Rage Against the Machines

Mariejo Pasion
Sports Performance

Training Fundamentals

- Training should focus on:
  - ✓ balance and alignment
  - ✓ functional training
  - ✓ progressions for exercises
- Fundamental movements:
  - ✓ Running
  - ✓ Jumping
  - ✓ Crawling (push)
  - ✓ Climbing (pull)

Retraining Nervous System & Neuromuscular patterns

1st Training Pillar: Balance & Alignment

- Eischens Yoga (EYE-shens)
- Based on Roger Eischens (derived from Iyenger Yoga)
- Activating all muscles during poses (no static stretching)
- Basis and root of all exercises and movement
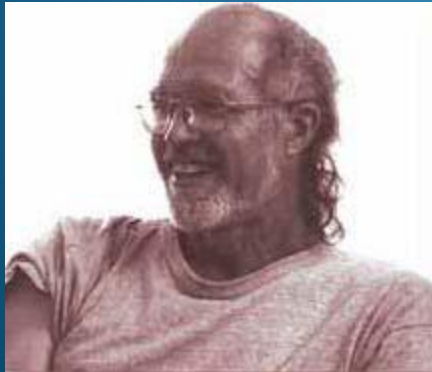
1st Training Pillar: Balance & Alignment

Eischens Yoga (aka High Energy Yoga)

• Activating all muscles during poses (no static stretching)

• Basis and root of all exercises and movement

• Retrains the nervous system

• Balances and energizes the body

• Wakes up parts of the body that are "asleep", inactive, or under-activated.

1st Training Pillar: Balance & Alignment

Eischens Yoga (aka High Energy Yoga)

Poses are held with muscles in activation. Without muscle activation, poses become static stretching.

1st Training Pillar: Balance & Alignment

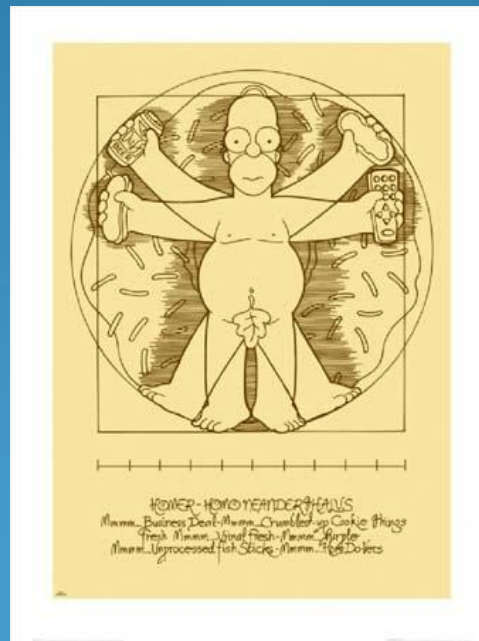Eischens Yoga (aka High Energy Yoga)

Muscle Activation can

- ✓ Aid recovery between meets and training sessions
- ✓ Create joint stability for more range of motion and strength
- ✓ Address compensations in movement that inhibit performance and predispose you to injury

1ˢᵗ Training Pillar:
Balance & Alignment

Eischens Yoga (aka High Energy Yoga)
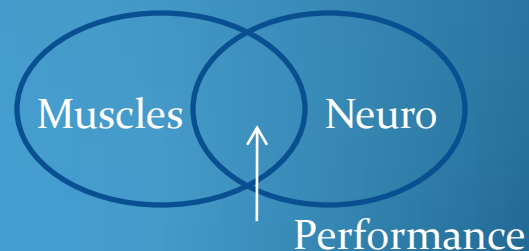
"Extend and Expand"

1ˢᵗ Training Pillar: Balance & Alignment

Eischens Yoga (aka High Energy Yoga)

Training enhances the working relationship between the muscles and neurological system.

