

BACKBENDS

Saturday – session II

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Arlington Sun & Moon Yoga Studio

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Gratitude

- >With deep gratitude and appreciation for my past and current teachers, and the multitude of books, dvds, and website references available.
- Special mention to those teachers and authors that helped make this presentation possible: David Keil, Paul Grilley, Judith Hanson Lasater, Doug Keller, Leslie Kaminoff, Blandine Calais-Germain, Mark Stephens, Ray Long, Donald Moyer, Kathy Lee Kappmeier, Diane M. Ambrosini, David Gorman, B.K.S. Iyengar, and Gregor Maehle

Backbends.....

- Scary for some people
- Should be started gradually
- Props allow easier accessiblity
- Related to Openness and Vulnerability
- Energizing & Invigorating
- Uplifting & Heart Opening
- Antidepressive
- Stimulating for the nervous system
- Create heat in the body

Backbends.....

- Pranic-supports the "up-breath", the upward flow of energy that is related to the inhalation
- Opens the front body
- Beneficial & Lengthening for the spine
- Works against our habituated postural tendencies body – reverses the "computer hunch" forward rounding of our daily life
- Compression/Massage "squeeze & soak" of internal organs beneficial
- Beneficial for digestive, vertebrae, and to find deeper diaphragmatic breathing

BACKBENDS ARE.....

"Backbends are rejuvenating. They give energy and courage and combat depression. They open the chest and make the spine flexible. The arms and shoulders become strong. The mind and body become alert." ... B.K.S. lyengar

Benefits from Backbends include strengthening spinal and back muscles, opening the heart and chest area,

and lessening tension in the back. Backbends are beneficial in counteracting every day "office posture."

These poses are energizing and awakening, naturally stimulating energy in the body by squeezing the kidneys and adrenal glands (Sun & Moon Yoga Studio Syllabi)

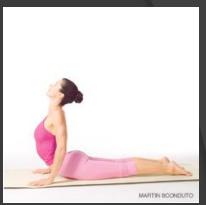
Beginning Backbends



Bitilasana (Cow Pose)



Sphinx (Baby Cobra)



Bhujangasana (Cobra)



Salabhasana (Locust)



Reclining Blanket Back Roll

Setu Bandha

(Bridge)



Purvottanasana (reverse table variation inclined plank pose)

Natarajasana (Lord of the Dance)

Level 2 Backbends



Purvottanasana (reverse plank)



Ustrasana (Camel)

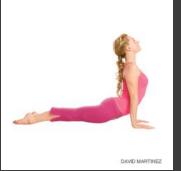
Ardha Bhekasana (Half Frog)



Dhanurasana (Bow)



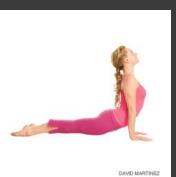




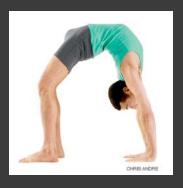
Urdhva Mukha Svanasana (Up Dog)

Eka Pada Rajakapotasana (Pigeon)

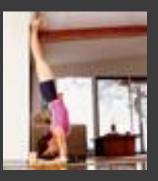




Level 3+ Backbends







Vrschikasana (Scorpion)

Pincha Mayurasana
(Feathered Peacock)
Camatkarasana

<u>Urdhva Dhanurasana</u> (Upward Bow/Wheel)



Sarvangasana (Shoulderstand)



Eka Pada Viparita Dandasana

(Wild Thing)



Dwi Pada Viparita Dandasana





Bhekasana (frog)



Extension of the Spine

ALIGNMENT OF BACKBENDS

Overall For Backbends

- Relax the body
- Establish the foundation
- Breathe easy and steady
- Emphasize compassion
- Avoid judgment
- Move gradually into successively deeper backbends
- Practice deep backbends as peak of practice when body is warmed up & prepared

