

HOW YOGA AND THE LYMPATHIC SYSTEM WORK TOGETHER

200 Hour Thesis

Beth Farmer

INTRODUCTION

I first became interested in Lymphatic Yoga when I moved to Orlando, Florida. I researched for a local yoga studio that would hopefully offer the classes I needed and educated teachers I had become accustomed to while attending Prairie Yoga 200 hour Teacher Training. I feel very blessed to have found Yoga Matrix.

One of my first classes was on Lymphatic Yoga, taught by the owner and teacher, Edely Wallace (BA, E-RYT, MT, CDT), who is also a former board member (2002-2005) of “Yoga Alliance.” Edely trained and studied with Master Teacher Andre Van Lysebeth in Belgium, the US, and Brazil using several yoga traditions. Edely was first exposed to yoga after a bus accident that left her bedridden for several years. The bus she was on coming back to her seashore hometown from a seminar was hit in the rear by a loaded truck. The bus projected off the roadway and free fell approximately 300 feet down into the middle of the tropical forest. Most people did not survive the impact. It took hours for rescue crews to reach the accident site. Edely had many fractures including both legs being injured posing threats of leg amputation. Several years passed with many surgeries, re-fractures, wheel chairs, walkers, crutches, and much more. Still, after two years Edely could not move from the waist down. She was finally told that yoga could help, but she could not believe that she would be able to do it since she could not do anything else but lie down 24 hours everyday. But, she gave it (This Yoga) a try. She thought it would at least be a good distraction. So, once a week a yoga teacher came to her home. Edely still could not practice physical exercise. She was first instructed in the breathing and relaxation exercises she was to practice several times a day. After about two weeks she started to feel some changes. She didn't have as much pain and the sense of helplessness decreased. She felt a lot of energy throughout her body and even experienced some comfort and happiness. After all of the positive results from the breathing and relaxation exercises she experienced, Edely decided to take her yoga practice more seriously and begin to read everything she could find about yoga and how it works.

For the next several years she engaged in a serious study on yoga and health related books. It took up entire days. Edely was steadily and slowly getting healthier though. She became stronger while she was learning and understanding more about yoga, breathing, and how the body works.

The work paid off. She could walk again even though all of the medical predictions said she would not. Edely traveled from Brazil to Brussels to take a yoga class from Master Teacher Andre Van Lysebeth. Edely's hometown wanted her to become a yoga teacher and everybody wanted to learn more about yoga after her very unexpected recovery.

One day she was at a bookstore and came across a book on "Lymphatic Drainage." She had no idea what it could be about. As she opened the book it was on the chapter of "Hard to Heal Bone Fractures." She thought that it was a sign that it was meant to be. That's when she started to practice a simple type of gentle drainage on herself.

Finally, after over twenty-five years of teaching yoga and practicing lymphatic drainage on herself she became a lymph therapist. Her training was at the leading lymphatic hospital, "Foldi Klinik" in Germany. This is when she decided to combine the two saving methods of yoga and lymph drainage.

I had the pleasure of taking one of her lymphatic workshops. She had just returned from another training in Austria studying under the influence of Dr. Vodder Schule. In order to further specialize in the lymphatic system, I begin my yoga journey with Yoga Matrix and two very special teachers, Edely and Nancy.

WHAT IS LYMPH?

Lymph is water and all cells of the body are bathed in this water. The body is mainly 70- 75% water. Blood comprises about 20% of this bodily water. Not many people know that the lymphatic system is the body's fundamental water reservoir that bathes all cells, tissues, and organs of the body while cleansing and nourishing them. Lymph is the transport and drainage system of the body (compared to a garbage disposal & Septic System). The lymphatic system is in fact so *vital* to the structures of the body that its condition can be considered the "Mirror of our

health.” The lymphatic system cannot be labeled as a circulatory system, because it is a one-way system. Lymph flows towards the heart. Unlike the cardiovascular system that relies on the heart to pump blood, the lymphatic system does not have a central pump to assist its flow. The Lymph is slow to move and it moves because of muscle activity and deep breathing. This is why yoga and the lymphatic system can match and help each other. By combining deep breathing and specific yoga, asanas and movements can keep our lymphatic system healthy and happy!

