

"A human being is a container invented by water so that it can walk around." Juhan, Deane.
Job's Body - Barrytown / Station Hill Press

Water Bags

Large organisms must develop circulatory systems so that fluid-borne cells can reach their interiors and continually bathe into fluid. The life of every cell in the human body depends upon the proper function of these circulatory systems. Wherever this circulation is chronically impeded, areas of our internal sea stagnate and parts of us suffer or die. Connective tissue is one of the principal shapers and supporters of our circulatory network.

The fluid ground substances is the immediate environment of every cell in our body, and it has a wide range of effects upon every cellular membrane which it contacts.

Fluid Crystal

Fascial matrix (connective tissue) derives from the mesenchyme—a subdivision one of the three primordial layer of embryonic cells, the mesoderm (meso = in between). It differs from the two other layers (endoderm and ectoderm) by expressing a more gel like quality. Its function comes into play to maintain and contain the unfolding entities in the growing embryo. The mesoderm creates a balanced order between structure and fluidity in a process which is evolving from global fluidity to definition and specialization. This same germinal layer subsequently produces tendon, ligament, cartilage, bone, marrow, muscle, blood, lymph, blood and lymph vessels, and the surface linings of the body cavities, the joint capsules, the kidneys, ureters, gonads, genital ducts, and the adrenal cortex.

Connective tissue varies in tone and density: its physical nature can modulate from fluidic to rigid states, including all nuances in between. Where we find mostly fluid and few fibers, we have a watery intercellular medium that is ideal for metabolic activities; with less fluid and more fibers, we have a soft, flexible lattice that can hold skin cells or liver cells or nerve cells into place; with little fluid and many fibers, we have the tough, stringy material of muscle sacs, tendons, and ligaments. If chondroblasts (cartilage-producing cells) and their hyaline secretions are added to this matrix, we obtain even more solidity, and in the bones this cartilaginous secretion is replaced by mineral salts to achieve a rock-like hardness.

Connective tissue is composed of ground substance and fibroblast, which in their turn secrete collagen fibrils. Of all the cells in the body, the fibroblasts are the only ones which retain throughout our lives the unique property of being able to migrate to any point in the body, adjust their internal chemistry in response to local conditions, and begin manufacturing specific forms of structural tissue that are appropriate to that area.

Collagen is to animals what cellulose is to plants—the tough lattice in which all other kinds of tissue are developed and contained. In animal evolution, collagen appeared at a very early stage, during the development (jelly fish, sea anemones and the sponges). In the development of the human embryo it appears as early as the twelfth day following fertilization.

The hollowness of the collagen fibril is one of its fascinating aspects. Most tubes in the body circulate fluids of one kind or another, and this one seems to be no exception. These billions of fine tubules constitute one of the circulatory systems of the body, along with those for blood and for lymph. Some researches reports finding inside the collagen fibrils is not blood, nor lymph, nor ordinary ground substance, but rather cerebrospinal fluid!

> for a moment, consider deeply where you feel most connected, most connective... imagine being a tree part of a luxuriant forest... isn't it a place/state where deeply in your cells you can experience profound support and resonance?

> moving from fluidity into fluidity > versus micro articulations, micro consciousness, inter-connectivity, inner simultaneity... modulating tone...

... walking, circulating in the room... creating flow... a space of circulation, of conduction... by releasing through breath and voicing, find the ground... release into gravity...

start rolling, first as one unity, one ball rolling from its gravity center, then roll by displacing your gravity center to one side, other side, then multiply your centers articulating your rolling motion among different centers of gravity simultaneously... transfer your consciousness to the membranes containing the centers of gravity and the fluid they also contain... membranes containing fluid, enveloping a nucleus... your skin being the mega-membrane containing the innerly membranes... articulate, slide, surrender to fluidity...

... as you move, acknowledge the transformations: the ground substance (inner fluidity) becoming fluidier... the membranes more permeable... the tissues more spongy... explore and nourish yourself from your experience...

... continuing what you are doing, invite some gentle stretches, yawning the body... while you inhale extend, while you exhale create a subtle contraction through all your body, making yourself innerly compacter, gradually modulating the micro tonus of your muscle fibers... then release. Have a normal breath cycle before inviting a new expansion/condensation... renew several times, in deferent lines, awakening different geographical relations through out your body... progressively find your way back to verticality... studying with full attention the process... embodying the process... supporting yourself with the imaginary field of being immersed into water, carried by water, being yourself a sea contained into a membrane contained into a sea... the fullness and pressure of the contained water gives you the inner support to rise, if you guide this water by increasing the tonus in the membranes and the fibers you can find the necessary support to grow into levity without effort and strain... walk in the room, feel the quality of your verticality, of your motion... observe, acknowledge, share...

