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THE AUTHOR

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Welcome to the fascinating world of fascia

Up until a few years ago, they were still considered the "stepchild" of tissues in medicine. In practical anatomy courses for doctors-to-be, they were immediately peeled away in order to be able to see other elements. We are talking about the muscle connective tissue, or the so-called fascia. Although in the past, it was viewed as packaging and filler material, much like the wrapping of a Christmas gift, more recent research shows that our fascial network plays an important role—in muscular force transmission, one’s own body perception, and many types of soft-tissue pain, as well as in sports medicine, in the areas of flexibility, power, and energy efficiency.

Much like a bodysuit, this fibrous, collagenic connective tissue surrounds the entire body from head to toe with a thickness of 0.3 to 3 mm, depending on local stress levels. It is therefore most developed at the outside of the upper thigh (the so-called iliotibial band) and at the bottom of the foot. But rather than just enveloping us, this suit seamlessly transitions into countless sacs and septa inside every muscle, into the tubular sheaths...
of the bundles of nerves and vessels, as well as the internal organs. The modern point of view thus sees the fascial network as a tensile stress network that envelopes, permeates, and interlinks the entire body, and whose orientation of collagen fibers is specialized based on local stress history.

Osteopaths, Rolfers, and some skilled yoga and martial arts experts have long known about the importance of fascia and developed—most often independently—effective methods to specifically affect this tissue. But what was missing was scientifically acceptable quantification. X-ray diagnosis for the exact measuring of bones has been available for decades, as well as so-called electromyography (EMG) for the measuring of muscles. But to explore the fascia one had to rely on the subjective stretch sensation of the user or the palpatory findings of the practitioner.

Thanks to new measuring methods, this regrettable state has significantly improved in recent years: Using highly sensitive ultrasound, today we are able to capture the thickness and mobility of a fascia to within a tenth of a millimeter. We are able to ascertain its strength, elasticity, and water content before and after athletic or therapeutic stimulation with portable equipment. And, using miniscule fascial tissue samples, we are able to take a close look at their biochemical matter and compare the results to the more-or-less-esoteric concepts of belief of osteopaths, Rolfers, yogis, and Eastern martial artists.

These are exciting times for fascia-inspired therapists and scientists such as myself. These days barely a month goes by that the international network of fascia researchers that sprung up seemingly overnight does not make scientific headlines with a new, sensational discovery about fascia. It is no wonder that fascia, the former "stepchild," is now also increasingly dragged into the limelight in the areas of fitness and exercise therapy.

This book is one of the first publications in this new area to be taken seriously. Dozens of me-too products will most certainly flood the market in the coming months and years, but presumably not with the same expertise and professional quality as this book.

Gunda Slomka recognized the importance of new findings regarding fascia early on and immersed herself with heart, brains, and dedication in the current international findings as one of the first experts from the German fitness scene. Together with our fascia
research group at the University Ulm, Germany (fasciaresearch.de), as well as the—in my opinion—leading fascial fitness association (fascial-fitness.de) in the area of content implementation, she has modified existing back exercises, gymnastics, dance, and yoga exercises in a fascinating manner in order to make it accessible to a wider public for the first time through this book.

Her background as a former sports scientist, her reputation as one of the most successful and well-known pioneers of the German fitness scene, her close collaboration with the German king of stretching Dr. Jürgen Freiwald, and last but not least her winning personality, convinced us to lend her our full support as a fully qualified proponent of fascial training.

I would therefore like to congratulate the reader for choosing this book. I would also like to add a well-intentioned and scientifically substantiated recommendation: In spite of all your enthusiasm, please approach your fascial training slowly and patiently. Collagen regenerates more slowly, but all the more sustainably, in reaction to athletic strain than do muscles or cardiovascular fitness.

Engage in fascial training the way you might manage a savings account: Many small deposits over a long period of time will allow you to transform your physical home from a brittle fiber structure into an elastic, springy tensional network over a period of 6 to 36 months.

A well-trained fascial network will then allow you to engage in greater physical exertion in the future with increased resilience and without injury. You will feel an increased excitement and sensuousness while dancing and running and will be able to perform many challenging everyday movements with youthful ease.

Another of Gunda Slomka’s exciting projects is her previously released DVD on fascial training. As you watch, let her powerful yet supple elegance inspire you as it did me.

*Dr. Robert Schleip*

*Director, Fascia Research Group, University Ulm, Germany*

*Director of Research, European Rolfing Association*
4.2.4 Rules for practice

Alternating between loading and unloading is useful and recommended to ensure and support the continuous exchange of fluids and to provide the “inner flow.”

