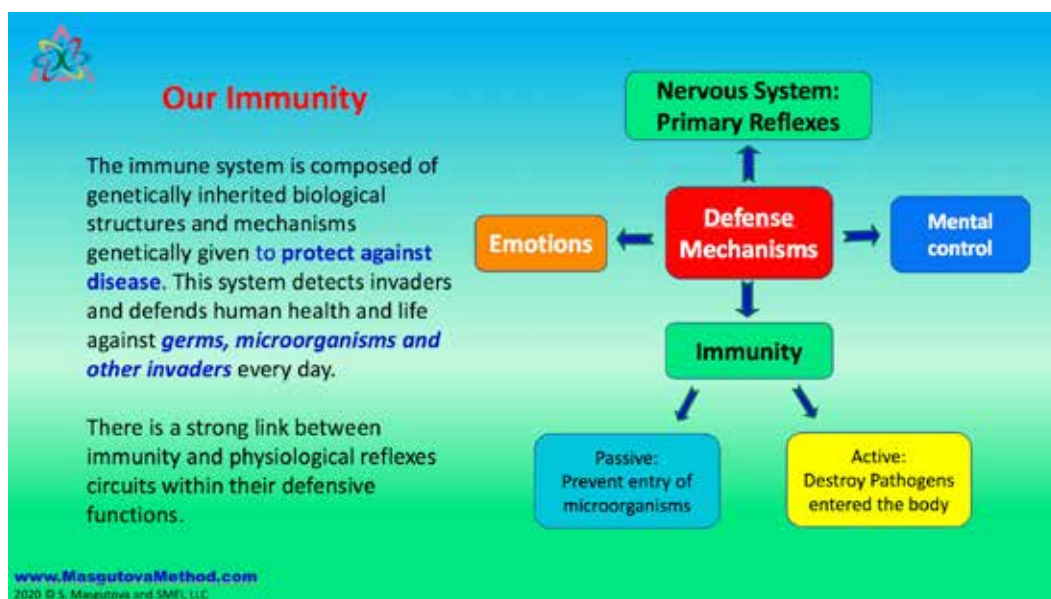
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# The Role of the Immune System

The human immune system is composed of systems of biological structures and mechanisms genetically given to protect against diseases stemming from bacteria and viruses. This system is made up of special cells, proteins, tissues, and organs, which defends human health and life against germs, microorganisms and other invaders every day.

search has been published in many peer-reviewed journals. These articles include:

- “Clinical-Immunological Assessment of Therapy Effect of the Neuro-Sensory-Motor Integration Program of Reflex Patterns in Chronic Inflammatory Diseases”
- “Immunological Efficiency of MNRI® Program at Treatment of Respiratory Diseases”
- “Influence of MNRI® on the Immune Status of Children with Down Syndrome”
- “Immunological Effects of Masgutova Neurosensorimotor Reflex Integration in Children with Recurrent Obstructive Bronchitis”
- “Immunological Study of Effectiveness of MNRI® Program on Respiratory Diseases”



Our extensive research involving immunology studies of the effect of the MNRI® neurosensorimotor reflex integration program has shown significant progress in the health of children and adults with conditions such as chronic respiratory inflammation disease and immune status improvement in children with Down syndrome. Our comparative immunology studies have shown the effectiveness of MNRI® intervention, which is based on the neurobiological activation of the primary motor system and the integration of reflexes. This re-

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[www.Masgutovamethod.com](http://www.Masgutovamethod.com) under the 'Learn More'/'Scientific Articles' links.

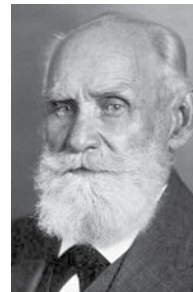


# Reflexes as Innate Responses

A reflex is a genetically inherent specific automatic response of the nerve system to a specific sensory stimulus. The stimulus can be internal (rising blood pressure or the heart racing) or external (what we hear, smell, touch, feel, sense, taste). Reflexes are neurological building blocks, which have a significant influence on neurodevelopment, brain functioning, and higher level physical, emotional and cognitive areas of formation as we mature. (Masgutova, 2010). Reflexes also serve as a primary component of the body's protection in stress and survival.



Ivan Sechenov



Ivan Pavlov

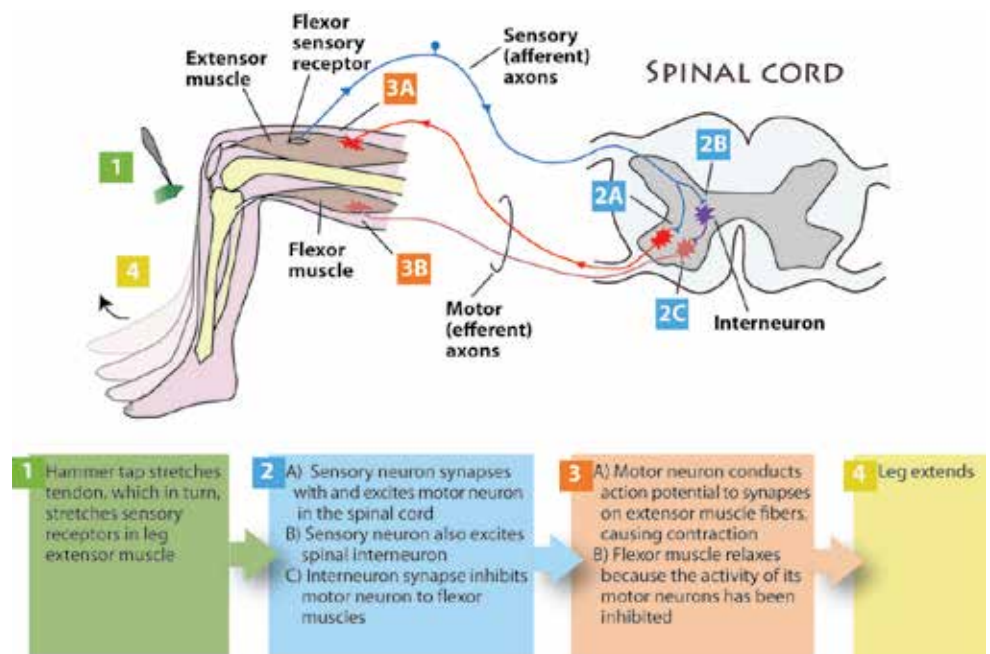


Charles Sherrington

productive.

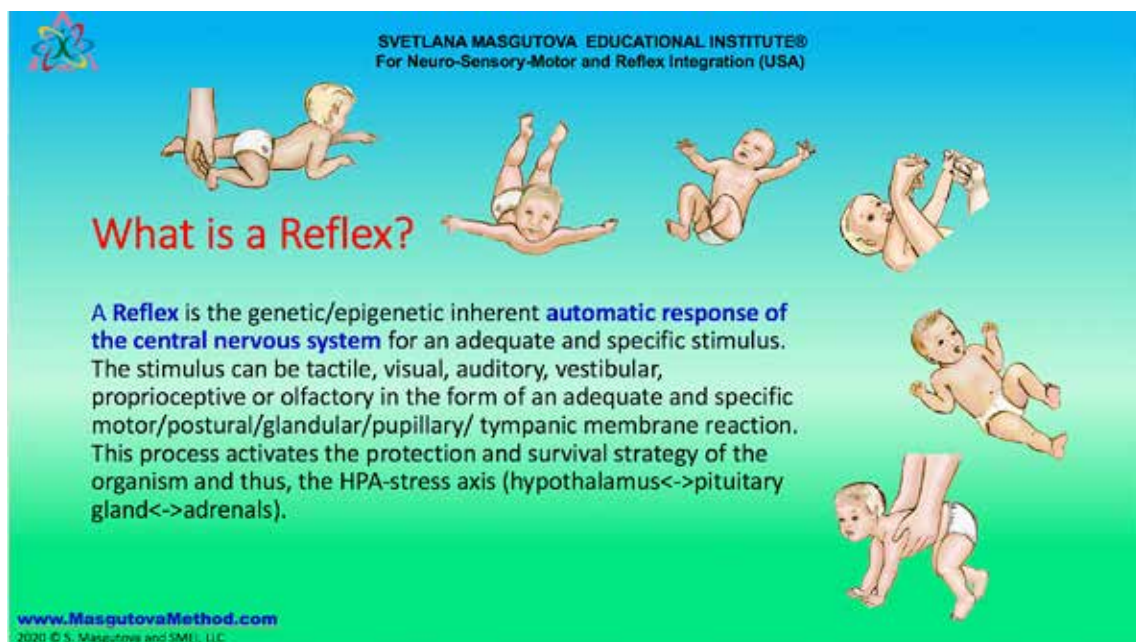
World-renown Russian physiologist Ivan Sechenov (1829-1905) and his protégé, Nobel Prize-winner Ivan Pavlov (1849-1946), outlined the basic understanding of a reflex as a physical response directed by the brain. Sir Charles Sherrington (1857-1952), a Nobel Prize-winning English neurophysiologist, accentuated their positions during the early 1900s with his own simple physiological explanation for how the body's reflexive activity

The MNRI® system focuses mainly on sensory-motor reflexes as units that can replicate the means of recovery of the body-brain system and also affect the other related systems, such as the respiratory and immune systems. These reflexes also can be tested, their level of maturity can be measured, and exercises can be created based on their functions. The MNRI® research of individuals in different challenging situations shows the choice of the reflex-recovery methodology has been highly





# REFLEXES AS INNATE RESPONSES



— that are collectively referred to as the primary-sensory-motor system (differentiated from the traditionally used term of “primitive reflexes”). The responses and reflexes belonging to the primary-sensory-motor system each have their own structures that are expressed by individuals as genetic sensory-motor “programs” of hu-

man development.<sup>14</sup>

1. Sensory system receptors in our different systems (tactile, auditory, visual, olfactory, gustatory, vestibular, proprioceptive) detect a change in the environment as a result of something we feel, hear, see, smell or taste. The change can also result from a sense of movement, or sensations from joints, muscles and connective tissues.