Global Network

Connective tissue, in its various shapes and consistencies, forms a continuous net throughout the entire body. It contains many specialized structures, but it is really all one piece, from scalp to soles and from skin to marrow. Just beneath the skin it forms an envelope that wraps the body as a whole. Beneath this outer layer it organizes the muscles into functional groups, wraps each individual muscle, and also honeycombs the interior of the muscle belly with supporting septa. It gathers the ends of the muscles into tendons, and tendons blend into the fibrous sheath that covers the bones, the periosteum; the periosteum is continuous with the ligaments, and even with the inner coating of the hollow bones, the endosteum. Serous membranes cover nearly all organs and the fascial substance envelops all nerves, vessels, central and peripheral.

Organ of Movement and Structure

The system that transmit movement through our body and which makes a structural entity of us is the connective tissue.

Not only joint capsules and tendons, but literally all of the connective tissues—together with the fluids they contain—aid the weight-bearing capabilities of the skeleton.

There is not a single horizontal surface anywhere in the skeleton that provides a stable base for anything to be stacked upon it. Weight applied to any bone would cause it to slide right off its joints if it were not for the tensional balances that hold it in place and control its pivoting. Like the beams in a simple tensegrity structure, our bones act more as spacers than as compressional members; more weight is actually borne by the connective system of cables than by the bony beams. It is the network of connective tissue—the pressurized water bags and the tension cables—and not the bones, that bears most of the structural responsibility for stable, upright posture and graceful carriage. It is the connective network which synchronizes the motion between muscles, vessels, nerves, and viscera, as well as transferring muscle action to the bones. In this way the movements of my muscles and my skeleton are continually stretching and massaging my internal organs.

Connective Tissue as a health facilitator

The many compartments of fascia throughout the body are of great assistance in the prevention of the spreading of infections, diseases, and tumors. Each separate compartment tends to contain the destructive agent, and prevent its spilling into adjacent compartments. This is accomplished partly by the fibrous walls of the compartments, and partly by specific chemical barriers in the fluid ground substance.

Connective tissue constitutes the major repair mechanism of the body. Its chemistry monitors the inflammatory response, its fluids deliver the antibodies and white blood cells to fight infection, and its fibroblasts produce the fresh collagen to close the wound or fracture with new scar tissue. All in all, this stringy, gooey stuff provides us with a remarkable array of necessities and advantages; it is the container that allows us to take our precious sea water with us wherever we go, and that keeps our organisms intact in the midst of the many dispersing forces around and within us.

Connective Tissue in relation to touch and movement

Since connective tissue is largely non-living, it is the mechanical motion and friction caused by muscular activity which provides much of the energy and warmth that maintains its fluid quality.

Manipulation of the tissues by skilled hands can provide a pleasant and extremely effective means of introducing freer movement and higher levels of energy into the connective framework. The hands of the therapist can literally supply the mechanical activity which a sluggish limb fails to produce, raising the metabolic rate and restoring some of the fluidity of its connective tissues.

Pressure, motion, and friction created by deep manipulation raise thermal and thixotropic (viscosity decreasing when friction is applied) levels far beneath the surface. In addition, the squeezing, stretching, and contorting of the connective tissues creates a cleansing, flushing effect.

Myofascial Lines

The Myofascial network meanders around and within all the muscles, from bundles to fibers, from macro to micro, making of their individuality a unity. The Myofascial Meridians are sheets of connective tissue containing and maintaining our muscular tissue, creating a semi-fluidic matrix which interconnects all individual muscles into one continuous bed of relation. This network enable us to move as an intelligent and sentient unit.