Muscles   Neuro

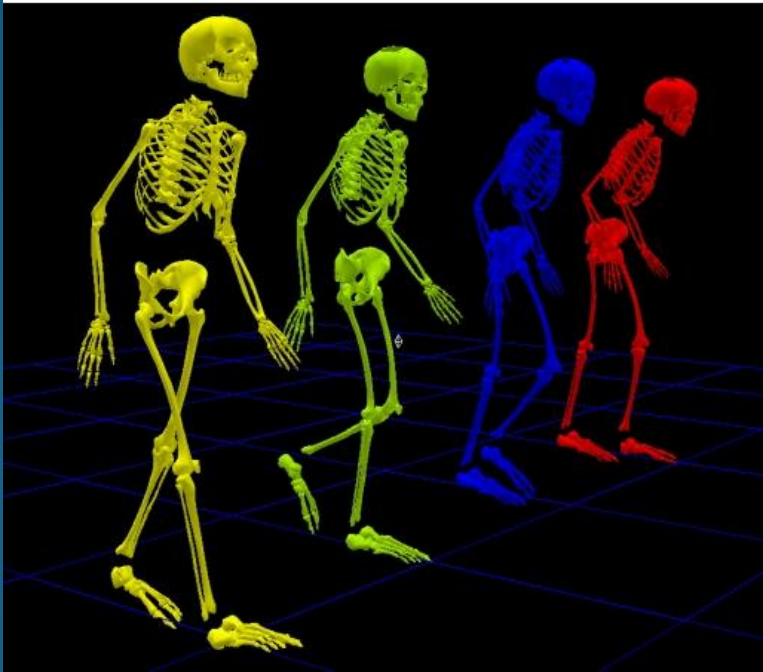Performance

2nd Training Pillar: Type of Contraction

3 Kinds:

1. Eccentric (Lengthening)
2. Concentric (Shortening)
3. Isometric (Stabilizers)

Eischens Yoga helps connect and develop all 3.

3rd Training Pillar: Coordination

Coordination

The athlete's ability to coordinate the timing of contraction of all the muscles involved in the movement.
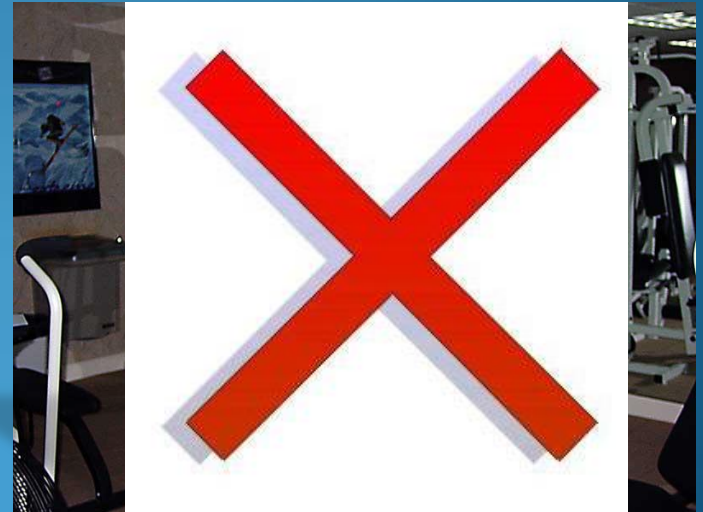
3rd Training Pillar: Coordination

For most sports, the entire body must be coordinated to successfully perform the movement.
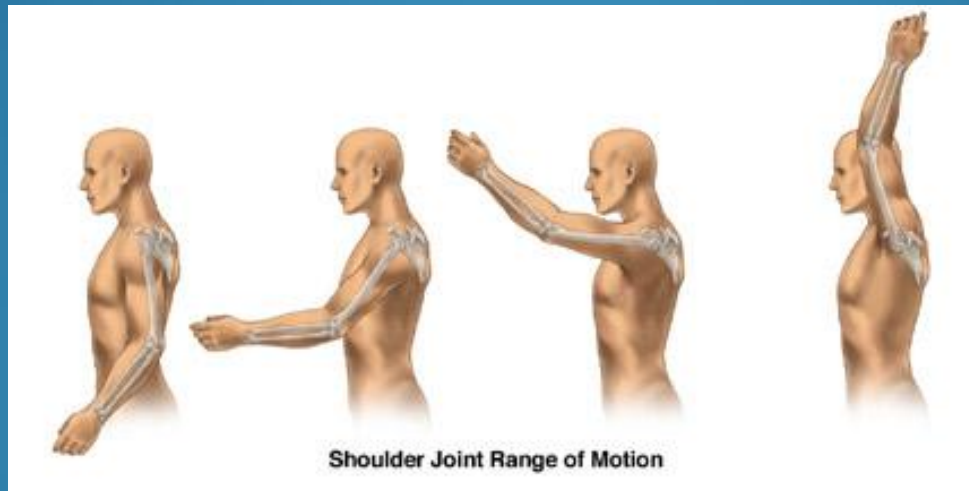
Isolated strength training is not the most effective way of increasing functional ability...