2. A sensory neuron delivers the sensory message through neural pathways that connect to the central nervous system (spinal cord and brain).

3. The central nervous system interprets the sensory information and determines the necessary response. This system acts as the coordinator and decision-maker for all conscious activity while managing or overseeing all unconscious activity.

4. A motor neuron carries the response messages to the skeletal muscles, non-skeletal muscles, glands, organs or vascular pathways, whichever is responsible for generating the motor response.

5. A motor response is generated.

Each child is born with a sophisticated system of natural sensory-motor responses — reactions, reflexes and sensorimotor coordination systems

man development.<sup>15</sup>

Primary reflexes emerge in utero and are “active,” or present, for a period of time, before they eventually integrate within the body-brain systems to serve as subordinate roles to more complex sensory-motor schemes. (This concept<sup>16</sup> differs from the widely held limiting metaphysical view that healthy development requires reflex inhibition.<sup>17</sup>)

Once the reflex emerges, the basic pattern progresses, through the sensory-motor circuit (sensory stimulus ⇔ brain processing ⇔ motor response). This process creates the nerve network that produces an appropriate response to a specific stimulus. Development through reflex circuit activation is essential for neurodevelopment, as this is the time when the biomechanical aspect of a reflex, and its main function of protection, becomes coordinated.

The emergence, maturation and integration of a primary reflex in utero and after birth involves a multi-step journey — a metamorphosis through different phases, with each phase serving a specific purpose<sup>18</sup>. Once matured, reflexes remain available for defensive automatic reaction (brainstem response), and also for a positive protection and

survival on a more conscious choice level (cortex). They also continue to support further development of specialized functions of higher brain structures in childhood and beyond. Integrated primary sensory-motor reflexes reappear in moments of stress (fear, real danger), when we are most vulnerable to losing our conscious control and learned abilities, and have to rely on our automatic programming to protect us.<sup>19</sup>

In the most basic sense, MNRI® research and work is devoted to the innate, or primary reflexes, and the associated primary movements and sensory-motor patterns. These programs aim to support reflex integration among newborns, children, and adults by supporting the brain development, its neuroplasticity, the development of stress resilience, and the strengthening of nervous and immune systems.

*For more detailed information about the role of reflexes in human development, please visit our website at [MasgutovaMethod.com](http://MasgutovaMethod.com).*

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# ***What Happens When the Coronavirus Enters the Body?***



Viruses are tough to eradicate with treatment, due to their tiny structure and ability to reproduce inside cells. The coronavirus, for example, enters the body through the respiratory tract, primarily through the mucous membrane in the nose and mouth, and possibly eyes.

The average incubation period for SARS-CoV-2 is four days, though it can range anywhere between two to 14 days.<sup>22</sup>

Once inside, the virus begins to infect the epithelial cells within the lining of the lungs. A protein on the receptors of the virus affixes itself to the receptors on a host cell. The virus breaches the cell, and begins to replicate until it kills the cell. This process begins in the upper respiratory tract and continues down to the lower respiratory tract. The pulmonary surfactant — a complex lipoprotein substance that helps keep the lungs open and decreases the work of breathing — becomes diminished in an infected person. A dry cough, shortness of breath, headache, muscle pain, and fatigue can occur. The organism begins to struggle to destroy microbes and viruses. An increase in body temperature results. A fever fights with bacterial or viral infections by increasing the production of interferons to inhibit the virus replication. Some doctors recommend letting low-grade fevers (between 98.7°F-100.4°F or 37.5°C -38.3°C) run their course without taking medicines such as aspirin or ibuprofen. But higher fevers can be dangerous. Once the fever reaches 103° (39.4°C) to 104° (40°C), it is considered a high-grade fever. Fevers that edge above 104° are considered high-grade temperatures. A fever of 106°F (or 41.1°C) is considered a very high fever, a term also known as hyperprexia.

The symptoms of the novel coronavirus escalate the temperature as the virus moves down the windpipe and through the respiratory tract.<sup>23</sup>

The COVID-19 has been compared to the flu, since they share many similar symptoms, but it is worth noting that while the flu usually transpires suddenly, the symptoms of this new coronavirus materialize more slowly. The World Health Organization also references some other distinguishing characteristics between COVID-19 and the flu:

- The flu has a shorter incubation period than that of COVID-19.
- The percentage of people who develop severe symptoms as a result of contracting COVID-19 appear higher than the flu.
- There are no vaccines nor antivirals yet available for COVID-19, while they are developed by immunologists-epidemiologists and are available for the flu.

Pathogens like coronavirus can rapidly evolve and adapt to an organism's condition. By doing so, they avoid detection and neutralization by the immune system, which lead to immunodeficiencies.

As we mentioned earlier, keeping your body healthy can help prepare it to fight off bacterial infections and viruses such as COVID-19. Even if you feel prepared to face the pandemic because of confidence in your immune system health, uncertainties associated with any kind of illness, especially a global pandemic, can still cause stress including tension in body and thoughts, fear and emotional-behavioral reactivity, and repetitive negative thoughts.


Stress is an internal state and process. A need or demand that is perceived to exceed the resources available to effectively deal with the protective task at a certain time can cause chronic stress and trauma-related symptoms.<sup>24</sup> The main organism's regulators affected by a stressor are the nervous, endocrine and neuroimmune systems, which then involve every organ and system into the stress-overexhaustive state.

Alexander Luria (1902-1977)<sup>25</sup>, a developmental psychologist and a founder of neuropsychology, outlined the mechanisms for stress response. The body's automatic nervous system acts as the body's first line of defense. In non-stress situations, the nervous system automatically regulates reflex reactions and impulses to ensure the long-term security of the body. Under negative stress, the reflex reactions mobilize into a defensive preservation mode known as "fight or flight." When the body is in this state, our movements, behavior and decisions are more impulsive, emotionally driven, and when pushed to the brink, rational thinking and learning can be compromised.

When stress is overwhelming or becomes too difficult for our genetic programming to handle, post-traumatic stress or post-traumatic stress syndrome also can result.<sup>26</sup> Intermittent, prolonged or chronic stress can cause dysfunctions in primary sensory-motor reflex functions, which can impact one of the key roles primary motor reflexes play, which is to serve as positive protection for the body.

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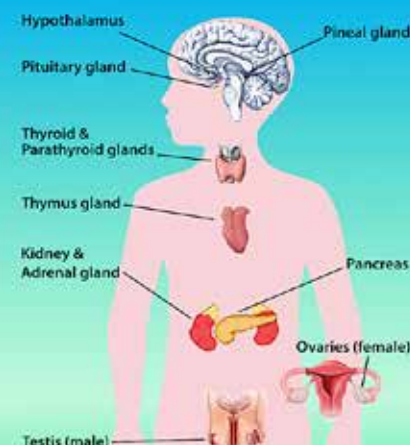


## What, exactly, is stress?

**Stress** is an internal state of the organism and mental processes. A need or demand that is perceived to exceed the resources available to effectively deal with it at a certain time or a disease can cause a stress.

Prolonged chronic or intermittent stress can cause **emotional instability and dysfunctions in sensory-motor reflex patterns**. And also opposite, poorly developed reflexes can result in inability of a person for positive protection of own body and health.

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The main organism's regulators affected by a stressor are the nervous and endocrine systems, which then involve every organ and system into the stress state.



