YOGA FOR FARMERS



UPWARD COW WITHOUT LYCRA. Brie Weisman, OTR/L

BY THE END OF THIS PRESENTATION YOU'LL UNDERSTAND:

- How basic/modified yoga poses improve flexibility, strength, and balance.
- How yoga can increase productivity on the farm.
- The types of farm chores that increase risk of musculoskeletal injuries.
- Expectations for farmers' aging bodies.
- How to squeeze yoga into your busy day without wearing lycra or sitting on a yoga mat.

YOGA PRACTICE TODAY

Yoga is not a religion. The aim of Yoga is simply to improve the practitioner's awareness of the connection between the physical body, mind and soul.

Today we will focus strictly on the popular, thousands year-old asana (pose) aspect of Yoga, a series stretches originally created to loosen the muscles and joints of practitioners, enabling them to sit comfortably and undistracted during long periods of meditation.

WHAT THIS PRESENTATION IS NOT PRESENTING:





WHY ARE FARMERS AT INCREASED RISK OF INJURY?

- Farmers often work alone.
- Weather dependency for many farming activities often means putting in long hours of hard work to beat the clock.
- Work includes dangerous vehicles: tractors, trailers, trucks, and 4-wheelers.
- Unpredictable livestock.
- Exposure to pesticides: biological and respiratory hazards.
- Hazardous equipment: chain saws,bucket loaders, grain bins, snow-blowers, manure spreaders.

MUSCULOSKELETAL PAIN DEVELOPS FROM REPEATED EXPOSURES TO STRESSORS AMONG FARM WORKERS

Long-term exposure to

hard physical labor heavy lifting and carrying whole-body vibration

working in awkward postures with trunk flexion

are all risk factors for low back pain

2007 Davis and Kotowski https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3593628/#R7

STATISTICS ON FARM-RELATED MUSCULOSKELETAL INJURIES

- Every day, about 100 agricultural workers suffer a lost-work-time injury.
- 50% of all hired crop worker injuries are sprains or strains.
- An estimated 4,000 youth each year suffer injuries while working on the farm. (from CDC)

In a '06 study of 250 Kansas farmers, participants reported:

| 25.9% 23.6% | 22.4% | MSD in 1/9 body area |
|----------------|-------|----------------------|
| Shoulder Knees | Neck | 60% |

25% saw a doctor for low back pain.

20% had to modify work habits.

Farmers experience low back pain in much higher numbers than the general population

TYPES OF ACTIVITIES THAT FARMERS PERFORM

| Repetitive motion | Strenuous tasks | Sedentary activities |
|--|--|--|
| Loading hay Moving/setting up electric netting fence Shearing sheep Grooming horses Weeding/planting Pruning Fruit picking | Carrying feed bags, water buckets, bales Harvesting crops manually Shoveling manure Jumping off tall tractor/vehicle Repairing heavy equipment | Driving tractors, trucks, and other machinery Planting tray seeds A.I. livestock Selling at farmers market Billing, calls, office work |

Repetitive Motion

Strenuous Tasks

Sedentary Tasks

| INJURIES | INJURIES | INJURIES |
|--|---|--|
| Carpal Tunnel Syndrome Epicondylitis Upper limb disorder (hand, wrist, arm, shoulder & neck) | Knee pain Back pain Shoulder pain | Sciatica chronic hip pain Lower back pain Knee pain Neck pain |
| SYMPTOMS | SYMPTOMS | SYMPTOMS |
| Pain Tingling Swelling Redness Dropping things | Pain Weakness Numbness Stiffness Tingling | Pain radiating from butt to knees Weakness Numbness Stiffness Tingling |

AGING FARMER BODY

The average of working farmers is now 58.5 years old. 1/3 are over 75.

Considerations for an aging body:

| muscle mass | cognition | reaction times |
|-------------|-------------------|-------------------------|
| vision | balance | heat and cold tolerance |
| hearing | connective tissue | posture |

(Doria, Buonocore, Focarelli, & Marzatico, 2012)

Many older farmers work past traditional retirement age and started in their teen years, when bodies are not yet fully developed. This increases the risk of hip and back injury later in life.

Cattle Breeder and certified yoga instruc Chris Willis from Greenthorpe, New So Wales, Australia demonstrates tracto yoga for farmers.

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BASIC YOGA DOS AND DON'TS

DO NOT *overdo it!* Pushing unnecessarily past pain risks injury, not rapid improvement. **DO** find a place that moderately challenges oneself and then hold that position. Being gradual and consistent in your practice, thereby winning modest but steady gains week after week, month after month.

DO NOT bob, lunge, or move hastily into a pose in a way that uses your "momentum" to stretch farther! **DO** move slowly into a pose, paying attention to your body, exploring rather than exceeding its limits.

