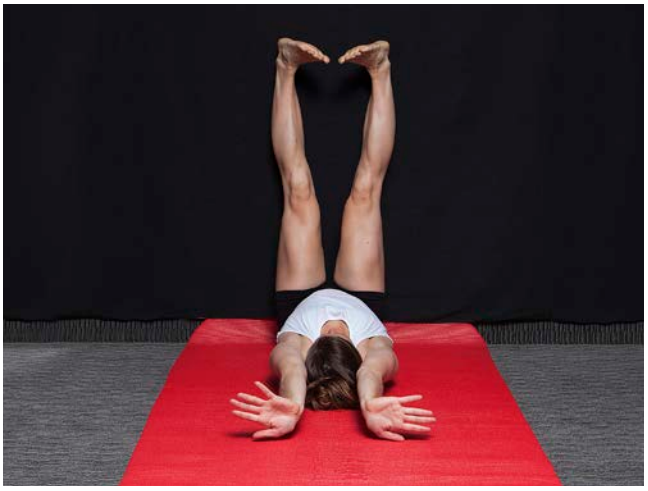

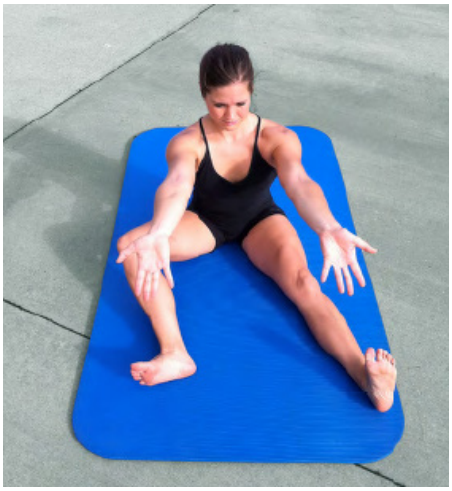

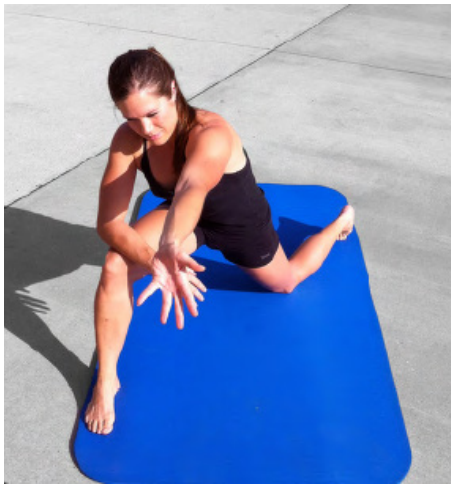

Introduction to

SomaTraining

Legacy Sport & Wellness Center

Professional Development Series

Instructor: Scott Herrera

July 20, 2024

Dallas, Texas

Introduction to SomaTraining & ELDOA

July 20, 2024

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Dallas, Texas

Instructor: Scott Herrera

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Medical Disclaimer

No Advice

This manual contains general information about medical conditions. The information is not advice, and should not be treated as such.

Medical Disclaimer

This manual is not meant to diagnosis, treat, or offer medical advice. It is solely for the purpose of education.

Professional Assistance

Do not rely on the information is this manual as an alternative to medical advice from your doctor or other professional healthcare provider.

If you have specific questions about any medical matter, please consult your physician or other professional healthcare provider.

Scott Herrera, ELDOA Program Director

Scott Herrera is co-owner of Legacy Sport & Wellness Center, founder of the ELDOA School of Training in Dallas, and Director for the six-level ELDOA Certification Program. He began his career, training athletes, at Southern Methodist University where he played football under Forrest Gregg.

After graduating from SMU, Scott spent more than 20 years traveling throughout North America to study from the highest regarded experts in the fields of strength and conditioning, corrective exercise, and osteopathy.

Scott was introduced to Guy VOYER, DO and his course work in New York in 2003. He and one other practitioner studied intensively with VOYER in the U.S. and at Sutherland Academy in Canada for over sixteen years.

During this time of intensive study and travel, Scott developed his innovative approach to sports performance training, performance rehabilitation, and wellness and exercise instruction. In 2008, he and his business partner opened Legacy Sport & Wellness Center in Dallas, the first permanent facility to implement his approach and the Legacy business model. The Legacy model has two divisions: the Sport Program, the Wellness Program and the teaching Institute.

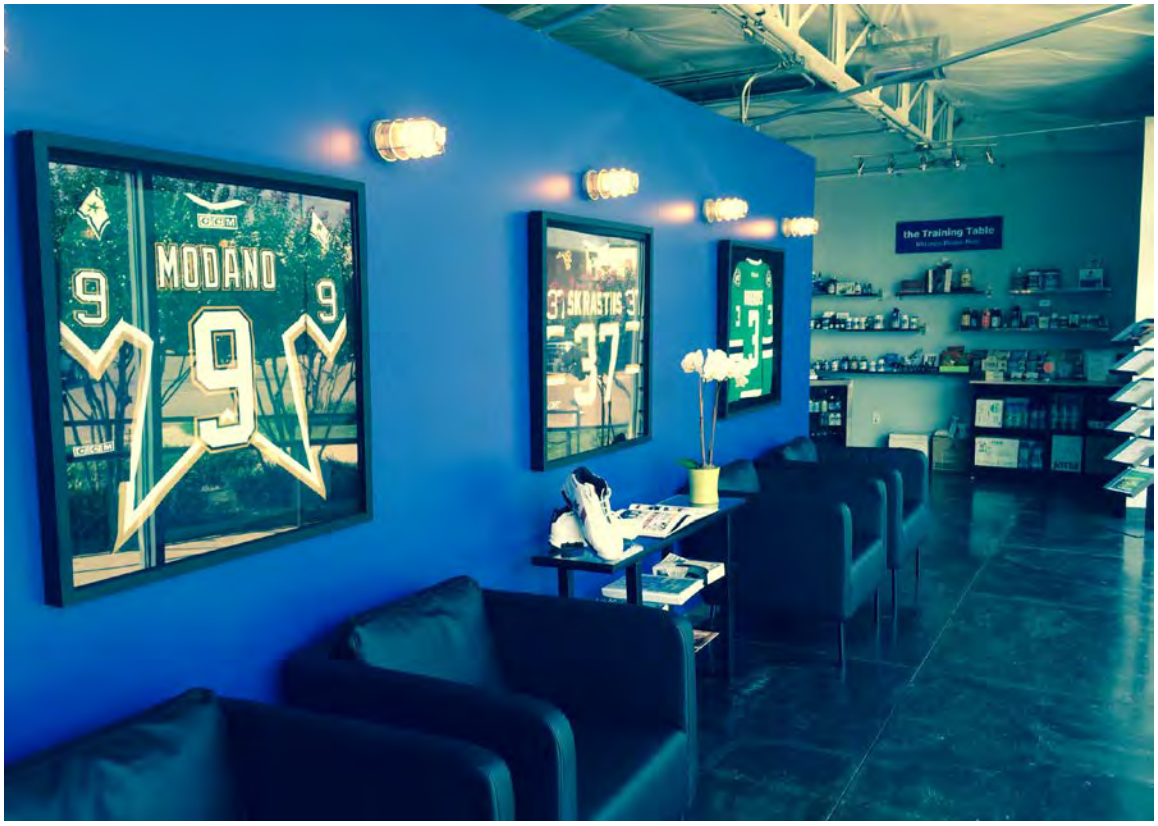
In 2013, Legacy, LLC and Scott hosted the largest ELDOA Conference in North America, with 100 practitioners from around the world in attendance. Shortly thereafter, the ELDOA became a stand-alone Certification Program and Guy VOYER, DO appointed Legacy as Program Administrator. Scott writes course manuals for ELDOA Certification Levels 1, 2, and 3, SomaTraining and Practical Application Workshops. He is an instructor for ELDOA Certification Levels 1-2-3 and SomaTraining in New York.

Scott teaches workshops based upon his innovative approach and on many topics pertaining to sport performance and wellness. He regularly consults with professional sports organizations and professional athletes/players, university athletic programs as well as wellness facilities and exercise students. When Scott isn't traveling to instruct or give lectures, he meets with clients and teaches at the Legacy Sport & Wellness Center.

Scott lives in Dallas, Texas.

Legacy Sport & Wellness Center
Legacy Sport & Wellness Institute

In 2008, Legacy Sport & Wellness Center opened in Dallas, Texas with an innovative approach dedicated to teaching sports performance and wellness. Recognizing the need for a different way and better results, Scott Herrera spent more than twenty years traveling throughout North America to study from the highest regarded experts in their respective fields – strength and conditioning, corrective exercise, and osteopathy.



For our innovative approach, it was necessary to construct a new model, using a system that combines traditional "global exercises" and movements with more precise "analytical segmental" exercises and specific exercise instruction performed in an environment conducive to change.

At the core of Legacy's approach are three key components:

- Structure and Function are Inter-related
- Client Education is the Foundation for Permanent Change
- Each Person is an Individual – *there are no protocols*

Legacy's Wellness Program

The primary objective of Legacy's wellness program is to teach clients how to build a healthy body. Each client is viewed as an individual with specific needs and goals and Legacy believes education is the key to change. Clean water, quality food, sleep, and stress management are all foundational principles in Legacy's wellness program.

Clients who visit Legacy Center receive customized home programs specific to their needs. Private sessions are scheduled to work on personal programs. As a part of our system, we organized a series of *semi-private and group exercise classes* to support clients on their path to permanent change. Examples of group classes include*: ELDOA for General Wellness, Abdominal Training, Basic Conditioning for Wellness, Myofascial Stretching for Wellness/Myofascial Stretching for Athletes, and ELDOA for Back Pain.*

In combination with Legacy's exercise system and group exercise program, we offer traditional weight-lifting (global training) and cardio-vascular training. Other services include massage therapy, clinical aromatherapy, and lifestyle coaching.

Saturday morning ELDOA Wellness Workout

The Legacy Institute

Education is the foundation for permanent change. As part of Legacy's business model, we opened a teaching facility that offers regularly scheduled certification courses and workshops for health practitioners, exercise professionals, and clients. All courses are organized into short, intensive modules offered throughout the year.

One division of the Institute is the **ELDOA School of Training**. It opened in 2013 after the North American ELDOA Conference, and the reorganization of the ELDOA Certification. Guy VOYER, DO appointed Legacy as the ELDOA Program Administrator and Scott Herrera as the Director of the ELDOA Program. The Center regularly hosts ELDOA Certification Courses for all levels (1-6) and Practical Application Workshops specific to the ELDOA training.

The **Professional Development Series** (PDS) is a second division within the Institute. It offers original course work, developed by Scott Herrera (based upon the work of Guy VOYER, DO), designed to stimulate problem solving, provide supervised practice time, and give practitioners more in-depth exposure to the material so they can master their skill set.

ELDOA Certification Course at Legacy Sport & Wellness Institute

Soma Training Diploma Program

Soma Training is considered by Dr. VOYER to be one of the most important components of his paradigm. The Soma Training Program is a three-year course of study offered to those who are interested in working with athletes at all levels, and those who are interested in using exercise and wellness techniques to improve the general health and function of their clients. This includes but is not limited to sports trainers, fitness consultants, and physical therapists.

The Soma Training curriculum integrates very precise and specific exercise techniques ranging from analytical and segmental training, to proprioception, myofascial stretching, and ELDOA. The exercises learned are an integral and supportive part of Dr. VOYER's therapeutic treatment paradigm, helping clients reach an optimum level of health, and athletes reach maximum levels of performance.

Soma Training Seminars are organized into 3 levels of training offered in a variety of different locations around the country. Level 1, **Certificate of Applied Trainer** (European Diploma of Animator in Sport, Health, and Fitness Training) is 4 courses offered in a one year period of time. Each course is 3 days.

Level 1: Analytical and Segmental Muscular Strengthening of the Abdominal Muscles and Thoracic Diaphragm, Analytical and Segmental Muscular Strengthening of the Lower Limbs, Analytical and Segmental Strengthening of the Upper Limbs and Trunk, How to Organize the Education and Progression of a Global Movement (Tests, Adaptation Training): The Squat, Qualitative and Quantitative Periodization.