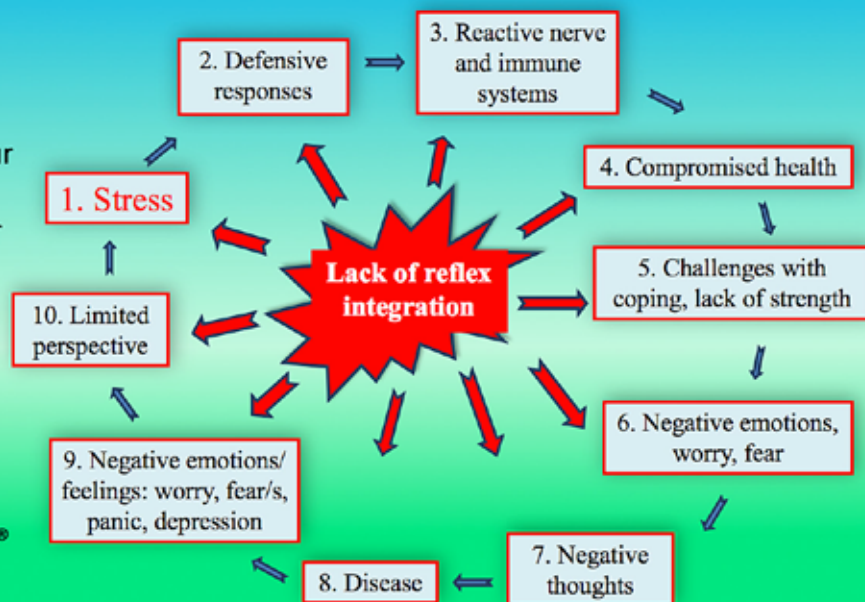


Beginning in January 2020, people throughout the world experienced devastating consequences of pandemic COVID-19, causing worry for our survival and health for ourselves, our families, and our friends. Our biggest responsibility is to follow the medical world health advisories.

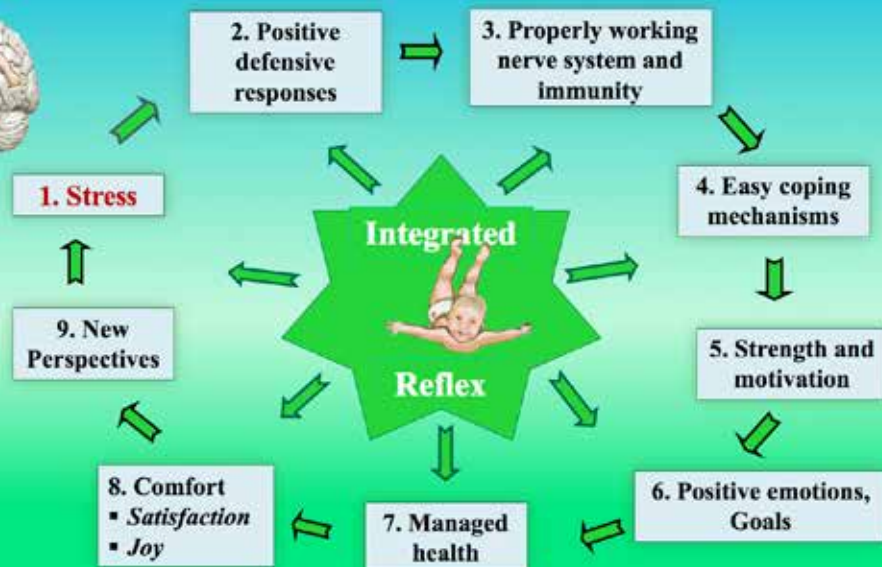
In this program we propose more resources to strengthen your immunity using the MNRI® exercises and techniques.

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## Stress Cycle and Consequences



## Coping, Self-Regulation, Caring about Health, Open Style of Communication and Learning



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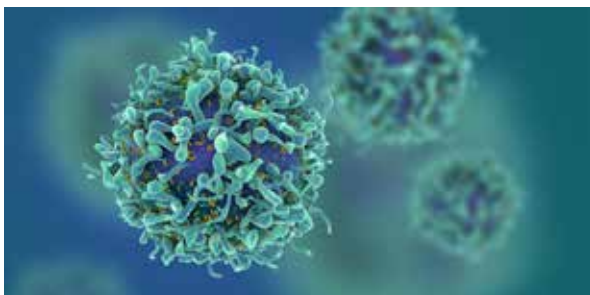
# ***Why are MNRI® Exercises Highly Supportive for our Immune System, Protection, and Survival?***



Below we share a short summary on the scientific research which has been completed on the effect that MNRI® programs have on immunity. This summary has been developed by Dr. N. Akhmatova, Ph.D. (immunologist, virologist) and Dr. D. Lukhacheva (clinical immunologist).

The studies of the immunomodulating effect of the MNRI® neurosensorimotor programs on immunity have been conducted over the last 12-15 years in cooperation with more than 760 patients/clients in Poland and Russia. These patients traveled from Russia, Poland, Canada, U.S., Germany, Singapore, and Indonesia and presented with different symptoms: respiratory diseases, including recurrent obstructive bronchitis, herpes-associated multiforme erythema, and Down Syndrome immunity. All of these studies demonstrated the similar improvements of the immunity among individuals who received the MNRI® exercises and techniques. These different studies were overseen by doctors N. Akhmatova, M. Kiselevsky, E. Sorokina, O. Lebedinskaya, E. Akhmatov, M. Kostinov, and E. Akhmatova, and others.

## ***What were the scientific goals of immunity studies in patients/clients receiving the MNRI® Program?***



Pic. 1. T-lymphocytes

The structures of lymphocyte subpopulations, cytokines, and immunoglobulin levels in blood were evaluated to identify the specifics of the immune status of the patients.

## ***What are the basic discoveries from these studies?***

The MNRI® Reflex Integration therapy resulted in:

### **A. Normalizing T-lymphocytes in a human:**

- 1) The normalization of absolute counts of T-lymphocytes (CD45/CD3) in different age and symptom groups occurred at an increase of 2.5 times.
- 2) The normalization of T-helper levels (CD3/CD4) compared with levels before the MNRI therapy occurred at an increase of 1.63 to 2.2 times.

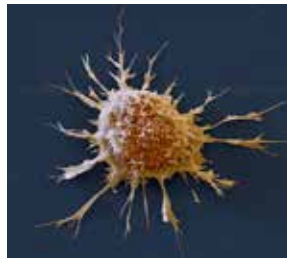
These results indicate that the MNRI® exercises support the natural mechanism of the immune system known as the T-helper cells, and particularly:

- activate the B-cells to secrete antibodies;
- improve the macrophages activity to destroy ingested microbes;
- activate the cytotoxic T-cells to kill infected cells in a targeted way, which as a mechanism of normal functioning immunity, is described in a range of scientific studies.<sup>27</sup>

- 3) A normalization of cytotoxic T-cell (CD3/CD8) numbers was observed to increase 1.94 times in all Immunological studies of the MNRI® effect.

These results indicate that MNRI® exercises

support the cytotoxic T-cells to monitor all the cells of the body, so they are ready to destroy any threat to the integrity of the host/organism. The cytotoxic T-cell kills the cells infected by viruses and prevents them from becoming the source of more viral pathogen.<sup>28</sup>



Pic. 2. Natural Killer cells - NK cells  
Credit: Science Source

## B. Normalizing effect on the natural killer cells in a human organism:

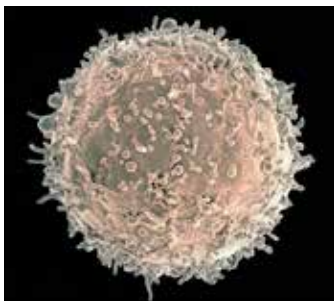
- 1) A statistically significant normalization in the number of natural killer (NK) cells (CD16) at an increase to 1.5-2 times after the MNRI® Program was implemented.

Natural killer cells are the key effectors of innate immunity. They fulfill an important biological role:

- in the destruction of viruses and parasite-infected cells;
- in the mechanisms of immune surveillance (the targeting of tumor cells);
- and in the regulation and differentiation of bone marrow cells through control of the stem cells function and prevention from rapidly proliferating hemopoietic cells.<sup>29</sup>

## C. Normalizing the effect on B-lymphocytes in a human organism:

- 1) A correction effect in B-lymphocytes (CD45/CD19) at an increase to 2.9 times and in the number of activated CD45/CD95 blood cells at an increase to 2.2 times.



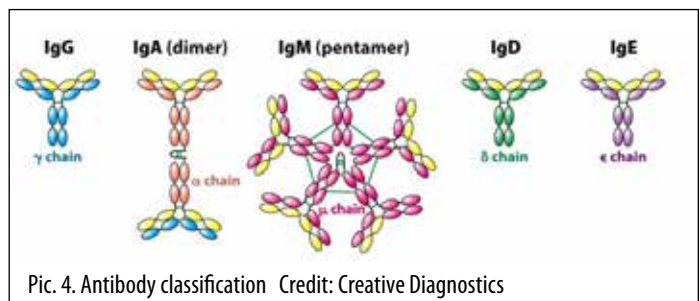
Pic. 3. Human B Cell Lymphocyte

This data is very important to understand the unique effect of MNRI® exercises on the protective functions of the organism.

