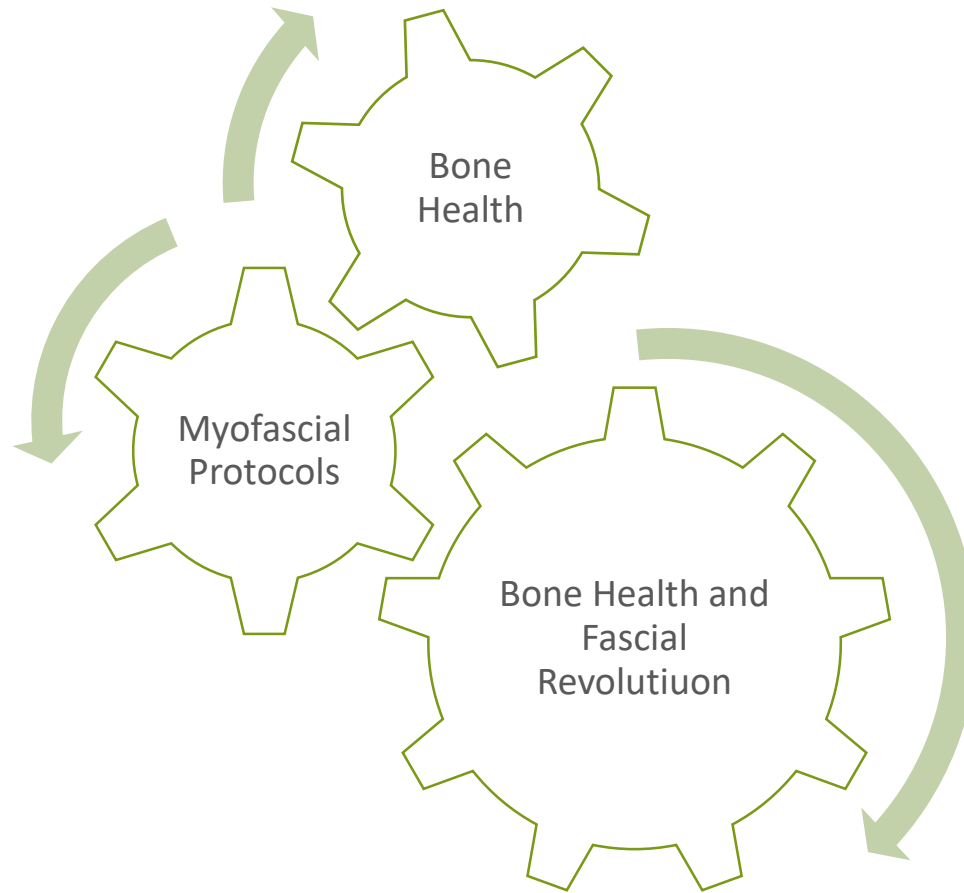




BONE AND MYOFASCIAL TISSUE HEALTH
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TECHNIQUES FOR BONE AND SOFT TISSUE HEALTH

BONE HEALTH INFORMATION



BONE HEALTH AND FITNESS

- BUILDING STRONG BONES BEGINS IN CHILDHOOD. BEST TIME TO BUILD BONE DENSITY IS DURING YEARS OF RAPID GROWTH.
- YOU DEVELOP BONE THAT LASTS A LIFETIME WHEN YOU ARE BETWEEN THE AGES OF 10-18 YEARS OF AGE.
- WEIGHTBEARING EXERCISE DURING THOSE YEARS ARE ESSENTIAL TO REACH MAXIMUM BONE STRENGTH. AT LEAST 3-4 DAYS PER WEEK, A TEEN'S PHYSICAL ACTIVITY SHOULD INCLUDE 20-30 MINUTES OF WEIGHTBEARING EXERCISE.
- IN THE ELDERLY POPULATION, PHYSICAL ACTIVITY NO LONGER INCREASES BONE MASS, BUT IT CAN SLOW BONE LOSS, MAINTAIN MUSCLE MASS TO PRESERVE AND STRENGTHEN SURROUNDING BONE, AND DECREASE THE RISK OF FALLING.