WHAT IS THE LYMPHATIC SYSTEM COMPOSED OF?

The lymphatic system is composed of the lymph, lymphatic vessels, and lymph nodes. Lymph, or clear water, is the fluid and protein that has been squeezed out of the blood (blood plasma), minerals, vitamins, lymphocytes, enzymes, dead cells, toxins, debris, dust, bacteria, virus, cancer cells and gases. The lymph content is known as a “Lymphatic Load” according to German Researcher, Dr Foldi. Protein molecules are always leaking from the bloodstream into the interstitial fluid, so it is vital that they return to the blood. Proteins are the vehicle for vitamins, hormones, and minerals to be delivered to the cells. More than ½ the protein content of blood leaks from the bloodstream throughout a single day. If proteins do not return to the bloodstream in 24 hours shock or even death can occur. The transportation of proteins back to the bloodstream is considered *most* important function of the lymphatic system.

LYMPHATIC VESSELS

On its journey back to the bloodstream, the lymph enters the initial lymph vessels (lymph capillaries). The main function of this is to collect the interstitial fluid. The heart is the destination of the lymph fluid. The lymph moves from the capillaries to larger lymph vessels, or pre-collectors, to collectors, trunks and ducts. The lymph collectors are larger and more complex vessels than capillaries. They are built from valve segments (muscular units). The valves are known as lymphangions and have an extensive innervation from the autonomic nervous system. Lymphangions also have motion and pulsate like “little hearts” to help pump the

lymph. They give direction to the lymph and prevent lymph backflow. The largest lymphatic vessels are the lymph trunks, which exit into the venous circulation close to the heart. The largest lymph trunk is the thoracic duct. It is about 2 to 5 mm in diameter and 40 cm long. It parallels the spine from the lumbar spine to the basis of the neck. It also located below the diaphragm and acts as a sac-like enlargement named cisterna chili. The lymph flow passes through one or more filtering stations, the lymph nodes.

LYMPH NODES

These nodes filter, clean and boost the lymph that moves through them. Lymph nodes retain, neutralize and break down toxins as well as bacteria and viruses as they produce antibodies known as lymphocytes. There are about 600 to 700 lymph nodes. They occur in clusters spread throughout the body. The neck has approximately 160 alone. They are mostly bean shaped with a diameter of .2-25 mm and are surrounded by a connective tissue capsule. They can vary considerably in size, shape, and number. Every region of the body has its own group of regional lymph nodes. The neck and abdominal area contain a great number of the lymph nodes. Other lymph nodes are spread throughout the body, especially in the joints.

Recently, I had a wake up call by my tooth aching very badly in the middle of a deep sleep. It was so bad that I took a Tylenol pill followed by 3 more. That did not work so I even took another and put ice on my cheek. I did it all. And, I am not someone that takes pain killers- ever! Finally, it calmed down to where I was able to fall back asleep.

The next morning I went to the dentist for an emergency appointment. To make a very long story short, after 2 weeks and 2 different dentists (one was a complete wacko), I ended up at a surgeon to get my tooth pulled. Now that I think back, my jaw and neck were sore for several weeks before, and I had headaches that I rarely get. This is a perfect example of knowing that our lymph nodes are working hard. (Let me tell you they did a good job. I must have some really strong lymph nodes).

ENERGETICS OF THE LYMPHATIC SYSTEM

The immune system involves setting clear boundaries between the self and other. The intelligence of immunity involves the setting of limits and ability to defend oneself and survive. Since most of the lymph drainage occurs at the skin level, immunity is skin deep. That is, the more flow and movement that occurs at the skin level, the healthier we are. When people are frightened, threatened, withdrawn or angry, the skin tightens and the lymphatic system may shut down. Certain yoga asanas serve to move blood, the lymph and nerve impulses under the skin. Stretching the skin and enlivening it brings greater clarity and health. Yoga is training to get rid of the unwanted, both infection that penetrates the body from outside and refuse (garbage cells) that build up inside.