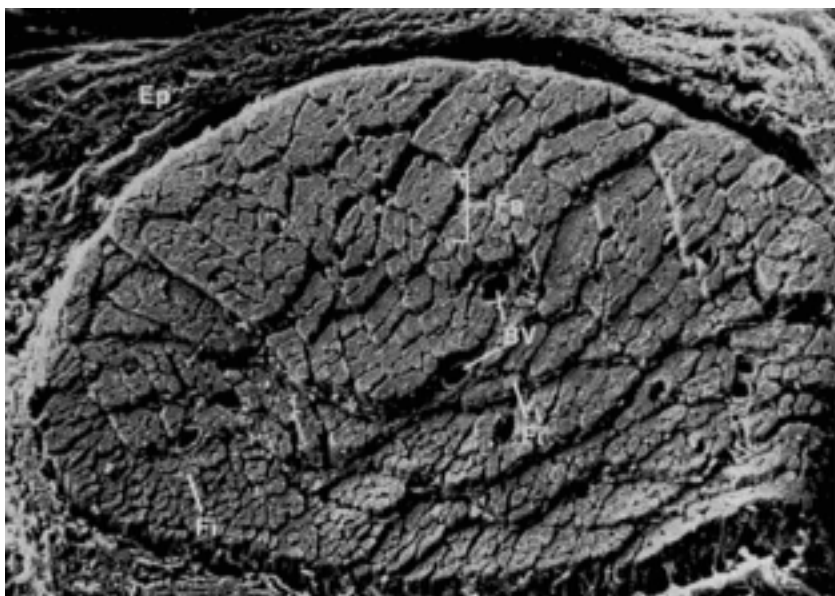
As kinetic chains, the Myofascial Meridian Lines permit adaptability as well as coordination and stability. They contribute for a great deal to our metabolic efficiency, being responsible for the healing of injuries, and providing the physical adjustments necessary for new muscular bulk, new habits, new skills to develop.

Understanding and experiencing motion by integrating the intelligence of the Myofascial Meridian Lines allows our bodily expression to be harmonious, embodied with ease and awareness, as well as it supports energy flow and resource. It also helps to improve multijoint stability and strength. By awakening our presence to our bodily connectivity through the Myofascial Meridian Lines, we can better understand our injuries or movement limitations, and rewrite ourselves into a more integrated and integrative being experience.

We visited:

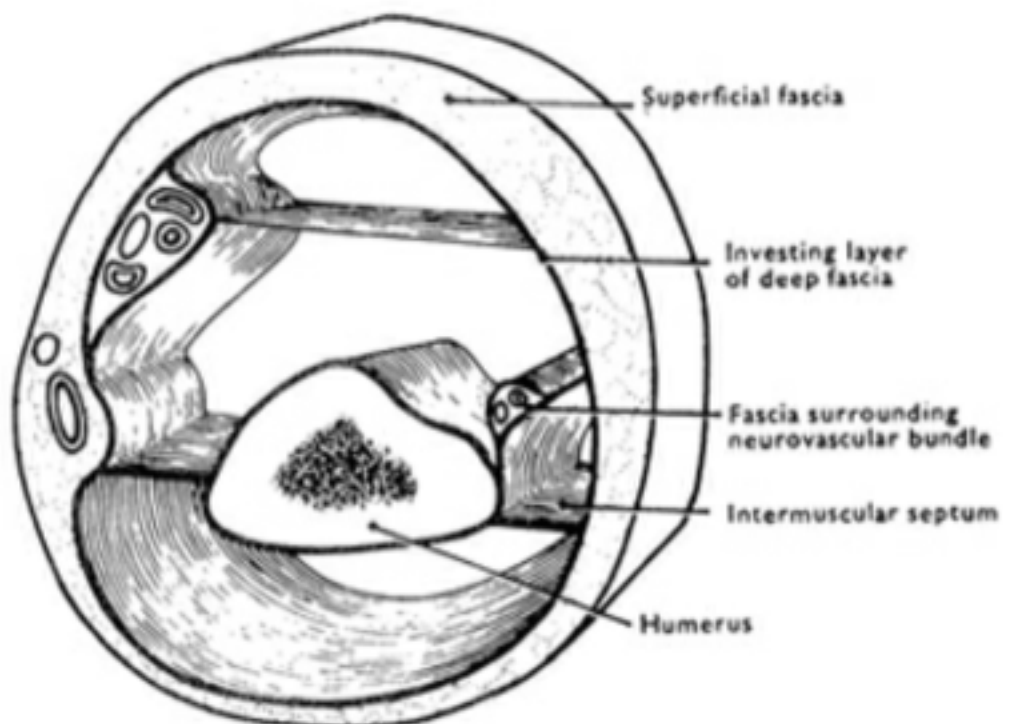
- Superficial Front Line (SFL)
- Superficial Back Line (SBL)
- Lateral Lines (LL)
- Deep Front Line (DFL)
- Superficial and Deep Back and Front Arm Lines (SBAL, DBAL, SFAL, DFAL)

> Hands-on: on a partner, apply your hands on key points (bony stations or muscle bulk) along the SFL, SBL, with a spacious attention, allowing subtle motilities, witnessing the play between flow and structure.