Overall for Backbends

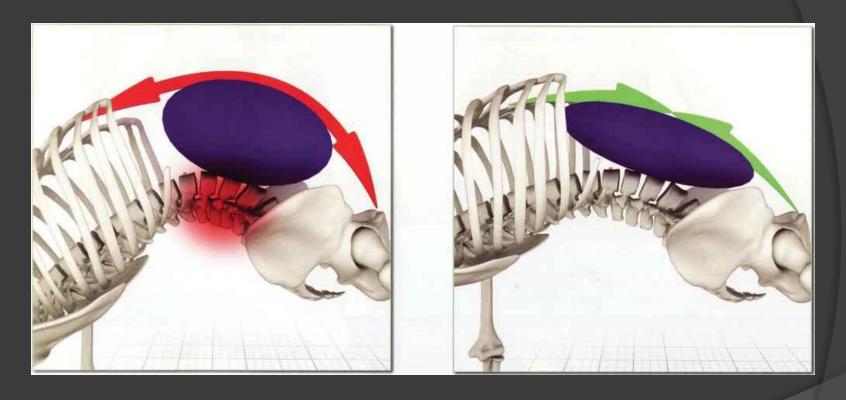
- Rotate the thighs internally
- Do NOT squeeze the buttocks tightly
- Posterior tilt of the pelvis
- Hip flexors are a focal point for stretching
- Elongate the spine
- Focus back bend in thoracic spine
- Lift through the sternum
- Add cervical spine last

Paradox of Active Release

- To go into a backbend
- Engage the torso extensors (erector spinae, quadratus lumborum) – but overdone will limit by shortening the back and obstructed by the spinous processes
- Once in the backbend release the trunk extensors and engage the torso flexors (abdominal muscles), thus lengthening the back and creating space between the spinous processes
- Backbending is opening of front body

"Airbag" Effect – Ray Long

The Key Muscles of Hatha Yoga pg. 118, 119, 125 / Anatomy For Backbends & Twists pg. 52



Increased intra-abdominal pressure combined with contraction of the rectus abdominus, will push the abdominal organs toward the spine and the back plane of the body to help create a single, stable unit.

Benefits of Lightly Contracting Abdominal Muscles "Airbag"

- Compress Abdominal Organs
- Additional Support Surrounding Muscles
- Opposes Hyperextension & Prevent Compression of the Low Back
- Activates Uddiyana Bandha & Illuminates Third Chakra

ASANA

Baby Cobra – Bhujangasana

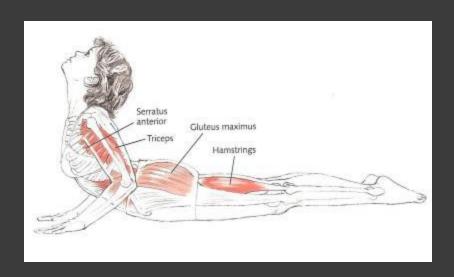


- SPHINX pose is used as easier variation for full cobra pose BHUJANGASANA
- Elbows can be directly under shoulders or forward of

boo-jang GAHS-anna bhujang = snake or serpent

(bhuja = arm or shoulder + anga = limb)

Full Cobra - Bhujangasana



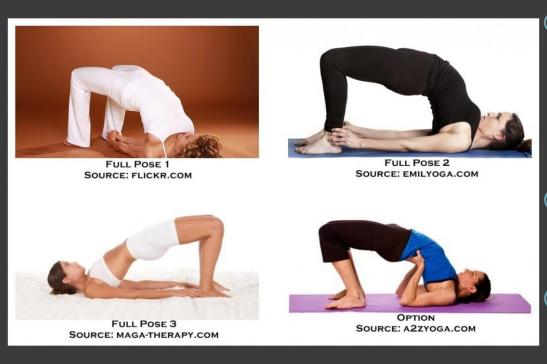


- Elbows slightly move toward one another
- Allow the chest to expand pull hands toward body
- Lower tips of shoulder blades move in toward the heart

• Benefits

- Strengthens your back muscles and arms.
- Increases the flexibility of your spine.
- Stretches your chest, shoulders, lungs, and abdomen.
- Stretches and massages your internal organs.
- Firms your buttocks.

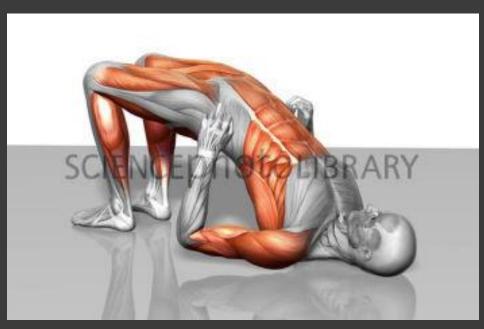
Bridge – Setu Bandha Sarvangasana



- (SET-too BAHN-dah) setu = dam, dike, or bridge bandha = lock
- Press through Shoulders and Feet
- Inner thighs release toward the floor
- Tailbone extends

Bridge - setu bandha

O Benefits

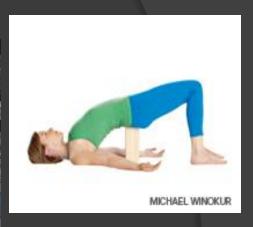


- Stretches your chest, neck, spine and hips.
- Strengthens your back, buttocks, and hamstring muscles.
- Calms your brain and central nervous system which helps alleviate stress and mild depression.
- Massages abdominal organs and improves digestion.
- Stimulates the lungs and thyroid glands and helps relieve the symptoms of menopause.
- Reduces anxiety, backache, headache and insomnia.