A radiant immunity involves getting rid of negative emotion. This is done by accumulating positive states of mind and an attitude of loving kindness (metta) to build resistance to negativity (including fear, depression and suspicion) that wear down one's immunity. Chanting, metta meditations, prayer, visualizations on the body of light and devotional reflection serve to boost one's health, creating a glow or radiance. My personal favorite is praying and having a quiet time every morning before the sun comes up. I listen to a Christian devotion that always seems like it was written just for me and go through a short yoga practice. You cannot go wrong on starting the day out by taking time just for you.

THE IMPORTANCE OF BREATH FOR A HEALTHY LYMPHATIC SYSTEM

The importance of breath and how to breathe correctly is *vital* for a healthy lymphatic system. Proper breathing benefits our multicellular being. The breathing function is also one of the main pumps of the lymphatic system, so it is vital to learn proper breathing. Poor breathing translates into impaired digestion and poor assimilation. All functions of the body need oxygen to perform their tasks. It's important to remember that we can survive without food or water for several days, but we cannot survive without air for more than a few minutes. There is a Yoga concept that says, "Life and breath are the same. Life comes with the first inhalation; Life goes with the last exhalation." Our lives are sustained by a series of breaths.

That's why the way we breathe affects conditions in our body but also our daily life. It is important to think about the diaphragm and moving the belly area. The diaphragm is the muscle in charge of 75% of inhalation. The diaphragm is below the lungs. If you have ever had the pleasure of watching a newborn baby breathe, they breathe in through the nose and their belly lifts. They breathe out through the nose and their belly lowers. Also, observe your dog or cat when they are sleeping. Notice the movements of their bellies. They breathe properly. Deep diaphragmatic breathing is the key to calmness, vitality and a clear mind. The up and down motion of the diaphragm also provides a natural massage for internal organs. The up and down motion of the "muscle of life," or the diaphragm, also activates the lymphatic nodes and vessels in the abdominal area. The motion of diaphragm helps the lymphatic inflow of the largest lymph trunk (the thoracic duct).

LYMPHATIC TRUNKS AND LARGE LYMPHATIC PATHWAYS

The lymphatic trunks form the final part of the journey for the lymph on its way back into the blood circulation. The valves of the thoracic duct are approximately 8 cm apart. They receive the cleansed lymph from the regional lymph nodes. Few lymph nodes are found along the ducts. Their wall structure is vascular and much the same as in the lymph collectors, except that the muscular layer is thicker and the valves are further apart. In the trunk of the body and cervical region nine large lymphatic trunks are found. Together, they form a sort of collecting vessel, the Cisterna chili, which collects lymph from the intestines, abdominal organs, and legs. The thoracic duct, after draining, discharges into the left venous angle where the subclavian and internal jugular veins join. Watersheds are notional lines drawn on the basis of the different directions of lymphatic flow. Watersheds are usually found between two bundles, because very few lymph vessels exist between the collectors of neighboring bundles. The following watersheds are important for manual lymph drainage:

1. Running horizontally across the navel and the 2nd or 3rd lumbar vertebra, dividing the skin into upper and lower body.
2. Running vertically along the midline of the body, dividing it into a right and a left half.

3. Running along the clavicle and the spine of the scapula, forming a small strip above the shoulders.

Other watersheds exist but they are not of interest for manual lymph drainage.

LYMPHATIC YOGA

Yoga becomes the ideal way to activate and renew the lymph fluid. A combination of breathing techniques and specific yoga postures focused on the anatomy of the lymphatic system can assure both the oxygenation of the body and the drainage of toxins. A lymphatic yoga practice can prevent devastating conditions in the body while also regenerating the tissues and boosting the immune system. Practicing lymphatic yoga also provides a relaxed state and feel-good sensation, because the lymph is directly related to the parasympathetic nervous system. This helps quiet the mind and provide a state of peaceful joy naturally. Edely Wallace, my master teacher at Yoga Matrix in Orlando will be offering a “lymphatic yoga teacher training” in November 2013. I will be attending so I can become a certified lymphatic yoga teacher.