...lack of coordination training involved in isolated exercises.

4th Training Pillar: Range of Motion

Gains in muscle strength are greatest in the range of motion (ROM) through which the exercise is performed.

Shoulder Joint Range of Motion

4th Training Pillar: Range of Motion

For strength gains to transfer to another movement, the training must include a range of motion equal to or greater than the goal ROM.

5th Training Pillar: Speed of Movement

Strength will transfer best to movements that are performed at the same speed as that at which the strength was gained.

Train slow = run, swim, perform slow

SSU to DUL

S- Static   D- Dynamic

S- Stable   U- Unstable

U- Unloaded   L- Loaded

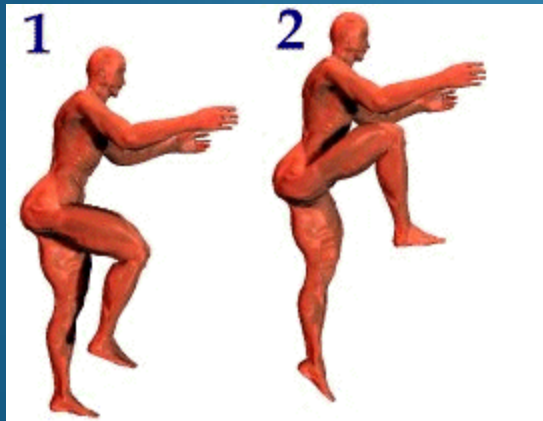# Strength, Stability, Alignment

Running

Leg Curl

Supine Bridge (alternating)

Strength, Stability, Alignment

Jumping and 1 - 2 step approach

Squat

Wide leg forward flexion to Chair pose

Strength, Stability, Alignment

Climbing (↑ ⟶)
"pulling"

Chin-up

90 degrees

60 degrees

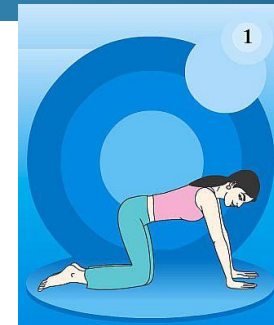Supine Bridge

Strength, Stability, Alignment

Crawling (↑ ⟶)
"pushing"

Push-up
Handstand

Kneeling Table
into Incline Plane

1

Transfer to Swimming?

YES!!!

✓ Better athletes = better swimmers
✓ More core stability
✓ Enhanced coordination of movements
✓ Recruitment of more muscle groups
✓ Injury Prevention
✓Progressions!

Transfer to Swimming?

YES!!!

✓Running and Jumping directly relates to starts and turns.

✓Crawling and Climbing directly relate to all 4 strokes

Why this type of training?

- ✓ Activation & Alignment
- ✓ Cost effective

- ✓ Space Limitations?

- ✓ Directly correlates

- ✓ Progressions

Challenges 🙁   Solutions 🙂

✓ Communication   ✓ Education

✓ Implementation   ✓ Demonstration

✓ Buy in   ✓ Experience

✓ Age appropriate?   ✓ All levels

Points

- ✓ Hardly any mention of core...but

- ✓ Static stretching is useless and harmful...

- ✓ Everything done in bare feet except...

- ✓ Nutrition, a big component...

- ✓ Olympic lifts...

Practical Demo

1. Go through Yoga Series

2. Go through activation of standing mountain, front warrior, incline plane, supine bridge

3. Go through progression of pull-up, push-up, jumping, running (invisible jumping rope to leg-curl)