Level 2: Myofascial Stretching, Specific Proprioception and Awareness, General ELDOA (1-2), Specific ELDOA (3-4), Clinical Application.

Level 3: Cardio Training and Health and Fitness Conditioning, Respiratory and Circulatory Techniques, Global Postural Stretching, Cinesiology Tests and Strapping for Sports Pathologies, Clinical Application and Examination.

SECTION ONE

Guy VOYER, DO & His Educational Paradigm

- Complexity & Systems Theory
- Tensegrity Biomechanics & Functional Anatomy
- Teaching Method - *"Learn by Doing"*

"One quality all of my students have is that they can think for themselves"
– Guy VOYER, DO

Guy VOYER, DO: Biography
Founder of SomaTraining & The ELDOA Program

Guy VOYER, DO is a "classically-trained" European Osteopath who remains true to his manual medicine training. He holds a Doctorate in Osteopathy with an extensive background in the field of sport, manual therapy and medicine, which includes studies and degrees in physical education, physiotherapy, sports medicine, traumatology, biomechanics, and various forms of body work including massage therapy. In addition, he has a PhD. in educational science. He has initiated and collaborated on numerous research projects, including the studies on intervertebral disc compression and herniation.

Born in Paris, Dr. VOYER has traveled the world since he was six months old. Throughout his childhood his family moved every two years due to the demands of his father's profession, but these frequent moves did not have a negative impact on him. Instead, it helped him develop his ability to adapt to new environments and make friends. Before his studies in health sciences, he was a competitive athlete in many sports, achieving a high level in Judo.

As a young student, Dr. VOYER was enrolled in a special school where half of the day was devoted toward training and the use of many different exercise modalities, preceded by a half day of academic studies. This helped him understand 'the role' that exercise plays in the development of the brain, the nervous system, and connective tissues - *fasciae*. It was one of the principle reasons that he, as a medical practitioner, began to prescribe exercise after his osteopathic treatment sessions, a practice he continues to teach all his students to use with their patients and clients.

Dr. VOYER began his career as a physical education teacher. During ten years of effort, the results achieved exceeded expectations; however, there were still problems to overcome, interactions to be studied, and fine-tuning to be developed.

Dr. VOYER then studied the body as "kinesitherapeute", not only through movement, but also through touch and work that was theoretically considered to be passive. This stage of study confirmed that *micro movement* generates *macro movement* in articular (joint) mobility. Simply massaging the muscles was of negligible value as long as the aponeurotic (fascia) structure remained hypertonic. Further study in medicine and sports biology, specializing in physical medicine, traumatology, and physiopathology of the loco-motor system, led him to the realization of the limitations of analytical and therapeutic theory.

While an intern in the Center for Reeducation and Functional Readaptation, Dr. VOYER refused to entertain the concept of prevention and remained obsessed with finding the *"magic bullet"* to cure a patient's symptoms. At this time in Europe, back pain was epidemic, causing strain on the economy. In search of a cure, Dr. VOYER traveled throughout Europe, attending numerous seminars on various approaches to treating back pain.

At the same time, he began to study the biomechanics of the human body, but in *a new way* – the way of tensegrity biomechanics. It was from his practice of many varied methods that Dr. VOYER was able to select the very best of all the techniques he studied and organize it into a system that he calls **the ELDOA**. This French acronym translates into English as **LOADS**: Longitudinal Osteo-articular Decoaptation Stretching.

From a very early age, Guy VOYER, DO was fascinated with the fasciae of the human body, its very precise anatomy, and its links to other structures. It wasn't until later that he was able to focus his research on the fasciae, understanding the various roles of the fasciae and how to best treat it. To better understand this, he has done extensive research in dissection and was one of the first to map the fascial chains of the body and the role they play in movement and human biomechanics.

As a result of this work, Guy VOYER, DO organized his own system of therapy (SomaTherapy) with many techniques that he created himself. To compliment his therapeutic system, he designed an exercise-training program (SomaTraining) that respects the organization of the fascial chains and human biomechanics. Today, he is one of the few osteopaths in the world to master the treatment of fasciae and how to prescribe exercise to reinforce these treatments.

"The whole is more than the sum of its part: one part cannot be properly understood in isolation. Study and research, philosophy, psychology, and sociology led me to the discovery of complexity models. Systems theory, as presented by E. Morin, De Rosnay, Watzlawick, Varella and others, confirmed my conviction that the body works as a whole, that only reasoning in synthesis can answer the questions of humanity, that only technology in a network will explain the links that emerge from a holistic base.

In the field of complexity, my research leans on the systems paradigm, the emergence and the constructivism." – Guy VOYER, DO

After decades of study and clinical practice as both an exercise practitioner and therapist, DR. VOYER organized his unique educational paradigm and teaching method – *"learn by doing"*. This paradigm includes the principles of complexity and systems theory, tensegrity biomechanics and functional anatomy. This method is used in all of his courses. His goal now is to teach and pass along his knowledge through the students who have followed his life's work.

Guy VOYER, DO lecturing at Legacy Sport & Wellness Center in Dallas, Texas

Guy VOYER, DO – Educational Background

Medical Specializations:

- C.E.S. in Biology and Sports Medicine at the Marseille Faculty of Medicine (1981).
- University Diploma in Sports Trauma, Marseille Faculty of Medicine (1983)
- Intra-University Diploma in Manual and Orthopedic Medicine, Marseille Faculty of Medicine (1989).
- Diploma from the University of Marseille Faculty of Medicine in Locomotor Pathology related to sports (1990).
- University level diploma in Judicial Compensation and Award for Bodily Injury (1991).
- University level Diploma in Physio-Pathology as applied to Physical Exercise (1992).
- Capacity in Hydrology and Medical Climatology, Marseille Faculty of Medicine (1993).
- Medical Intern at the Valmante Functional Reeducation Centre (Marseille - 1982 to 1986).
- Responsible for treatment at the Regional Sports Medicine Centre (PACA) (1982 to 1984).
- Lecturer at the Marseille Faculty of Medicine (Medical Hydrology and Climatology) (1993 to 1996).

Clinical Osteopathy:

- Osteopathic Office at the Résidence des Borromées, Marseille (1976 to 1988).
- Osteopathic Office at the Centre Deltaccord SA, Marseille (1986 to 1997).
- Osteopathic Office and the INTUMotion Clinic, Kingston, Ontario (since 1997).
- Osteopathic Office at the Clinique Physio 2000 in Montreal, Québec (since 2000).
- Osteopathic Office at the Total Balance Centre, Oakville, Ontario (since 2001).
- Osteopathic Office on rue Cambon, Paris (since 2001).
- Osteopathic Office at the HeartLake Orthopedic and Sports Medicine Clinic, Brampton, Ontario (since 2003).
- Periodic consultations in various parts of the world (USA, Canada, West Indies, Jamaica, Belgium, Italy, Morocco, Malaysia, Singapore, Poland, etc.) and during conferences for over twenty years
- Member of several Osteopathic Associations (The Osteopathic Register of Canada, The Osteopathic Association of Quebec, Registre National des Osthéopathes de France, The Federal European Register of Osteopaths)

Osteopathic Training:

- Osteopath DO, Ministerial Training College, Sheffield (1974).
- Diploma from the Academy of Applied Sciences for work in Osteopathy and physical medicine (1980).
- Former MTA student (Robert Bénichou) (1978 to 1980).

- Former student of The European School of Osteopathy, Maidstone (G.B.) (1978 to 1982).

- DO (Distinction) of the Chartered Society of Homeopathic and Natural Therapies (1982).
- Inter-University Diploma in Manual and Orthopedic Medicine from the University of Marseilles Faculty of Medicine (1989).
- Osteopath DO from the Collège D'Etudes Ostéopathiques, Montreal (1999).
- Osteopath DO from the Académie Sutherland, Montreal (2001).

Teaching and Research:

- Director, Collège d'Etudes Supérieures en Somatothérapie et Thérapeutiques Manuelles, Montreal and Quebec City (since 1997).
- Teacher, CEO Montreal; CCO in Toronto; and DOK in Munich (1994 to 2000).
- Student Teaching Director at the Toronto, Vancouver, Montréal and Marseille Sutherland Academies (since 2000).
- Student Teaching Director at the Sutherland Institute, Toronto (2002 to 2003).
- Director of Study and Research of the Fascia at the ESHF (European School in Health and Fitness) N° 93-130-676-613 (1984 to 2002).
- Teacher of Fascial Dissection at the Anatomy Department, Queen's University, Kingston, Ontario (sponsored by INTUMotion) (2003-2004).

Exercise Science & Physical Training:

- Professor of CP and fitness DE (1974).
- Masters in Diet and Nutrition (1975).
- Masso-kinesitherapist DE (1976).
- Registered as DEA of Physical Education at UFR-STAPS, Poitiers.
- Doctor of Physical Education (London College of Applied Sciences) (1981).
- Director of the Borromées Physical Reeducation Center (1977 to 1983).
- In charge of Functional Reeducation and Physical Rehabilitation at the Chenaie Diet Clinic (1981 to 1984).
- Owner-Manager and Service Provider of the Montgrand Omnisport Club (1978 to 1986)
- President of the French Physical Training Federation (since 1984).
- Student Teaching Director of PARAMED (N° 93-130-531-813) (1987 to 2001

Guy VOYER, DO and His Educational Paradigm

Guy VOYER, DO began his career teaching exercise. The quality of the training at the time was good, but the problem that he found in working with clients was the exercises were not very precise.

"If there are more than 600 muscles in the body, I wanted to know how to do an exercise for each of them." – Guy VOYER, DO

He wanted to know how to do an exercise for the beginning of each muscle, the **superficial, middle, and deeper part of the muscle**, and he wanted to know how to do myofascial stretching for all of the muscles in the body. He wanted to know how to improve the awareness for all the joints, how to do a proprioceptive exercise for a specific ligament in a joint complex, and how to do exercise for the viscera (organs).

With all of this in mind, he organized many different types of courses including the ELDOA, Myofascial Stretching, General Postural Stretching, Reinforcement of the Musculature of the Upper, Lower Limbs and Trunk, the Squat, Circulatory-Lymphatic Training, Sauna, Awareness and Specific Joint Proprioception, but this was not until many years later in his career. First, he sought more education.

It wasn't until Guy VOYER, DO completed his studies in biomechanics, dissection, medical and osteopathic training – in combination with many years of clinical practice in these respective fields – that he was able to organize his programs: *SomaTraining, SomaTherapy, Osteopathy, Manual Etiology, Pelviology and Viscerology.*

"When I organized my educational program I had two goals in mind - I wanted to design a program that increased the quality of the anatomy and biomechanics of the students, and simultaneously increased the number of quality techniques for them to use with their clients-patients." – Guy VOYER, DO

Why did he want to mix both of them at the same time?

In his teaching philosophy, Dr. VOYER does not believe in giving one "recipe" after another, never understanding why something works for one person and not for another. He teaches his students to solve problems using the anatomy, and biomechanics in combination with the techniques. In teaching this way, in time, students know exactly what to do with a person, because no two people are the same. Each person needs something different.

"One quality all of my students have is that they can think for themselves" – Guy VOYER, DO

Guy VOYER, DO: Foremost Expert on Fascia

From a very early age, Guy VOYER, DO was fascinated with the fasciae of the human body. It wasn't until after medical school when he began his osteopathic training that he was able to focus his research on the fasciae, understanding the various roles the fasciae play in the human body and hot to best treat it.

To reach his goal of mastery and better teach his work, Guy VOYER, DO has done extensive research in dissection. He was one of the first medical doctors to map the fascial chains of the body, and to define the role the fasciae plays in biomechanics and movement.

As a result of this work, Guy VOYER, DO organized his own system of therapy with many techniques that he created himself. To compliment his therapeutic system, he designed an exercise-training program (SomaTraining) that respects the organization of the fascial chains and human biomechanics. This program includes the ELDOA and Myofascial Stretching. Today, he is one of the few osteopaths in the world who has mastered treatment of fascia and how to prescribe exercise to reinforce these treatments.