BONE HEALTH CONTINUED

- Falls result in fractures, with long term consequences that may and could include permanent disability. Most common in elderly is wrist, spine, hip./
- Balance training is crucial to maintain muscle and bone health. Balance training has been shown to decrease falls by 47% and reduce the risk of hip fractures by approximately 25%.
- Loss of body weight has tendencies to lose bone as well. Having lower body weight at any age puts the patient at greater risk for bone problems and fractures.
- Sports and exercise are very healthy activities for all ages/women/men. However, female athletes who focus on being thin/lightweight or eat too little/exercise too much result in long-term health problems and severe bone damage.
- Young women who exercise excessively who lose too much weight lose estrogen (the hormone that is necessary for bone rebuilding) can cause bone loss at a time when young women should be adding to their peak bone mass.

BONE HEALTH/SOFT TISSUE HEALTH CONTINUED

- Eating disorders lead to bone loss as well. Anorexia/bulimia/stomach surgeries/weighty loss surgeries/Crohns disease/celiac disease.
- Medications lead to bone loss – some include long term corticosteroids/prednisone/cortisone/dexamethasone/Dilantin.
- Tobacco usage/alcohol usage/gender/BMI of 19 or less means less bone mass to draw from/race and family history (increased risk for white and Asian women)/hormone levels.

WHAT CAN WE DO TO MAINTAIN BONE HEALTH?

- EXERCISE!!!!!! Weight bearing exercise is key! It is so important for building strong bones when we are younger, and essential for maintaining bone strength when we are older. Exercise works on bones much like it works on muscle – by making them stronger. Bone is a living tissue, it changes in response to the forces placed upon it. When you exercise regularly, your bone adapts by building more cells and becoming more dense. Another benefit of exercise is that it improves balance and coordination.
- Examples of weightbearing exercise is walking/running/hiking/dancing/jumping rope/tennis/team sports/stairclimbing/bicycling.
- Strength training activities and resistance is added to movement in order to make muscles work harder, becoming stronger. These exercises focus on increasing muscle mass, however, they also put stress on bones and have bone building capacities.

MAINTAINING BONE HEALTH (CONTINUED)

- Non-impact exercises such as yoga and tai chi are not as effective as strengthening bone, but provide significant flexibility and balance training benefits. Non-weightbearing exercises, such as swimming and cycling, do not increase bone mass, but are excellent choices to strengthen heart and lungs.
- Effective exercise programs for bone health should include 30 minutes of weightbearing activity – 4 days or more a week/strength training at least 2 times per week focusing on the major muscle groups/flexibility and balance training should also be incorporated into your regime as well.
- Dietary requirements should include 1,000/mg calcium daily which could include a vitamin supplement/almonds/dairy/broccoli/kale/canned salmon/sardines/soy.
- Attention should be paid to vitamin D as it absorbs calcium – recommended daily is 600 IU – supplements/oily fish/salmon/trout/white fish/tuna/mushrooms/eggs/fortified milk, orange juice/cereals/sunlight.

