



Yoga Inversions: The Fountain of Youth

Darryl Olive, MBA, MHA, CSCS, E-RYT 500

Agenda

- General Benefits/Risks
- Posture ABCs
 - Alignment
 - Benefits
 - Contraindications/modifications

What is an inversion?

- Yoga Definition:
 - Upside down (head below the level of heart)
 - Lower extremities are perpendicular to the floor, the torso at a 45-60 degree angle from the floor

Case Study: Peter

- A year ago, the morning after carrying his bouncing 2-year-old boy on his shoulders, Peter woke up and discovered he couldn't move his head. The pain in his neck and shooting down his left arm was so intense that he could not lie on his back, sit upright, or focus enough to drive a car. Diagnosed with cervical radiculitis at C5, C6, and possibly C7, Peter missed work, numbed himself with muscle relaxants, and kept his neck trussed up in a brace for two weeks. He discovered that the pose that gave him greatest relief was Uttanasana. For months, his practice was gentle and low-to-the-ground: hip-openers, forward bends, and restorative work. Five months later, the skin of his left elbow was still numb and the first fingers on his left hand occasionally tingled.
- The irony of his injury wasn't lost on him. Forty-one years old at the time, Peter had been practicing yoga for 13 years. Though he knew he was getting older, Peter had always been "good" at yoga, handling advanced poses with aplomb, competing with his peers for the teacher's compliments.



A Comparison

Western Yoga Today

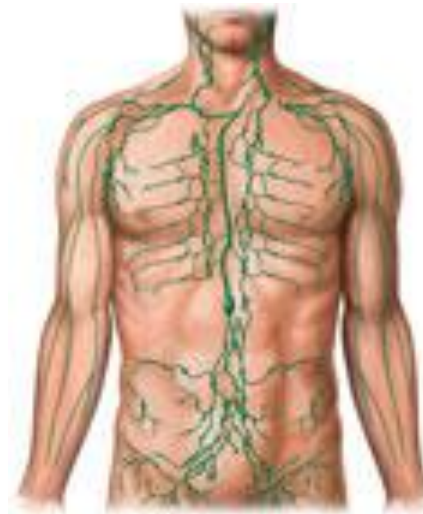
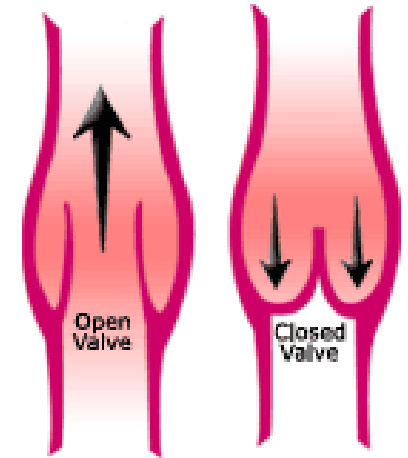
- Students drop in, inconsistent practices
- Teacher led and personal practices
- Competitive environments, time and goal oriented

Ancient Yogis

- Practices daily, sometimes for hours
- Ascetic practice with self-experimentation/gurus
- Belief that immortality/super human powers was held in the 7th chakra