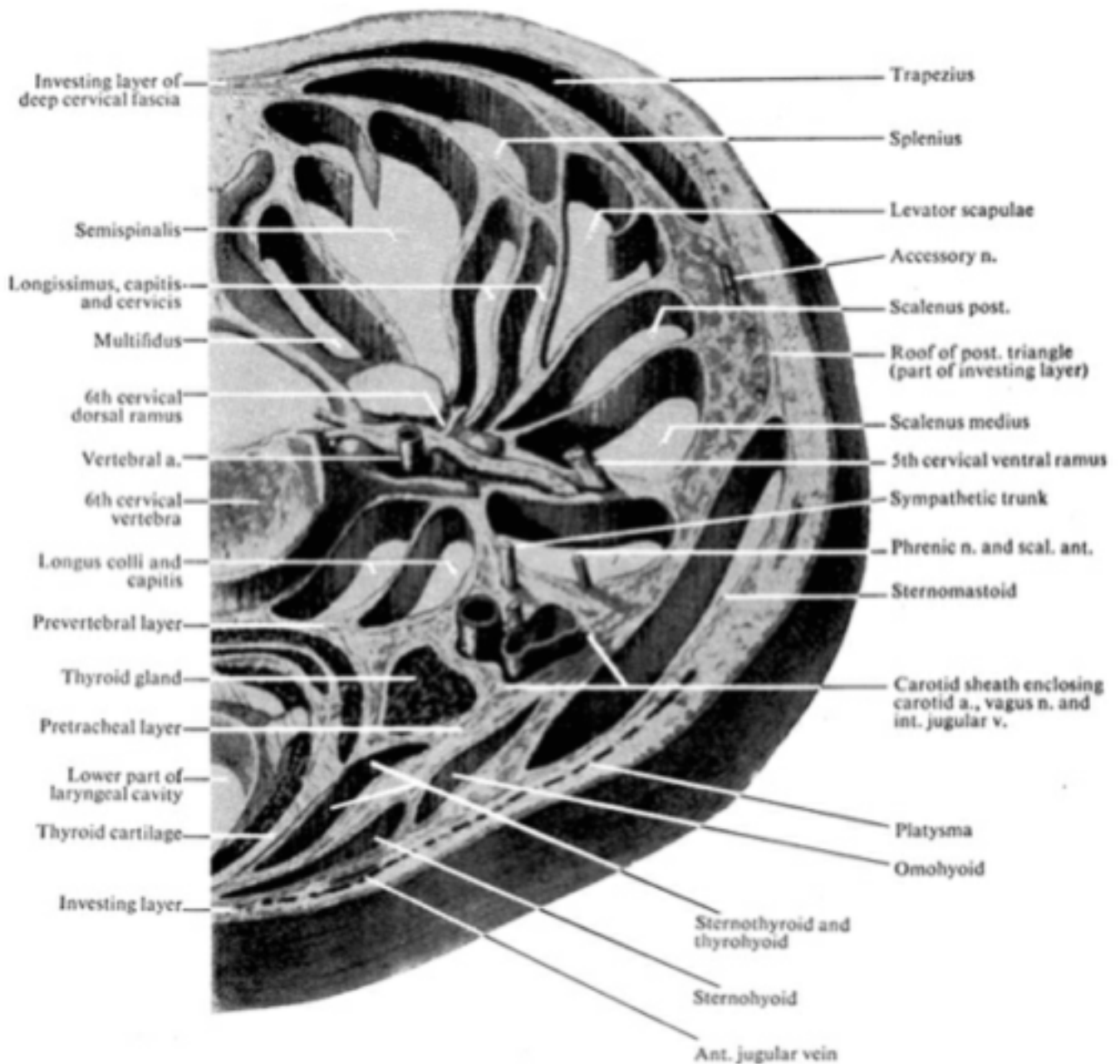


A cross-section of a muscle belly. The muscle is wrapped in a sheet of fascia, called the epimysium. This same sheath extends inward, where it is called the perimysium, and divides the belly of the muscle into many septa. These septa bundle the long muscle cells together, preserve their parallel arrangement, and determine their angles of pull upon the tendons and bones.