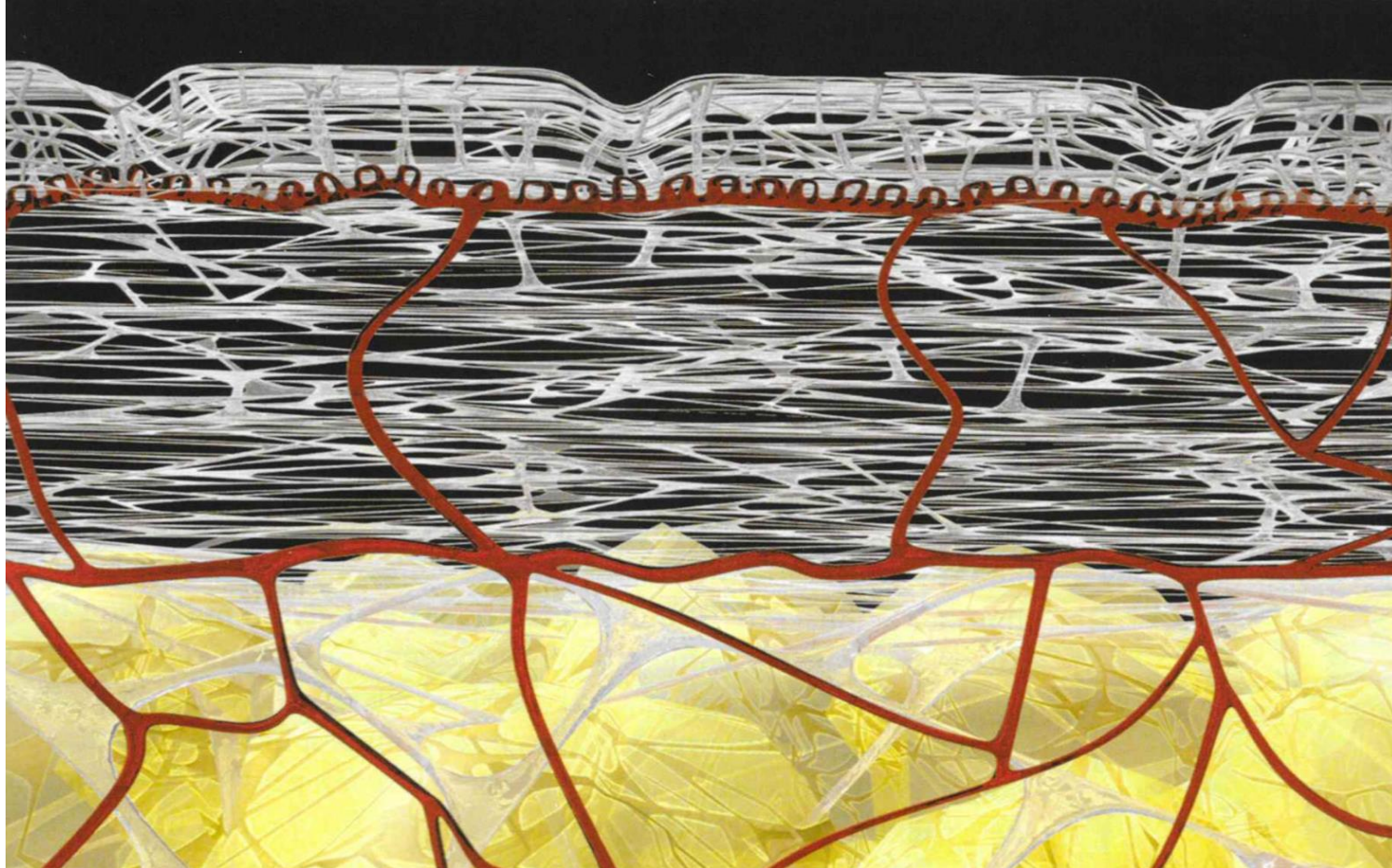
HOW DO WE TIE BONE HEALTH INTO MUSCLE HEALTH?

- ✓ Why muscle health?
 - ✓ What is Fascia?
 - ✓ What are the every day challenges?
 - ✓ Soft Tissue problems
 - ✓ Rehabilitation Perspective | Injury | Maintenance
- Becoming conscious of repetitive/overuse scenarios during work/life balance.*

