



GROW WITH EBFA™

October, 2015

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

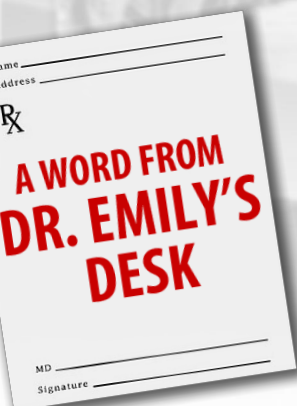
Hello Health & Fitness Professionals!

Welcome to another issue of GROW with EBFA where we strive to keep you current with the latest in barefoot science, live workshops and our featured professionals.

In this issue we celebrate the announcement of our 2016 Barefoot Training Summit dates. Next year we will be returning to India and the United States but will be expanding to Italy! We have many great presenters who will be returning to share their knowledge - as well as a couple new surprises. To learn more please visit www.barefoottrainingsummit.com

As always - stay barefoot strong!

Dr. Emily



Featured EBFA Master Instructor



Featured Article

Compartment Pressure | The Secret to Preventing Impact Injuries?

by Dr Emily Splichal, DPM, MS, CES



Upon hearing the words “compartment pressure” – what comes to mind?

A majority of us may think of exertional compartment syndrome in runners or possibly compressive garments.

Today's blog is going to explore how our body – particularly the foot and lower leg – uses compartment pressure to efficiently transfer

(continued on page 2)

Karl Sterling New York, USA

1. How did you first get involved with barefoot training? What attracted you to this training approach?

In the summer of 2014, at the suggestion of my friend Dr. Brent Brookbush, I reached out to Dr. Emily to ask if she would consider doing an interview for my podcast. Fortunately for me, she said yes and we met the following week for the interview.

We spent a total of one hour together, interviewing and talking. By the end of that hour, I knew it was absolutely imperative that I learn more about barefoot training. The information she shared with me was so compelling, I felt that

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if I didn't learn more, it would be a dis-service to my clients.

Two weeks later I took the EBFA Barefoot Rehab Specialist Course and immediately started implementing barefoot training with all of my clients and in my own workouts. Five months later, I completed the Barefoot Training Specialist Course. Within those five months, my clients were demonstrating very noticeable improvements in their stability, strength and mobility. This includes a client who has Parkinson's disease. His stability and movement are considerably better and when he trips, he no longer falls down.

2. Why did you want to become and EBFA Master Instructor?

The positive results experienced by my clients made me want to reach deeper and share barefoot training with as many people as possible. For this reason, I set my goals on becoming an EBFA Master Instructor and completed the program in Dubai in 2015. Being an EBFA Master Instructor is an amazing opportunity to educate other fitness professionals on the advantages of barefoot so they can implement this training with their clients and help them experience the benefits

3. What is your suggestion to those who are hesitant to start barefoot training out of fear of injury?

Fear of injury may prevent some trainers from learning more about barefoot training. My suggestion for them is to sign up for the Barefoot Training Specialist workshop as soon as you can. Discover the tremendous power and benefits of barefoot training. Take this information and implement into client workouts and watch them achieve higher levels of stability, strength, and mobility. Your clients will thank you!

To learn more about Karl Sterling, visit
<http://www.ebfafitness.com>



forces. After researching the concepts I am about to discuss with you, my approach to overuse injuries and my Podiatry practice as a whole has changed! It's as if I look at injuries through a different lens.

Foundational Concepts

Before we delve deeper into the concept of compartment pressure, we must first review a few key points which lay the foundation to impact and movement efficiency.

I decided to do it in a step-wise fashion to make it easier to understand.

Step 1 – Encounter Impact Forces

With every step we take our body encounters impact forces ranging from 1 – 1.5x our body weight (walking) to 3 – 4x our body weight (running)

These impact forces are designed to provide the kinetic energy to walk, run, dance etc.

Step 2 – Perception of Impact Forces



Our body perceives these impact forces as vibrations – vibrations which are initially detected through the skin on the bottom of the foot. All vibrations (like a tuning fork) is set to different frequencies with walking impact forces being 15 – 20 Hz)

Step 3 – Damp / Load Impact Forces

As impact forces enter the body our soft tissue (muscles) respond to stop or damp the entering

vibrations by contracting isometrically. The concept of loading through isometrics is a new concept so let me give you an analogy to better understand this.