B-cells participate in T-cell activation via

antigen presentation and cytokine production. They support the antiviral (through antibodies = IgG, IgM, IgA) and antimicrobial defense mechanisms and prevent tissue inflammation. Furthermore, B-cells serve as regulatory cells, which modulate both the cellular and humoral (antibody) responses. These are a mechanism that is presented in basic immunology.<sup>30</sup>

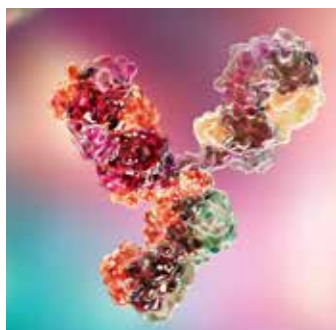
*Note: Immunoglobulin (antibody) has specific functions:*



Pic. 4. Antibody classification Credit: Creative Diagnostics

- The IgG participates in antitoxic immunity, and effects the viral and microbe pathogens. It is found in all body fluids and protects against bacterial and viral infections.
- It is transported to the fetus by mother's body and continues to serve the health of an infant until 6 months of life. It is also transported in the mother's milk.
- The IgM participates in antimicrobe and viral immunity; neutralizes microbe pathogen in the blood and lymph fluid; and, is the first antibody to be made by the body to fight a new infection.
- The IgE participates in the immediate hypersensitive reaction-type1 to fight an allergic pathogen and also in an antiparasitic immunity. It is found in blood, lungs, skin, and mucous membranes.
- IgA strongly participates in the antiviral immunity of mucous membranes of the respiratory tract (lungs, sinuses) and the digestive system (stomach, intestines).
- IgA is also found in fluids: saliva, tears, and in the blood.

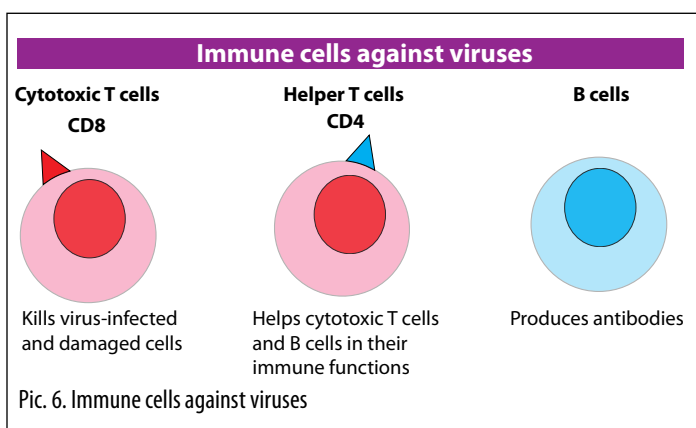




Pic. 5. Molecule of immunoglobulin

- IgD exists in small amounts in the blood. Its role has not been adequately studied in science.

2) The normalization of IgM and IgG levels at an increase to 1.5 times, and normalization of IgE at a decrease of 2.9 times, which means a decrease of almost three times after the MNRI® therapy.

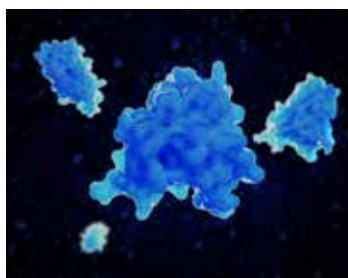


Pic. 6. Immune cells against viruses

Humoral immune responses are characterized by the production of antibodies by B-lymphocytes and their progeny, plasma cells. These antibodies permeate extracellular spaces, where they protect against infection.

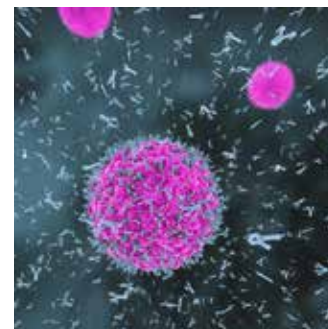
3) There was a three-folded regulatory and balancing effect in the levels of pro-inflammatory (IL-6, TNF- $\alpha$ ), anti-inflammatory (IL-4, IL-10) and regulatory (IFN- $\gamma$ , IL-12) cytokines.

The increase in pro-inflammatory cytokines (IL-6, TNF- $\alpha$ ) concentration is part of a chronic inflammatory process, the same way as an increase of anti-inflammatory (IL-



Pic. 7. Interleukin 4 (IL-4) molecules

4, IL-10) demonstrates poor performance of the immune system in children (with Down syndrome), who often<sup>31</sup> get sick. The MNRI® therapy regulates the production of pro- and anti-inflammatory cytokines, and the regulatory cytokines (IFN- $\gamma$ , IL-12) and thus positively affects the interaction of the immune, endocrine, and nervous systems and ultimately homeostasis.



Pic. 8. Antibodies attacking virus cell

Based on data, the effect of MNRI exercises is demonstrated to support immunity and normalization of levels of: cytotoxic T-cells (CD3/CD8), T-helper-cells (CD3/CD4), natural killer cells (CD 16), B-lymphocytes (CD45/CD19), IgM and IgG, as well as the regulatory and balancing effect in the levels of pro-inflammatory (IL-6, TNF- $\alpha$ ), anti-inflammatory (IL-4, IL-10) and regulatory (IFN- $\gamma$ , IL-12) cytokines. This data offers information from which we can conclude that MNRI® exercises are unique tools to support our antiviral immunity and is urgently needed at times of pandemic such as with SARS-CoV-2 virus resulting in COVID-19.

The medical community strongly urges us to be mindful about the significance of personal hygiene. Dietitians and nutritionists suggest that we follow a healthy diet and to make sure we are maintaining our body's vitamin and mineral requirements.

The MNRI® community suggests a Program which will assist in the activation of the immunity system through reflex patterns that links neurophysiological aspects of the human body and the immune system.



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# ***MNRI® Reflex Integration for Immunity: Protocol***



The following reflex exercises can supplement your brain-immunity-boosting regimen and improve your overall health, emotional and cognitive well-being.

Our protocol presents exercises and movements in six groups:

## **Part 1. Move Out of the Re-Action into Action**

1. Trunk Extension, #2. Head Turn-Spine Rotation

## **Part 2. Activate Your Breathing = Strength**

3. Breathing: Side Stretch

## **Part 3. Regulate Protection and Survival**

4. MORO: Invite Courage into Body-Mind

## **Part 4. Strengthen Immunity**

5. Six-Ended Star in Action; #6. Extend Arms/Chest:

“V” (Victory) with Arms

7. Elbows Up and Down: Chicken Dance

8. Raise Arms/Elbows

Up and Back

## **Part 5. Stabilize Your Body and Be Flexible**

9. Spinal Perez

10. Hands Supporting

## **Part 6. Keep Open to Enthusiasm and Joy!**

11. Landau

The neuro-sensory-motor reflex integration techniques and exercises are designed to strengthen our immune systems and regulate stress

levels, so that our bodies remain strong and are prepared to fight off the coronavirus and other invader organisms. Additionally, the release of stress will help us maintain our health and immunity, activating the natural protective mechanism of the reflex patterns given by Mother Nature on a genetic and epigenetic level.

Please, move your body using these reflex exercises to target the automatic protection mechanisms to support your well-being. At times of stress it is good to spend as much time as possible playing sports. Take care of your hygiene. Maintain your enthusiasm. Stay open to joy. Play, sing songs, listen to good music and dance!

We wish you and yours good health and success in your pursuit of survival and your continuous building of a life of happiness.



# PROTOCOL PART 1. MOVE OUT OF RE-ACTION INTO ACTION

## 1. Trunk Extension



### Trunk Extension

*Instructions: Do this exercise while standing or sitting depending upon your abilities. Exhale slowly while going through the movement. Repeat each exercise 3–5 times.*

#### **Step 1. Extend whole body**

Stand straight while stretching your spine. Your head should be upright and hands and feet should be pushing down (pic. 1). Hold this position for 7 seconds.

#### **Step 2. Bend body to center**

Curl your upper body into a ball with your chin toward your chest (pic. 2). Hold this position for 7 seconds. Repeat Step 1.



# PROTOCOL PART 1. MOVE OUT OF RE-ACTION INTO ACTION

## Trunk Extension – assisted

*Instructions: Do this exercise while standing or sitting.*

### **Step 1. Push on shoulders - resistance**

Straighten your spine. Make sure your head is upright and push your legs against the ground. Open palms and extend your palms and fingers. Stretch your hands, bend at the wrist, push downward. Ask your partner to place his hands on your shoulders downward. Gently press your shoulders upward against his pressure while elongating your chest/spine (pic. 1).