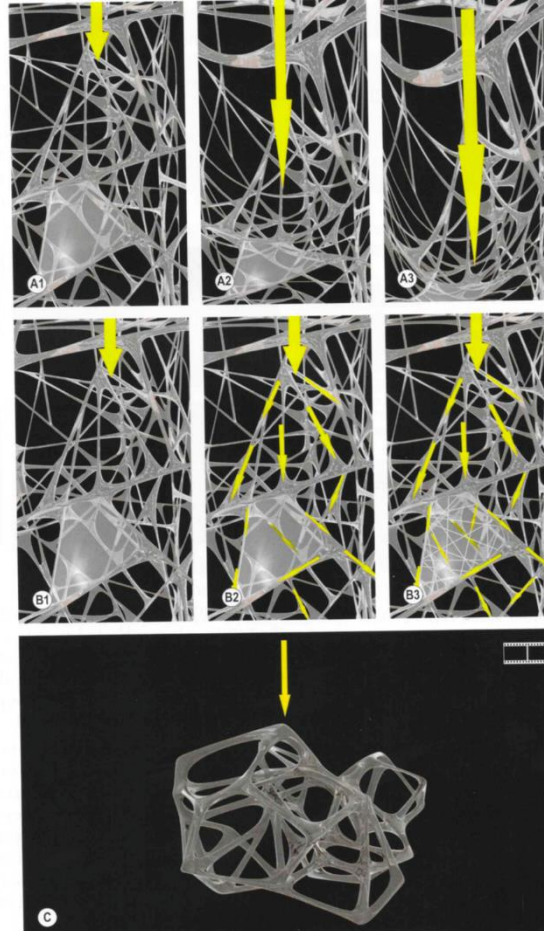
VARYING SKIN PATTERNS



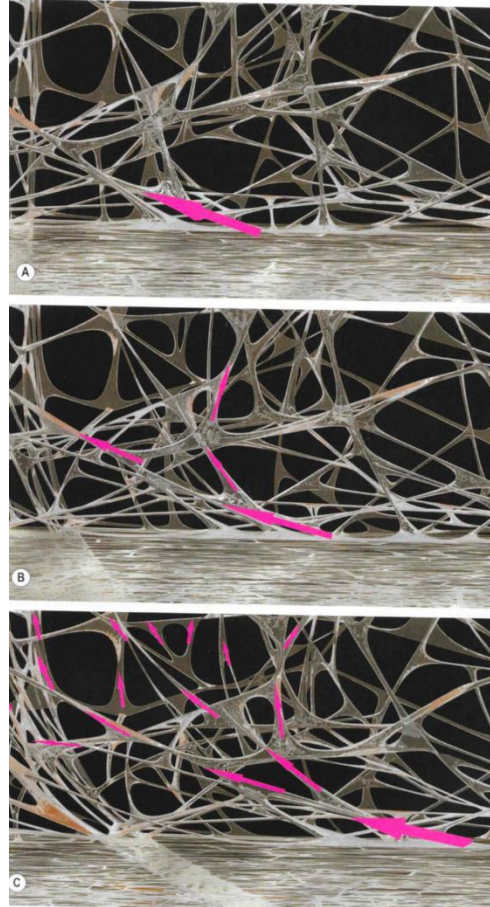
ARCHITECTURAL STRUCTURE



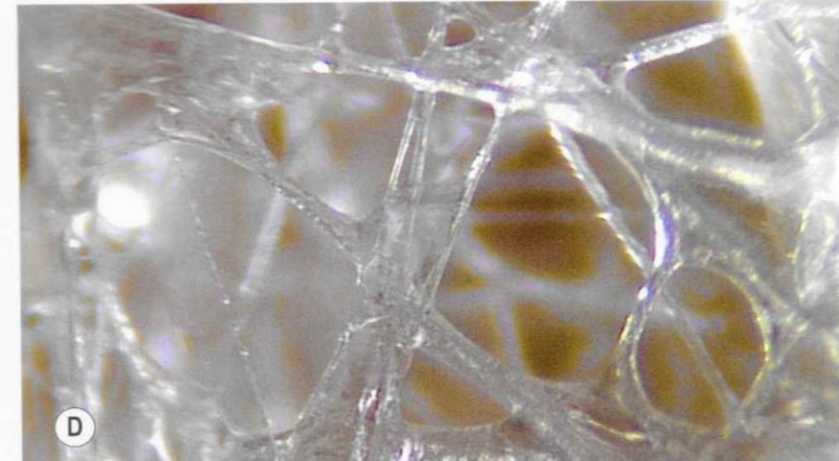
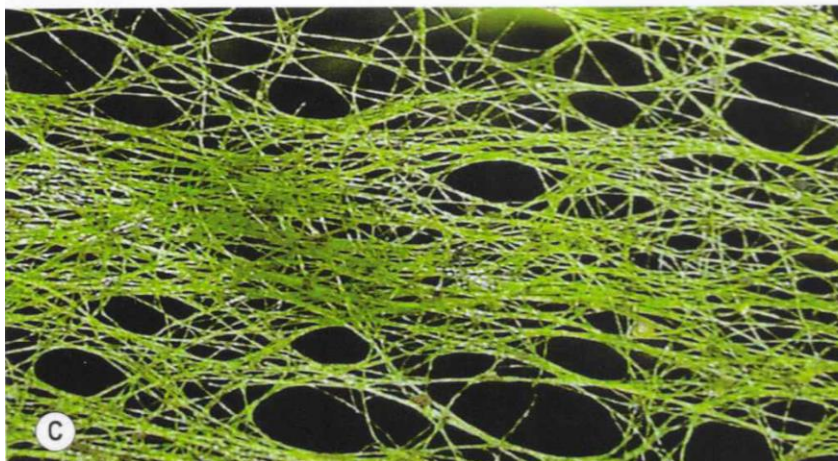
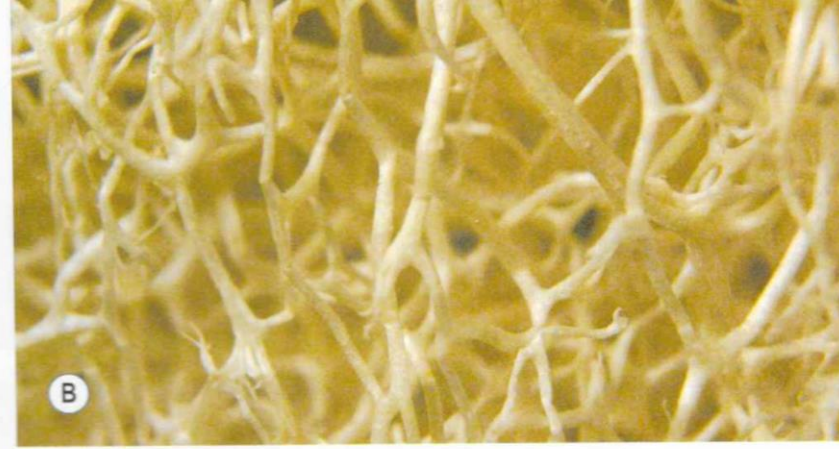
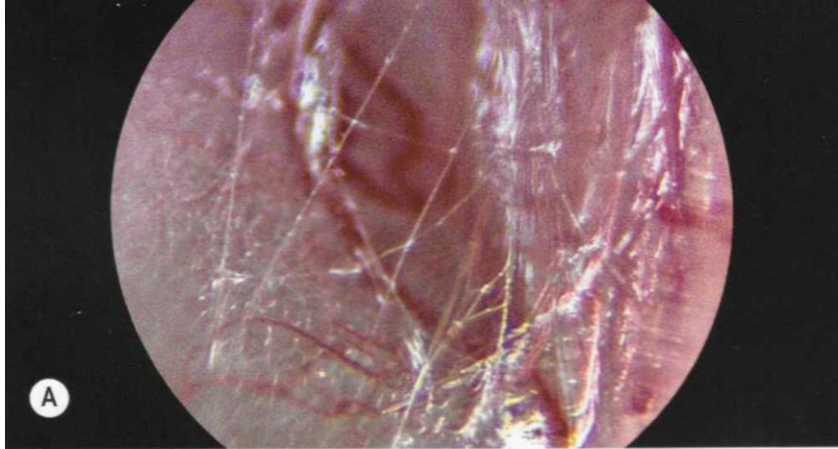
EXTERNAL FORCE ON TISSUE