DO NOT expect constant, daily progress. Your body responds constantly to weather, rest, stress, exertion, what you've eaten and how recently, many other factors. Some days you will be less flexible than others. **DO** expect regular practice and dedication to reap noticeable improvement <u>over time.</u>

DO NOT fall into the trap of telling yourself that "success" means perfectly replicating the pose of a
 24 year old, willow-thin yoga instructor who has been practicing yoga daily for hours since high school.
 DO find success in improved flexibility and strength, and in approaching, rather than achieving, an ideal.

UPWARD SALUTE (CHAIR YOGA MOVES)

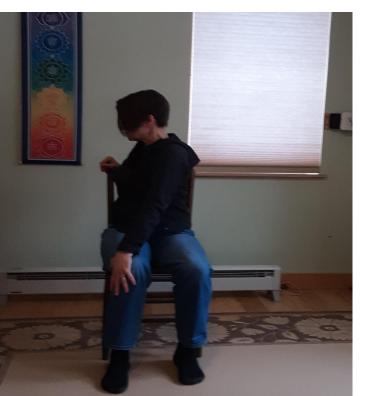
Inhale. Raise arms out and up straight while squeezing shoulders blades toward each other.



Exhale. Lower arms out and down to sides.

DO A FEW OF THESE EVERY HOUR OR TWO DURING BENDING AND SITTING TASKS. ALSO AN EXCELLENT WAY TO START THE DAY TO LOOSEN UP STIFF MUSCLES AND JOINTS.

SEATED TWIST Use during long hours driving, tractor work, and heavy lifting.



PLACE HAND ON OUTSIDE OF OPPOSITE KNEE. <u>GENTLY</u> TWIST TO THAT SIDE. (OPTIONAL: PUT OTHER HAND ON CHAIR BACK.) REPEAT ON OTHER SIDE.

CAT POSE

Inhale while slowly tilting your hips forward. Lift the chest forward & upward toward the sky.

COW POSE

Exhale while slowly rounding your back. Slouch and let head drop toward your chest.



USE AFTER LONG SEDENTARY ACTIVITIES, AFTER BENDING, KNEELING, AND SQUATTING ACTIVITIES. THIS IS A GREAT STRETCH FOR EVERYBODY.

HALF DOG AGAINST WALL MODIFIED WARRIOR

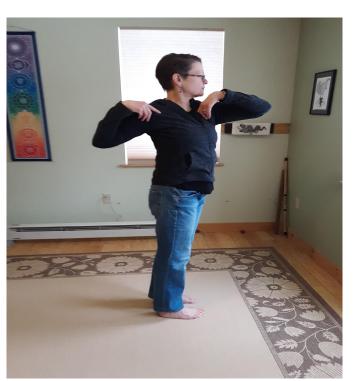
Stand about leg distance from wall with slightly bent knees and a flat back. Hands at shoulder height, place palms on wall. Head between ears looking down. 5 breaths. Separate legs about 3'. R foot straight ahead, L foot 30°. Bend R leg while keeping L leg straight. R hand against wall or other support. Reach L hand to sky. Modify by lifting back heel if needed.



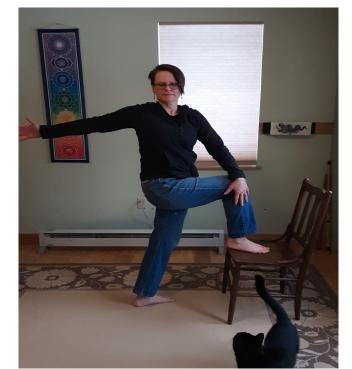
GOOD FOR BENDING, LIFTING, STANDING, AND SEATED ACTIVITIES.

STANDING SHOULDER TWIST, STANDING TWIST

Fingertips on shoulders. Inhale. On exhale, slowly turn your upper body to side. Hold pose for 3 breaths. Return to center, turn to other side.



Put R foot on chair or other sturdy object of comfortable height. Place L hand on outside of the R knee. Raise R hand out to side. Turn in that direction.



GOOD FOR Standing, Bending, And Lifting Chores, And During Long Periods of Sitting.

NECK STRETCH.

Especially good during activities like looking behind tractor or other vehicle while driving in reverse or watching attachments for long periods of time.



USE GENTLY. Don't overdo!

Start by gently tipping and rotating head in a circle in one direction.

Put hand palm down on head. Use fingers, not whole arm, to move head. Curl fingers toward wrist to gently pull head toward shoulder. Hold 8 - 10 seconds. Next, release pressure, moving hand at wrist, use fingers to move head forward and backward.

Repeat to opposite side.

Concentrate on relaxing neck as completely as possible. Allow hand to move head without assistance or resistance from neck.

BENEFITS OF YOGA BREAKS DURING CHORES

Doing simple/modified yoga poses every one to two hours during work day will:

- Reduce risk of musculoskeletal injuries and disorders.
- Increase strength, balance and endurance.
- Increase mobility in the joints.
- Increase worker productivity.
- Decrease lost time due to injury and fatigue.
- Decrease stress.

QUESTIONS AND THANKS



WITH SPECIAL THANKS TO:

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