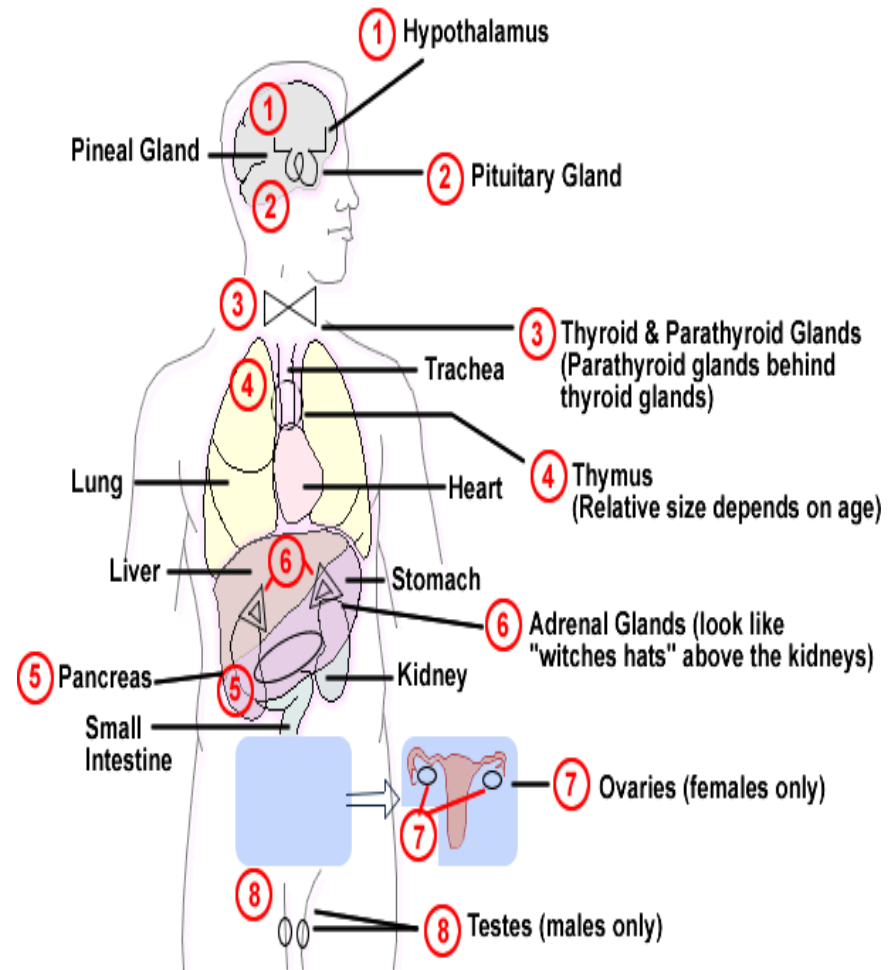
Generic Benefits

- 1. Cardiovascular:**
Increase blood volume to heart and brain, helps with venous return
- 2. Lymphatic system:**
drainage



Benefits

3. **Nervous:** Increases neurotransmitters, cerebrospinal fluid
4. **Endocrine:** Increased circulation
5. **Musculoskeletal:** Reduce muscle pain/spasms in lumbar spine, strength, flexibility, alignment
6. **Psychosocial:**
 - Approach fears and things we avoid
 - Build self-esteem



Pre-Requisites

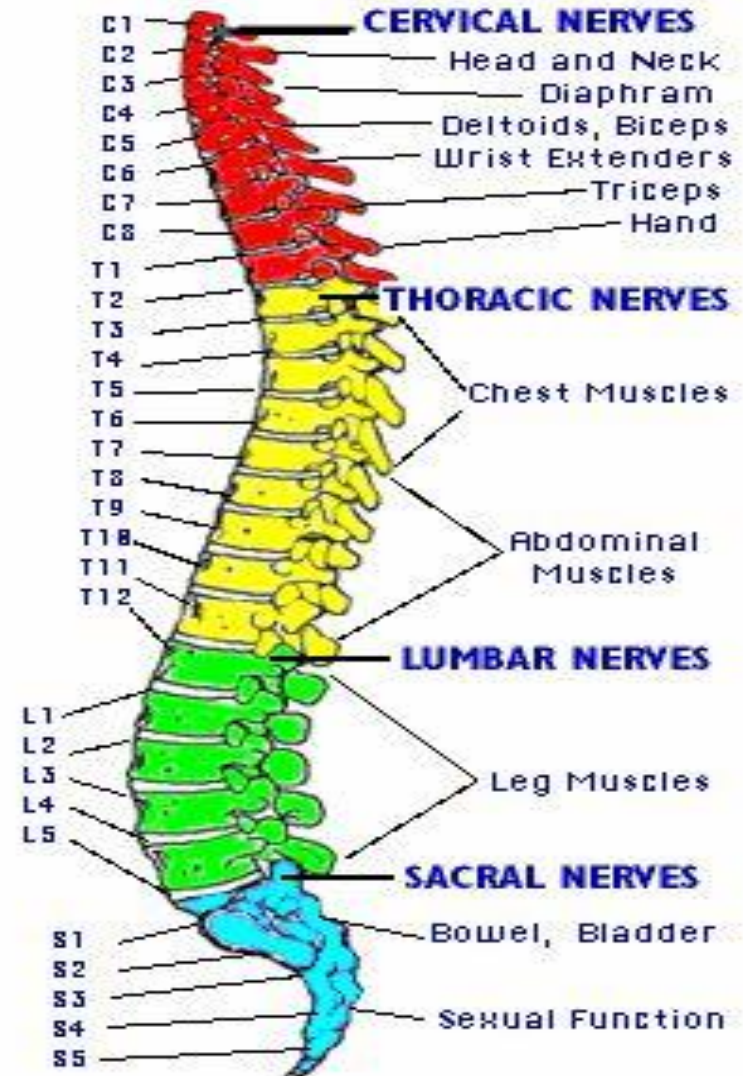
- Body awareness in multiple orientations
- Strength (core, arms/shoulders, etc)
- Flexibility
- Warm-up
- Previous yoga practice for strenuous inversions

