

GROW WITH EBFA[™]

July, 2014

Educational newsletter brought to you by the Evidence Based Fitness Academy Inc.

Hello Health & Fitness Professionals!

Welcome to the latest issue of GROW with EBFA®!

We have a couple exciting announcement for you. Please check out our new EBFA Blog - www.barefootstrongblog. com Here you will find many new blog articles dedicated to the integrated role between the foot, core and total body movement.

In addition in 2015 we will be hosting the first ever Barefoot Training Summit! This is a 3 day conference dedicated exclusively to the power of barefoot training, footwear science and surface technology in fitness, performance and rehab. Dates are set for March 2015 in Delhi, India, May 2015 in Florida, USA and June 2015 in Madrid, Spain.

We hope you enjoy this month's issue and remember to stay barefoot strong!

Dr. Emíly

Featured

Barefoot Training Facility









Featured Article

Foot Function and Fascial Lines: The 1st MPJ By Dr Emily Splichal, DPM, MS, CES

Fascia. Aterm that just a few years ago had little meaning in the performance and fitness industry. The days of foam rollers collecting dust in the corner have been replaced with courses specializing in fascial dissection, trigger point release and rehab programming related to fascial lines.

As we enter this paradigm shift in the way we look at human movement, corrective exercise and performance I have seen an increase in the appreciation for the foot & the ankle. With almost every fascial line passing through the bottom of the foot, professionals worldwide can experience how integrated the foot and the ankle really are with the rest of the body.

In this article series we are going to take the concept of foot function and fascia further than any course or textbook on the market. This first article is dedicated to taking a closer look at how the fascial lines influence great toe range of motion.

Let's take the importance of fascia and foot function one step further and look at propulsion!

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Functional Fitness -

Boulder, CO

Two years ago I was invited to teach my introductory foot & ankle course at Functional Fitness USA, a fitness and wellness studion in Boulder, CO. Right away I knew this facility was special. Combining general fitness, rehab, massage and yoga, Functional Fitness is your one-stop shop to what Founder Sam lanetta calls "Fitness Longevity".

Founded in 1992 Sam wanted to created a facility that utilized his 20+ years of corrective exercise experience and develop an expert staff of trainers specializing in interesting cases.

"We train all ages, sizes, conditions and love what we do. EBFA training is a powerful tool for our over-sized



A WORD FROM





(continued from page 1)

tool box and our clients have been reaping the benefits of the advancements that they have made in Barefoot Training and it's connections to a whole body of wellness." Sam lanetta states. How do the members respond to the concept of working out Barefoot?

Our members and clients at Functional Fitness regarded us as experts and they have responded very well to working out barefoot. This is especially true when we detail out why and justify the movements with science and logic.

Some common statements by those clients training barefoot include: "that makes so much sense" and "I can immediately feel this not only in my feet but my legs butt and back too".

Sam adds, "Although some people don't love their feet for some reason they love the way the barefoot training makes them feel!"

Want to learn more about Functional Fitness USA in Boulder, CO?

Please visit <u>www.functionalfitnessusa.com</u>

EBFA Launches Barefoot Education in Australia!

Join EBFA Founder Dr Emily

October 4 - 5

as she launches EBFA's

from the ground up Education

in Sydney, Australia.

Goodlife Health Clubs 4/1 Martin Place Sydney, Australia 2000

For more information please email: education@ebfafitness.com

Propulsive Phase of Gait

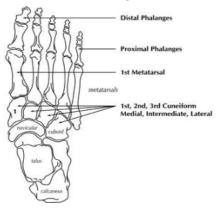


Whether we are walking, running or jumping – push-off or propulsion is characterized by dorsiflexion of our digits at the metatarsophalangeal joint (MPJ). The joint that takes a majority of the forces during push-off and is responsible for the release of elastic energy is the 1st MPJ.

As much as dorsiflexion of the 1st MPJ may seem like a simple biomechanical movement, it is actually quite complex – requiring timed control and activation of our fascial slings.

Let's take a closer look at the 1st MPJ.

The First Metatarsophalangeal Joint



The 1st MPJ is formed by the base of the proximal phalynx and the head of the 1st metatarsal. Sitting directly under the head of the 1st metatarsal and lying within the tendons of the flexor hallucis brevis are the sesamoids. Inserting on the medial aspect of the proximal phalynx is the abductor hallucis which is opposed laterally by the adductor hallucis.

As we begin to transition onto the forefoot and into propulsion, what dictates the range of motion of the 1st MPJ is first metatarsal position in the sagittal plane. The image below illustrates how an elevation of the first metatarsal in the sagittal plane can block the dorsiflexion or gliding the proximal phalynx over the head of the first metatarsal.