"Only with good awareness is it possible to ask the body to correct itself."
– Guy VOYER, DO

Dr. VOYER's Goal: Teach and Share His Knowledge

After four decades of clinical practice as an exercise practitioner, therapist, and Osteopath, Dr. VOYER's goal now is to teach and pass along his knowledge through the dedicated students who follow his work

Teaching Method – *"Learn by Doing"*

Based upon years of study and clinical practice, Guy VOYER, DO organized his unique educational paradigm and teaching method. Course work is not the lecture/note taking style, but rather group work in which students are challenged to find a posture which will produce a specific result. Thus the teaching method, *"learn by doing"*. The VOYER paradigm includes principles of complexity and systems theory, tensegrity biomechanics and functional anatomy. This method or style of teaching is used to some degree in all of his courses.

SECTION TWO

The ELDOA

"You Are Your Own Best Therapist." – Guy VOYER, DO

What is ELDOA?

Definition: The ELDOA are postural exercises (LOADS) that you can do yourself with the primary goal being to increase the space within a chosen articulation. As the ELDOA *"create space"*, there is an improvement in joint mechanics, increased blood flow, reduced pressure on the discs, a reduction of pain, spinal disc rehydration, better muscle tone, improved posture, and a sense of well being and awareness.

The human spine is a complicated and vital structure. Compression and articular blocks can cause pain, arthritis and neurological conditions. The ELDOA exercises are a highly effective solution to these conditions. The ELDOA are very precise postures that target a specific joint region to provide relief from pain and restore balance.

Designed by French osteopath Guy VOYER DO, the ELDOA (Etirements Longitudinaux avec Decoaptition Osteo-Articulaire) utilize myofascial stretching to put tension around a primary lesion making it the center of "separating forces." The myofascial tension solicits a postural normalization in a specific joint resulting in numerous benefits.

LOADS (Longitudinal Osteo-articular Decoaptation Stretches) are postural self-normalizing techniques, which aim at widening the space within a pair of joints. It is possible in one minute a day to relieve disc compression between L5-S1 or even more specifically at the base of the long arm of the left sacroiliac joint.

Back Pain

Back pain is one of the most common ailments in the United States, second only to headaches. Back pain sends more people to the doctor's office than any other complaint. There are very few people who haven't experienced back pain in their lifetime, or don't know of someone who suffers from it to varying degrees. Nine out of ten patients never know the primary cause of their back pain.

According to the National Institutes for Health, Americans spend $50 billion every year on lower back pain treatment, the most common type of back pain. There is a reported $100 billion spent on indirect annual costs of back pain. Time Magazine wrote in their March 7, 2011 cover story, Understanding Pain, that lower back pain accounts for ninety-three million workdays lost every year. It is one of the leading causes of missed work days (second to the common cold) and it causes more lost days of productivity in the workplace than any other medical condition. Yet for such a common problem, the treatment and management of back pain can be very costly and ineffective.

Having personally suffered from back pain – fractures of the thoracic and lumbar vertebrae, a cervical sprain, multiple herniated discs, paralyzing sciatica and painful cruralgia (femoral nerve pain) – Guy VOYER, DO asked the question that so many do:

"What can be done for painful back pain after the therapeutic model has exhausted the drug arsenal of pain medications, anti-inflammatories, and physical therapy, to no avail?"

His answer was immediate. **EXERCISE!**

But what type of exercise? How much and when, at what intensity, and how many repetitions per set?

Obsessed with identifying the cause of back pain and treating it accordingly, Guy VOYER, DO spent more than three decades in study and clinical practice. This is the story of the ELDOA, a method of exercise and teaching movement to normalize tensions throughout the body and spine using the myofascial chains.

The History of the ELDOA, According to Guy VOYER, DO

More than thirty years ago, upon completion of my medical training and at about the same time I began my Osteopathic studies, the subject of “back pain” was very popular throughout all of Europe. The fields of medicine, physical therapy, and Osteopathy all spoke and wrote articles about back pain, attempting to answer the question,

“How is it possible to correct back pain, the pain of the world?”

For this reason, I too, became very interested in this subject and spent the next ten years traveling to take many different seminars on back pain. They were good, but something was missing in each.

Each course, I picked up one or two key points to add to my practice, mixing them all together, trying to see what worked and what did not, always searching for the best approach to resolve back pain. At the same time, I began an intensive study of biomechanics, but in a new way - the way of tensegrity- that began in the 1980’s with Buckminster Fuller.

I came to understand that the current view of the spine and spine biomechanics was limiting. The view of the spine - “one vertebra in relation to another vertebra” - was incorrect. Instead, in the way of tensegrity, the spine and the vertebrae are in relation to all of the body - the spine, the pelvis, the skull, and all of the bones. I began to speak about C-S-S-C, or Cranial-Spinal-Sacral-Coccygeal spine.

“All is in link from the tailbone to the skull.”

For back pain, I found that the primary cause was due to compression, compression from gravity or from an accident or impact.

It is possible to compress a nerve between two vertebrae, like classic sciatica, but because there is a nerve between each vertebra, it is possible to compress any one of these nerves - the intercostal nerve, the radial nerve, or femoral nerve, etc.

It is possible to compress the disc and create a disc herniation; at first, a bulge progressing to a protrusion, and finally a herniation. And it is possible to compress a joint, the zygopophysial joint, and when a structure is compressed it creates “a lot of rust.” The name of this rust is osteoarthritis.

If I want to resolve all of this there are two solutions and I studied both of them. The first solution is to treat medically and the other is to use exercise and training.

The medical approach has two groups. The first group is to use surgery but this creates another trauma to the body. The second group treats the symptoms with medication - “You have pain, okay… painkiller” - but that doesn’t change the cause.

For the exercise-training approach there are two groups as well. The first group uses exercise and therapy to treat the symptoms, such as physical therapy, but that does not address the cause either; the second group uses very specific exercise to treat the cause - that is what I wanted to do.

For example, if a patient has a problem at the vertebral level of L5-S1, I want to find a way to open this specific segment with a precise exercise, and I want to teach the patient how to do that for himself - "auto-normalization". I organized many exercises to do this - the ELDOA is one example.

That is the first part of the story.

The second part of the story took place many years later in my hometown of Marseille, France. It was here that I opened a big center with a gym and over 2000 patients. I used the ELDOA with each patient to create research and statistics to better understand what was working and why, and I used x-ray imaging to track their progress. It came as no surprise to me that after I gave the ELDOA exercises to a patient their back pain improved, but I was surprised when some of the patients would come back and tell me that other physical ailments improved after starting a regular practice of the ELDOA.

When I met with a patient, I would ask, "How is your back pain?" They would answer, "Yes, thank you, it is better, but even better"…"my menstrual pain is gone", or "the burning sensation when I eat has improved", or "my headache is gone", or "now I breathe better when I sleep."

My intention was to give an exercise for a mechanical problem - for the bone, the joint, or the disc - and a patient's physiologic problem improved. What happened?

I had to stop and think, "What happened, how is that possible?"

I realized that I had forgotten about the relationship with all the nerves and the visceral organs via the spinal cord; there is an attachment for all the viscera to the spine. For example, the kidney attaches to the spine via the fascia of Zuckerkandl, and the liver attaches to spine at the level of L1-L2 via the diaphragm**. I know now, that when I gently move a specific vertebra with an ELDOA exercise that I can improve the function of the organ.

What are the Goals of the ELDOA?

Definition: The ELDOA are postural exercises (LOADS) that you can do yourself with the primary goal being to increase the space within a chosen articulation. As the ELDOA 'create' space, there is an improvement in joint mechanics, increased blood flow, reduced pressure on the discs, a reduction of pain, spinal disc rehydration, better muscle tone, improved posture, and a sense of well being and awareness.

The goals of the ELDOA are as follows:

1. To create more space between the vertebrae.

2. To create more space for the intervertebral disc.

3. To depress the nerve between the vertebrae.

4. To improve proprioception of the vertebral joint segment.

5. To improve proprioception of the functional spinal unit (FSU).

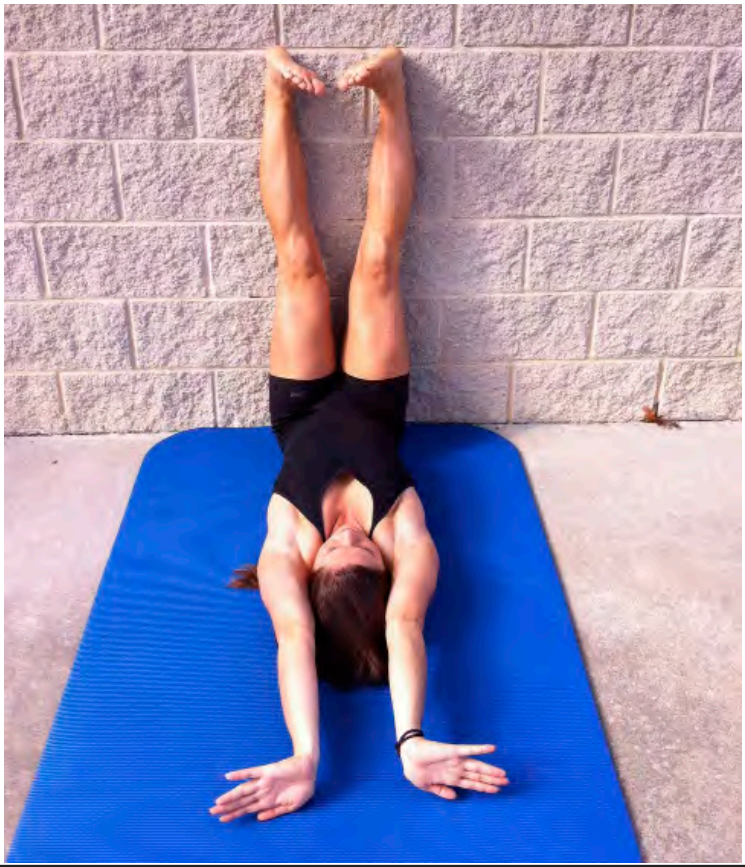
6. To hydrate the intervertebral disc.

7. To move all the parts of the annulus fibrosis to stimulate the water intake.

The ELDOA Postures

ELDOA L5-S1

Client:	Practitioner:
• Lie on your back, pelvis flat on the floor and "sit" bones touching the wall. • Legs rest on a vertical support, the wall, to relax the abdominal muscles. • Arms in the same frontal plane as the trunk. • Hands are kept shoulder width apart.	• Practitioner rigorously monitors all the factors of progression. As correction is made, monitor one location with the hands, another with the eyes and another with command. • Control the breathing of the client, ensuring adequate depth, rate, etc. of respiration.

Actions:	Photo(s):
• Ankle in dorsi-flexion with two components of inversion (adduction and supination). • Push heels to the sky. Maintain a component of psuedo-inversion of the feet. • IR of the lower limb. • Extend the arms (elbows). • External rotation of the upper limb. • Total extension of the elbow and wrist. • Push the arms away from the body very strongly. • Flatten the lumbar spine. • Chin in axial extension from the coccyx to the vertex. • Put everything (heels, coccyx, lumbo-sacral joint, vertex and the heel of the hand) into tension at the same time. • Push L5 vertebra to the ground.	

Notes:

SECTION THREE

Myofascial Stretching

"…the goal is not to gain flexibility of a muscle, but to improve the quality of the movement of the tissues in relation to one another."
-Guy VOYER, DO

What is Myofascial Stretching?

For a long time now we believed that we knew how to stretch muscles; however, how do you stretch a muscle when it is sheathed in a leather casing? Muscles are three dimensional in shape with multiple sites of attachment and fascia is the thin 'skin' weaving into and surrounding structures like the muscle tissue, 'linking' various structures together in a chain that includes the joint or joint capsule.

All the connective tissue in the body is made of water and this water is arranged in microscopic tubules. Perhaps even more amazing is that the *fascia is continuous upon itself: it is one single entity*. In order to stretch a specific muscle it is better to consider it as *a link in a specific chain* extending from the toes to the back of the knee, inserting into one or more of the ligaments of the pelvis. This is the 'real anatomy' of the body and respects the global organization of its tissues. A stretching posture will be chosen to *solicit the tension of the whole fascial chain in order to correct the specific muscle link.*

With myofascial stretching (MFS), the goal is not to gain flexibility of a muscle, but to **improve the quality of the movement of the tissues** in relation to one another. MFS is the only type of stretching that respects this organization.