Setu Bandha with Props











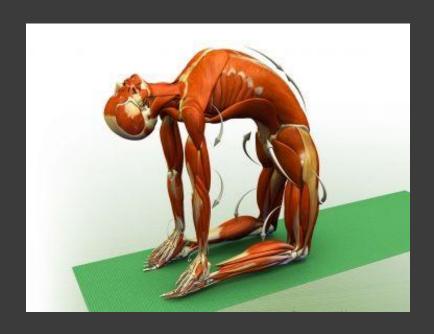


Camel - Ustrasana (Level 2+)



- Traction-Backbend
 Muscles in the front of the
 body eccentrically contract
 to overcome gravity
- Teach with props
- O Benefits:
- Stretches your neck, chest, abdomen, thighs, hip flexors (psoas), groins, and ankles.
- Strengthens your back muscles, gluteal muscles, and arm muscles (triceps).
- Massages and stimulates your organs and charkas of the abdomen.

(oosh-TRAHS-anna) ustra = camel



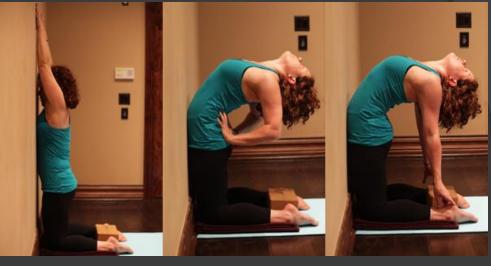
Basic Joint Positions

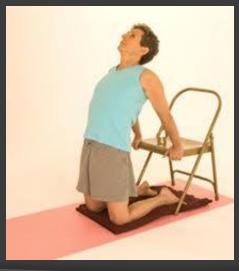
- The knees flex.
- The ankles plantar flex.
- The hips extend, internally rotate, and adduct.
- The trunk extends.
- The shoulders extend.
- The elbows extend.
- The forearms supinate.

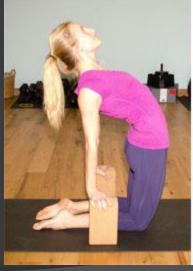
Contraction of quadriceps

Ustrasana with Props













Sequencing Backbends

- Make use of props!
- Prepping for backbends: Adho Mukha Svanasana-Down Dog, Standing Poses, and Surya Namaskara-Sun Salute
- Move gradually into successively deeper back bends
- Avoid alternating forward bending and back bending postures
- Malasana-squat is a good release after ustrasana-camel
- Keep the cooling poses (i.e.-forward folds) after the active/ heating poses

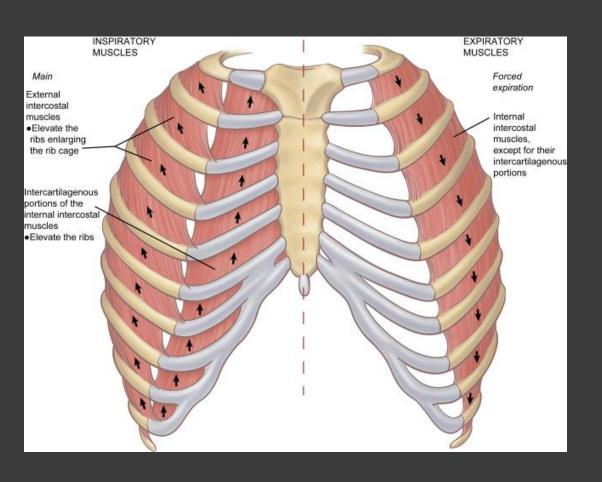
Sequencing

- Allow time for calming and spine neutralizing poses after backbends (esp. in an evening class)
- After backbends: Adho Mukha Svanasana-Down Dog fills out the back and softens the kidney area, Uttanasana-standing forward fold, nonstrenuous forward bends, Balasana-Childs pose, light lengthening twists
- To soothe the nervous system, after backbends

 (possibly in place of savasana or prior to)
 practice legs up the wall, legs resting on a chair,
 Ardha Halasana –half plow(w/chair and/or blankets) or Salamba Sarvangasana-shoulderstand *for level 3+