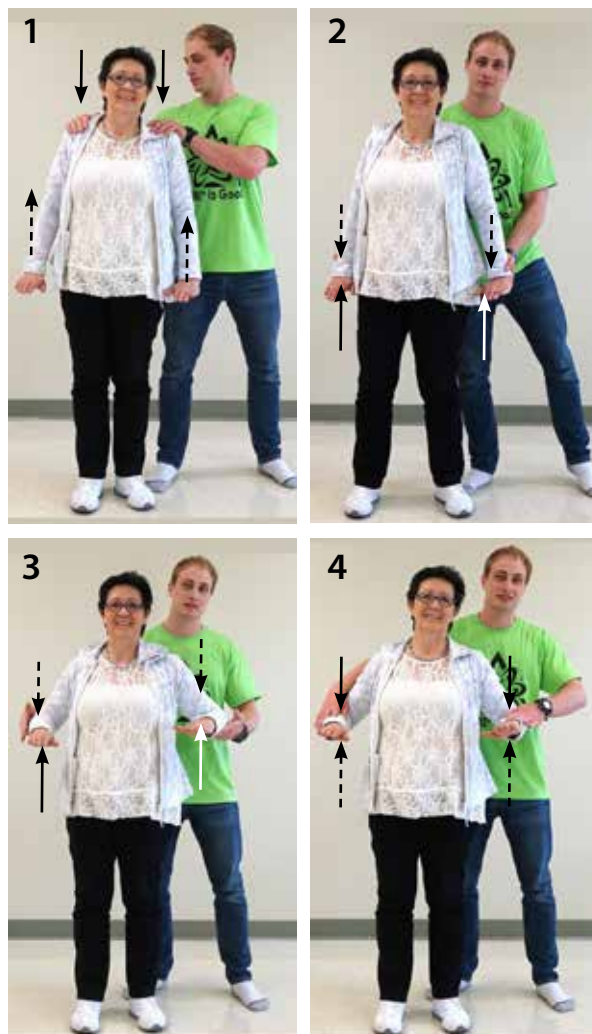
### **Step 2. Pushing under palms - resistance**

Ask your partner to hold his hands under yours and press lightly on them in an upward direction. Your palms/hands should gently push downward against his hands (pic. 2).

### **Step 3. Pushing under elbows - resistance**

*Option 1:* Ask your partner to place his hands under your bent elbows to push lightly in an upward direction. Gently push downward with your elbows against his hands (pic. 3).

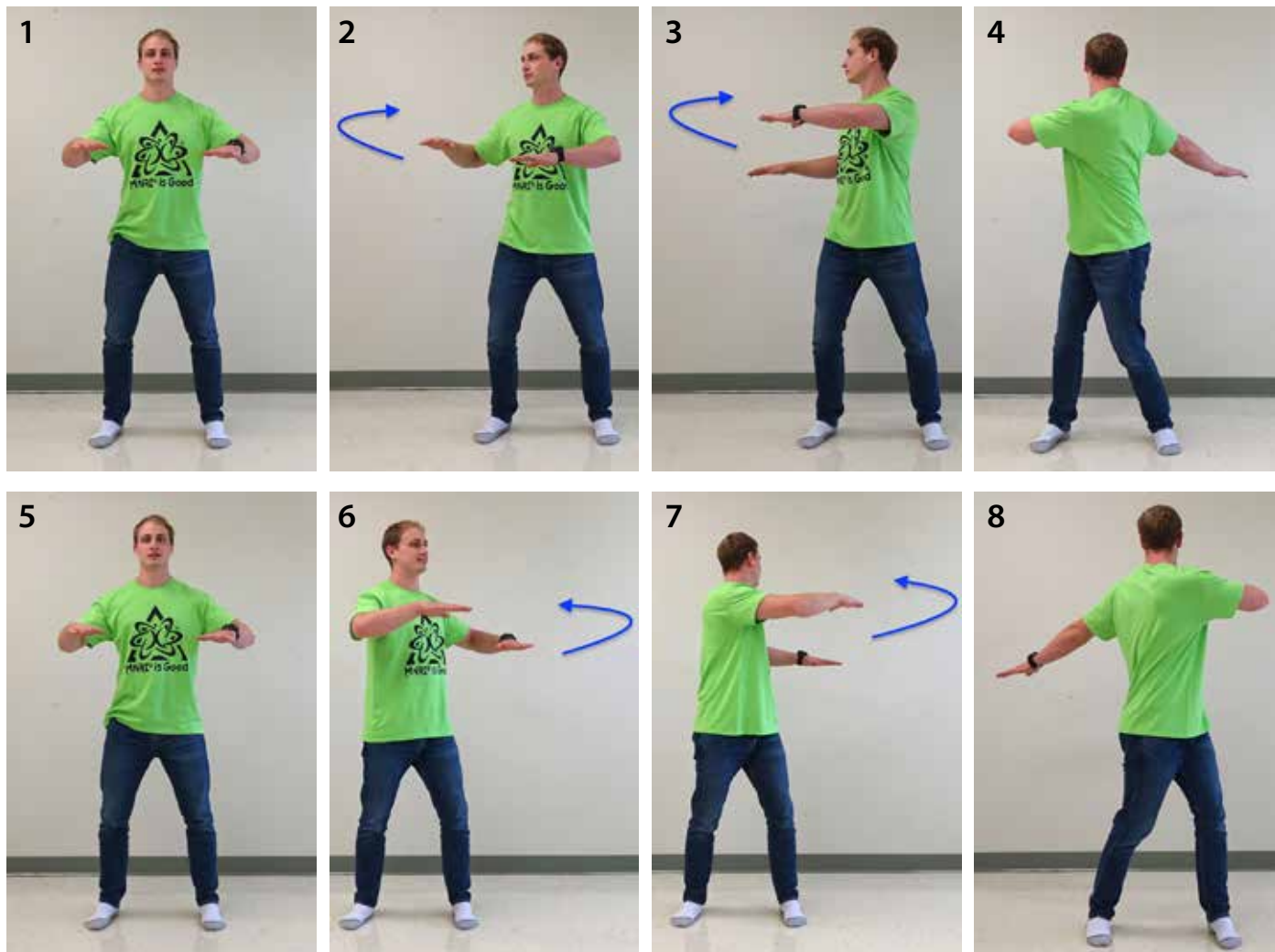
*Option: 2.* Ask your partner to place his hands on top of your bent elbows and to push lightly in a downward direction. Gently hold or pull your elbows upward against his hands while elongating your chest/spine in an upward direction as well (pic. 4).





# PROTOCOL PART 1. MOVE OUT OF RE-ACTION INTO ACTION

## 2. Head Turn-Spine Rotation



### Head Turn–Spine Rotation

*Instructions: Stand or be seated, depending upon your abilities. Exhale slowly while going through the movement. Repeat each exercise 3–7 times. Older persons should do this 2-3 times a day.*

Your head leads the movement of the whole body as it turns to one side, slightly lowering the arm that is on the same side as the head, holding for 7 seconds, and back to the center. Repeat in the other direction. This movement is done very slowly for soft spine rotation. Breathe deeply while doing the motions, and be aware of crossing the body midline and maintaining your grounding and stability.

## PROTOCOL PART 2. ACTIVATE YOUR BREATHING

### 3. Breathing: Side Stretch



#### Breathing – Side Stretch

*Instructions: Stand, be seated, or lay on your back depending upon your abilities. Repeat each exercise 3–7 times. Older persons should do this 2-3 times a day.*

**Step 1.** Stand straight; close your right nostril (the left nostril is open, pic. 1, 2) if this is safe for health situation. Raise your left arm, flex your trunk and head to the right side – your left side (ribcage) is extended (pic. 3). Inhale slowly through the left nostril filling air fully into your lungs for 7 seconds or more. Next, move your arm and extend your ribcage (left side) further (pic. 4,5). Then, release the right nostril and slowly bring your arm, upper trunk, and head back to the midline while simultaneously breathing out through your mouth (pic. 6). Rest for 5-7 seconds.

**Step 2.** Repeat as above with the other side.

Do this exercise 3-7 times for each side alternating the extension of the arm and ribcage and resting between the movements.



## PROTOCOL PART 3. REGULATE PROTECTION AND SURVIVAL

### 4. Moro: Invite Courage Into “Body-Mind”



#### Moro

*Instructions: Stand or sit, depending upon your physical abilities. Repeat each exercise 3–5 times. Older persons should do this 2 times a day.*

##### **Step 1. Moro – Flexion of the core and limbs**

Stand up straight and inhale; then bend your core – all limbs moving toward the center of your body in a 45° angle with a strong and prolonged exhale. Hold your body in this position for 7 seconds (pic. 1).



##### **Step 2. Moro – Extension of the core and limbs**

Next, slowly and actively open the center of your body and spread all your limbs backwards to a fully extended position in a 45° angle with a strong inhale. Hold your body in this position for 3-5 seconds (pic. 2).

##### **Step 3. Moro Embrace**

Next, slowly and actively move your whole body and limbs to create an embracing pose while exhaling. Hold your body in this position for 3-5 seconds (pic. 3).

Repeat Steps 1, 2, and 3 as one cycle movement 3-7 times. Exhale deeply while performing the exercise each time.

#### **Cross-Lateral Moro (flexion-extension)**

Bend your opposite limbs – right arm and left leg – and move them toward the core in a 45° angle with a strong exhale. From there, move this arm (right) and opposite leg (left) slowly yet actively outward to a fully extended position from the core while exhaling (pic. 4a, 4b). Repeat this with the other arm (left) and opposite leg (right). Do this exercise sequentially; repeat the cycle of limbs moving in the opposite directions 3-7 times. Exhale deeply each time while performing the exercise.