Pre-Cautions

- High blood pressure
- Heart disease
- Glaucoma, detached retinas and other problems
- Pregnancy
- Osteoporosis
- Neck/shoulder injuries
- Excessive weight (obesity)

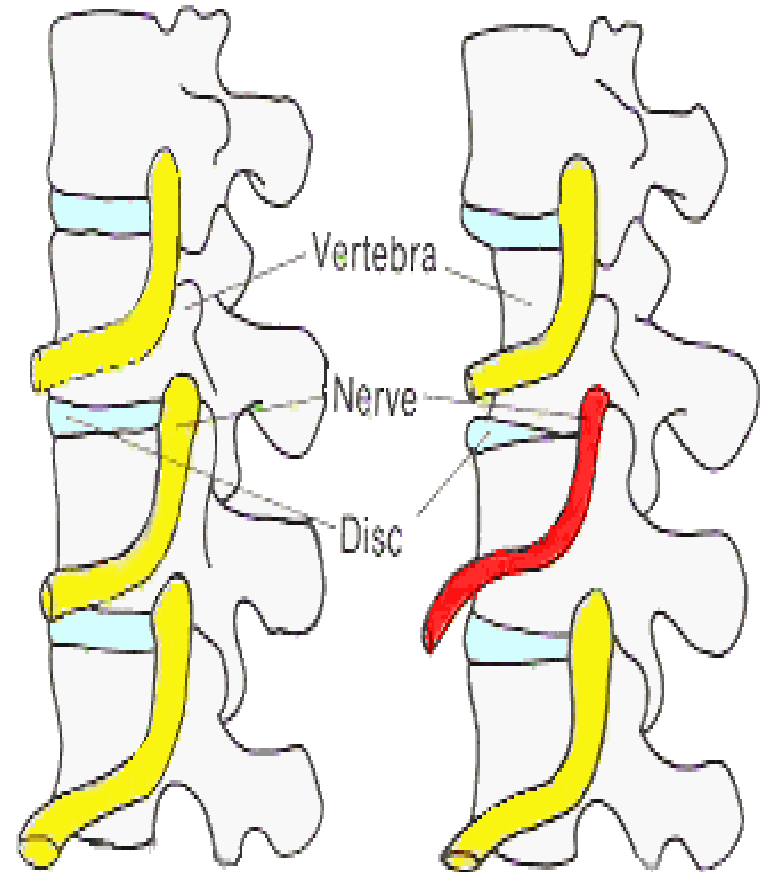
The Spine

- Spine has natural curves, the goal is to maintain them
- With time all curves can increase
 - Rounded shoulders (thoracic)
 - Slumped head (cervical)
 - Abdominal weight gain (lumbar)



Spine

- Breathing is linked to spinal shape
 - Inhale: Flatten thoracic spine
 - Exhale: Flatten the lumbar spine
- Nervous flow is linked to the spinal shape



Tips

- Start with modifications of strenuous inversions
- Warm-up
- Use blankets to support the cervical spine in Shoulder stand and plough
- Don't be time oriented with the postures, avoid inversions longer than 3-5 min.
- Attend class regularly
- Wait ample time before beginning strenuous inversions
- Read the cultural texts of yoga to understand the deep dimensions and reason of practice (enlightenment)
- Practice ahimsa (non-harming) and svadhyaya (self-study/contemplation)
- Allow your practice to change over time, or daily as needed