INTERNAL FORCE STRUCTURE



CHAOTIC TISSUE BEHAVIOR IN NATURE



TECHNIQUE 1 – MYOFASCIAL KNEADING

- NO LOTION!
- Short in duration – bring blood to surface of skin, two to five minutes.
- Check restriction in joint ROM with PROM/AROM – site specific.
- Interactive, consistently check in.
- Grasp tissue – push/pull like manually kneading bread.
- Goal is to separate fascia from muscle/break up scar tissue/fascial adhesions/trigger points and depth of fascial layers.
- 360 degrees around the body, don't stay in one spot.

2. MYOFASCIAL COMPRESSION WITH A TWIST

- SITE SPECIFIC – utilized after Myofascial kneading to “peel” off additional layers of fascial collapse/binding.
- Duration – two to five minutes.
- One hand puts tissue on stretch while the other hand utilizes compression with either thumbs/knuckles/forearm/elbow and twists in a circular direction (either clockwise or counterclockwise) to proceed deeper into fascial collapse and/or disorganization.
- Increases blood supply, increases ROM and decreases pain.

THE WHY | THE WHAT | THE HOW OF SPORTS MASSAGE

✓ ***The Why***

- ✓ Repetitive/overuse scenarios are preventable!
- ✓ Old techniques meet NEW

✓ ***The What***

- ✓ Bone and Muscle Health= Massage-Fascial Revolution
- ✓ The 21st century

✓ ***The How***

Primary effects based on 25 years in professional industry and research in field.

INTO ACTION & Q&A

- Email: Hendryathleticmyotherapy@gmail.com
 - To Receive information on bone and fascial health – email us!
 - Recruiting repetitive/overuse solutions to all organizations.
- **Hendry Athletic Myotherapy – Proven Techniques!**

Join Bone Health & Fascial Revolution!

THANK YOU!