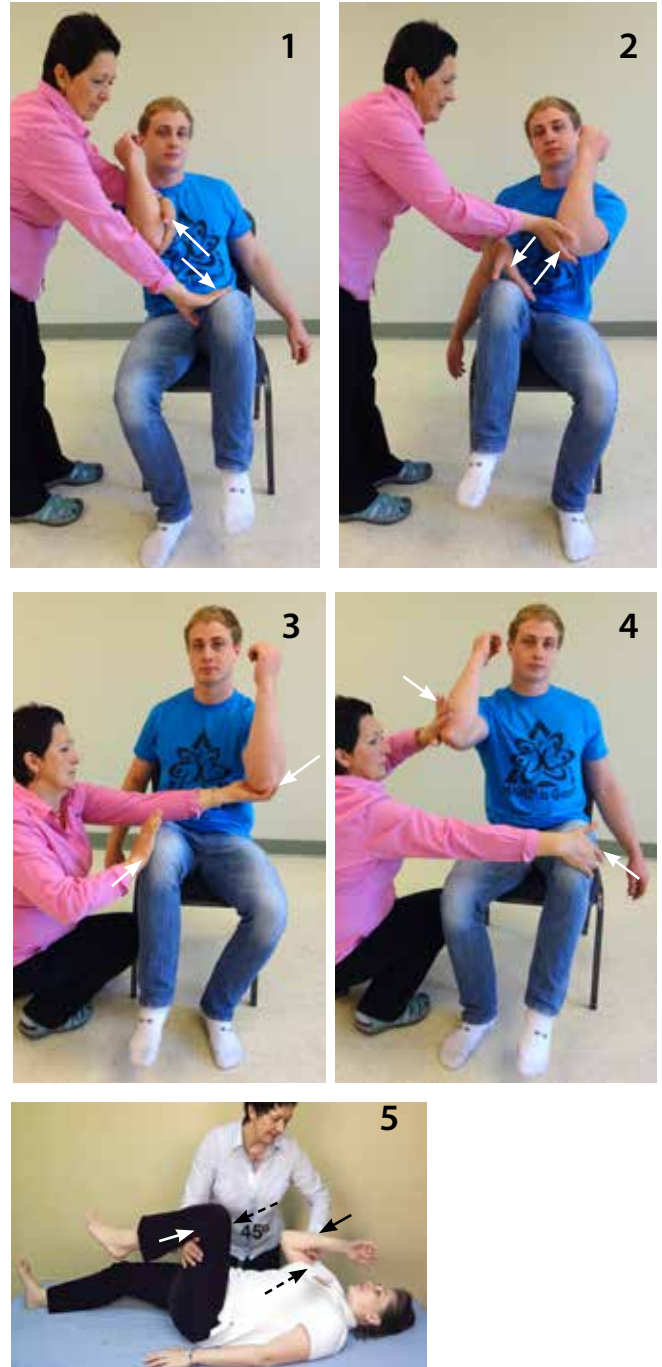
# PROTOCOL PART 3. REGULATE PROTECTION AND SURVIVAL

## Moro – assisted

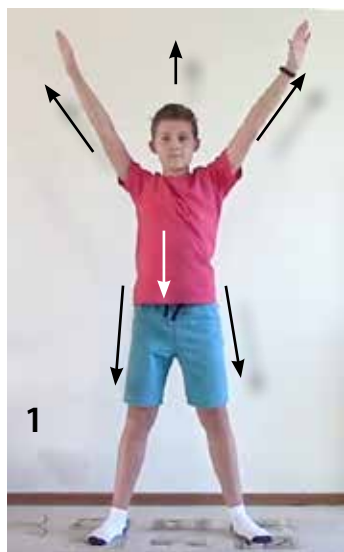
*Instructions: Seated or lying down (pic. 5). Repeat each exercise 3–5 times, exhaling deeply each time. Older persons should do this 2 times a day.*

### Step 1. Cross-lateral Moro (passive or active)

Ask the person to bend their right arm and left leg and help them to move each toward their core in a 45° angle (pic. 1, 2). Hold the limbs in this flexed position for 7 seconds. Do the same with the other arm (left) and opposite leg (right). If the person can do this exercise actively, then ask them to slowly move their arm (right) and opposite leg (left) against your resistance, backward into a fully extended position (pic. 3, 4, 5). Do the same with the other arm (left) and opposite leg (right).



### 5. Six-Ended Star in Action



#### Six-Ended Star

*Instructions: standing or sitting (depending upon your abilities to do this exercise actively). Stand straight with your arms stretched over your head and out, and your feet planted firmly on the ground with knees slightly bent. Repeat 3-5 times.*

##### **Step 1. Star Extension - turn the body to sides**

Extend your whole trunk and arms and plant your feet firmly into the ground (knees still slightly bent, pic. 1). Next, slowly, turn your whole body to one side, keeping your body straight, and then to the other side (hold for 3-4 seconds, pic. 2,3). Hold stretched position for 7 seconds.

##### **Step 2. Star Extension – turn the body to the side in cha-cha rhythm**

Next, continue turning in the Cha-cha rhythm to one side then the other.

Do these movements a bit faster while exhaling. Hold for 7 seconds; repeat for 3-5 times.

## PROTOCOL PART 4. STRENGTHEN IMMUNITY



### Star Flexion - Circles with Arms

*Instructions: stand or sit (depending upon your ability to do this exercise actively) straight with your arms outstretched over your head and out, and your feet planted firmly on the ground with knees slightly bent.*

#### **Step 1. Extend your whole trunk**

with arms up and legs pressing into the ground (with knees slightly bent, pic. 1). Next, slowly flex your whole body, and put your elbow to your opposite knee (pic. 2).

#### **Step 2. Do four circular movements with arms**

with your other arm moving forward and then in a backward direction (pic. 3, 4). Switch sides.

Do these movements slowly while exhaling. Hold for 7 seconds; repeat for 3-5 times.



## PROTOCOL PART 4. STRENGTHEN IMMUNITY

### 6. *Extend Arms/Chest: “V” (Victory) with Arms*



#### **V with Arms**

*Instructions: Do this exercise standing or sitting (depending upon your ability). Repeat 2-3 times.*

**Step 1. Put closed hand on opposite clavicle** and bring your opposite arm out and up.

**Step 2. Repeat Step 1 on the other side**  
Bring both arms up together in a 'V' shape and extend both arms up and out in a cha-cha rhythm.

Do slowly while exhaling. Hold for 7 seconds.



### 7. *Elbows Up and Down: Chicken Dance*



#### **Chicken Dance**

*Instructions: Do this exercise standing or sitting (depending upon your ability). Repeat 2-3 times. Exhale on every movement.*

##### ***Step 1. Move bent elbows actively up and down***

Raise your elbows up toward your head and then bring them down.

Keep your hands in light fist at the level of your upper chest.

##### ***Step 2. Move bent elbows up and down in Cha-cha rhythm***

Do the exercise as above. This time “flap” your elbows in upward direction in Cha-cha rhythm.

### 8. Raise Arms/Elbows Up and Back



#### **Raised Elbows Up and Back**

*Instruction: Stand or sit (depending upon your physical abilities) with extended spine and arms flexed at elbows to approximately 90° and directed straight. Do this exercise actively upon an exhale in a standing position with your feet planted firmly on the ground.*

**Step 1. Arms Up and Down**  
(pic.1, 2) Raise your arms up and behind in one prolonged exhale.

Next, bring them around and down, then backward (pic.3, 4).

**Step 2. Arms Up and Down in Cha-cha Rhythm**  
Do the same movements in Cha-cha rhythm.

Do these movements intensively while exhaling. Repeat 3-5 times.





## PROTOCOL PART 5. STABILIZE YOUR BODY AND BE FLEXIBLE

### 9. Spinal Perez



#### Spinal Perez

*Instructions: Stand or sit depending on physical abilities. Repeat every step 3-5 times while exhaling.*

##### **Step 1. Stroke up along the spine**

Press and stroke with your fist or fingers gently and firmly along the spine from the lower sacrum toward your neck, going as far you can (pic. 1).

##### **Step 2. Light pressure on the sacrum**

Apply pressure on your sacrum at a 45° angle in a forward and downward direction. Then repeat, this time moving your sacrum very gently into your hands. Create a good feeling of micro-stretch in the sacrum area for yourself (pic 2).

##### **Step 3. Perez posture**

Stand straight. Stroke with your hand along the spine as in Step 1. Move slowly with your whole body into the Perez Reflex pattern – extend your spine and arms. Arms are bent at elbows, and the head moves forward. (pic. 3a, 3b).