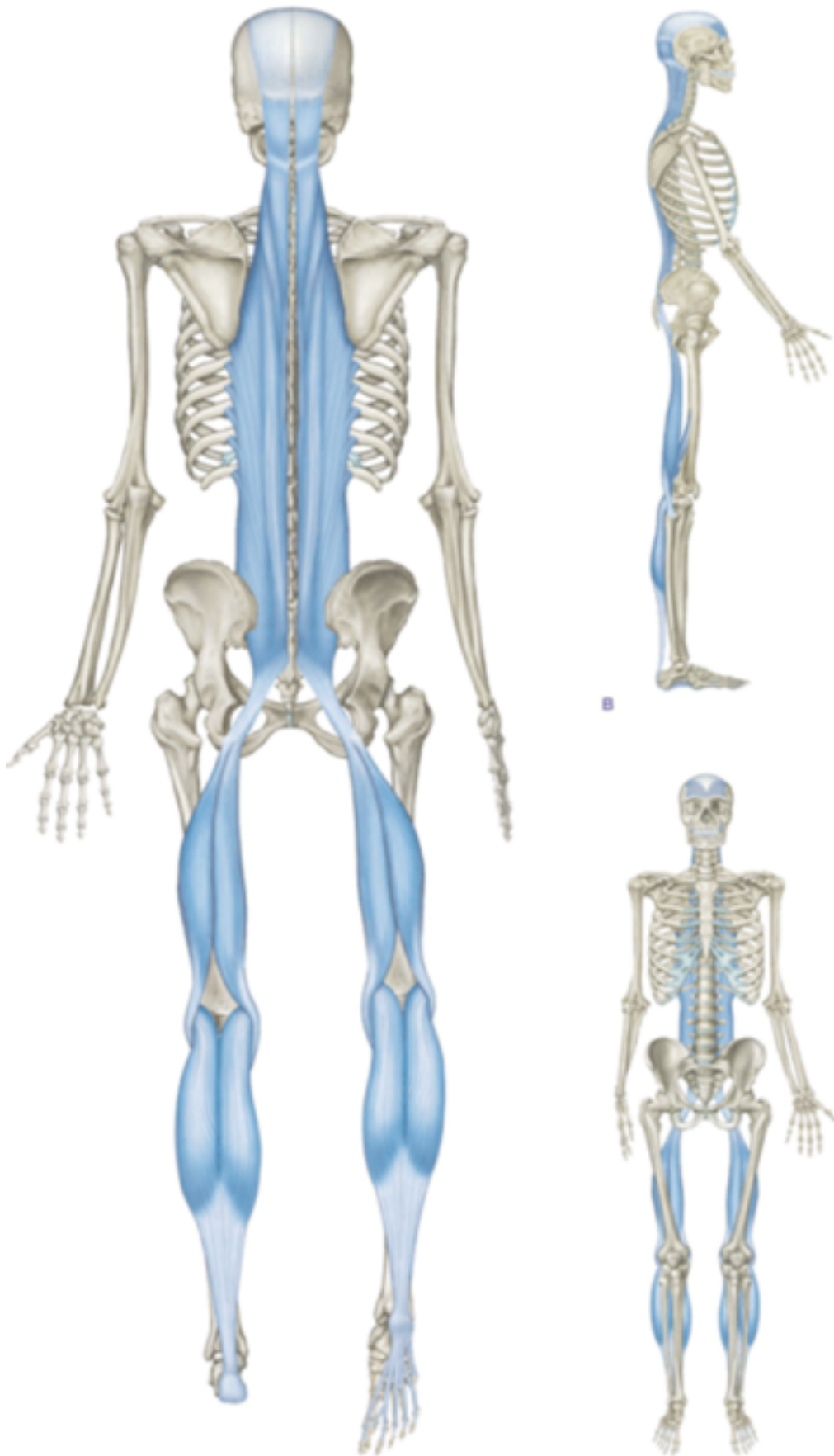
Transverse section of the upper arm showing the fascia sheets between the muscle bulks



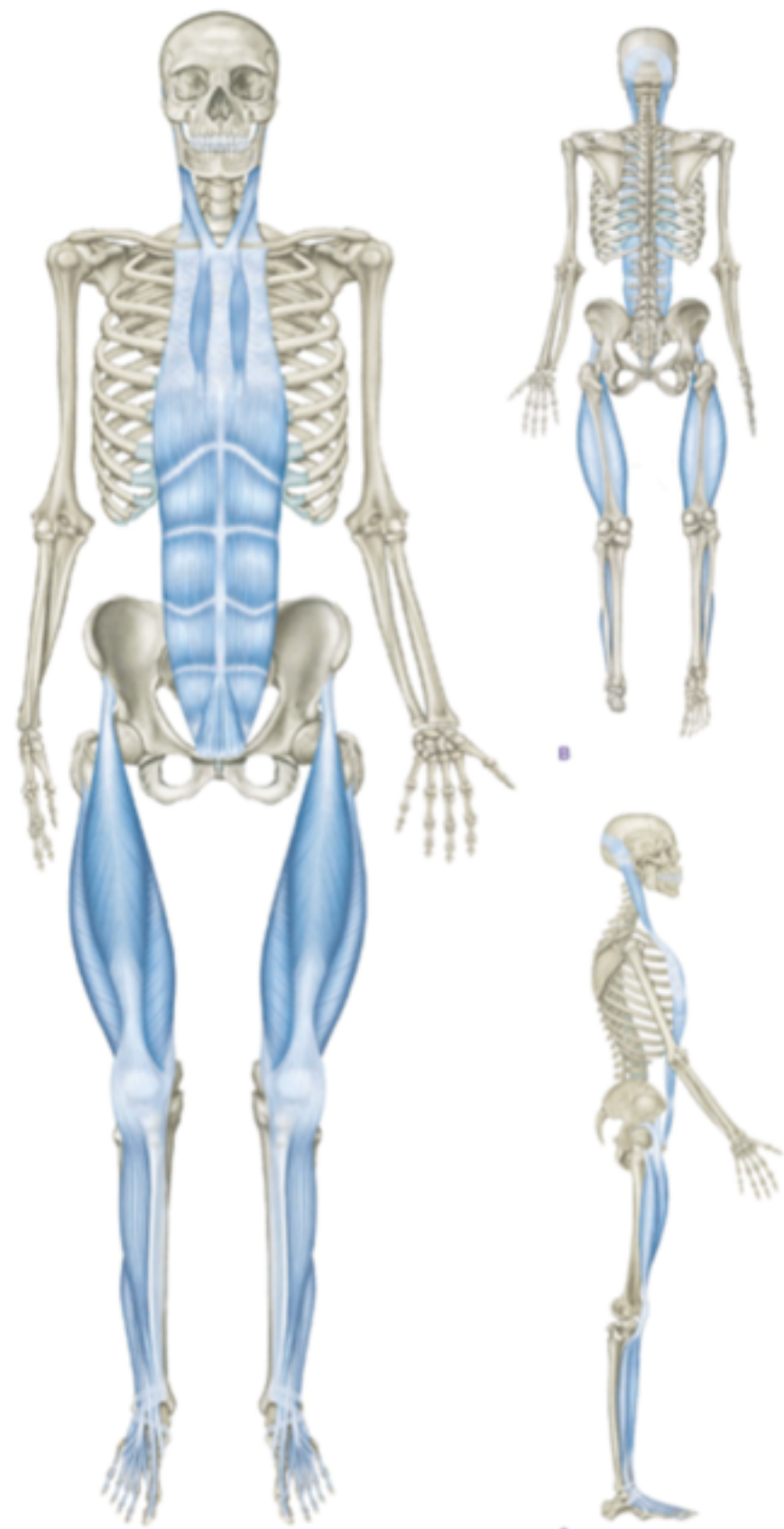
Transversal section at the level of the 6th cervical vertebra showing the inner patterns of the fascial membranes