So what dictates the position of the first metatarsal in the sagittal plane thereby playing a role in 1st MPJ dorsiflexion at propulsion?

If you guessed the Spiral Line you are correct!

The Spiral Line - Expanded Version

In Thomas Myers' *Anatomy Trains* he describes the lower part of the Spiral Line as the tibialis anterior as it joins the peroneus longus at the level of the base of the 1st metatarsal.



Often referred by Myers as the "stirrup" of the foot, I want to expand upon this concept a little further and demonstrate how the Spiral Line plays a bigger role in propulsion than you may think!

The tibialis anterior muscle runs down the anterior aspect of the lower leg to insert on the medial aspect of the foot on the medial cuneiform (90%) and the base of the 1st metatarsal (10%). Joining plantarly is the

peroneus longus tendon which runs along the lateral aspect of the lower leg, behind the lateral malleolus and under the cuboid to insert on the base of the 1st metatarsal (90%) and medial cuneiform (10%).

With 90% of it's insertion on the base of the 1st metatarsal, the peroneus longus plays an important role in plantarflexion of the 1st metatarsal allowing dorsiflexion of the 1st MPJ during propulsion

So does this mean that for optimal propulsion and dorsiflexion of the 1st MPJ all we need to do is ensure proper activation of the peroneus longus muscle or the Spiral Line?

Unfortunately it isn't that easy! Proper activation of the Spiral Line is actually integrated with another fascial line – the Deep Frontal Line.

For the Deep Front Line again we return to Myers' *Anatomy Trains*.

In the plantar foot the Deep Front Line consists of the deep posterior leg compartment including the posterior tibialis, flexor hallucis longus and flexor digitorum longus. For the purpose of this article we are going to focus exclusively on the posterior tibialis.

Running posterior to the medial malleolus and along the medial aspect of the foot, the Posterior Tibialis inserts onto the navicular. After attaching to the navicular the Posterior Tibialis fans out and has 9 osseous and fascial attachments which includes:

- every tarsal bone (except the talus)
- every metatarsal (except the 1st)
- peroneus longus tendon
- flexor hallucis brevis muscle



This fascial attachment between the posterior tibialis and the peroneus longus joins the Deep Front Line to the Spiral Line allowing for more integrated foot biomechanics.

EMG studies have shown that the posterior tibiailis activates prior to the peroneus longus during the gait cycle which means this fascial integration between the PT and PL prepares the foot for propulsion.

With the posterior tibialis as a driver of subtalar joint supination or inversion just

prior to heel lift, a reflexive activation of the Spiral Line leads to stabilization of the 1st metatarsal by the peroneus longs – allowing for dorsiflexion of the 1st MPJ and propulsion.

Client & Athlete Application

When assessing optimal propulsion in our clients and athletes remember the function of the Spiral Line and Deep Front Line on 1st MPJ dorsiflexion. A limitation in 1st MPJ dorsiflexion or power at propulsion may be related to an impairment in posterior tibialis strength.

To optimize posterior tibialis strength in clients and athletes, integrate barefoot exercises, such as short foot, which picks up the navicular bone and stimulates the Deep Front Line. In addition, single leg exercises can be used the strength the posterior tibialis and it's co-activation patterns with the gluteus medius and maximus.

To learn more about about foot function and barefoot strengthening please visit:

www.ebfafitness.com

Are you barefoot strong?



Meet the Newest EBFA Master Instructors

EBFA Welcomes 10 Professionals to the EBFA Team



JOHN BAUER California **Certifications/Education:** BS Wellness and Fitness, PTA Global Advanced Trainer, PTA Global Board of Certification, NASM CPT, CES, PES, Vivobarefoot Coach, Rocktape FMT Level I & II, TP Therapy SMRT-CORE, Animal Flow Coach, VIPR certified



Certifications/Education: Core Pilates NYC-C, Balanced Body - Pilates, NASM-CPT, AFAA-Group, Zumba, willPower & Grace, Johnny G Spinning.