## PROTOCOL PART 5. STABILIZE YOUR BODY AND BE FLEXIBLE



### Spinal Perez – assisted

*Instructions: Do this exercise sitting in a chair. Repeat each step 3-5 times, allowing rest for neurological integration. A person supports throughout all steps.*

**Step 1. Stroking along the spine** (sensory activation). Your partner uses her fingers to provide pressure and stroking, with the base of the palms gently and firmly placed along the spine, and following from the sacrum up to the neck (pic. 1).

#### **Step 2. Light pressure on the sacrum** (active)

Your partner applies a pressure on your sacrum at a 45° angle in a downward direction. You move into her hands (pic. 2). This exercise should create a good, pleasant feeling of micro-stretching in your sacrum area.

#### **Step 3. Activation of sacrum and upper back** (active)

After stroking up the spine again, your partner presses simultaneously on your upper back and upper sacrum. You move slightly into her hands, extending your lumbar spine forward.

#### **Step 4. Pressure on the sacrum and shoulder** (active)

Your partner provides a pressure simultaneously on one of your shoulders and the upper sacrum (pic. 3a, 3b). You move lightly into her hands. Repeat the same with the other shoulder, extending your lumbar spine forward.

# 10. Hands Supporting

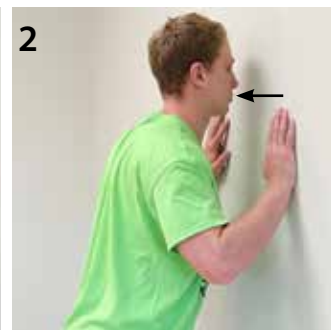
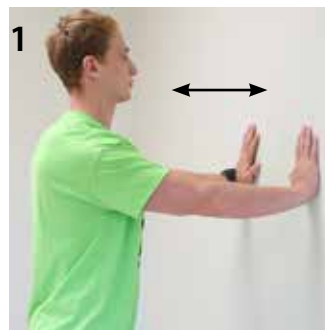


### Hands Supporting

**Instruction:** You are standing or sitting. Repeat each exercise 3–7 times, allowing rest for their neurological integration.

#### Exercise 1. Arms forward

Stand in front of a wall at the distance of your outstretched arms (pic. 1). Bend your elbows to lean in against the wall (pic. 2). Next inhale and with an exhale, start slowly straightening the elbows.



#### Exercise 2: Push – pull

With a partner, put your hands together and gently push and pull with more pressure being given at the bottom of the palms of the hands (pic. 3, 4). Bring your hands together; a person pushes at the base of both your palms simultaneously, and, next, pulls your hands away from your core.



### Game

#### Push to win-win

You and your partner bring the hands together and gently push against each other for both “to win” (pic. 5).



## 11. Landau



### Landau

*Instructions: You may be standing, sitting, or lying on your stomach. Organize your breathing while doing these movements – exhale slowly. Repeat each movement 3–5 times. All movements must create a feeling of active muscle stretch and provide you with a feeling of body extension and be comfortable at the same time. Hold every position for 7 seconds. Relax between every step if you feel the need.*

#### **Exercise 1. Whole Landau in joy**

Stand or lie on your stomach. Lift your head, arms, trunk and legs up (or back) with a comfortable range of backward extension (pic. 1) and hold for 7-8 seconds while exhaling.



#### **Exercise 2. Landau pushing the leg behind**

Stand straight. Lift your arms up, head is straight, one leg is behind the trunk grounded on ball of the foot. Inhale, and next, move your trunk backward pushing on leg/foot behind with a comfortable range of spine extension (pic. 2) and hold for 5-7 seconds while exhaling deeply and slowly.

#### **Exercise 3. Landau while in a chair**

Sit straight. Lift your arms up, head is straight, sacrum pushing into chair, feet on floor (pic. 3, 4).

These exercises are also shown below in a sitting position.





## PROTOCOL PART 7. BE OPTIMISTIC, OPEN TO JOY AND WELL-BEING

### Landau – assisted

*Instructions: You are sitting on a chair or lying on your stomach. Do each exercise 3-5 times, allowing rest in between.*

#### **Step 1. Whole Landau with back of body**

With the support of another person bring your arms up and diagonal. Lift your head straight; angle your legs slightly apart and extend your trunk as much as you can.



#### **Step 2. Extend your hands a bit backwards**

Hold this position for 5-7 seconds on an exhale (pic. 3).



The exercises below are also shown for a lying position (pic. 4, 5).



# Food for Immunity

Immune system strength is largely influenced by the foods we eat, so making sure we maintain a healthy and nutritional diet is paramount. A Mediterranean diet that is rich in fresh, seasonal plant-based foods, for one, is a great way to support cardiovascular, brain and musculoskeletal and immune system health, notes Dr. Leonard Calabrese, a Professor of Medicine at the Cleveland Clinic Lerner College of Medicine and Director of the R.J. Fasenmyer Center for Clinical Immunology.<sup>32</sup> “There are copious amounts of scientific evidence in the scientific literature supporting merits of this type of diet,” he says.

Additional ways in which you can boost your immune system:

- **Garlic** is an immune system stimulant. It has powerful antiviral, antibiotic and antiseptic properties that can help shorten the duration of a cold or flu. *Tip: Consume chopped raw, steamed garlic or use as a glycerin extract.*



- The berries and flowers from **elderberry** are used as medicine. The elderberry's flavonoids contain antioxidants that have antiviral, immune-stimulating properties. Those flavonoids help reduce swelling in the mucous membranes, relieve nasal congestion and may otherwise reduce the duration of flu by three days. *Tip: Take 1 teaspoon of elderberry syrup per day, or three times per day if you develop the flu.*



- A common cold can last up to two weeks, and may be caused by nearly 100 different viruses. Lemon and **cayenne pepper** powder are commonly used to treat cold symptoms and can reduce symptoms such as congestion, sore throat and fever. The front line soldier in cayenne pepper — capsaicin — activates the hypothalamus, or the cooling portion in the brain that helps lower the body temperature and fight fever. *Tip: Add a sprinkle of cayenne pepper in your lemon water.*



- **Lemons** are high in Vitamin C, are a natural antioxidant and have antiviral and antibacterial properties. In fact, 100 grams of lemon contain 40% of the daily norm of Vitamin C. Lemons have a number of additional health benefits, including preventing bacterial growth and infections, relieving nausea, loosening chest congestion and helping maintain gastrointestinal health. Lemon also has a hemostatic effect, which minimizes or stops bleeding or hemorrhaging. *Tip: Add a slice or two of lemon to your water, and a dash of salt to filtered water to also help re-mineralize your water. Add honey and lemon into hot water to help fight symptoms of a virus.*



- Referenced in Hindu devotional and sacred ceremonies as “the golden goddess,” **turmeric**, a fiery orange spice, has been a celebrated ingredient in In-



dian cooking for millennia. Curcumin, the substance responsible for turmeric's orange hue, contains potent antiviral, anti-fungal, anti-cancer and anti-bacterial properties. It also blocks enzymes that promote inflammation and pain, such as in the throat and tonsils. *Tip: Turmeric should be taken with black pepper to maximize its medicinal benefits (turmeric rapidly metabolizes in the liver and intestines).*

- **Ginger** is a powerful antioxidant that has been shown to naturally boost the immune system. Ginger contains many vitamins, including magnesium, iron, zinc and calcium. Ginger or ginger root can help ward off the symptoms associated with a cold or flu. *Tip: Add fresh ginger or ginger powder to your tea or other meals if you have no intolerance to this spice.*



- **Cloves** are found in both whole and grounded forms, and are an excellent spice for boosting sweet and savory foods. Cloves have high amounts of antioxidants, which help the immune system ward off oxidative stress and free radicals. The antibacterial properties of cloves also aid in spreading bacteria inside the mouth. Studies also suggest that the beneficial compounds found in cloves help promote liver health. *Tip: Add a sprinkle of cloves to your soups or tea, or simmer whole cloves in boiling water for 5–10 minutes to make a soothing cup of clove tea.*



- The leaves, flowers, seeds and fruits of the **sea buckthorn** plant are used to make medicine. Sea buckthorn has a vast application of health uses, including the treatment of gastrointestinal ailments, high blood pressure, skin conditions, protecting mucus membranes and boosting immu-



nity. Sea buckthorn is high in vitamins A, B1, B2, B6. *Tip: Sea buckthorn oil is a popular way to access the vitamins, minerals and omega fatty acids of this superfood. Add a drop or two into your foods or smoothies.*

- Incorporating **root vegetables** into your meals is a great way to ingest a variety of vitamins and minerals. Root vegetables include onion, carrots, turnips, beets, sweet potatoes, and, as previously mentioned, garlic. Sweet potatoes, for example, are high in vitamin A, and help improve immunity. Turnips (an easy replacement for potatoes), deliver immunity-boosting Vitamin C. Studies show that beets increase blood flow to your brain. *Tip: Chop up a medley of root vegetables, sauté over a low to medium heat in a sauce pan until soft, about 8-10 minutes. Add stock to create a nutritional base for a soup, or eat as is.*



Research shows that a plant-based diet that is composed mostly of fruits, vegetables, nuts, seeds, whole grains, beans/lentils can help change the body's acid level, also called the pH level. Research has shown that eating a diet high in alkaline foods (high pH) and limiting acidic foods can help raise the body's pH levels (or improve the alkalinity of the body). Changing the body's pH level can help improve your health.