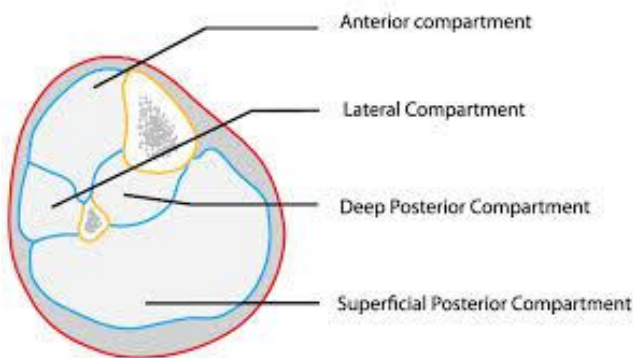
If you imagine a tuning fork vibrating upon impact it will vibrate at a certain frequency. To stop the vibrating tuning fork one must either touch it or put it against something. Putting pressure against the tuning fork is analogous to the isometric contractions of our lower leg upon impact.

Step 4 – Elastic Energy Stored in Fascia / Tendons

As the muscles contract isometrically the fascia and tendon fibers slide thus allowing the joint range of motion needed for ankle dorsiflexion and STJ eversion. As the joints flex elastic energy is being stored in the fascia and tendons.

As we shift from late midstance to push-off the fascia and tendons release this stored energy swinging the leg forward into swing phase.

So where does compartment pressure come in? And what even is a compartment?



A compartment is a group of muscles that are surrounded by a sleeve of fascia. Muscles within a specific compartment are often innervated by the same nerve and supplied with the same artery.

In our lower leg we have 4 compartments: anterior, lateral, superficial posterior and deep

posterior. In our foot we have 9 compartments!

As our muscles contract (especially isometrically) compartment pressure and stiffness begins to increase. The degree of pressure or stiffness is dependent on the rate at which the muscle fibers contract as well as the number of fibers recruited.

How does this affect the loading response?

Well all compartments respond to vibrations of different frequencies. Walking impact force frequency is 15 – 20 Hz which is also the frequency at which the lower leg muscles contract.

The goal upon foot contact – regardless of the movement – is to match the stiffness in the compartments to that of the incoming impact forces. Any delay in creating stiffness or compartment pressure can result in an increased risk of injury.

I've begun to look at overuse injuries – particularly running injuries – with this concept and a clear association exists between delayed or inadequate compartment pressure on foot contact.

How can you begin to apply this concept to prevent impact injuries?

1. Train the foot to detect impact forces faster and more accurately through barefoot training
2. Condition the lower leg and foot to better create stiffness and compartment pressure through barefoot landing techniques
3. Control training surfaces knowing that all surfaces vibrate differently with natural surfaces such as wood being the best
4. Utilize compression sleeves to assist in damping vibrations

To learn more about impact forces and preventing injuries, please visit

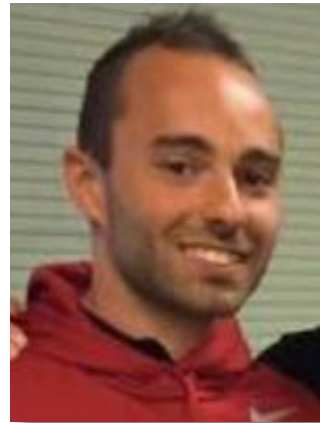
<http://www.ebfafitness.com/>

and check out one of our Certifications

Congratulations!
EBFA's Newest Master Instructors
Representing India, Italy, Kenya and the USA



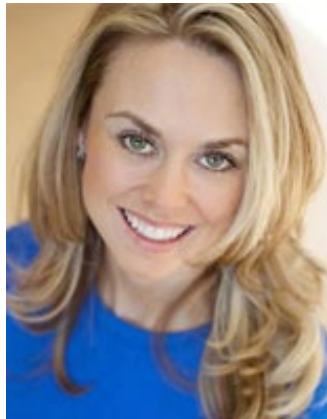
Radha Krishnaswamy - India



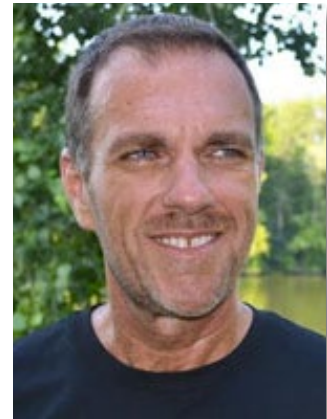
Stefano Baldini - Italy



Francis Xavier - Kenya



Dr Arianne Missmer - USA



Karl Sterling - USA

All EBFA MI's are qualified to conduct
Barefoot Training Specialist® Level 1 courses
and play an integral role in the growth of EBFA's Barefoot Education.