Certifications/Education: NASM-CPT. OPT for Seniors. ACE-CPT, TRX-C, Power Plate Master Trainer, Trigger Point Therapy Master Trainer, Silver Fit Instructor, AFAA Agua Fitness, Zumba Gold



Certifications/Education: MA - Media Arts, AFAA-Group, Zumba-Toning, Agua, Sentao, BARE®, R.I.P.P.E.D-C

AMBER BRIEN

AMIRA LAMB

New York



Certifications/Education: BS Exercise Science, NSCA-CPT, NASM-CPT, PES, IFT; ACE-CPT, Vivobarefoot Running Coach, Medical Exercise Specialist

DOUG JOACHIM

New York



New York Certifications/Education: BA Exercise Science & Business Management, EBFA Barefoot Rehab Specialist, NASM-CPT, Kettlebell Concepts, CHEK Institute HLC2, Melt Method, AFAA Group Exercise & AFAA Examiner



MIKE SALVATORE New York **Certifications/Education:** Certified Pilates Instructor -Romana's Pilates®, Level I Certified Student Instructor – Foundation Training, Certified Clinical Orthopedic Manual Therapist - The Art and Science of Kinesiology M.B.A., B.A., Neuropsychology



NARA YOON New York Certifications/Education: MS, DPT - Physical Therapy, Orthopedic Clinical Specialist (OCS), Schroth Scoliosis Therapist, Graston, TRX Sports Medicine, Kinesiotape, BASI Pilates, Pre and Post Natal Pilates, Kettlebell, **Animal Flow**



BRETT GROSSMAN Texas

Certifications/Education:BA in Philosophy, NASM-CPT, NASM-CES, NASM- PES, TRX, Power Plate - Master Instructor



STUART WAKEFIELD ONTARIO, CANADA

Certifications/Education:Kinesiologist-R, BS - Kinesiology, BTS-C

Upcoming Workshops

US & Canada

Sat. August 2, 11am - 5pm BARE® Workout Instructor Training -New York, NY

Crunch Fitness - 38th St 144 W 38th St New York, NY 10018

Sat. September 13, 10am - 5pm Barefoot Training Specialist® -Roseville, CA

Elite Athletics 10560 Industrial Avenue Roseville, CA 95678

Denver, CO

Sat. September 13, 10am - 4pm Barefoot Training Specialist® -

Project MOVE 4925 S. Santa Fe Drive #100, Littleton, CO 80120 (434) 942-0178

Sun. September 21, 11am - 2pm Barefoot Training for Power & Agility -Little Falls, NJ

Parabolic Performance and Rehab Floyd Hall Arena One Hall Drive, 28 Clove Rd, Little Falls, NJ 07242

Sat. September 27, 10am - 5pm BarefootRx® Rehab Specialist -Warwick, RI

Healthtrax Warwick 2191 Post Rd Warwick, RI 02886 Sun. September 28, 10am - 4pm
BARE® Workout Instructor Training Danvers, MA

KiKi Pilates 10 Elm Street Danvers, MA 01923

Sat. October 4, 10am - 5pm

Barefoot Training Specialist®
Dallas, TX

Location TBA

Sat. October 17, 9am - 5pm and Sun. October 18, 9am - 5pm

Foot to Core Sequencing / Gait Analysis - Denver, CO

Pilates Empowerment Summit Sheraton Denver Denver, CO

Sat. October 25, 9am - 4pm and Sun. October 26, 9am - 4pm

Movement from the Ground Up - Naperville, IL

mklab Pilates 20 W. Jefferson Naperville, IL 60564

Fri. November 7, 10am - 5pm and Sun. November 9, 10am - 5pm EBFA Master Instructor Training -San Mateo, CA

San Mateo Athletic Club 1700 W. Hillsdale Blvd San Mateo, CA 94402

International

Sat. Aug. 8, 9am - 5pm and Sun. Aug. 9, 9am - 5pm

Movement from the Ground Up - Buenos Aires, Argentina

Valpo Center Mitre 110 (6450) Pehuajo Buenos Aires, Argentina

Sat. Aug. 25, 9am - 5pm
Barefoot Training Specialist® Bangkok, Thailand

Fitness Innovations (Thailand) Limited 884, 886 Ploenchit Rd, Lumpini, Pathumwan Bangkok 10330, Thailand

Sun. Sept. 7, 9:30am - 5pm Barefoot Training Specialist® -New Delhi, India

Athena Fitness Sector 7, Dwarka New Delhi, India

Sun. Sept. 14, 9:30am - 5pm Barefoot Training Specialist® -Bangalore, India

Your Day Studio Wilson Gardens Bangalore, India

Sat. Oct. 4, 9am - 5pm and
Sun. Oct. 5, 9am - 5pm
Movement from the Ground Up Sydney, Australia
Location TBA

Barefoot Training Summit

Fitness | Performance | Rehab

Are you ready to take "barefoot" beyond running?

March 2015

Delhi, India

May 2015

Florida, USA

June 2015

Madrid, Spain



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G RESPONSE For

Footwear Science

BAREFOO

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