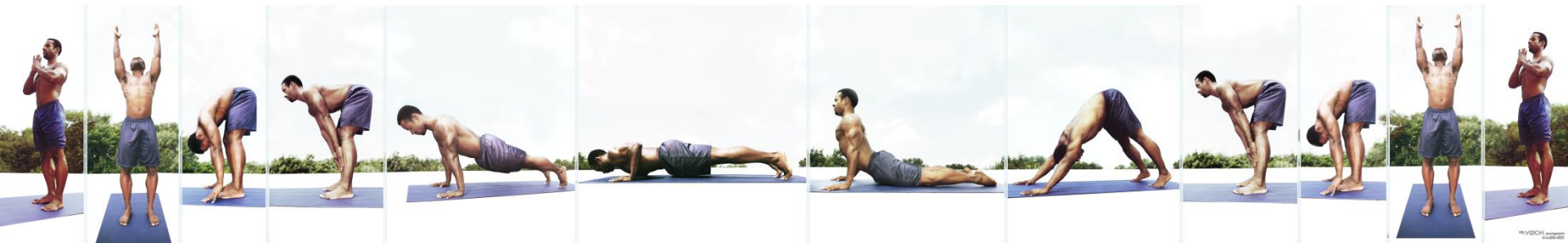
Self Study: Movement Analysis

- In yoga as with any other physical activity, there are some positions that can compromise one's health and wellbeing if the movement is inappropriate. We utilize a movement analysis system that creates and promote an analytical practice. The analysis includes answering the following questions:
 - What is the purpose of this asana or technique? Strength, endurance, warm-up, cardio conditioning, skill development, flexibility, lung capacity?
 - Am I doing that effectively?
 - Does the exercise or technique create safety concerns? Are there any potential stress areas or concerns over movement control and ability to perform in a safe manner?
 - Can I maintain proper body alignment and form for the duration of the pose? Consider form, alignment and stabilization.
 - Is the pose inappropriate for me (e.g. spinal injuries, high blood pressure)?
 - How can I modify?

Key Tools for Inversions

- Core stabilization
- Pelvic tilting (nutation)
- External shoulder rotation
- Scapular rotation/depression

Warm-Up: Sun Salutation Poses



Handstand: Adho Mukha Vrksasana (Downward Facing Tree Pose)

Alignment

- Place the hands 6-12" from a wall, with the hands shoulder width apart and finger wide
- Extend one leg back into runners lunge and split kick the legs to the wall
- Flex the toes upward and draw the belly in
- Take one leg away from the wall to begin partial and then full balancing

Benefits

- Strengthens the shoulders, arms and wrists
- Lengthens the chest and ribcage
- Strengthens the core musculature
- Stimulates upward moving prana

Contraindications

- Beginners, those very new to practice
- Lack of kinesthetic awareness
- Wrist/elbow/shoulder injuries
- High blood pressure, glaucoma, heart conditions, eye problems



1. Downdog



2. Wall Headstand



3. Full Handstand

Headstand (Salamba Sirsana) -King

2. Wall Headstand

Alignment

- From Dolphin keep triangulation with the hands and elbows, pressing the bottom of the forearms into the ground
- Walk the legs toward the body stacking the hips upward on top of the shoulders
- Left the knees to balance and continue extending the legs into the air
- Press firmly through the feet, extending towards the ceiling
- Follow with a neck release posture

Benefits

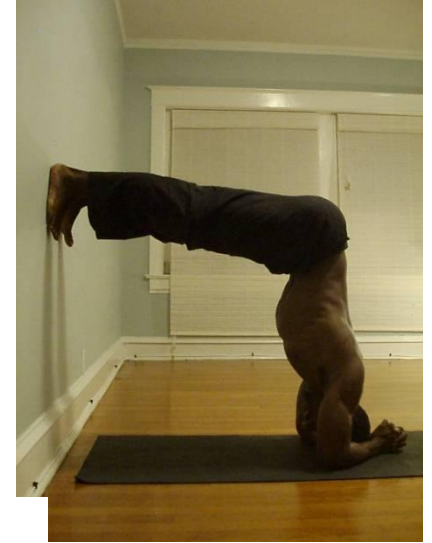
- Stimulates upward moving energy
- Strengthens the neck, shoulders, abdominals and spi
- Brings postural and balancing awareness
- May stimulates the pituitary/pineal glands

Contraindications

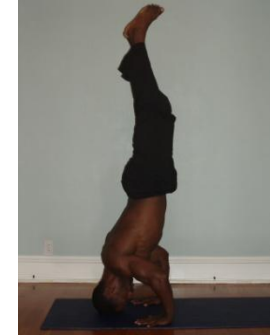
- Lack of kinesthetic awareness
- Neck/Shoulder injuries
- High blood pressure, glaucoma, heart conditions
- Obesity/pregnancy