– Sources: Healthline, WebMD, MD Anderson Center, <https://fermilon.ru/zagotovki/konservirovanie/solenye-limony-retsepty-otzyvy-rezultaty.html>, Dr. Svetlana Masgutova, Dr. Nelli Ahkmatova, The Herbal Academy.

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# About the Authors

**Dr. Svetlana Masgutova** has a Ph.D. in Psychology (1988, Russia) and Associate Professor degree (1992, Russia). She worked as a lecturer at various universities (Russia, Poland) and as a scientific researcher at the Russian Educational Academy. She also received a post-graduate degree in Clinical Neuro-Speech Development at the Medical University (Poland).



Svetlana Masgutova,  
Ph.D

She is an active founder of the Svetlana Masgutova Educational Institute for Neuro-Sensory-Motor and Reflex Integration, LLC. Dr. Masgutova has authored over 170 published works on psychology, education, Neurosensorimotor Reflex Integration, and sensorimotor-based development. Dr. Masgutova has been leading research since 1989 for the MNRI® Institutes, and has studied the influence of primary sensory-motor patterns on different aspects of neuro-development and learning. Her work focuses on the concepts of Reflex Integration processes to facilitate sensory processing, motor-physical and sensory-motor rehabilitation, emotional and post-trauma recovery, as well as learning and neurodevelopmental enrichment. Dr. Masgutova has been teaching her MNRI® programs throughout the world. She is the organizer of over 200 International Neurosensorimotor Reflex Integration and Rehabilitation Family Conferences and workshops for children and adults with neurodeficits and learning challenges.

**Dr. Nelly Akhmatova** is a Professor in Medical Sciences, an immunologist and virologist. She is a scientific worker at the Moscow Medical Research Institute by I. Mechnikov of Russian Medical Academy, and director of the laboratory of Immunodeficits and Therapeutic Vaccines. She is part of MNRI® International Team, helping with running Clinics and Family Conferences in U.S., Netherlands, Poland, Indonesia and Russia. Her scientific interest in MNRI® is the study of the immunological aspects of reflex integration programs.



Nelli Akhmatova MD,  
Ph.D

Dr. Nelly has overseen many MNRI® research studies, including a study on the Immunologic effects of Masgutova Neurosensorimotor Reflex Integration MNRI® Program in children and adults with recurrent obstructive bronchitis, allergies and dermic diseases. She currently is researching the effect of MNRI® exercises on the immune-deficits and neurodermites of the skin. The program on MNRI® Breathing Reflex Integration was created based on the research of her and her colleagues. This program presents the medical and neuro-physiological aspects of the immune and hormonal system under distress and challenged health conditions.

**Denis Masgutov, MA** (1983-2016) was the co-founder of the International Dr. Svetlana Masgutova Institute in Poland. He served as an International Specialist of the Masgutova Method®, had a degree in General Psychology and Psychology of Developmental Pathology/Defectology (Russia), and was certified in massage therapy (Russia). He had significant experience in working with adults and children with developmental challenges. Since 2009, Denis was the organizer of the International Rehabilitation Camps for children with neurodeficits in Poland and the PT and OT specialists' education program in MNRI®. He traveled extensively with Dr. Svetlana Masgutova in the U.S., Canada, Singapore, Australia, Israel, Netherlands, France, and Indonesia. Denis' primary interest was focused on the psychological and motor aspects of the neurosensorimotor integration of primary motor and reflex patterns, which serve emotional and cognitive development. In Poland, he used EMG/BTS equipment to obtain objective data on the correlation of reflex integration progress with neurostructural changes in over 300 children with CP and autism. Through this research, he developed a deeper understanding of many practical techniques for working with stress, the withdrawal response, and breathing reflex patterns. Children and their parents loved Denis for his understanding, support, and enthusiasm.



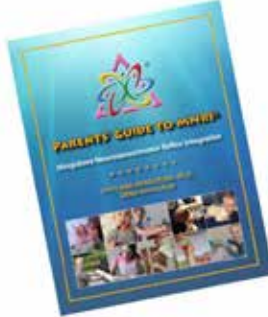
Denis Masgutov, MA



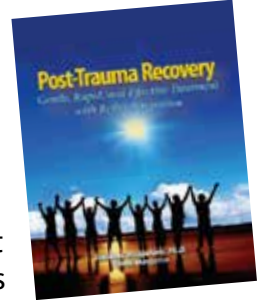
# MNRI® Publications



**Parents' Guide to MNRI®** is illustrated with simple Reflex Patterns for Hand/Arm; Foot/Leg; Core or Gross Motor Coordination; Trauma, Protection, & Survival; Emotional Stability, Fear, and Depression; Oral-Facial and Visual-Auditory; and Reflex Patterns for Cognitive Activity. It is 60 pages of full color illustrations and describes treatment for over 27 different reflexes along with descriptions of how the development of this reflex effects us and the implications for a poorly functioning or pathological response. This Parents' Guide is intended to use for support with ongoing treatment with a MNRI® CORE Therapist, after attending an intensive MNRI® conference, or simply for a continued home treatment plan.

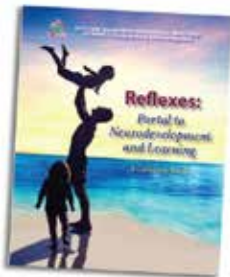


**Post-Trauma Recovery: Gentle Rapid, and Effective Treatment with Reflex Integration** is a comprehensive reference book about the causes of trauma, how the body responds to it neurologically and often continues to hold it within resulting in PTSD, the body's physiological co-factors that contribute to PTSD, and how to release these over-protections.



Post-Trauma Recovery is also a self-help book in which the reflex exercises which can release the body's over-protections are demonstrated so an individual can perform them and treat themselves.

## **Reflexes: Portal to Neurodevelopment and Learning**



**Reflexes: Portal to Neurodevelopment and Learning** showcases many aspects of MNRI®. It is a compilation of 120 articles by 60 authors describing MNRI® history, theory, and the science behind it, along with many case studies and testimonial stories written by Core Specialists, professionals, parents, and sometimes, the individual themselves. This amazing, eye-opening and compelling book shows the broad application of MNRI® and how many have used it to achieve surprising successes. It is available in printed form (560 pages) or as a pdf.

### ***Journal articles about MNRI®:***

[The Effect of the MNRI Method on Neurotransmitter Biomarkers of Individuals with Neurodevelopmental Disorders](#)

[The Impact of MNRI Therapy on the Levels of Neurotransmitters Associated with Inflammatory Processes](#)

[Physiological Markers and Reflex Pattern Progression in Individuals with Neurodevelopmental Deficits Utilizing the MNRI Method](#)

[Effects of MNRI Visual Reflex Neuro-Training on Visual and Academic Skills of Children with Autism](#)

[Effect of Reflex Neuromodulation on an Infant with Severe Amniotic Band Syndrome: A Case Report on the use of MNRI Techniques for Physical Therapy](#)

[Neurosensorimotor Reflex Integration for Autism: a New Therapy Modality Paradigm](#)

[Neurophysiological Aspects of NeuroTactile Therapy of Masgutova Neurosensory Motor Reflex Integration MNRI®Method](#)

[Influence of MNRI on the Immune Status of Children with Down Syndrome](#)

[Use of a Neurosensorimotor Reflex Integration Program to Improve Reflex Patterns of Children with Down Syndrome](#)

[Post-Trauma Recovery in Children of Newtown, CT using MNRI Reflex Integration](#)

[Progress with Neurosensorimotor Reflex Integration for Children with Autism Spectrum Disorder](#)

[Reflex Profile of Children with Down Syndrome Improvement of Neurosensorimotor Development Using the MNRI® Reflex Integration Program](#)

[Clinical-immunological assessment of therapy effect of the neuro-sensory-motor integration program of reflex patterns in airway chronic inflammatory diseases](#)

[Masgutova Neurosensorimotor Reflex Integration \(MNRI\) Neuromodulation Technique induces Positive Brain Maps \(QEEG\) Changes](#)

[Immunological Efficiency of MNRI Program at Treatment of Respiratory Diseases](#)

[Influence of Neuro-Sensory-Motor Reflex Integration Technique on Immune Response of Patients with Herpes-Associated Multiforme Erythema](#)

[Immunological Effects of Masgutova Neurosensorimotor Reflex Integration in Children with Recurrent Obstructive Bronchitis](#)

[The Impact of Rehabilitation Carried out Using the Masgutova Neurosensorimotor Reflex Integration Method in Children with Cerebral Palsy on the Results of Brain Stem Auditory Potential Examinations](#)

[Flood Trauma Survival and Recovery Using MNRI Reflex Neuro-Integration Therapy](#)

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