Fascia and the Formative Work of Guy VOYER, DO

Guy VOYER, DO dissecting a cadaver

From a very early age, Guy VOYER, DO was fascinated with the fasciae of the human body. It wasn't until after medical school when he began his osteopathic training that he was able to focus his research on the fasciae, understanding the various roles the fasciae play in the human body and how to best treat it.

To reach his goal of mastery and better teach his work, Guy VOYER, DO has done extensive research in dissection. He was one of the first medical doctors to map the fascial chains of the body, and to define the role the fasciae plays in biomechanics and movement.

As a result of this work, Guy VOYER, DO organized his own system of therapy with many techniques that he created himself. To compliment his therapeutic system, he designed an exercise-training program (SomaTraining) that respects the organization of the fascial chains and human biomechanics. This program includes the ELDOA and Myofascial Stretching. Today, he is one of the few osteopaths in the world who has mastered treatment of fascia and how to prescribe exercise to reinforce these treatments.

What is Fascia?

The term fascia means a form of connective tissue that is widely distributed throughout the body and is composed of irregular, interwoven collagenous fiber bundles of varying density. Fascia is comprised of three basic elements: collagen, elastic fibers, and ground substance.

Fascia has many roles in the body: it invests most structural elements, being highly protective in nature, and can also provide a lubricating function. Its network of interconnections between the skeletal elements appears to provide a mechanism for limited force transduction and its cellular composition strongly suggests both an immune function and a neurosensory role as well.

Fascia is the link…it is the link between
all the structures of the body, making the body a global structure.
Fascia is the skin of the structure that gives it shape and
structural integrity.

General Presentation of the Fascia by Guy VOYER, DO

The information below comes from Les ELDOA – 2003 written by Guy VOYER, DO

Fascia is the sheet of areolar or fibroelastic tissue that sheaths the entire body and the organs. It insinuates itself between the muscles. It sheaths the nerves, blood vessels and lymphatics

All the connective tissue (except the bones) is organized in the shape of fasciae. They are envelopes, sheaths, septum, support membranes, separating sheets or the attachment points.

This tissue network is suspended from osseous attachments. The tensions of the connective tissue depend on their integrity and vice versa…the quality of the movement of bone and joints depends on the quality of the connective tissue.

The Fascia in the Writings of A.T. Still

“It is in the fascia that we must look for the cause of disease and the beginning of healing action”

“…we can see all the beauties of life on exhibition by the great power with which the fascia is endowed… the framework of life, the dwelling place on which life so adjourns… can find all disturbing causes of life, the place that diseases germinate and grow, the seeds of disease and death.”

“Why not release, contract, stimulate, and clean the whole system of all diseases by that willing and sufficient power to rejuvenate all parts of the system from deadly components that generate through the delay and stagnation of fluids while in the fascia.”

“The general laws of nutrition to nourish life are to be found in the fascia and the nerves.”

A Brief Summary of the Fascia

Although the fasciae present intermediate and anastamotic planes they are divided arbitrarily into three layers;

Superficial layer: includes the different layers of the skin.

The middle layer: (from superficial to deep): The epicranial epineurosis, the fascia superficialis, and the aponeuroses

The deeper layer: The dura mater or pachymeninges is the external layer of the meninges; It is of mesenchymal origin. It is made up of several stratified layers of collagen fibers separated from one another by flattened cells. Each layer has a different direction in relation to its adjacent supra and infra layers which provides a significant resistance and inextensibility to the whole.

Dura Mater

The spinal cord is a flexible, elastic structure and nervous tissue is soft and delicate; the neurons can be injured by even slight pressure. For this, there are several layers of protection - the meninges which includes the dura mater and the cerebrospinal fluid - CSF.

The **dura mater** is two parts - the spinal dura mater, and the cranial dura mater.

Spinal Dura Mater

The **spinal dura mater** continues without interruption from the cranial dura mater at the circumference of the foramen magnum and forms a continuous cylindrical sheath extending from the foramen magnum through the sacral canal containing the spinal cord from which it is separated by the leptomeninges and the cerebral spinal fluid. (Les ELDOA – 2003)

At its superior part the spinal dura mater attaches to the entire extent of the circumference of the foramen magnum, perforated by two vertebral arteries facing the occipital – atlas articulations, and to the posterior surface of the body of the axis.

At its inferior part, where it constitutes the inferior dural sack or spinal recess, it inserts into the sacral canal at the level of the second sacral segment through a strong fibrous sacro-dural ligament of Trolard.

The spinal dura mater is attached to the posterior longitudinal ligament, which is located anterior to it, by fibrous tracts, which are more numerous in the cervical and lumbar regions, but still allow a relative amount of freedom.

Cranial Dura Mater

The cranial dura mater presents two layers: the external layer is applied to the skull with no epidural space. The internal layer sends out continuations, or expansions that partition (divide) the cranial cavity and separate the different neural elements which are found there: two sagittal extensions – faux cerebri and faux cerebelli.

There are three relatively horizontal extensions – tentorium cerebelli, tentorium of the hypophysis, tentorium of the olfactory bulb.

Two relatively vertical extensions are the tentorium of the optic nerve and Meckel's cavum.

In the mechanical organization of the body, the spinal and cranial dura mater constitute the first of the chain. The PRM itself will be very important to the treatment of the fasciae and the ELDOA exercises.

The Fasciae: Some Words to Remember According to Guy VOYER, DO

There are three components that are important in the biology of the fascia – *cells, fibers, and the matrix.*

The Cells: *fibroblasts, mastocytes, adipocytes, macrophages, plasmocytes, and leukocytes.*

The Fibers: *collagen, retinaculum, elastin.*

The Matrix (ECM): *The ECM is a complex of macromolecules manufactured by cells and exported by them to the extracellular space. The ECM of the connective tissue proper, the most common connective tissue in the body is composed of hydrated gel-like ground substance with fibers embedded in it. The ground substance resists forces of compression and fibers withstand tensile forces.*

The water of hydration permits a rapid exchange nutrients and waste products carried by the extracellular fluid as it moves through the ground substance.

Macromolecules

Ground substance is composed of glycoaminoglycans (GAGs), proteoglycans, and adhesive glycoproteins. These three families of macromolecules form various interactions with each other, with fibers, and with the cells of connective tissue and epithelium.

Types of GAGs: Hyaluronic acid, Keratan, Heparin, Chondroitin, Dermatim.

Water is Life

To function properly and avoid dehydration the human body requires regular water intake. The amount depends on various factors that include the level of activity, temperature and humidity. Most of the water humans take in is through foods and beverages other than pure water, but drinking pure water is the optimal choice for the tissues.

Water, Nature's First Medicine

Intracellular Water - Extracellular Water

The importance of water and the roles that it plays in the human body cannot be understated. Water is the most important and abundant inorganic compound in ALL living systems. Nearly all the bodies chemical reactions occur in a watery medium and many of its properties make it an indispensable compound for life (Tortura pg. 38).

The human body is comprised of up to 70 percent water. Water serves as a transportation medium by which other nutrients and essential elements are distributed throughout the body. It acts as a lubricant and its presence in and around the body helps to defend against the forces of shock. The brain, eyes, and spinal cord are all among the body's sensitive structures that depend on a protective water layer.

Total body water is distributed between two main compartments –"water inside the cells" and "water outside the cells".

Intracellular fluid (water) **-** The majority of the water in the body is contained in the cytoplasm of cells (inside the cells) and is known as intracellular fluid. Intracellular fluid is the water inside the cells in which all intracellular solutes are dissolved. It constitutes two-thirds of the total body water in the body, and under normal circumstances remains under osmotic equilibrium.

Extracellular fluid (water) **–** The other third of the water in the body is called extracellular water. It is the fluid outside the cells and includes all other body fluids.

About 80 percent of the extracellular water occupies the microscopic spaces between the tissue cells (interstitial fluid); The remaining 20 percent is plasma – the liquid portion of blood (Tortora pg. 1087).

Interstitial fluid surrounds the tissues and provides the appropriate micro-environment that allows the movement of ions, proteins and nutrients across the cell barrier. This fluid is not static; it is constantly being refreshed by cell capillaries and collected by lymphatic capillaries.

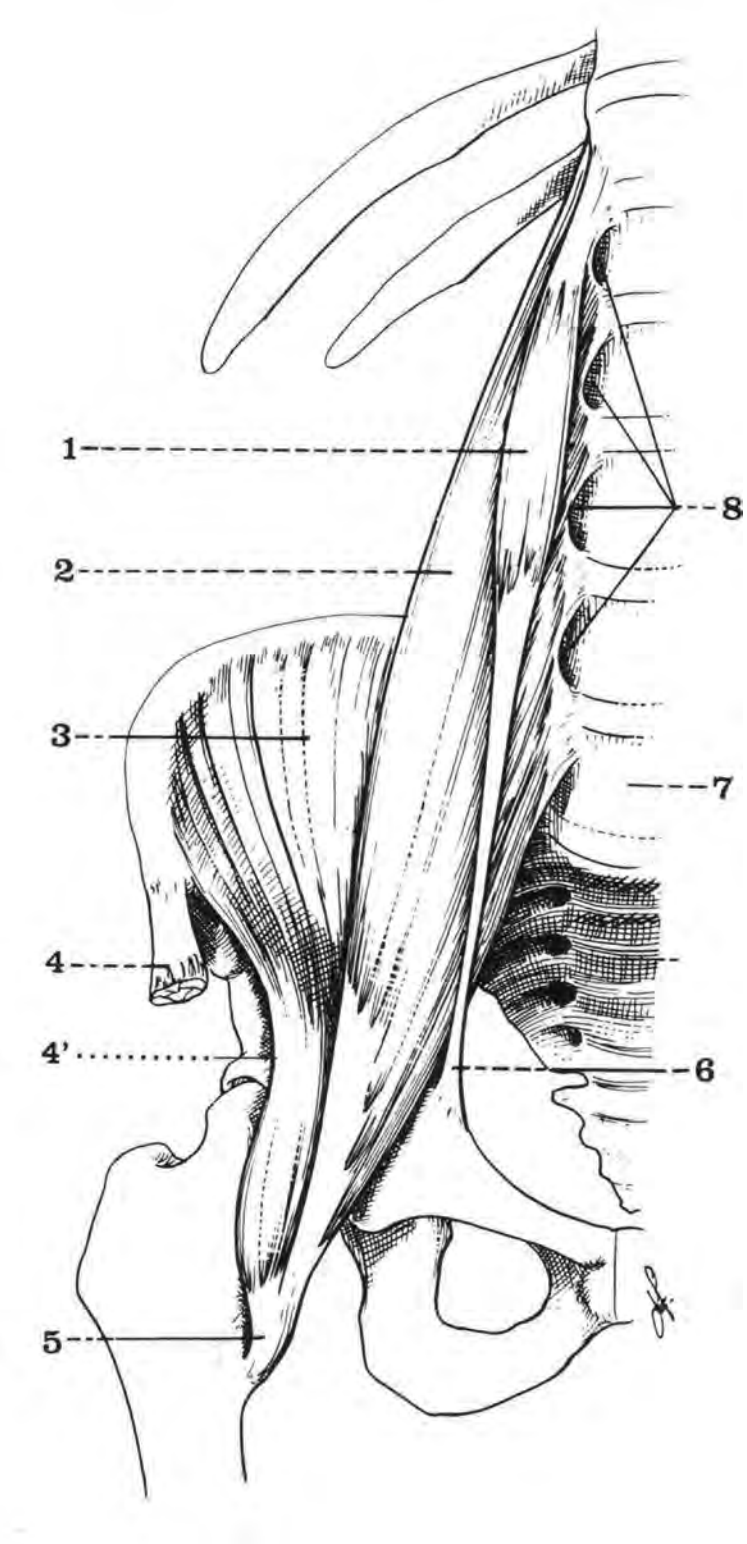
Other extracellular fluids that are grouped with interstitial fluid include **lymph**, and lymphatic vessels, **cerebral spinal fluid** in the nervous system, synovial fluid in joints, acqueous humor and vitreous body in the eyes; endolymph and perilymph in the ears; and plural, pericardial and peritoneal fluids between the serous membranes.