Superficial Back Line

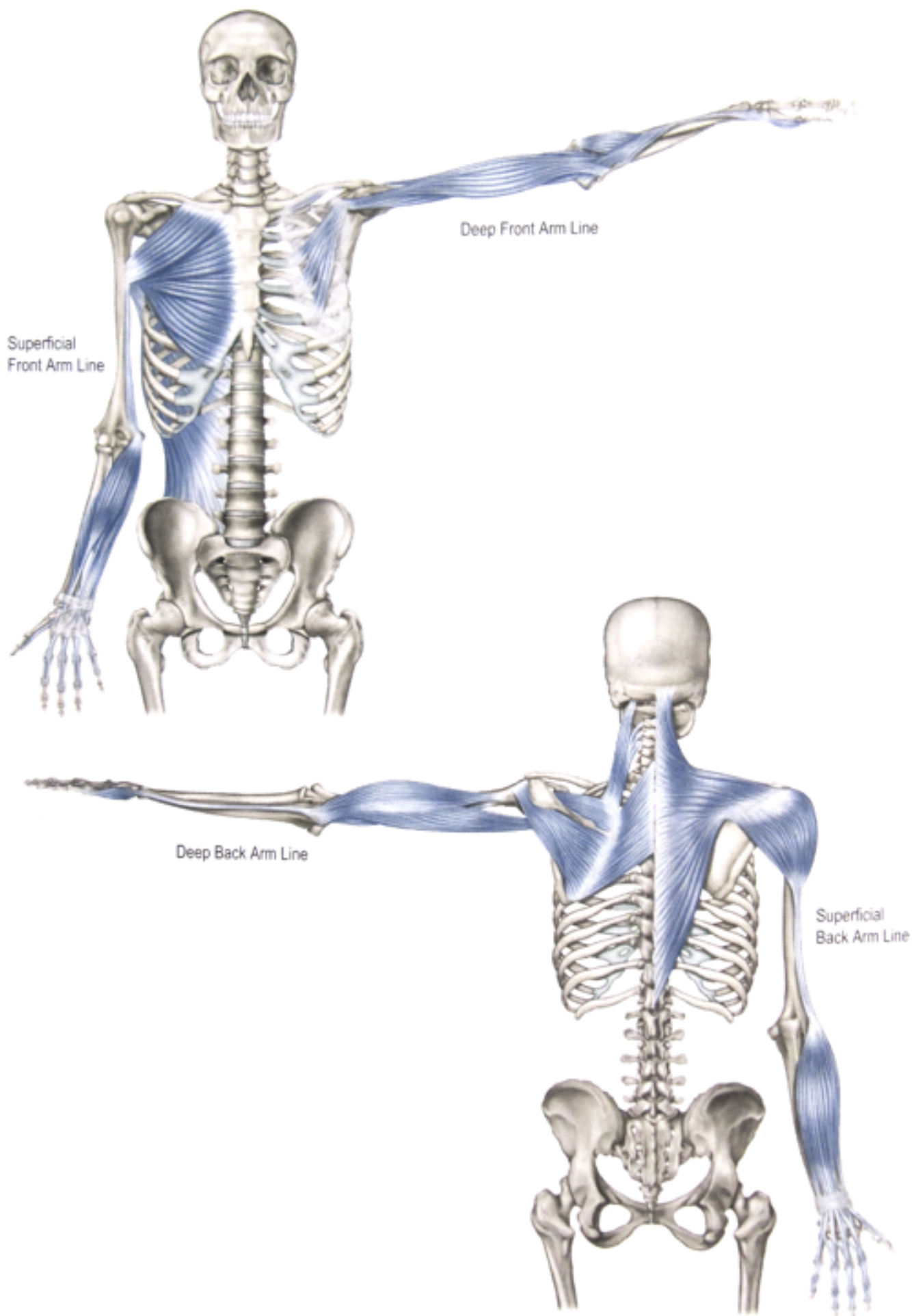


Superficial Front Line

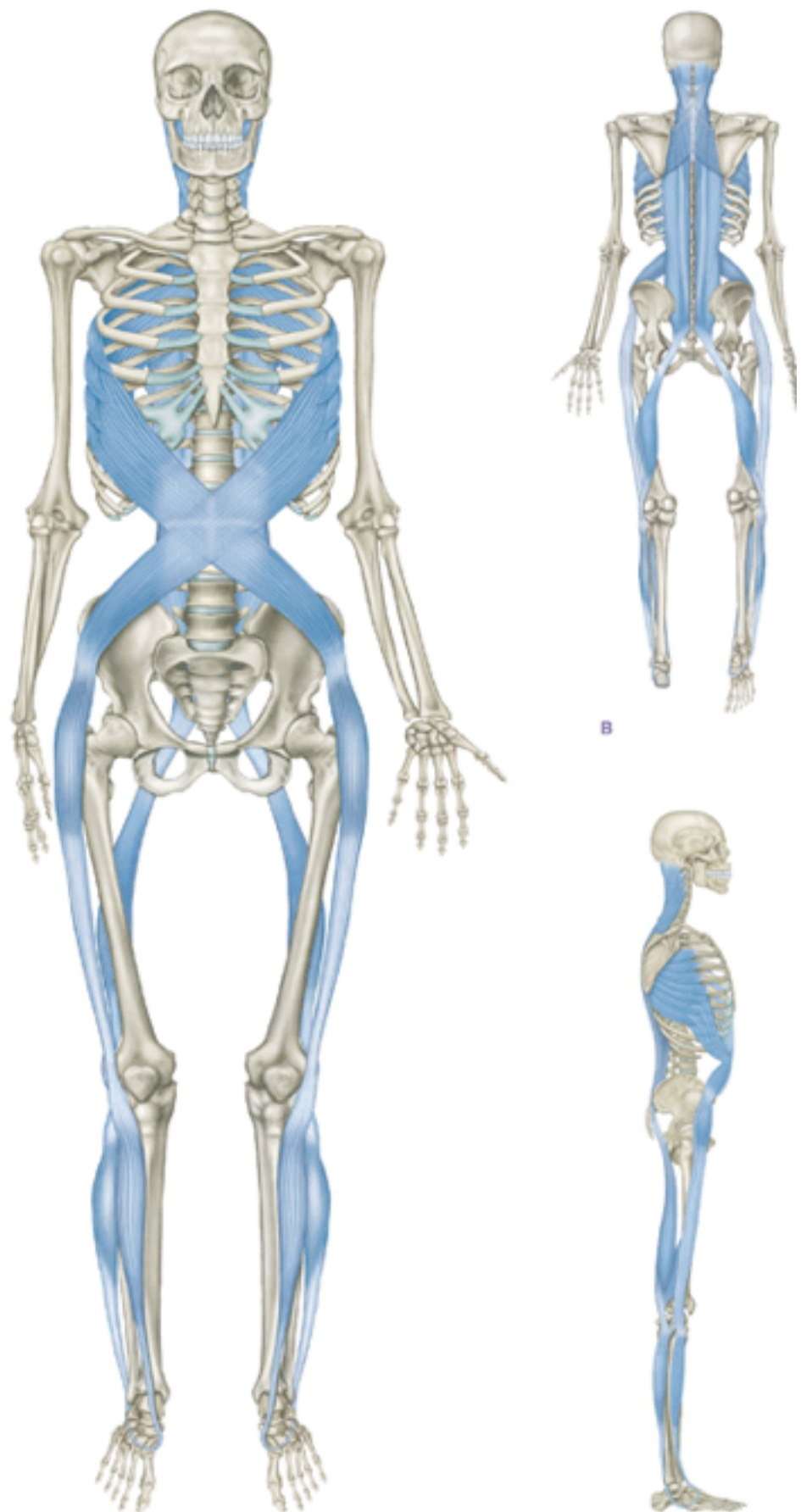


Lateral Line





Spiral Line



Myofascia Breathing

With a rope (natural fabric - hennep or cotton, 6mm diameter max, 4-5 meters long)

Preparation of the rope (if hennep):

Twisting the rope onto itself a few times and around a stake or a pole and rub it to soften it; with a flame, burn all the small fibers which are sticking out; repeat the first rubbing action; then wash the rope with conditioner (no soap); eventually massage the rope with vegetal oil or karité butter if necessary to soften it even more. you can see a clear and easy tutorial on:

<https://www.youtube.com/watch?v=oL4zww6aMoc>

You can also use a tetra® band (1m long using 2 bands permits to envelop the whole length of the foot)

Principles: in the inhalation phase expand from your core to your skin (periphery), increasing your inner volume, enlarging the space between your bones, between your cells. By this inhaling motion, you, like a sponge you call more fluid into your tissues, absorbing, flushing in. Make sure you include equally your all of your self, all of your cells. During the exhalation phase release internally from skin (periphery) to core maintaining the expansion and space in the structure, simultaneously inviting a condensing action into the muscle fiber until the end of the exhalation. Like squeezing a sponge and flushing out the remaining fluid. With the next inhale fresh blood and energy will flush into the muscle fibers and between the serous membranes (fascia) which gives them more elasticity and resiliency.

The tool helps you to guide the lines of tension and to awaken a kinetic and tactile sense within your connective chains.

Knowing the lines, you can adapt and adjust the inclination, orientation of your limbs in relation to your central axis activating this way different lines.

Bibliography:

- The Endless Web: Fascial Anatomy and Physical Reality by R. Louis Schultz (Author), Rosemary Feitis (Author)
- Anatomy Trains: Myofascial Meridians for Manual and Movement Therapists, by Thomas W. Myers (Author)
- <https://www.atlasbalans.com/fascia/fascia-lines/>

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