THIS IS HOW IT’S DONE!

Basic rules that are helpful when choosing exercises:

- Warm up your body and stay warm while doing the exercises.
- Make your exercises varied.
- Continue to look for new, challenging exercises while relieving the previously worked areas.
- Work with a large range of motion, in accordance with the degree of flexibility of your joints.
- Exercise in all planes of motion.

Tom Myers (G. Slomka: DVD – The Fascial Network, 2013) says: “I am a fan of exercise. We can move anywhere. We don’t have to go to a fitness facility or gym to do so. But when the intrinsic motivation isn’t there, it is a good idea to go to a place where one exercises under instruction.”
4.2.5 Practice

4.2.5.1 Connecting movements (flow) for active exchange

Working in flows (linked movements) is very much in line with the basic training principles for the fascia, with a focus on the liquefaction of the matrix and an exchange of substances in the tissues.

There is a dynamic interplay between loading and unloading. Diverse movement patterns result in a small motion sequence. Initially loaded tissue can recover and be replenished during the motion sequence.

Flow 1

- Take a forward step and raise the other leg until the knee is at hip level.
- Then lower the lifted leg back to the floor and let the second leg follow.
- The next movement starts with the leg that was previously lifted taking the step.
  - Step—knee lift—alternate.
  - Terminology: alternating step knee lift and march.
Stand on one leg with the other leg lifted or resting on the ball of its foot.

• Rotate the spine by moving one arm forward and backward.

Keep standing on one leg with the other leg raised or (alternatively) that toe resting on the floor.

• Extend the arms forward at chest level.
• The arm at the same side as the lifted leg begins to pull behind the body. In doing so, the spine rotates.
• The arm that pulled back extends forward again and repeats the motion several times.
  • Trunk rotation with arm support.
  • Terminology: Spinal rotation.
Standing on one leg, start to draw figure eights with the free leg. In doing so, the free knee draws imaginary figure eights on the floor.

After the final big figure eight, make a big circle with the free leg and then position that leg behind the supporting leg.

Extend the arm on the same side as the back leg to the sky and then lower it.
  - Repeat several times.
Now extend the arm overhead and increase the rotational force for just a moment.

Move the raised arm diagonally to the front as though you were trying to drape your body and arm over a body-sized ball.

From there pull the arm upward to the sky and diagonally back, opening the chest cavity.
- With each repetition the path of motion changes slightly, making the movements very diverse.
- Be open to experiments.

Now lower the arm.

Place your feet back into a parallel position.

Start the flow again from the beginning. This time the other leg starts by taking a forward step.
Flow 2

- Take a forward step and then lift the other leg until that knee is at hip level.
- Then lower the lifted leg back to the floor and let the second leg follow.
- Begin the next movement by taking a step with the leg that was previously raised.
  - Step—knee lift—alternate.
  - Terminology: alternating step-knee lift (see flow 1).
- Remain standing on one leg with lifted knee and straighten your spine (posture training characteristics; see Chapter 3.2).

- Swing the extended free leg back behind the body axis and extend the arms forward and up.
- Next move the extended leg back into starting position while lowering the arms.
  - Follow-through movement with one leg.
  - Terminology: alternating leg swing.
Start out with your trunk in an upright position.

After a while, move your trunk forward and swing the leg back.

Hold the body in a diagonal position.
- Diagonal or horizontal standing scale.
- Lower your back foot to the floor while keeping the leg straight as an extension of the spine.
  - High lunge.
Simultaneously lower both arms and let them swing backward.

At the same time, shift your body weight more to the back leg, with its knee bent, and round your back.

Use the forward arm swing to come back to an upright position and to shift the weight to the forward leg.

- Alternate.

Maintain this posture during the forward movement.

- Standing scale.
Bring the back leg forward and start the entire sequence from the beginning.

Flow 3

- Move your feet more than shoulder-width apart with your toes turned out diagonally.
  - Here the second big toe, the center of the kneecap, and the front upper bony projection of the iliac crest are lined up.

- Alternate your arms swinging side to side across the body and slightly to the sides.
Alternate the arms, swinging upward and back down to your side and to the thigh.

After the arm swing, push off with the same side foot, and with the arm movement, lift that leg into a one-legged standing position.
- Upper body tilt in the frontal plane.
- Together with lowering your arm, shift your weight back to the starting position.
- Alternate sides.
- Standing on one leg (frontal plane), hold this posture and balance for a moment.
- Lower the lifted leg (increase distance between ribs and pelvis).
- Lift the lowered leg and bend the elbow of the lifted arm (decrease distance between ribs and pelvis).

- Move back into an upright position with both feet on the floor.