"The two worst enemies of the fascia are dehydration and stress." – Guy VOYER, DO

Myofascial Stretching Exercises

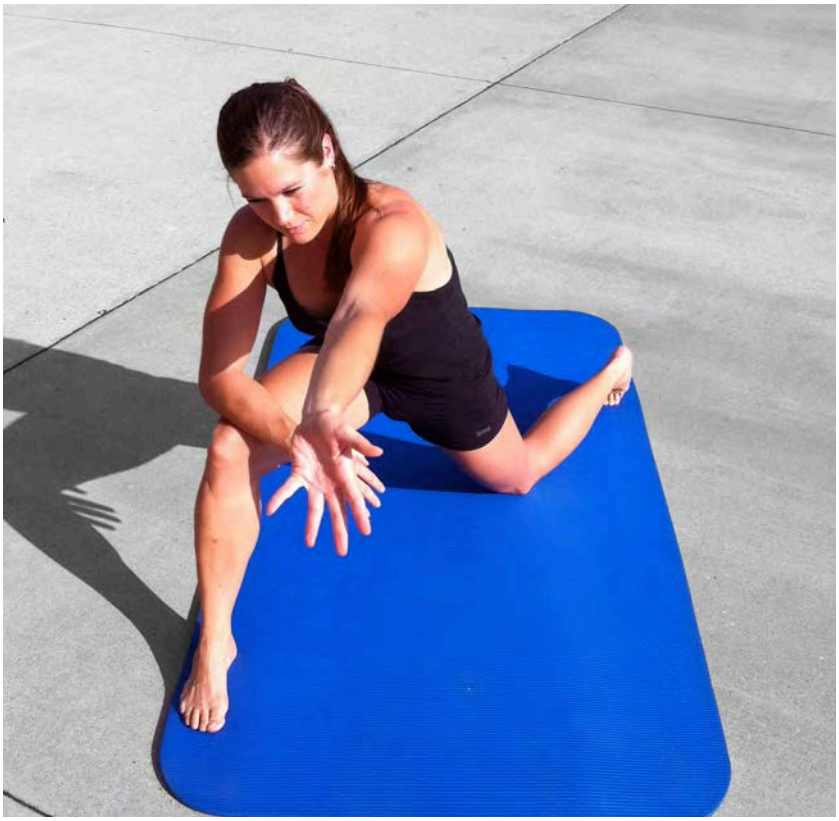
Based upon the work of Guy VOYER, DO

Ilio-Psoas



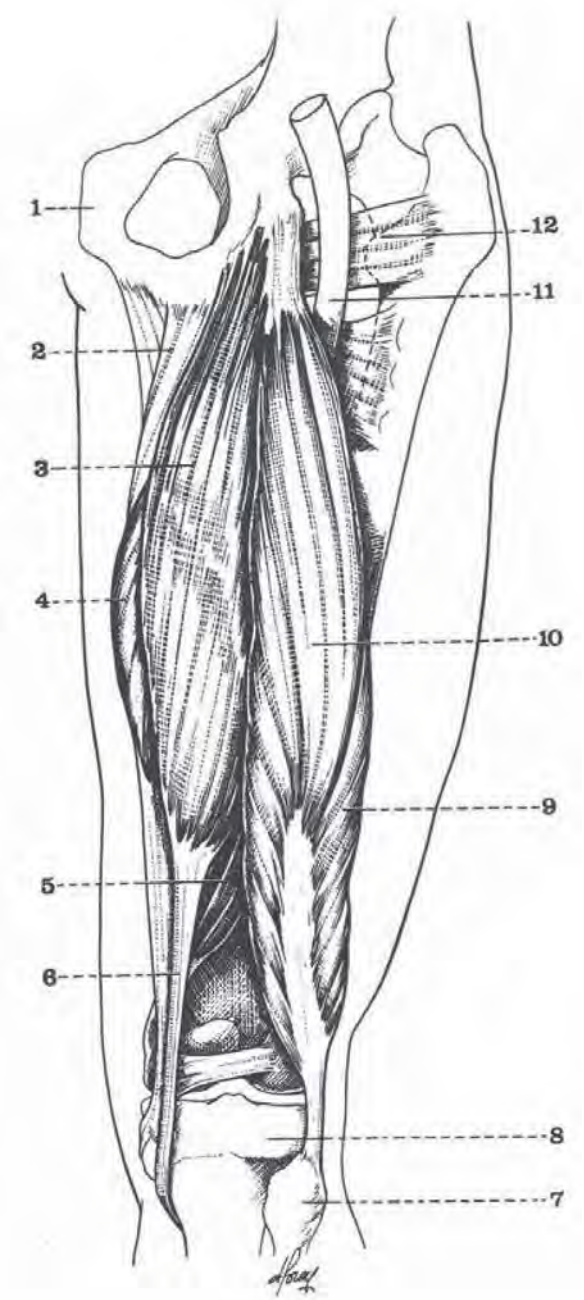
MFS Ilio-Psoas

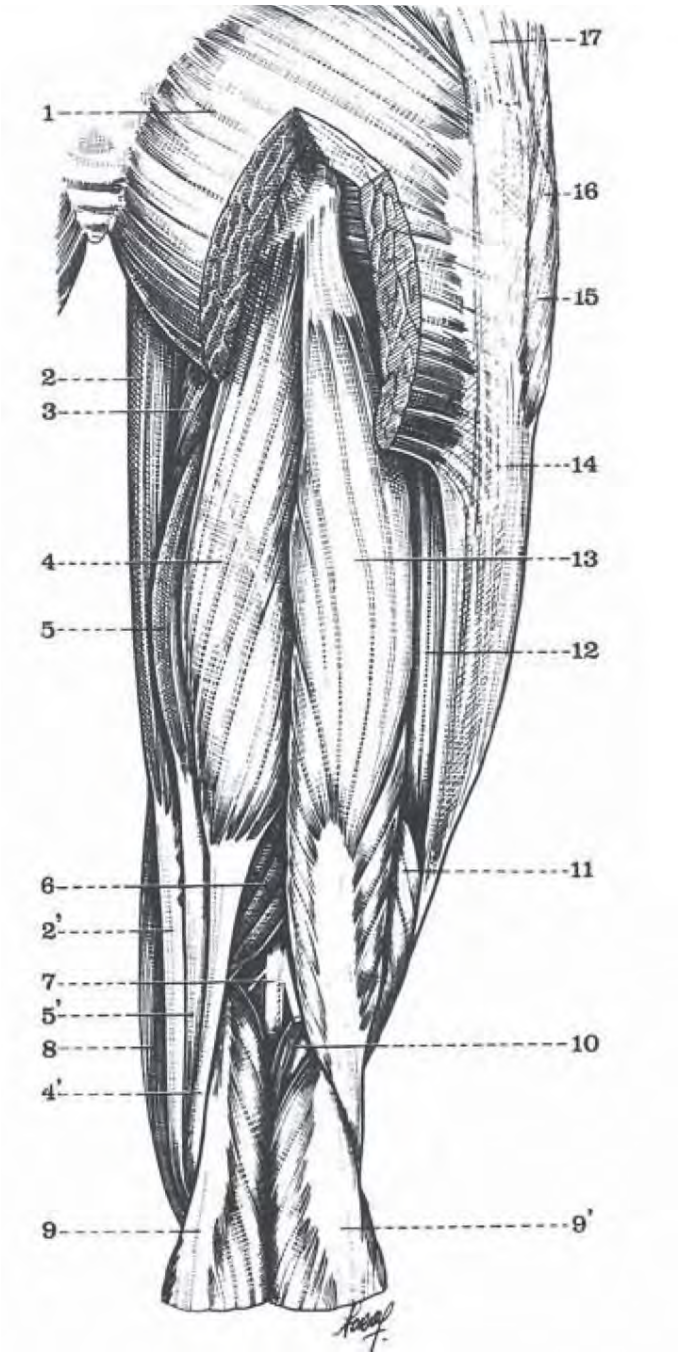
Muscle Action:	Muscle Counter-Action:
Hip: F + ER + Coaptation (+ADD) **Pelvis**: Anteversion of Pelvis **Iliac:** Outflare **Lumbar Spine:** E + Homolateral SB + Contralateral R + Homolateral Translation + Coaptation (causing increased lordosis)	**Hip:** E + IR + Decoaptation (+ ABD) **Pelvis:** Retroversion **Iliac:** Inflare Lumbar Spine: F + Contralateral SB + Homolateral R + Contralateral T + Decoaptation (decreased lordosis)

Position of Client:	Photo(s):
• Serving knight position; spread the feet for larger base of support; greater than 90 degrees FLX of the knee. • Pelvis: Retroversion lumbar spine: begin with translation then FLX + SB + R. • Put into tension Latissimus Dorsi; the upper 2 limbs horizontal + erection of the spine. • Left foot in eversion • Ilium in relative inflare; the client brings the spine and the sacrum forward. • Right foot: compression of internal arch. • Tibia in ER; push the knee laterally; outflare obtained by tension in cribiformis fascia giving a relative left inflare.	

Notes:

Anatomy of the Posterior Compartment of the Lower Limb

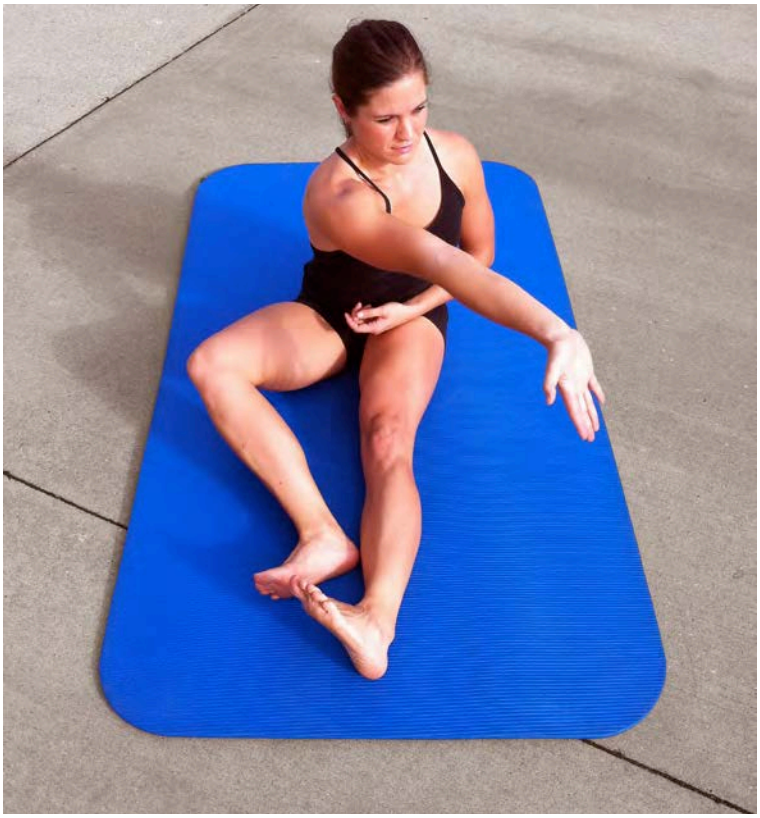




Based upon the work of Guy VOYER, DO

MFS Biceps Femoris

Muscle Action:	Muscle Counter-Action:
Hip: EXT + ER + ABD + Coaptation **Pelvis:** Retroversion + Homolateral Lateroversion **Ilium:** Inflare **Knee:** FLX + ER + Valgus + Lateral Translation **Fibula:** Ascends	**Hip:** FLX + IR + ADD + Decoaptation **Pelvis:** Anteroversion + Contralateral Lateroversion **Ilium:** Outflare **Knee:** EXT + IR + Varus + Medial Translation **Fibula:** Descends

Position of Client:	Photo(s):
• Seated with left lower limb straight and right lower limb relaxed; both sits bones on the ground. • ADD straight lower limb; do not cross the midline. • Extend the knee, dorsiflex the ankle, psuedoinversion of the foot. • IR of the lower limb. • Varus of the knee. • Erection of the spine. • Anteroversion of the pelvis and push the belly button forward. • Rotate trunk in the direction of the straight leg. • FLX + ER of the contralateral upper limb for the Fascia of Leblanc. • Descend the fibula. • Relative outflare of the left Illium as the sacrum is in negative tension.	