ANATOMY

Intercostal Muscles



- Thin groups of muscles occupying the spaces between the ribs
- Responsible for controlling some of the movement of the ribs in breathing

External & Internal Intercostals

- Superficial -external intercostals lift/elevate the ribs during quiet and forced inspiration/ inhalation
- Originate on Ribs1-11
- Insertion on Ribs2-12

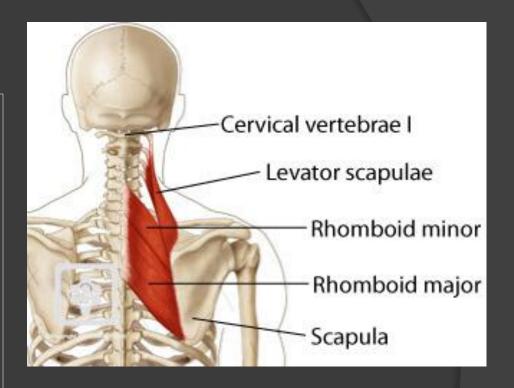
- Deep -internal intercostals draw the ribs together during forced expiration/ exhalation (quiet exhalation passive)
- Originate on Ribs2-12
- Insertion on Ribs1-11

Rhomboids

(rom-BOID)

Two Muscles— Major & Minor - Situated at the upper back Between spine and shoulder blades

The rhomboids retract (adducts) the scapula (pulling the shoulder blades toward the spine) and cooperate with levator scapulae muscles for downward rotation of scapula. They are stretched in Garudasana.



Overstretched rhomboids produce a rounding of the shoulders forward closing off the front body. Contraction of the rhomboids draws the scapula toward the spine thus opening the front of the body (ie: for backbends)

Pectoralis (pek-to-RA-lis) Major

Pectoralis Major:

- ➤ Originate from Thorax
- Large Fan Shaped Muscle Over the Shoulder Joint and front of chest anteriorly

ORIGIN

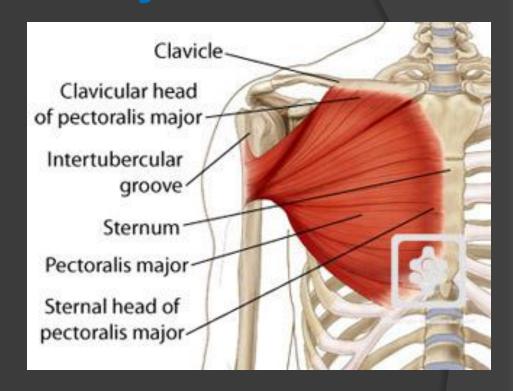
sternum; ribs 1-6; clavicle

INSERTION

humerus

ACTION

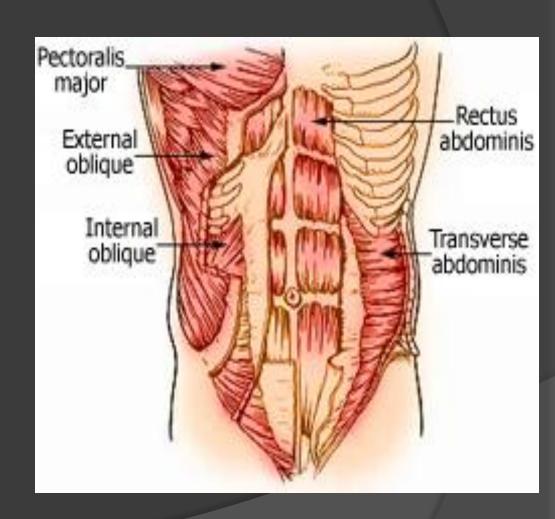
flexes, adducts, and medially rotates arm Accessory for inspiration



To lengthen the spine and back to create and achive deeper backbends, Pectoralis Major (along with rectus abdominus, and psaos) create that lengthening action.

4 Layers of Abdominals

- From Deep to Superficial...
- 1. TransversusAbdominis
- 2. Internal Oblique
- 3. External Oblique
- 4. RectusAbdominus



Rectus Abdominus (REK-tus ab-DOM-i-nus)

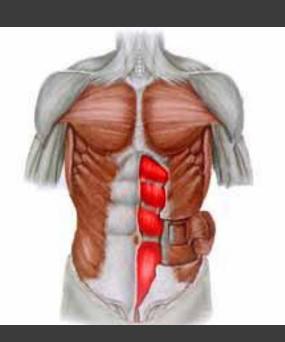


"The Six-Pack Muscle"

Long flat muscle that extends bilaterally along the entire length of the front of the outermost layer of the abdomen

Flexes lumbar spine (torso), depresses ribcage and stabilizes pelvis during walking. Provides anterior support to the lumbar spine, helping to maintain good posture.