If you are interested in learning more about
EBFA's Master Instructor Program, please contact us at
education@ebfafitness.com

Upcoming Workshops

US & Canada

Sat. October 17, 9am - 4pm

**Barefoot Training Specialist® Level 1 -
Norcross, GA**

Greater Atlanta Christian School
Naik Athletic Training Center
1575 Indian Trail Road
Norcross, GA 30093

Sat. October 24, 10am - 5pm and

Sun. October 25, 10am - 5pm

**Barefoot Training Specialist® Level 2 -
Portland, OR**

Training Day PDX
5516 SE Foster Rd
Portland, OR 97206

Sat. October 31, 10am - 5pm and

Sun. November 1, 10am - 5pm

**Barefoot Training Specialist® Level 2 -
New York, NY**

Lucille Roberts
50 E 42nd St.
New York, NY 10027

Thurs. November 5, 10am - 5pm

**Foot Strike & Functional Movement -
Uncasville, CT**

NEHRSA/IHRSA
Fall Conference
Mohegan Sun
Uncasville, CT

Sat. November 7, 10am - 5pm

**Barefoot Training Specialist® Level 1 -
Baldwinsville, NY**

Willow Health and Wellness Center
3090 Belgium Rd.
Baldwinsville, NY 13027

Sun. November 15, 10am - 5pm

**Barefoot Training Specialist® Level 1 -
Palm Beach, FL**

D1 Fitness
4215 Burns Road
Palm Beach Gardens, FL 33410

Sun. November 15, 10am - 5pm

**Barefoot Training Specialist® Level 1 -
Chicago, IL**

School of Holistic Massage & Reflexology
515 Ogden Ave., Suite 300
Downer's Grove, IL

Sun. November 15, 9am - 4pm

**Barefoot Training Specialist® Level 1 -
San Mateo, CA**

San Mateo Athletic Club
1700 W. Hillsdale Boulevard
San Mateo, CA

Sat. November 21, 10am - 5pm

**Barefoot Training Specialist® Level 1 -
Charlottesville, VA**

Rainmaker Fitness
609 East Market St Suite 211
Charlottesville, VA 22902

International

Sat. October 17, 10:00am - 6:00pm

**Barefoot Training Specialist® Level 1 -
Rome, Italy**

Maximo Sport & Fitness
Via di Cassal
Boccone, 283
00137 Rome, Italy

Sat. October 24, 9am - 5pm and

Sun. October 25, 9am - 5pm

**Barefoot Training Specialist® Level 1 & 2 -
Fukuoka, Japan**

Location TBA
Fukuoka, Japan

Sat. November 21, 9am - 5pm and

Sun. November 22, 9am - 5pm

**Movement from the Ground Up -
Lisbon, Portugal**

Location TBA
Lisbon, Portugal

Sat. November 21, 9am - 5pm and

Sun. November 22, 9am - 5pm

**Movement from the Ground Up -
Zarautz, Spain**

Location TBA
Zarautz, Spain

Sat. November 28, 9am - 5pm and

Sun. November 29, 9am - 5pm

**Movement from the Ground Up -
Lisbon, Portugal**

Location TBA
Lisbon, Portugal

Sun. December 13, 10am - 5pm

**Barefoot Training Specialist® Level 1 -
Malaysia**

Fitness Innovations Malaysia
BHD No. 2-8, 2nd Floor
D19 Business Centre, Jalan PJU 8/3
Petaling Jaya 47820 Malaysia

Sat. December 19, 9am - 5pm and

Sun. December 20, 9am - 5pm

**Movement from the Ground Up -
Valencia, Spain**

Location TBA
Valencia, Spain

Fri. January 8, 10am - 5pm

**Barefoot Training Specialist® Level 1 -
Mumbai, India**

Location TBA,
Mumbai, India

Tues. September 8, 9am - 5pm and

Wed. September 9, 9am - 5pm

**Movement from the Ground Up -
Dubai, U.A.E.**

Pilates Academy Dubai
Jumeirah Bay X2 Tower, Suite 4201
JLT, Cluster X
Dubai, UAE



MOVE. LEARN. FEEL.
Be Human.

SAVE THE DATE!

Barefoot Training Summit

Asia Summit

March 5 - 6, 2016
Mumbai, India

USA West Coast Summit

April 2 - 3, 2016
California, USA

USA East Coast Summit

September 10 - 11, 2016
New York, USA

Europe Summit

September 23 - 24, 2016
Rome, Italy

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Leaders in Barefoot Fitness