Notes:

MFS Semitendinosis

Muscle Action:	Muscle Counter-Action:
Hip: EXT + IR (more than membranosus + ADD (more than membranosis) + Coaptation **Pelvis:** Retroversion + Homolateral Lateroversion **Ilium:** Inflare **Knee:** FLX + IR	**Hip:** FLX + ER + Decoaptation **Pelvis:** Anteroversion + Contralateral Lateroversion **Ilium:** Outflare **Knee:** EXT + ER + Valgus
Position of Client:	**Photo(s):**
• Seated with the lower limb straight + ABD. • Contralateral lower limb relaxed. • Extend the knee, dorsiflexion of ankle. • IR of the lower limb. • Valgus of the knee. • Erection of the spine. • Anteroversion of the pelvis, push the belly button forward. • FLX + ER both upper limbs parallel to the floor.	
Notes:	

SECTION FOUR

Analytical Segmental Training vs. Global Movements

- Abdominals
- Glute Max
- Squat

Analytical Segmental Training vs. Global Exercise (Movement)

The dictionary defines **analytics** as the science of logical analysis.

Segmental is defined as one of several pieces that fit together and create a whole.

In **analytical segmental muscle strengthening** there are hundreds of specific exercises which can solicit the *proximal, distal, medial, lateral, middle, superficial, or deep portions* of each muscle.

> *"Each muscle of the body can and should be worked qualitatively at first, before moving on to **global** or specific (volume, strength, power, speed, endurance, resistance, or maintainence) exercises."* *-Guy VOYER, DO*

Analytical and segmental muscular strengthening: There are hundreds of specific exercises which can solicit the proximal, distal, medial, lateral, middle, superficial, or deep portions of each muscle (i.e. proximal psoas or distal rectus abdominus) in the trunk. The details covered in this allow for a more comprehensive knowledge of how the body is organized, taught in conjunction with hundreds of specific exercises to target the structures.

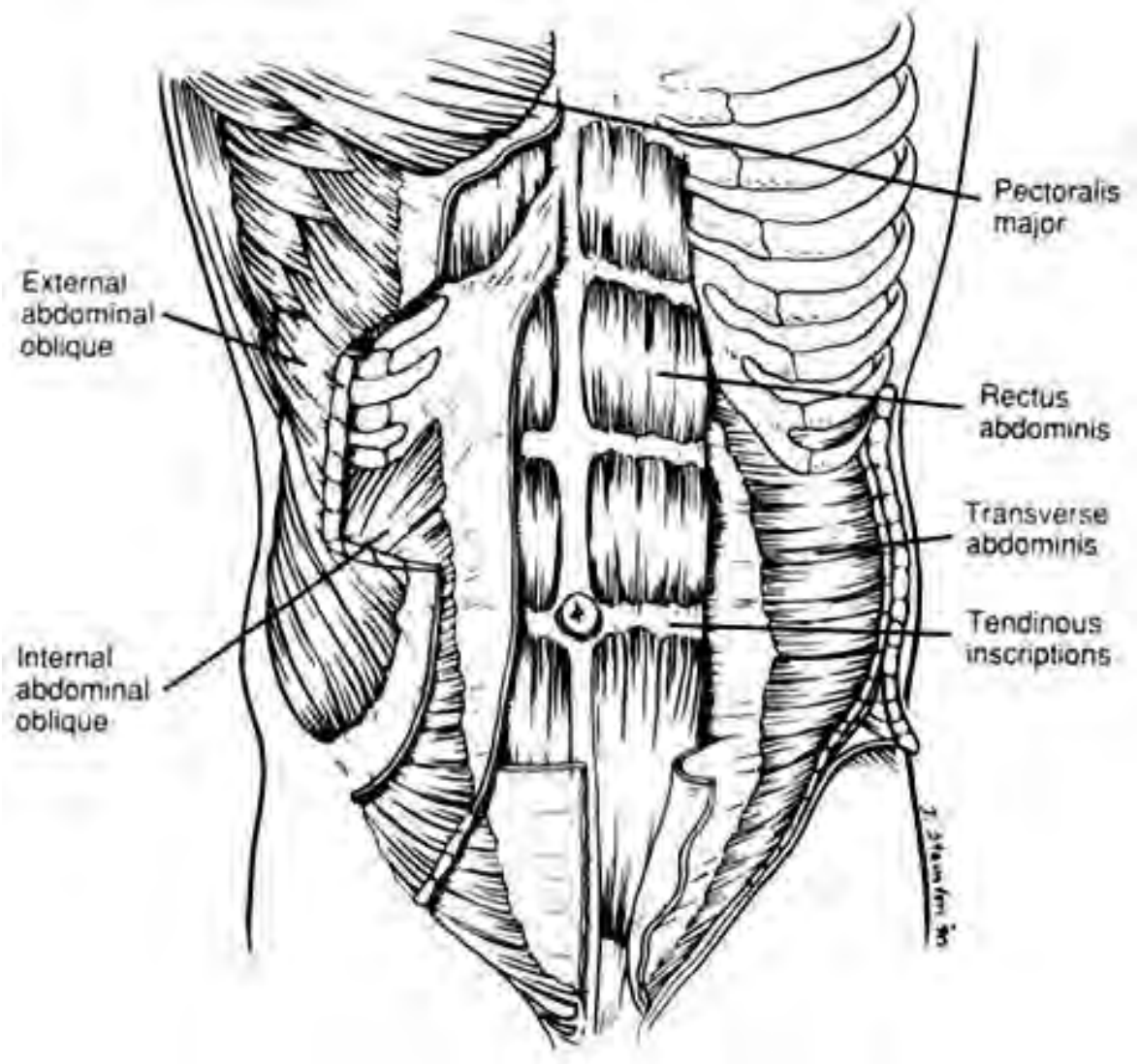
Global Movements: The Squat: The squat is a global movement pattern with many different variations and over 100 progressions. Teaching these progressions leads to a fundamental understanding of the proper method and progressions that lead to performing a biomechanically sound squat. All of this is taught in the course, How to Organize the Education and Progression of a Global Movement: The Squat.

Classic Descriptive Anatomy vs. Descriptive Relational Anatomy: The purpose of the anatomy taught in school (origin/insertion, functions) is so that the student is able to pass an examination.

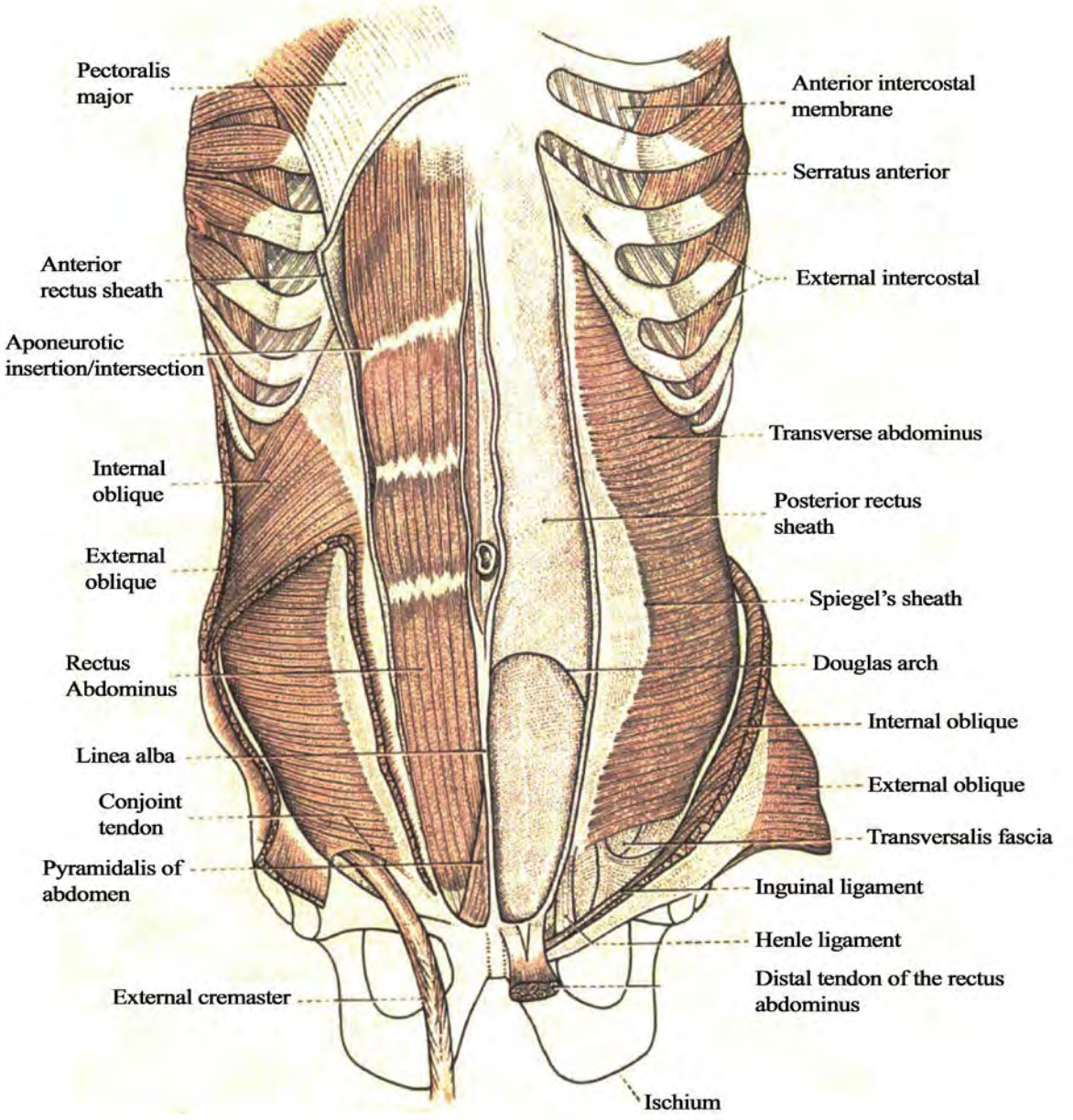
In SomaTraining, there is no exam!

The SomaTrainer needs to know the classic anatomy, but to know it in the relation it has to other structures in the body.

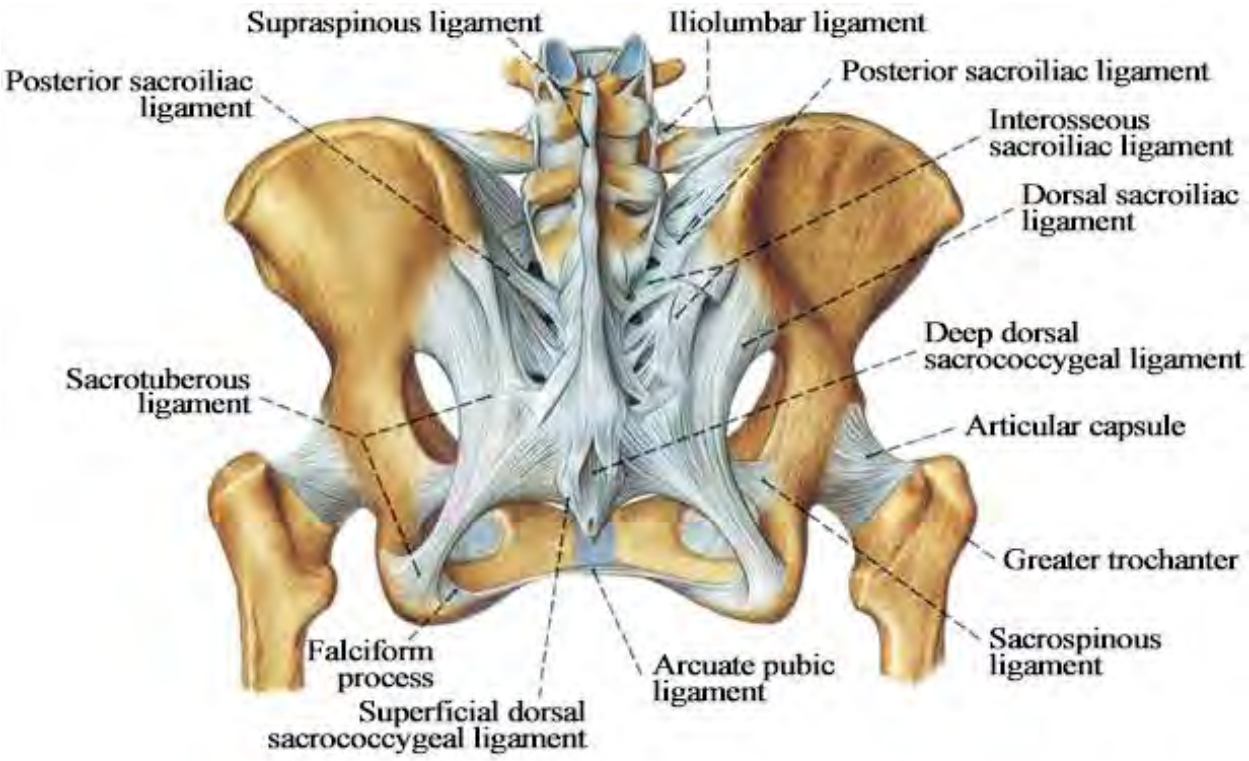
The Classic Descriptive Anatomy of the Abdominals