SIMPLE DAILY STEPS YOU CAN TAKE TO IMPROVE THE LYMPHATIC SYSTEM

- Drink lots of water, purified or filtered
- Walk
- Reduce salt intake
- Avoid restrictive clothing
- Body brushing
- Avoid processed foods
- Engage in a nutritional detox method
- Swim or walk in water
- Take a deep and slow breath often
- Drink a glass of hot water with lemon when waking up
- Tongue scraping

A LYMPHATIC YOGA PRACTICE- SKIN BRISHING, HOW IMPORTANT IT IS TO GET THE LYMPH MOVING

I want to go into more detail about skin brushing. Personally, I have been brushing my skin for the last year and I can tell a big difference in the texture and appearance of it. In the following information it will give benefits of skin brushing and a YouTube video with a website you can visit to get a visual demonstration on the importance of skin brushing (YouTube- The correct way to skin brush, by GreenSmoothieGirl). Her website is greensmoothiegirl.com

DRY BRUSHING TECHNIQUE

Did you know ?

1. The skin is the largest, most important organ in the body.
2. Skin is responsible for one quarter of the body's detoxification each day.
3. The skin is known as our third kidney.
4. The skin receives one third of all the blood circulated in the body.
5. The skin is the last to receive nutrients in the body.
6. The skin is the first to show signs of imbalance or deficiency.

Dry brushing was recommended by the Finnish Dr. Paavo Airola for his patients 30 years ago and is still very popular in European spas and cancer treatment centers today. The Russians, Turks and Scandinavians have used dry brushing for centuries.

Benefits of Dry Skin Brushing

1. Removes cellulite
2. Cleanses the lymph system
3. Removes dead skin layers

4. Strengthens the immune system
5. Stimulates the hormone and oil producing glands
6. Tightens the skin preventing premature aging
7. Tones the muscles
8. Stimulates circulation
9. Improves the function of the nervous system and helps digestion

Remember to always dry brush your skin dry before you shower or bathe and use a light pressure. Skin brushing should be once a day, preferably first thing in the morning. Don't give up. It will take about 30 days to see and experience the changes. For a thorough lymphatic cleansing, perform skin brushing daily for a minimum of three months.

TIAS LITTLE'S PRAJNA YOGA INFUSION WEEKEND INTENSIVE ATLANTA GEORGIA

I had the good fortune to travel to Atlanta, Georgia this past fall October 2012 for a 3 day intensive by Tias Little. He had a session on the lymphatic system and how asana and pranayama is so important to moving our lymph. He provided us with 2 excellent sequences, which he demonstrated and then we did as a class. The first sequence was asana for compromised immunity. The second asana sequence was for the healthy body type to build Immunity. I personally enjoyed the 2nd sequence the most and I would practice this the most.

ASANA SEQUENCE FOR COMPROMISED IMMUNITY

Supta Baddha Konasana Recline angle

Supta Virasana

Supta Padmasana

Supta Padangushtasana

Supported shoulderstand

Supported Plough

Setu Bandha Sarvangasana

Supported Purvottanasana

Prasaritta Padottanasana

Supine Spinal Twist that give wringing action to organs

Viparita Karani (my personal favorite)

PRANAYAMA

Savasana (supported on a bolster)

Viloma 1 and 11

ASANA SEQUENCE FOR HEALTHY BODY TYPE TO BUILD IMMUNITY

Adho Mukha Savanasana

Suryanamaskara

Trikonasana

Ardha Chandrasana

Prasaritta Padottanasana

Uttansana

Sirsasana (with variations)

Sarvangasana (with variations)

Halasana

Upavaishtha Konasana

Ardha Matsyendrasana 1 and 11

Marichyasana 1 and 111

Salabhasana

Dhanurasana

Ushtrasana

Viparita Dandasana (in a chair)

I would also like to include some of Tias's personal thoughts on the lymphatic system and just good thoughts that resonated with me.

1. Twist every morning
2. Trust your life even if it does not feel good. It's all part of it.
3. **Keep your Temple (body) Clean**
4. Lymph is related to light. Light plays a big role in yoga. Also, it relates to our spinal cord, the crown of our head and our immunity.
5. **YOGA IN THE PITS** (he said this will most likely be your first time that you have heard yoga compared to the pits in your body)
6. Stretching all around the pit areas is very important to moving the lymph. This includes the neck, armpit, leg pit (back of knee), elbow pit, and the pits between your legs.
7. One of the best exercise and fun things to do is the **Hula Dance**. It moves the lymph system.
8. Yin Yoga is excellent for lymph

I'm glad that I took good notes, because I knew I would include this in my paper. While at Tias's Prajna Yoga Infusion Weekend Intensive in Atlanta, I met a lot of wonderful people and made a few new friends. And, as always it was a pleasure to attend one of Tias's teachings.

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By Beth Farmer
200 Hour Teacher Training

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LYMPHATIC YOGA SEQUENCE

LYMP in Sanskrit is LASIKA which comes from the Sanskrit root LAS meaning to glisten, radiate or shine brightly. LASIKA in the body refers to Lymph, mucous or plasma. It also refers to the sap or vital fluid of a plant. Lasika varana-circulation

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- * Body Brushing
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Lymphatic Yoga Practice Sequence



Legs up the wall pose / Viparita Karani

If you could do just one pose a day, Legs up the wall is the pose. Putting your legs up the wall can also strengthen both your Immune System & Lymphatic System. Stay in this pose at least 10 min. & breathe in and out through your nose.

Benefits

Relieves anxiety

Good for Lymphatic System

Digestive problems

Headaches

Varicose Veins

Blood Flow

Menopause / PMS

Depression



Neck Massage

Place hands at the back of the neck and gently press and release the neck area for a few times. As you do this bring your attention to the neck and feel what you are doing as you do it. Be gentle, slowly breathe in and out through your nose. After that, press and release the area between neck and shoulders.



Neck Motions

Start with your head facing forward and chin parallel to the ground. Exhale and lower your chin toward your chest. Inhale and slowly look up as you lift your chin toward the ceiling. Exhale, bring your chin down to chest, inhale back to center with your head facing forward. Exhale and slowly rotate your head to the right looking far over your shoulder. Inhale, bring your head back to center. Exhale and slowly rotate your head to the left looking far over your left shoulder. Inhale, bring your head back to center. Repeat 2 times.



Shoulder Dragging

Inhale, raise both arms up and bring your hands between the shoulder blades. Gently press down. Exhale keep a continuous pressure, drag hands forward across the shoulders and collar bones. Finish by shaking the hands out. Repeat motion several times.



Elbow Circles

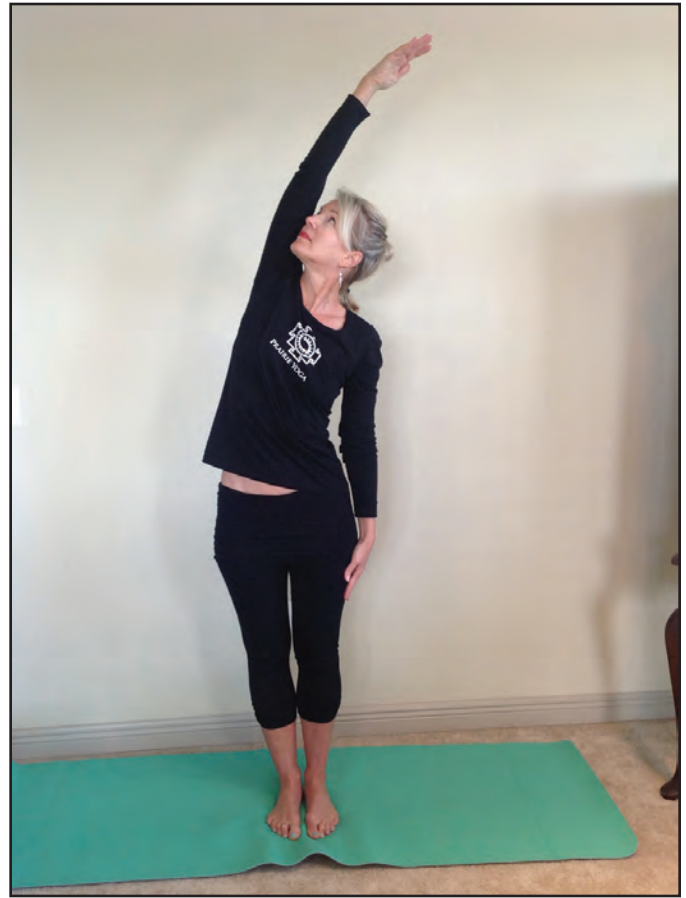
Bend both elbows, and reach them out to your sides. Relax your fingers on the tops of your shoulders. Begin to draw small circles with your elbows creating a rotation at your shoulders. Then continue to make circles larger. First go backward directions several times, pause, then forward directions. Repeat 2 times.