Modifications

- Dolphin, Wall Headstand, Half Headstand



1. Dolphin



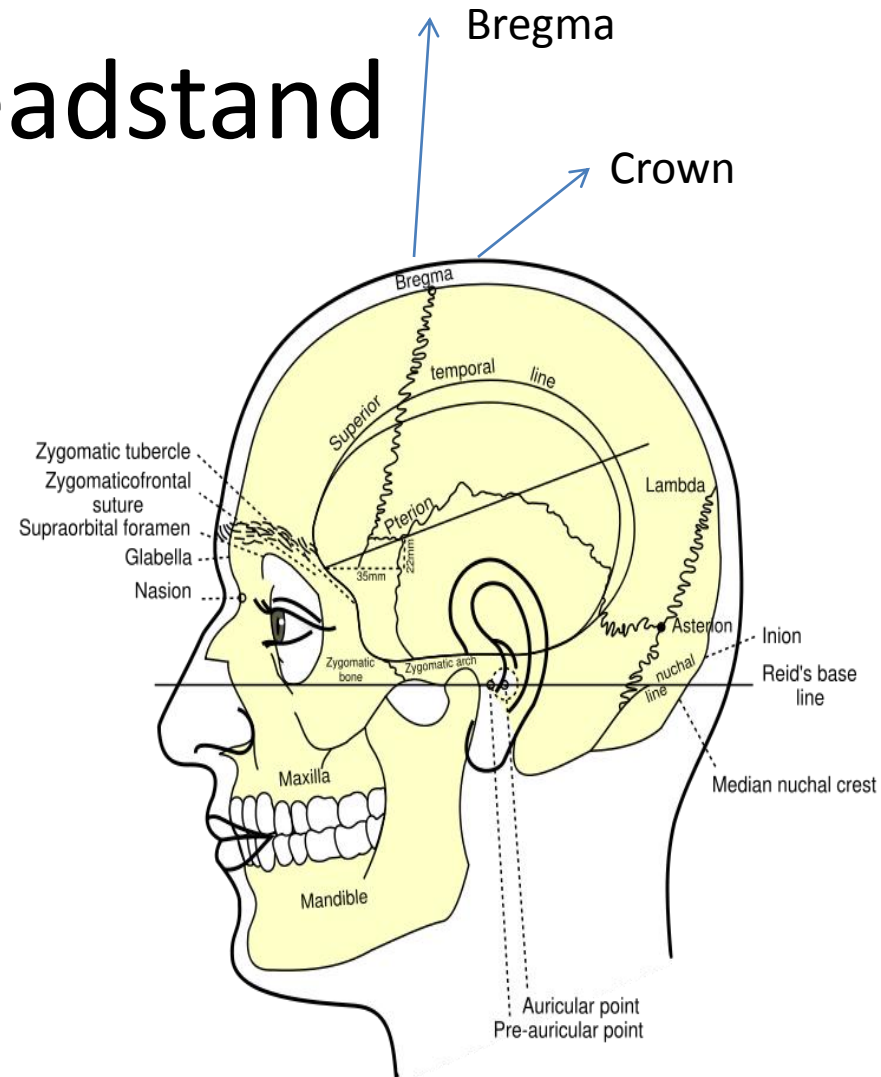
3. Full Headstand or Tripod

Classic Headstand

- Focus on forearms and str8 elbows (the inner area just below elbow joint)
- 10-12 inches from wall
- Prep: down dog, dolphin, wall dog (upward staff pose)
- Stage 1: Downdog walk feet forward until most of the weight are out of the feet on toes, knees straight or bent, back will be rounded
- Stage 2: Bend the knees and take the feet toward the earth, thighs hug chest
- Stage 3: Extend hips and lift knees toward ceiling, keeping them flexed, low back will be arched
- Stage 4: Extend the knees, low back arch decreases

Bregma Headstand

- Hands are cupped underneath head rather than posteriorly
- Less tendency to fall forward
- Doesn't require as much balance
- Has more extension in the neck and low back



