

# YOGA AND ATHLETES



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# WHAT PEOPLE OFTEN THINK WHEN THEY HEAR “YOGA”



OR



yoga postures  
mark giubarelli

# Yoga

Yoke

Union

Unification of mind and body



# Why Yoga as part of sport training

Several pro athletes are turning to yoga

- Shaquille O'Neal and LeBron James
- Ray Lewis: linebacker Baltimore
- Victor Cruz: Wide receiver for NY Giants
- Mike Krzyzewski: BB Coach
- New Zealand All Blacks Rugby Team
- Kevin Garnett forward Boston Celtics

- Vernon Davis tight end for the 49ers
- Kevin Love forward for Minnesota Timberwolves
- Evan Longoria 3<sup>rd</sup> baseman Tampa Bay states

“To be strong in general doesn’t necessarily mean you are going to be strong from a baseball stand point .....When you’re hitting you want to be as stable as you can and use the 3-D aspect that yoga provides.”

## ATHLETES CLOSER TO HOME INCLUDE

- Packers players <sup>4</sup>

Terrell Owens

Aaron Rogers

Randall Cobb

- Kareem Abdul Jabbar: <sup>2</sup>

states that a regular practice of yoga is what kept him in the game for so long



Blake Griffin power forward for the LA Clippers, “  
for me the mental part is just as big as the physical  
part. 2

My biggest problem is being tight: quad,  
hamstrings, hip flexors, calves,. Once things get  
tight they lock down and my back starts to hurt  
my knees hurt. So keeping everything loose  
helps keep me functioning at my highest level. 2

# Kent Katicich: Yoga instructor for the NBA

2

- “the body awareness and body mindfulness
- improve the athletes awareness of their limitations and strengths
  - prolong their professional careers



## CHALLENGES COACHES ADDRESS WITH ATHLETES

- Anxiety with competition
- Decrease focus
- Physical injury
  - Shoulder
  - Ankle
  - Spine: low back, neck
  - Hip, knee

# WHAT YOGA CAN DO/ HEALTH BENEFITS

## 1. INCREASED MUSCLE POWER

- Improve muscle function:

- balance or symmetry

--decrease compensatory patterns

- Improve flexibility

----improve muscle play, ability of muscles to slide over and against each other

ie: swimmers on block

- Improve ROM

- Increased efficiency through improved alignment, muscle in better position to recruit muscle fibers

# BENEFITS CONTINUED

## 2. IMPROVED MUSCLE FUNCTION/ ENDURANCE:

- with strong focus on breath improve breathing pattern
- increase focus on exhale
- decrease in fatigue
- opening postures increase respiratory capacity
- increase circulation, digestion

## BENEFITS

Study assessing short term yoga practice on Pulmonary Function 9

-improve in FVC: force vital capacity

FEV: forced expiratory volume

MVV: maximal voluntary ventilation

PEFR: peak expiratory flow rate

# BENEFITS

- Yoga postures (asana) reap these benefits
  - isometric contraction of skeletal muscle
  - increase strength of diaphragm with forced exhale due to increase excursion of the diaphragm-> efficiency
  - increase lung inflation stimulates surfactant into Alveolar spaces-> increase lung compliance
- stretch collagen and elastin
- stimulate release of prostaglandins decrease tone of smooth muscles in bronchioles
- result in increase calm, decrease stress, decrease Bronchorestrictions

# BENEFITS

## 3. MENTAL TOUGHNESS

- Emphasis on connection of the body and mind
- Meditation
- Holding poses
- At higher skill levels, distinguishing factor is the mind
- Shown to decrease salivary levels of cortisol. Blood glucose, nor-epi and epinephrine, stress induced HTN
- Relate to benefits of mental preparation for high-level competition

## BENEFITS

### 4. CONTROL/ BALANCE/ PROPRIOCEPTION

- Focus on control and quality of movement
- Increase awareness with analysis of form decreasing compensation and injury
- Increase neurological connections brain and muscle more efficient motor programs
- Improve stability

# BENEFITS

## 5. ACTIVE RECOVERY AND MUSCLE REPAIR

- On lighter practice days incorporate yoga practice
- Improve blood flow to recovery musculature.
- Improved body mechanics and awareness lead to prolong competition longevity 5-8



## WHAT YOGA CANNOT DO FOR YOU

- It does not alter aerobic capacity
- Even with power flow yoga where asanas/ poses are performed rapidly the minimal aerobic requirements are not met

# RISK FACTORS FOR YOGA

- Just like all other forms of exercise, physical exam prior to initiating exercise is recommended especially for 50 and older and those with health concerns
- Each asana/ pose has precautions/ contraindications
- Overall stay away from any extreme neck, cervical positioning.
- Caution is advised with prolong positioning, HTN, glaucoma
- If it hurts don't do it

# PRANAYAMA = BREATH WORK

- One of the eight limbs of yoga
- Breath work
- Part of yoga's power: control of breath
- Integrating breath with movement
- Equalizing inhalation and exhalation
- Full commitment exhale

# ATHLETIC POSITIONS AND ASANAS

Great for improving flexibility of hips, spine, and shoulders : lower risk muscle strain



Stretch/ open shoulders



Stretch hamstrings and calves



Yoga takes the body through sequences of positions, each repetition moving further into the pose





Stretch/ open hip flexors and quads

Prolong holds of a pose improve strength and stability



Improve focus by holding poses while focusing on your breath





Improve balance, focus, and awareness  
of your body's position relative to  
environment



## YOGA FOR ATHLETES

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