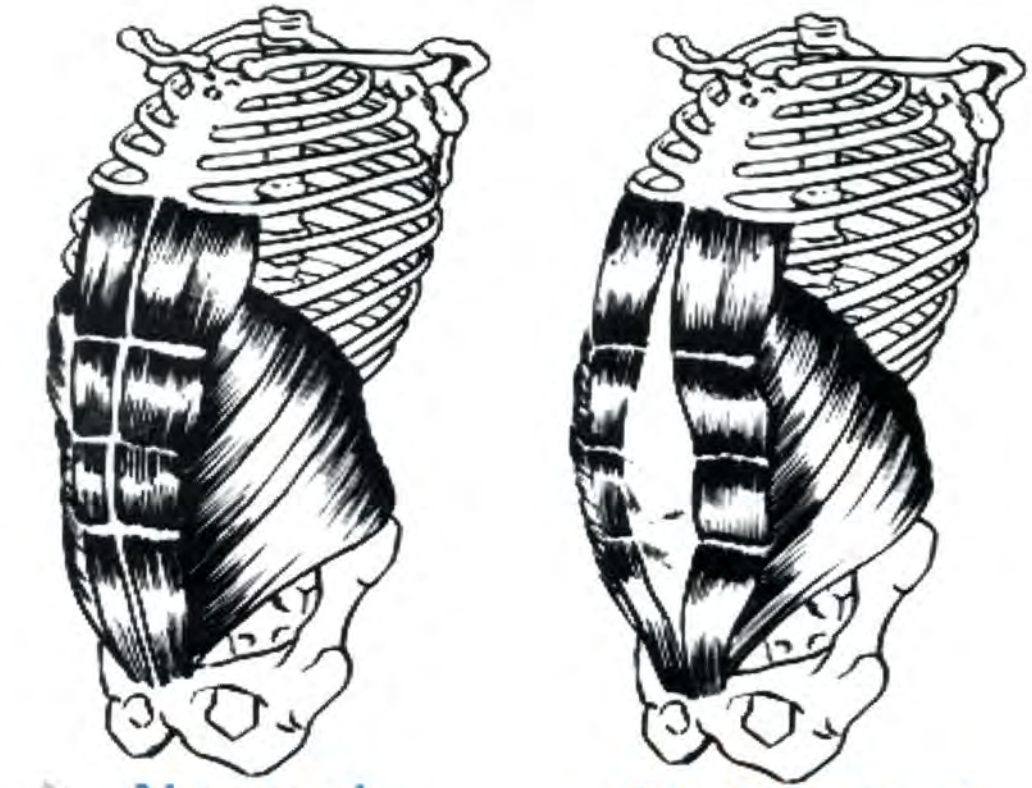
The Descriptive and Relational Anatomy of the Abdominals



Pelvis and Ligaments, Rear view, Female

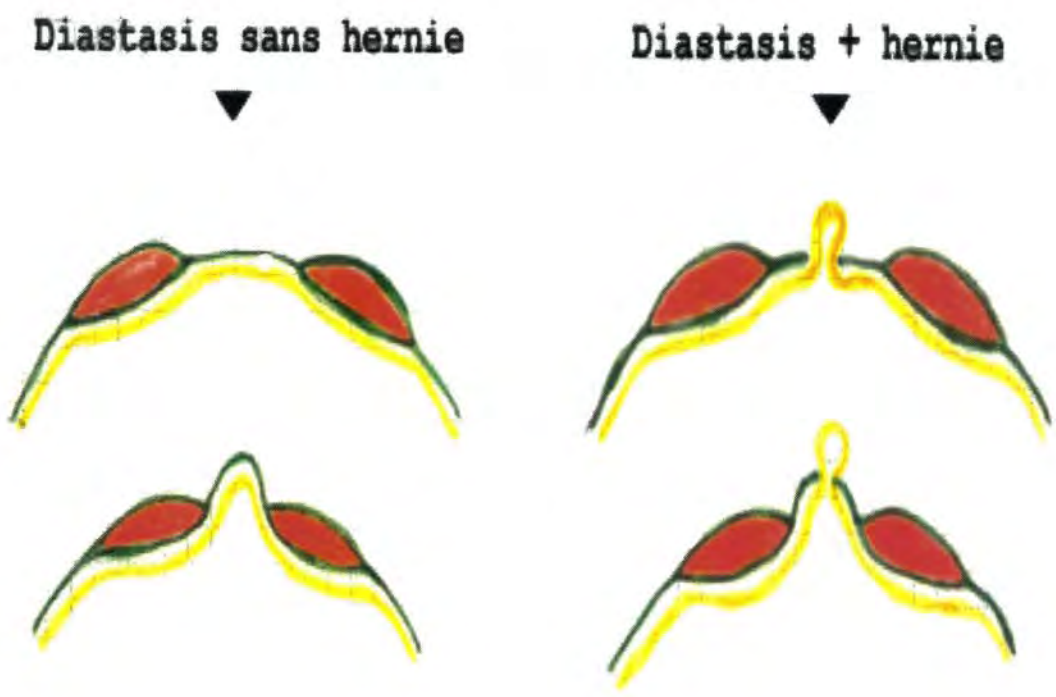


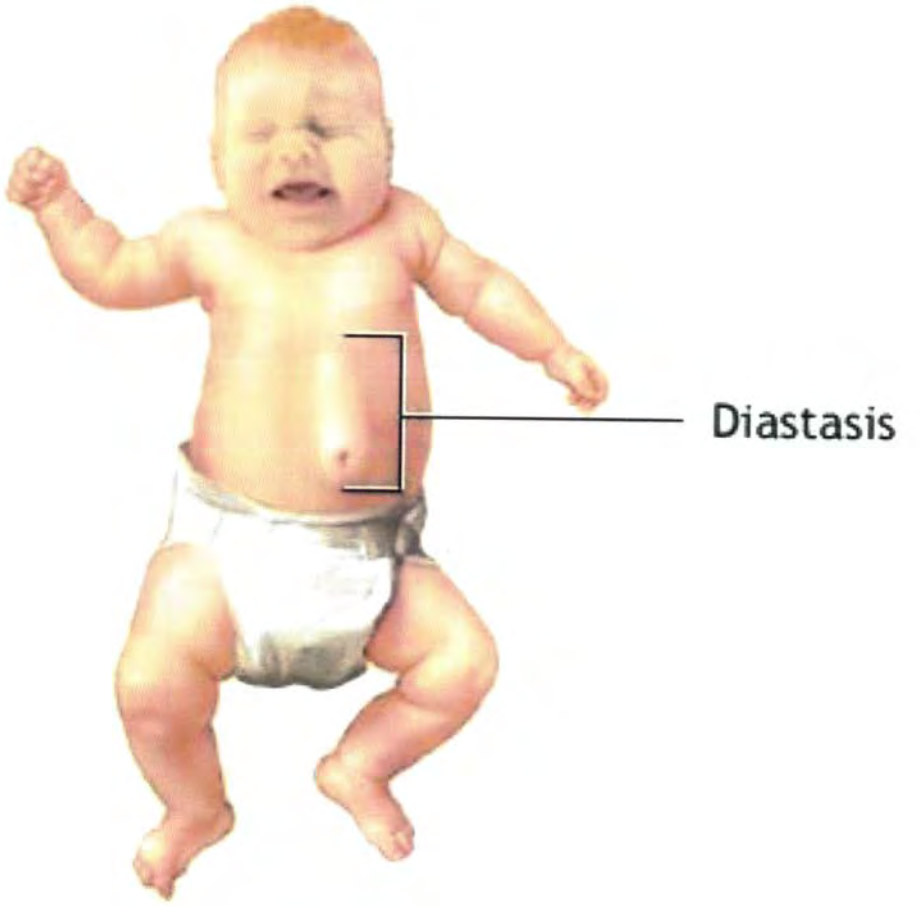
Clinical Significance



Diastasis Recti

Diastasis Rectus Abdominis



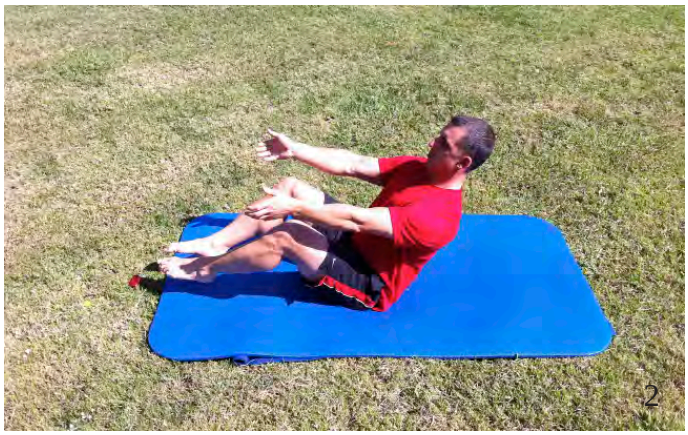


Practical Exercises

Rolling - Unrolling

Base of Exercise:	Principles of Work:
• Seated on ischiums • Knees bent and femurs ABD • Trunk flexion begins at the level of S2 • Arms straight out in front	•Maintain the knees at 90 degrees & the lower limb in ABD • Roll pelvis - spine into extension • Version: 1 arms stay in front of the body • Version 2: arms move with the trunk • Chin-in • CSSC • Exhale before beginning flexion of trunk on pelvis • Unroll and roll through the total range

Action of Exercise:



Notes:

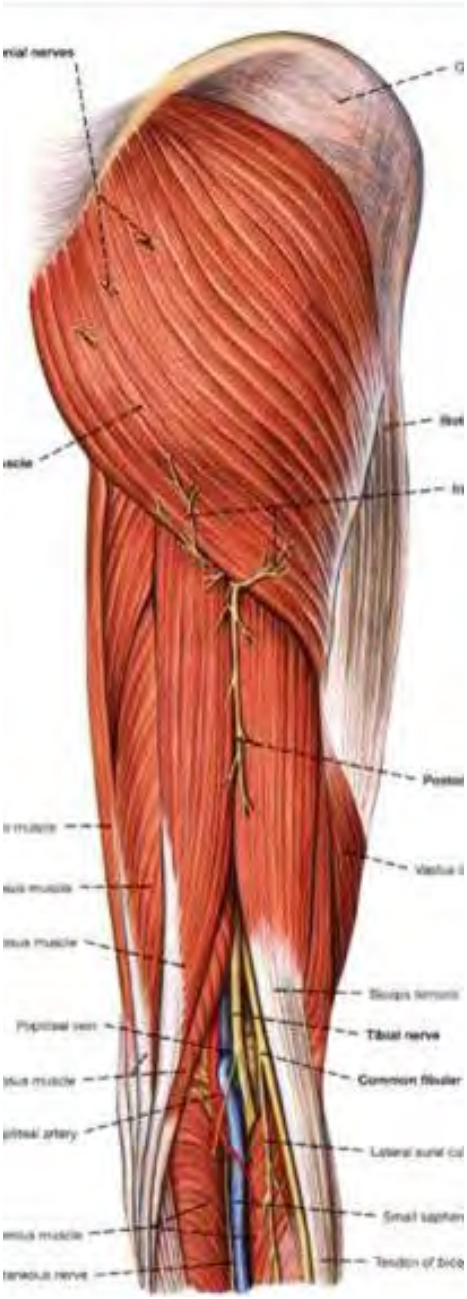
Rolling - Unrolling: Assisted

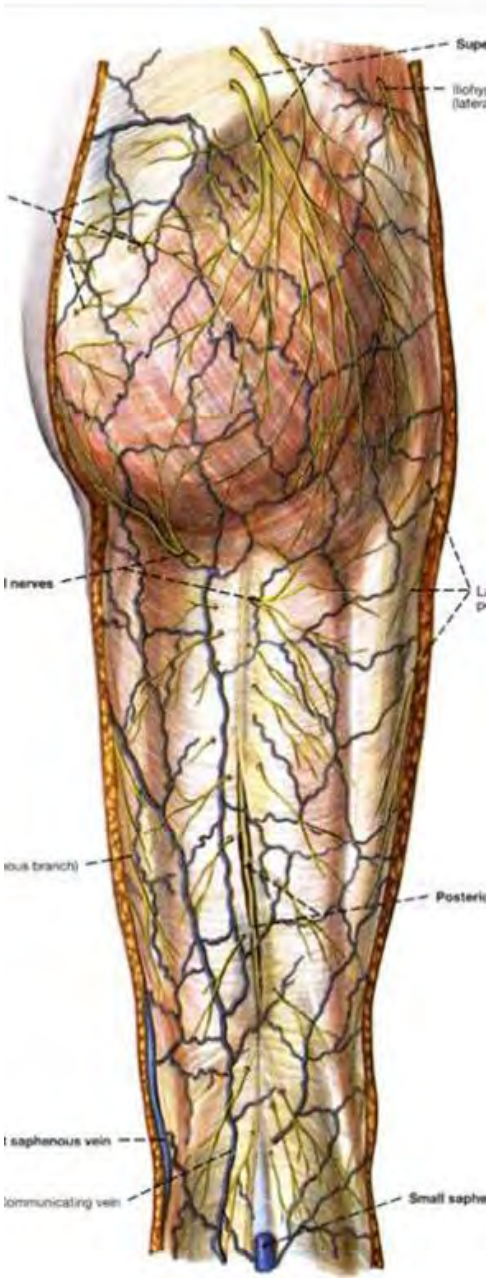
Base of Exercise:	Principles of Work:

Action of Exercise:

Notes:

Gluteus Maximus





Glute Max

Base of Exercise:	Principles of Work:
• Supine • Hips flexed • Knees flexed 90 degrees	• Posterior pelvic tilt • Chin in • CSSC • Hip Extension

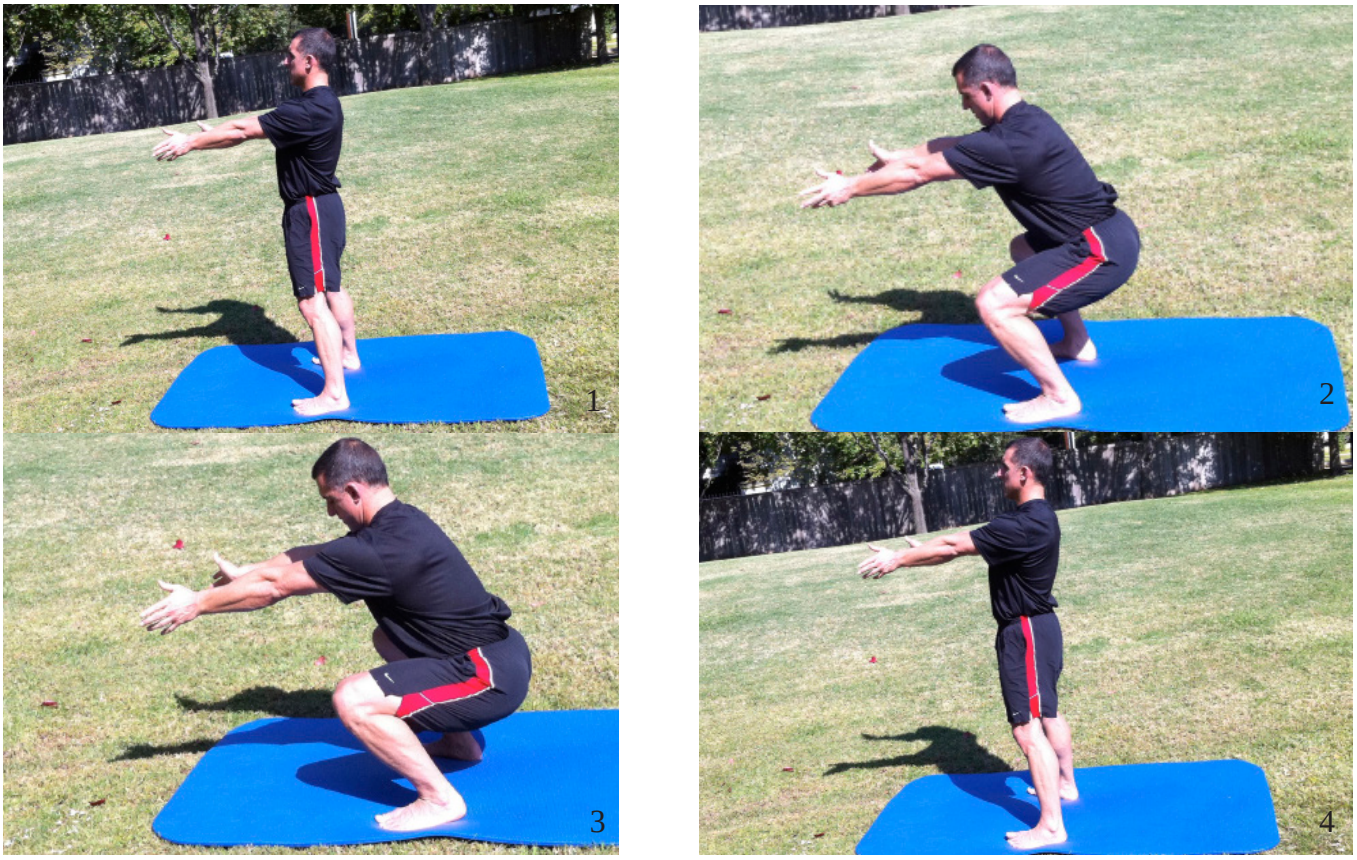
Action of Exercise:

Notes:

Gravity Squat

Base of Exercise:	Principles of Work:
• Standing • Feet underneah the hips	• Axial Tension (chin in, Spine straight) • Posterior pelvic tilt • Initiate squat by pushing the knees forward • maintain axial extension • lower center of gravity

Action of Exercise:



Notes:

The purpose of the gravity squat is to master the gravity line and spine during triple flexion.

SECTION FIVE

Proprioception

"It is impossible to ask the brain to command a body that it does not recognize."
-Guy VOYER, DO

Proprioception

The physiology that controls a joint depends on numerous control mechanisms located in **the muscle tendons, ligaments, and joint capsules. It is logical to train these** "microcomputers" to increase or provide control of a joint. Following a specific condition, a sprain, arthrosis, lost joint mobility, or to improve effectiveness these various aspects must be trained.

To do this work however, it must be very precise. It is not only the joint that is trained, but a specific ligament or part of the capsule. The proprioception course teaches hundreds of exercises that may be used throughout the body for this type of training.

Awareness

Awareness: a 3D image that the brain has about our body in space.

Receptors:

- **Interoreceptors**, by which we perceive the pain and the stretching of internal organs
- **Exteroreceptor**s, which are physical (touch, sight, hearing) and chemical (taste, smell)
- **Proprioceptors**

How do we work with awareness?

- Work principle: we address the cortex not the person
- Base of exercise: why the position? contraindications? (flex knees to have a retroversion of the pelvis, etc)
- Progression factors: to increase the limits of what a person can do
- Details of the technique: only after the other 3 steps have been achieved

References

- **Transcendental**
- **Receptors**
- **Cortical**
- **Perturbation factors**
-

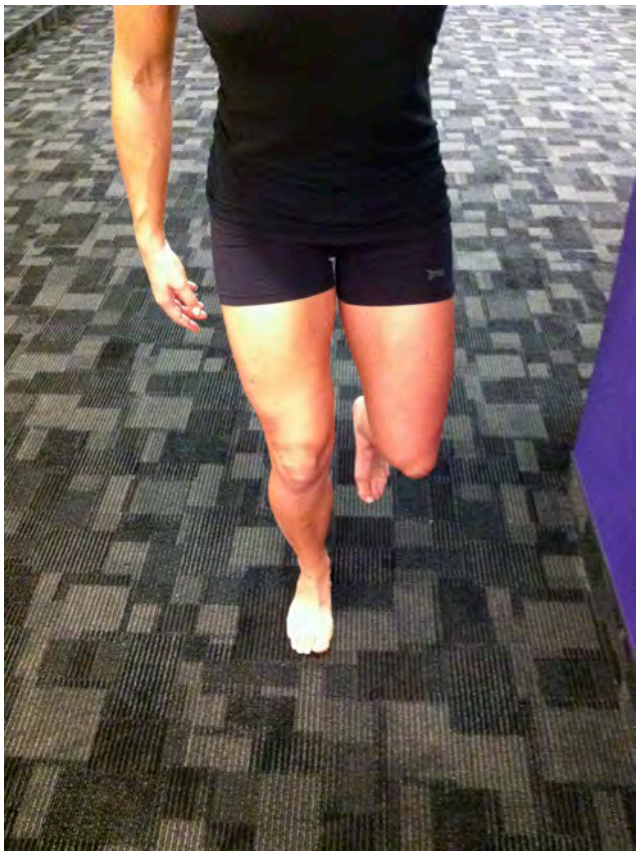
Awareness can be achieved:

- **Relatively**
- **Absolutely**

Proprioception of the Knee Valgus/Varus

Base of Exercise:	Principles of Work:
•Lemniscate of the foot • Flex the knee • Posterior pelvic tilt • Valgus of the knee	• Lemniscate of the foot • Flex the knee • Posterior pelvic tilt • Varus of the knee

Action of Exercise:

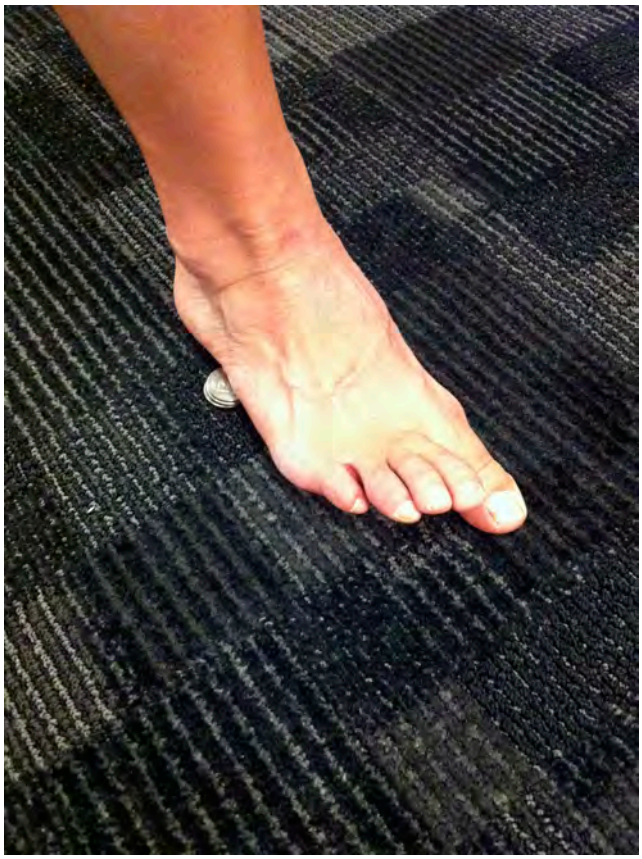


Notes:

Proprioception of Cuboid/Navicular

Base of Exercise:	Principles of Work:
• Fix the knee in extension • Relative dorsiflexion of the ankle • Press the 1st meta into the ground • Press the medial border of the calcaneum into the ground • Extend the 5th meta • Press the cuboid into the ground	• Fix the knee in full extension • Relative dorsiflexion of the ankle • Press the 5th meta head into the ground • Press the lateral border of the calcaneum into the ground • Extend the 1st meta • Press the navicular down onto the coin

Action of Exercise:



Notes: