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Massaging Yourself Helps Boost Lymphatic Function

Analysis by Dr. Joseph Mercola | August 26, 2025

STORY AT-A-GLANCE

- Research shows rhythmic neck pulses increase cerebrospinal fluid (CSF) clearance by 100% within an hour, reducing intracranial pressure and clearing harmful proteins
- Quality sleep, especially deep sleep phases, dramatically boosts glymphatic system activity, washing away Alzheimer's and Parkinson's-related proteins from brain tissues
- Key drainage points include collarbone area, jaw angle, armpits, abdomen, groin, and behind knees, all of which require regular movement for optimal function
- Start by stimulating neck, armpit, and groin lymph nodes with gentle circular motions before performing full-body lymphatic massage sequences
- Perform lymphatic drainage two to three times weekly for 10 to 30 minutes, stay well-hydrated, and incorporate regular walking to maximize lymphatic system drainage

Your immune system has many methods of keeping your body safe. One prominent part of it is the lymphatic system, which contains specialized tissues called lymph nodes positioned throughout your body. Lymphatic fluid passes through these nodes, filtering out foreign invaders such as viruses and bacteria.[1]

What's interesting about the lymphatic system is that it has a subnetwork — the glymphatic system — to keep the brain healthy. Cerebrospinal fluid (CSF) travels throughout this system, flushing out waste products produced by your brain, such as proteins linked to Alzheimer's disease and Parkinson's disease. Now, research shows that you can optimize this function further by massaging your lymph nodes.[2]

Gentle Neck Pulses Dramatically Boost Brain Drainage

Research published in Nature investigated whether gentle, rhythmic pulses applied to the skin of the neck could increase the drainage of CSF. The study was conducted by a team from Yale University, which used animal models.[3]

Healthy samples were chosen specifically because their lymphatic drainage systems closely mimic human anatomy. Using advanced imaging techniques, researchers were able to precisely measure the rate at which a fluorescent tracer dye, infused directly into CSF, exited the brain and entered cervical lymph nodes.

- **The benefits were immediate —** Within just one hour of gentle neck stimulation, the rate of fluid drainage doubled compared to control groups. While fluid drainage continued to remain elevated after this period, the greatest improvements in lowering pressure and enhancing clearance of harmful substances happened rapidly after stimulation began.

  This substantial improvement in drainage speed translated directly into decreased intracranial pressure, which is the pressure inside your skull. When intracranial pressure is too high, it can result in headaches, dizziness, confusion, or more serious neurological issues.

- **The improvement was most pronounced in lymphatic drainage efficiency —** Before the treatment, the clearance rate of CSF was relatively slow, allowing harmful substances to accumulate. After neck pulses, researchers reported fluid clearance rates increased by more than 100%, effectively doubling the brain's waste-removal capabilities.

  In essence, gentle pulses on the neck enhanced the frequency and strength of these contractions, creating a more efficient "pump" action. This powerful yet gentle motion quickly cleared excess fluid, reduced pressure buildup, and removed harmful waste proteins from brain tissues.

- **The biological mechanisms explained —** Tests show that the benefits primarily lie in the structure and responsiveness of lymphatic vessels in the neck. According to the researchers, gently pulling and stretching the skin activated specific lymph channels, essentially widening them.

  At a microscopic level, mechanical stretching caused endothelial cells — the thin lining inside lymph vessels — to realign and expand, directly increasing the diameter of these vessels. A wider channel means CSF flows more easily and rapidly, significantly speeding up drainage from the brain.

Sleep Is a Powerful Adjunct for Optimal Glymphatic Function

In a study published in Biomedicines, researchers examined the relationship between sleep quality, aging, memory function, and the efficiency of your glymphatic system. The researchers selected adults across various age groups, examining healthy older adults, adults experiencing cognitive decline, and those diagnosed with Alzheimer's disease.[4]

The team found a link between the quality and depth of sleep and the brain's ability to efficiently clear away toxic proteins, specifically beta-amyloid and tau proteins, which are associated with memory loss and Alzheimer's. Adults with impaired sleep or fragmented rest had significantly reduced glymphatic activity, which directly correlated with declining memory and cognitive function.

- **Deep sleep boosted the clearance of harmful brain proteins —** During deep sleep, which is characterized by slow, rhythmic brain waves, the glymphatic system shifted into high gear, actively flushing beta-amyloid and tau proteins out of brain tissues. According to the researchers, just one hour of deep sleep markedly increased glymphatic clearance, making sleep quality one of the most important factors in maintaining a healthy, resilient brain as you age.

- **Memory and cognitive sharpness improved —** The research showed that participants who regularly experienced uninterrupted deep sleep had significantly lower levels of harmful proteins building up in their brains. As a result, these

individuals showed less age-related memory loss and stronger cognitive performance compared to those who suffered from poor sleep. Simply put, good sleep protects your memory by literally washing your brain clean of toxic waste.

- **Nighttime sleep provided the most robust improvements in glymphatic activity —** Tests showed that irregular sleep schedules or staying awake late into the night could severely limit the effectiveness of the glymphatic system's cleansing process. In contrast, establishing consistent sleep patterns was strongly linked to improved cognitive health and memory preservation.

  Interestingly, the greatest benefits appeared among adults who already had noticeable symptoms of mild cognitive impairment. For this group, enhancing sleep quality significantly slowed cognitive decline and even reversed some early memory problems.

- **Quality sleep is the most important factor —** The researchers carefully compared different variables influencing glymphatic function, including aging, sleep disruption, and levels of toxic proteins in the brain.

  They found that disrupted sleep had a more immediate and severe negative impact on glymphatic function compared to aging alone. While aging gradually slowed this waste-clearing system, poor sleep rapidly accelerated its decline, underscoring how important good sleep habits are for protecting your brain against memory loss and cognitive impairment.

- **A closer look at the glymphatic system —** The researchers identified astrocytes — star-shaped brain cells — as critical players in glymphatic function. Astrocytes surround blood vessels in your brain and have special channels known as aquaporin-4, acting as tiny gates that regulate fluid flow.

  During deep sleep, these channels become aligned, dramatically increasing fluid movement through brain tissue and efficiently clearing harmful proteins. When sleep is disrupted, these channels lose alignment, drastically slowing fluid clearance and allowing waste products to accumulate.

- **How aging disrupts these astrocyte channels —** Older brains typically have less organized aquaporin-4 channels, making fluid clearance less efficient. However, regular deep sleep strongly counteracts these age-related changes, helping realign aquaporin-4 channels and boosting glymphatic flow. Essentially, quality sleep is a powerful way to keep your brain young by maintaining these critical fluid pathways and protecting your memory as you age.

- **Disrupted circadian rhythms severely compromised glymphatic function —** Restoring a natural circadian pattern, through regular sleep routines and exposure to morning sunlight, dramatically improved the brain's ability to cleanse itself.

Based on the research, it's clear that optimizing your sleep quality will have a protective effect on brain function. That said, I believe that getting restful sleep is a cornerstone of optimal health.

If you're having trouble falling asleep faster or staying asleep longer, there are many ways to address them. For in-depth recommendations, read "**Sleepmaxxing — Will This Viral TikTok Trend Help or Hinder Your Sleep?**" There, I provide several strategies that can help you boost your sleep quality.

Your Body Has 6 Lymphatic Points



The lymph nodes are found in strategic locations around your body's primary joints, which are meant to move frequently. They're found at the shoulder joints, hip joints, knee joints, the center of your torso. The last nodes are found at the top of your neck,

specifically the first three vertebrae and behind your jaw's angle.

- **Lymph nodes require movement —** The reason behind this is to facilitate optimal lymph flow. According to my interview with chiropractor and lymphatic expert Dr. Perry Nickelston, lack of movement in these areas, alongside poor diaphragmatic breathing, will stagnate your lymphatic system. That's why he recommends massaging these six lymphatic points before moving your body.
- **You're effectively "priming" your lymphatic system for better fluid flow —** While Nickelston suggests that order is important, my review suggests that this isn't the case — what's important is to move lymph fluid from areas of high pressure to low pressure, which is toward your collarbone. This is the ultimate destination for lymph drainage:

    1. Collarbone area (both sides)
    2. Behind the angle of your jaw
    3. Shoulder joint/armpit region
    4. Abdomen (from sternum to navel)
    5. Inguinal lymph nodes (groin area)
    6. Behind your knee

How to Prime Your Lymph Nodes

Now that you know where your lymph nodes are located, how do you go about stimulating them? To begin your own manual lymphatic drainage (MLD) routine, start by making sure you're hydrated. That's because the increase in water will help keep your lymphatic fluid moving better throughout your body. Once you've drank water, you'll need to relax yourself.

MLD is done on the lymph nodes, as these serve as filtering points for lymphatic fluid. To get them working to their fullest, they need to be “primed” through simple massages. This ensures that your lymph nodes are ready to receive fluid from the rest of the body. Start with these first:

- **Neck (cervical) lymph nodes**
    - **Location —** Both sides of your neck, under your jawline.
    - **How to stimulate:**
        1. Place your fingers on either side of your neck, just below your ears.
        2. Using light pressure, gently stroke downward toward your collarbones.
        3. Perform five to 10 strokes on each side.
- **Armpits (axillary) lymph nodes**
    - **Location —** In the armpit region.
    - **How to stimulate:**
        1. Place your hand flat under your armpit.
        2. Gently press upward toward your shoulder with light circular motions.
        3. Perform five to 10 circles in each armpit.
- **Groin (inguinal) lymph nodes**
    - **Location —** In the crease where your thighs meet your lower abdomen.
    - **How to stimulate:**
        1. Place your fingers on either side of your groin area.
        2. Gently press inward and upward with circular or sweeping motions.
        3. Perform five to 10 circles on each side.

Once you've finished these areas, you can now move on to doing MLD. Performing the following MLD techniques will optimize your lymphatic system.

- **Target your face and neck —** Start by placing your fingers in the center of your forehead, then gently sweep outward toward your temples. Continue moving downward, sweeping along the sides of your face and jawline, guiding the fluid toward your neck. Perform five to 10 strokes on each section of your face.

  Then, place your hands flat on either side of your neck. Gently stroke downward from your jawline to your collarbones. Perform 10 to 15 strokes.

- **Arms —** Begin at your upper arm, near your shoulder. Use your hand to gently stroke down toward the armpit, where the axillary lymph nodes are located. Repeat these steps 10 to 15 times on each arm. Then, move to your lower arm, starting at your wrist and stroking upward toward your elbow. This process encourages fluid to drain from your arms toward the axillary lymph nodes.

- **Legs —** Start at the upper thighs, just below your hip, and gently stroke upward toward your groin, where the inguinal lymph nodes are located. Repeat 10 to 15 times on each leg.

  Move down to your lower legs and repeat the same process, starting at your ankles and stroking upward toward your knees. This will help reduce any swelling in your legs and promote the movement of lymph fluid back toward your heart.

Additional Tips to Maximize Manual Lymphatic Drainage

To ensure that you're getting the most out of your MLD sessions, remember these tips:

1. **Frequency —** For best results, perform MLD two to three times per week or as recommended by a health care professional.

2. **Duration —** Ideally, each session takes anywhere between 10 and 30 minutes depending on the areas treated.

3. **Stay hydrated —** Drinking water before and after MLD flushes toxins and waste products from the lymphatic system.

4. **Consistency —** Regular practice of MLD helps maintain healthy lymphatic function.

While MLD has its therapeutic benefits, there are contraindications for it. If you have any of the following conditions, do not perform MLD:

- Infections, such as cellulitis
- Congestive heart failure or other heart-related problems
- Deep vein thrombosis or a history of blood clots

In addition to what's mentioned above, I recommend you incorporate exercise into your routine, particularly walking. Your body thrives on movement, and doing it regularly stimulates the flow of your lymphatic system better. As noted by Nickelston:

> *"You should be walking, hopefully brisk enough and without a phone in your hand, so you get some twisting and rotation and torsion in the center of the abdomen, and that moves fluids too. I always tell people envision wringing out a towel; twisting gets fluids to move."*

Frequently Asked Questions (FAQs) About Your Glymphatic System

Q: What is the glymphatic system and why is it important?

A: The glymphatic system is a specialized part of the lymphatic system responsible for clearing waste products like beta-amyloid and tau proteins from the brain. Efficient glymphatic drainage helps prevent neurological diseases, such as Alzheimer's and Parkinson's, and reduces intracranial pressure, improving cognitive health.

Q: How can gentle neck massage improve brain health?

A: Gentle, rhythmic pulses applied to lymph nodes in the neck have been shown to dramatically enhance CSF, doubling the rate of toxin removal from the brain. This method quickly lowers intracranial pressure, reducing headaches, dizziness, and neurological problems.

Q: What role does sleep play in glymphatic system efficiency?

A: High-quality deep sleep significantly boosts the brain's glymphatic clearance, effectively flushing harmful proteins and protecting against cognitive decline. Poor sleep or disrupted sleep schedules drastically reduce glymphatic activity, accelerating memory loss and cognitive impairment. To maximize lymphatic drainage, combine lymph node massages with high-quality sleep.

Q: How can I optimize my lymphatic system through manual lymphatic drainage (MLD)?

A: To optimize your lymphatic system, regularly massage key lymphatic points such as the neck, armpits, and groin. Gentle, rhythmic strokes toward the collarbone region help stimulate lymph flow, improving drainage and overall lymphatic health. It's most effective when combined with hydration and consistent practice (two to three times per week).

Q: Are there conditions when MLD should be avoided?

A: Yes. Avoid performing MLD if you have infections (such as cellulitis), congestive heart failure, heart-related conditions, or a history of deep vein thrombosis (blood clots). Always consult a health care provider if unsure about starting a lymphatic

massage routine.

Sources and References

- [1] Cleveland Clinic, “Lymph Nodes”
- [2] New Scientist, June 4, 2025
- [3] Nature, June 4, 2025
- [4] Biomedicines 2023, 11(8), 2092