Marching In Place

Stand facing forward with both arms relaxed by your sides. Lift Left Knee and tap the Left Thigh with palm of Left hand. Lower Leg. Repeat on Right Side. Relax your face & your arm that is not tapping. Repeat several times on each side.





Half Moon

Stand with feet together, Inhale as you lift right arm over head. Relax your trunk to the left, as you exhale. Inhale press right foot to floor, exhale relax trunk to left. Stay into this pose on each side for 3 long breaths, in & out your nose.

As you inhale observe your ribs separating on the right side. As you exhale notice the ribs returning. Inhale and centralize the spine, exhale, lower right arm. Repeat on the other side. Repeat 3 times.



Belly Breathing

Lie down on back with knees bent soles on ground, feet hip distance apart parallel to each other. Relax shoulders. Place right palm of hand on belly, left hand on your heart.

Exhale through your nose draw belly-in (feel belly lowering) Inhale through your nose, (feel belly rising.) Long deep breaths. Repeat this 6 times.



Cat Cow Pose

Start in table position. Hands directly underneath shoulders. Knees under hips. As you exhale, tuck your tail bone under, and round middle back and drop head. Inhale, slowly lift tail bone curve your back in other direction & look up. Repeat this 4 times moving slowly with your breath.



Triangle

Separate your feet at least 3 feet apart. Turn right foot to a ninety degree angle. Turn left foot at a slight angle inward toward the right. Inhale and raise both arms directly out to the sides. Exhale and reach directly out to the right. Inhale again reach further to the right. Now look down at right foot, Lower your right arm, down to the right leg at the same time, raise left arm up towards ceiling. Shoulders need to be stacked, shoulders in line with each other tuck tail bone under, Inhale, slowly rotate head look up at left arm. Crown of head reaches directly out to right. Hold position for 3 deep breaths, repeat on other side.



Standing Forward Bend Uttanasana

Stand in Tadasana / Mountain pose. Exhale and bend forward from hip joints, not from waist. Emphasis is on lengthening the front torso, if needed use a block and place hands on block, you want to make sure your hands are touching, the floor or block. With each inhalation lift and lengthen the front torso slightly. With each exhalation release a little more. Let your head hang. Take 3 long deep breaths. Repeat 3 times.



Chest, Shoulders & Back Stretch using a Strap.

To stretch, chest, shoulders, and back use a strap gripped firmly over the head. Take strap between hands inhale as you lift strap up over head, exhale as strap comes back to chest... Repeat this 6 times.



Ankle & Wrist Movements

Sit with legs stretched out & together exhale point feet away from you, inhale & flex your feet towards you. Repeat 2 times. Then circle both ankles together several times in one direction, pause then circle the other direction.

Wrist circles, both arms out straight circle wrists together in one direction then other direction, do this several times. Remember to breath.



Shavasana

Lie on your back with arms by your side slightly apart and feet out to sides. Relax shoulders, allow breathing to become natural.

Gently close your eyes, Relax face let eyes soften, relax your whole body. Remain in this position for at least 6 mintues.

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Prajna Yoga Infusion Weekend Intensive Atlanta Georgia, October 21,
2012, Tias Little

Edely Wallace Oct Lymphatic Yoga Classes, Yoga Matrix, Orlando
Florida

Edely Wallace Lymphatic Yoga seminars, Yoga Matrix, Orlando Florida