Rectus Abdominis Muscle



RECTUS ABDOMINIS

ORIGIN:

pubis

INSERTION:

xiphoid process, costal cartilages 5-7

ACTION:

supports abdominal viscera, flexes waist as in sit-ups, depresses ribs, stabilizes pelvis, increases intra-abdominal pressure

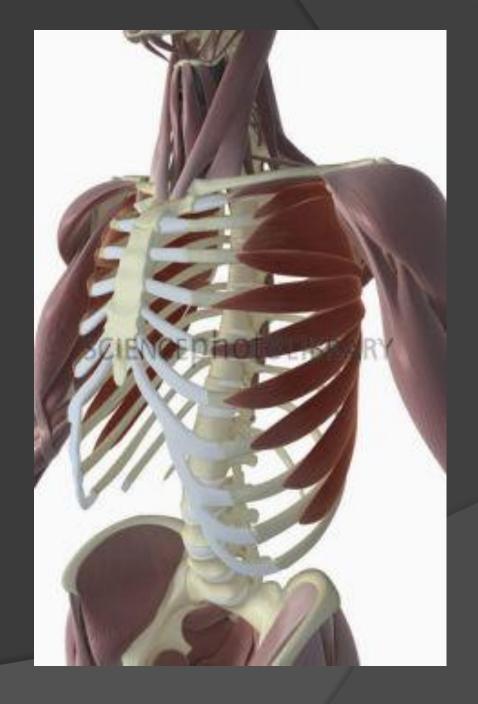
In Backbends:

- Engaged to anchor lower ribs and keep them from flaring open
- Lifts the pubic bone and allows the coccyx /tailbone to drop
- Tightness limits depth of backbends (esp. Urdhva Dhanurasana and Purvottonasana

Serratus Anterior

(ser-RA-tus an-TEER-I-or)

- Abduct scapula, Depress scapula
- Pulls the Scapula forward of Thoracic Wall
- Rotates Scapula for Abduction & Flexion of Arm
- Hold medial border of scapula against rib cage, act in forced inhalation (if scapula is fixed)
- Stabilize Scaulae "Heart Stabilizers"



Serratus Anterior in Backbends

- Broad muscle that begins underneath the shoulder blades along the medial border. It's muscle fibers travel along the inside of the shoulder blade and branches out in a finger like manner, attaching to the front sides of the ribs.
- Engage SA muscle to hug the ribcage, focus on less work in the upper trapezieus, free the neck, & more work in SA to give chest a good lift in backbend

Quadriceps (KWA-dra-seps)



Extensor Muscle
of the Leg
Group of Four Separate
Muscles Forms the
Front of the Thigh

Rectus Femoris
Vastus Lateralis
Vastus Medialis
Vastus Intermedius

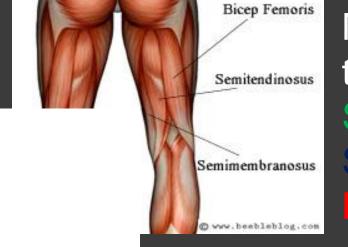
Virasana lengthens the quadriceps

Quadriceps=

(Rectus Femoris, vastus lateralis, vastus medialis, & vastus intermedius)

- All four quad muscles cross/insert at the knee joint (patella/kneecap)
- Rectus Femoris is only one of four quad muscles that has two heads of origin and crosses the hip joint - Action: Extends the knee joint and flexes the hip joint
- The group of 4 quad muscles together straighten the knee when rising from sitting, during walking, climbing, and in backbends.

Hamstrings



Comprised of three individual muscles: Moving from medial to lateral:

Semimembranosus Semitendinosus Biceps Femoris

Origin: Ischial
Tuberosity (sitting
bones)
Biceps Femoris also
originates from the
back of the femur

Biceps Femoris
Semimembranosus
Semitendinosus

Action of the Hamstring Group: Flex the knee Joint & Extend the Hip Joint

Biceps Femoris

INSERTION: tibia;fibula

ACTION: laterally

rotates (turns out) the

Long head

lower
leg
when
the
knee is
flexed

Semitendinosus & Semimembranosus

INSERTION: tibia

ACTION: medially rotate (turn in) the lower leg when knee is flexed