Shoulderstand (Salamba Sarvangasana) –Queen

Alignment

- Use a blanket, when doing the half and full version
- Fold the blanket, with the shoulders resting at the edge and the head on the mat.
- From Plough, walk the hands to the sacrum, extending the legs upward towards the ceiling
- Form triangulation with the elbows, resting on the upper arms
- Tuck the chin slightly

Benefits

- May stimulates the thyroid gland
- Lengthens the shoulders and neck
- Stimulates upward moving energy

Contraindications

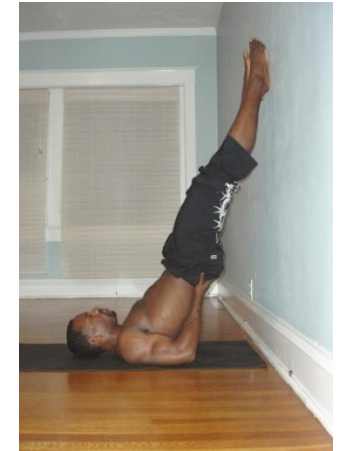
- Neck/shoulder problems
- Pregnancy
- High blood pressure

Modifications

- Half Shoulderstand, knees bending, wall supported
- Legs up the Wall Pose



1. Legs Up the Wall



2. Wall Shoulderstand



3.3/4 or Full
Shoulderstand

Plough (Halasana)

Alignment

- The spine can be straight or rounded
- From Shoulderstand or knees to chest, walk the hands to the sacrum, extending the legs upward towards the ceiling
- Form triangulation with the elbows, resting on the upper arms
- Lift the chest toward the chin
- Flex from the hips and extend the legs over the head, resting the toes down and heels up, as if in Mountain Pose

Benefits

- Stretches the back and shoulders
- Stimulates the thyroid gland
- Opens the neck and shoulders
- Stimulates upward moving energy

Contraindications

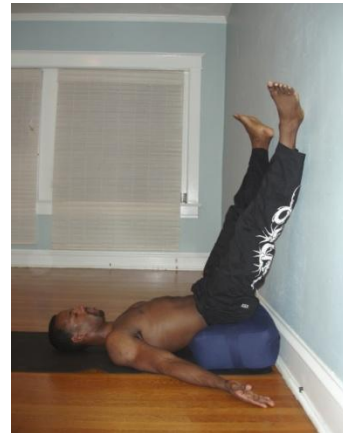
- Pregnancy
- Back pain
- Neck injury

Modifications

- Support the legs on a chair , bolster or wall
- Legs up the Wall Pose
- Use knees to chest instead



3. Full Plough



1. Legs Up the Wall



2. Supported Plough

Fish (Matsyasana)

Alignment

- From a supine position with the legs extended, place the elbows to the side of the body, lifting onto the crown of the head

Benefits

- Opens the ribcage and chest
- Strengthens the neck
- Stretches the abdomen

Contraindications

- High blood pressure
- Neck injury or severe back pain

Modifications/Variations

- Use Bound Angle Pose legs position
- **Bridge Pose**



1. Fish Pose



2. Supported of unsupported bridge

Scorpion (Vrschikasana) and Peacock (Pincha Mayurasana)

Alignment:

- From handstand, slowly bend the elbows, steadying the body
- Bend the legs and draw the feet towards the head
- Press the hips forward in opposition to the feet

Benefits:

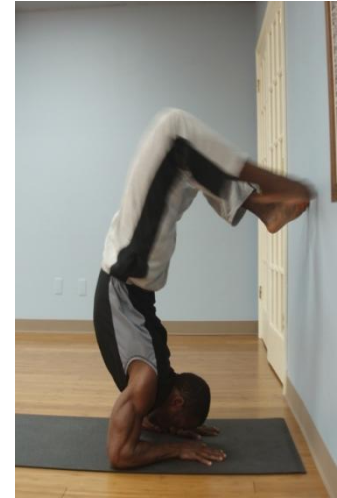
- Strengthens the arms, shoulders, back and hip extensors
- Stretches the front hips, abdomen, and rig cage
- Reverses the effects of gravity
- Established focus and concentration

Contraindications:

- Non mastery of pre-requisites: dolphin, high/low plank, handstand
- Beginners/lack of body awareness
- Shoulder, elbow, back injuries
- Poor balance, Pregnancy

Modifications:

- Wall assisted scorpion
- Cobra, upward bow (wheel), dolphin and other backbends



1. Scorpion



2. Peacock

Q & A