#### **DESKERCISE**

Reduce pain/discomfort while boosting productivity

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#### **DESKERCISE**



#### GOAL: Target pain/discomfort to improve mood, productivity, & movements

- Activities that can be incorporated hourly or bi-hourly
- + Target specific areas/needs
- + Simple or complex movements
- + ↑ oxygen & nutrients
- + ↓ metabolic damage
- + ↓ musculoskeletal complications
- + ↓ pain & discomfort



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Questions? – Email Deskercise@bcbsnc.com

# **TARGET PAIN & DISCOMFORT**



#### TRIGGER POINT – STANDING OR SITTING



#### It's time to use your tennis balls



#### Issues addressed:

- Soft tissue restrictions
- Restrictions alter movements
- Restrictions cause pain and discomfort (including radiating pain)

#### If done properly & regularly, it may:

- Break up adhesion, soreness, tightness
- Bring blood to tissues
- Helps muscles relax
- Improve range of motion
- Lower pain and discomfort





- Place the foot (starting with the arch) on top of the ball
- Roll the ball around the foot searching for sore areas
- A golf ball is best for this region due to its smaller size
- To apply stronger pressure simply stand up

## HAMSTRING









- Sit in your chair with knees bent at 90 degrees
- Find the belly (the thickest area) of your hamstring
- Place the ball between the chair and the belly of the hamstring
- As you rest on a sore spot begin to extend your leg up and down
- Transfer the ball another area of your of your hamstring and repeat

#### HIP/GLUTE





- Sit on a ball under the outside of one of your glute/hip (where your pocket might be). The harder the chair (or ball) the deeper you will get.
- If possible, cross your opposite leg over your knee (adds additional pressure)
- Roll yourself around the ball-&-socket join in a "C-like motion."
- Keep moving the ball around to other locations as this is an area that may have multiple sore zones.

#### TRIGGER POINT NECK WITH PEANUT







- Using a peanut, lean into the wall placing the peanut between the wall and your lower neck area.
- The middle of the peanut should be between the neck bones
- Roll your body down and up the wall while the peanut rolls in the opposite direction contacting both sides of your neck

## TRIGGER POINT TRAPEZIOUS





- Reach across your body to your upper trapezious area
- Roll the ball up and down this area stopping if a sore spot is located
- Use your other arm to help extend your reach if needed

## TRIGGER POINT – MID BACK/SHOULDER BLADES







- Place the peanut between the wall and your mid back (slightly below your shoulder blades.
- Wrap your arms around like you're "giving yourself a hug."
- Roll up and down the wall by bending at the knees and lowering your hips
- To add more pressure put more weight into your upper body by leaning back

#### TRIGGER POINT – PECTORALS & DELTOID





#### **Pectoral**

- Position the ball just under your collar bone
- Maintaining pressure, roll the ball side-to-side/up-&-down shoulder

#### **Deltoid**

- Position the ball against the outside of your shoulder.
- Maintaining pressure, roll the ball along the outside of your shoulder

# FLEXIBILITY MOVEMENTS: ELONGATE YOUR MUSCLES



#### RECOMMENDED FLEXIBILITY PROTOCOLS



- + Flexibility exercises are recommended at least 2 or 3 days each week to improve range of motion.
- + Each stretch should be held for 10-30 seconds to the point of tightness or slight discomfort.
- + Repeat each stretch 2 to 4 times, accumulating 60 seconds per stretch.
- + Flexibility exercise is most effective when the muscle is warm.
- Try light aerobic activity or a hot bath to warm the muscles before stretching.
- + Breathe out slowly as you stretch
- + Make sure you feel the stretch only in the specified areas
- + Only hold stretches that feel good (do not cause pain)
- + Relax from of stretches gently.

# SEATED NECK STRETCH (BACK OF NECK)







- Place both hands behind your head with your elbows extended out
- Keep your chest open and tall
- Gently begin to tuck your chin towards your sternum (chest bone)
- Being to round your upper back slightly
- Slightly apply additional pressure on your neck with your hands for an additional stretch

#### SEATED SIDE NECK BEND







- Place on hand on the top of your head
- Grad the underside of the chair with the opposite hand keeping it straight
- Gently pull and bend your head away from the extended arm while tightening your grip on the chair with the extended arm

# TRAPEZIOUS STRETCH







- Grab underneath your desk with both sets of fingers
- Begin to pull your shoulders downward
- Slowly round/arch the top of your body to intensify the movement
- Maintain a tall posture during the stretch

## CHEST/PECTORAL OPENER WITH HYPEREXTENSION







- Place both hands behind your head with your elbows extended out
- Keep your chest open and tall
- Keeping your elbows out, begin to bend backwards with your chin pointing towards the ceiling
- Let your head push into your hands with your hands slightly resisting your head

# SLEEPER STRETCH (SHOULDER/ROTATOR CUFF)







- Position your body perpendicular to the desk
- Put your elbow on the desk with your arm bent and shoulder retracted (pulled back)
- With the opposite hand gently push down on the back of the hand towards your body until you feel a MILD stretch
- Do this gently for a few reps and you will see improvement without pushing on the arm aggressively
- Note: 1 arm may be more flexible than the other

#### SEATED THORACIC SPINE MOBILITY









- Sit tall close to the edge of your seat
- Place both hands behind your head with your elbows pointed out
- Keep your hips still and rotate your upper body to one side as far as possible
- At the end of your rotation bend sideways towards the floor leading the bend with your elbow

## SEATED CHEST AND BICEP STRETCH





- In a seated position, turn away from your desk; place your palms on the desk with arms extended
- Maintain a tall seated position
- Walk your hands towards each other (only go to your comfort zone)

#### BENT OVER REACH OUTS







- Place your arms on the arms (or top) of a chair with your arms straight
- Bend your knees 5-10 deg pushing your hips back while maintaining a flat back
- Keep your head and neck in line with your spine
- Begin to push the chair away from you will sinking further into a bent over posture
- Push or drop your hips back as best as possible
- Maintain a flat back as best as possible

## SEATED THORACIC ROTATION









- Lean into the desk with a neutral spine keeping your hips back into the chair
- Place both palms down on your desk with your arms extended
- Place one hand behind your head with your elbow pointed out
- Begin to rotate away from the desk until you feel other parts of your body move to allow the rotation to continue.
- Keep pressing into the desk with your palm that is down
- Keep your head looking downward, not allowing it move too much

# **ARM WALL SLIDES**







- Stand with your back flat against a wall with the back of your arms and hands in contact with the wall.
- Slowly move your arms up the wall keeping in contact with the wall until you lose contact.
- Slide back to starting position

## STANDING SIDE BEND - ARM OVERHEAD





- Begin standing tall with your one arm extended overhead
- Bend sideways towards the down arm keeping the extended arm aligned with midline of your head (about were your ears are).
- Reach downward with the down hand, and upward with the extended hand

#### SIDE BEND STRETCH WITH MINIBAND OVERHEAD







- Stand with a mini band around your wrists while extending your arms overhead
- Pull the band apart to create resistance/tension in the band
- Breath in, and then breath out as you bend to the side
- No band? extend your arms above your head
- Try to keep arms in-line with your ears.
- If you can't find a comfortable range.

## SEATED SINGLE LEG HAMSTRING







- In a seated position, fully extend one leg
- Flex (point your toe) towards the ceiling
- Bend at the waist and reach towards your foot
- Try to maintain a flat back as you stretch
- Extend to your comfort zone

# BACKWARD BEND, FORWARD REACH









Initiate the bend with your hips



Maintaining the 5-10° bend

#### PHASE 1

- With feet flat, being to push your feet into the floor as your reach overhead
- Maintain a minimal arch in the back to (avoid hyperextension)

#### PHASE 2

- Maintaining a flat back, begin to reach towards your feet.
- EXHALE as you progress downward
- Begin to hinge forward at the waist (initiate the bending with your hips, not your knees) lowering your arms as depicted
- (hold for 3 seconds)
- A 5-10 Degree bend in the knees should remain constant (do not bend your knees more to attempt to reach your toes)

#### -PHASE 3

- Maintaining the 5-10 degree bend in the knee, release the flat back, and stretch towards the feet – you should feel a larger stretch in the hamstrings and low-back. Slowly return to a standing position.

## BENCH STRETCH - WITH PROGRESSIONS SHOWN











- In a seated position, lift and cross one leg over the opposite leg
- Grab your foot with your hand and flex your foot
- Position 1: push down on the bent knee keeping your hips flat in the chair
- Position 2: lean/bend forward keeping your back straight (if possible)
- Position 3: reach across the bent leg towards the opposite shin/ankle/foot

#### REVERSE LUNGE WITH ROTATION









- •Step back with your left leg into a reverse lunge keeping the back foot flexed
- •Lean forward into the front leg as far as you can, but keep the front foot flat
- •Contract the left glute muscle (this allows a deeper stretch of the quad)
- •With the palm facing up, release your right hand from the desk and bring your left hand across your right leg (you may also keep it on the desk to help balance)
- •Begin to rotate your arm away from the desk as far as you comfortably can.
- •Do not let your back arch and maintain the forward lean into the front knee

# ANKLE CIRCLES (FINGERS BETWEEN TOES OPTIONAL)







- In your chair cross one ankle over the opposite thigh
- Relax your foot. With your hand move your foot in circles
- Circle the foot clockwise and counterclockwise
- If an option, your fingers can be placed between your toes

# CORE MOVEMENTS: IMPROVE YOUR SUPPORT SYSTEM

## DESK PLANK - ELBOWS





- Place your elbows directly under your shoulders on your desk
- Create a straight line from head to toe
- Apply pressure into the desk with your hands and into the floor with your feet
- The goal is to shake in the middle during this movement
- Do not hold to the point where your low back is in discomfort
- NOTE: add a challenge by extending an arm, or lifting a leg.

# CHAIR ROLL OUTS (EXTENSIONS)



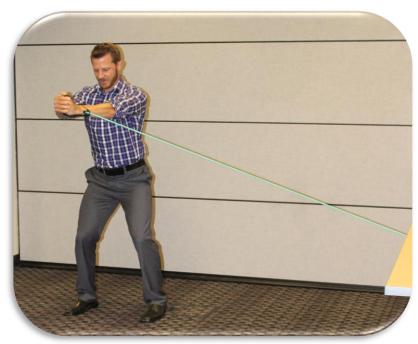


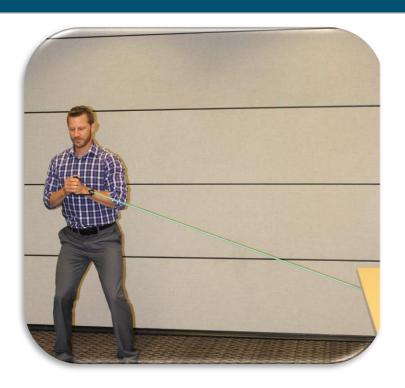


- Place your hands on the handles of a chair and position your body in a inclined pushup position
- Keeping your pillar tight slowly push the chair away from your body
- Use the desk as a stopping point to prevent your lower back from arching
- Use your arms to pull the chair back to the starting position
- NOTE: The closer your feet are, the harder the exercise

# PALLOF PRESS WITH BAND







- Connect your band to a stable desk pole
- Position your body in a quarter squat position parallel to the desk, push through your feet into the ground
- Grab the handle or end of the band with two hands, and step away from the desk to create tension on the band.
- Begin with your hands positioned in the middle of your chest
- Press the band away from your chest, fully extending both arms.
- Return to the starting position and repeat

#### **BAND SIDE BENDS**



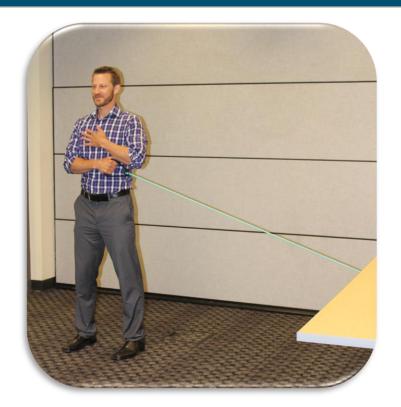




- Attach your band to the lower end of a pole and stand to the side of the pole
- With the band in one hand create tension on the band by walking away from the desk staying parallel to the desk
- Bend away from the hand with the band
- Return to the starting position in a controlled manner

## **BAND OBLIQUE TWISTS**







- Attach your band to the lower end of a pole and stand to the side of the pole
- Hold the band with the outside hand at your waist
- Slightly rotate inward (towards the desk) and begin to pull/twist the band around the outside hip
- Unravel yourself to the starting position

## METABOLIC MOVEMENTS: RECHARGE YOUR SYSTEM



### METABOLIC MOVEMENTS



### Short burst of energy output provide the following benefits:

- + ↑ heart rate
- + ↑ blood flow to muscles
- + ↑ oxygen deliver to the brain
- + ↑ cognitive function
- + ↑ caloric burn

#### Perform movements for 10-30 seconds

- + Aim for a rest period 2x longer than the exercise duration
- + Challenge yourself with longer durations and shorter rest between exercises as you improve

# MARCH (OR RUN) IN PLACE







- In a standing position bring one knee up
- Immediately return it to the floor and repeat on the opposite side
- Intensity of the march is increased by increasing the speed of the march
- Aim to hit/land on the ground with the ball of your foot (not flat or on your toes)
- The opposite arm should move during the march/run (just like walking)

# STRENGTH MOVEMENTS

### STRENGTH TRAINING



#### + Deskercise

- Perform strength movements in a controlled manner
- Suggest 10-15 repetitions per movement
- Suggest 5 seconds for each repetition
  - 2 seconds on the contraction phase (shorten the muscle)
  - 1 second on the hold phase
  - 2 seconds on the eccentric phase (lengthen the muscle)

### + American College of Sports Medicine (ACSM)

- 2 or 3 days/wk Major muscle groups
- 2 to 4 sets
- 8-12 repetitions
- 48 hours between sessions

#### + Benefits

- Strengthens the musculoskeletal system
- Prevents sarcopenia (atrophy breakdown of muscle tissue)
- Prevents falls
- Improves running economy

## STRENGTH MOVEMENTS: UPPER BODY

### **DESK PUSHUPS**





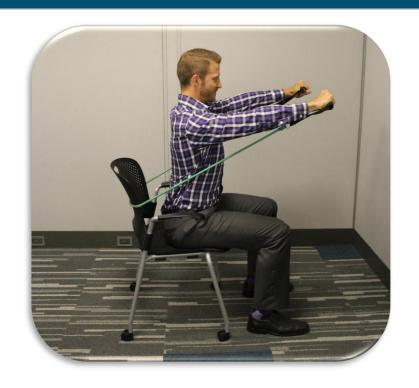


- Place palms on your desk flat with arms flat just outside the width of your shoulders
- Create a straight line from your head through your hips down to your ankles
- Your heels should be elevated with the weight placed on the ball of your feet
- Lower yourself downward in a controlled manner to your desk while maintaining the your posture
- Try to pull your chest apart as far as possible and squeeze the shoulder blades together
- Be sure not to shrug your shoulders upward during the movement
- Push through your palms into the desk to initiate the pushing phase back to the starting posit of

### SEATED CHEST PRESS WITH BAND





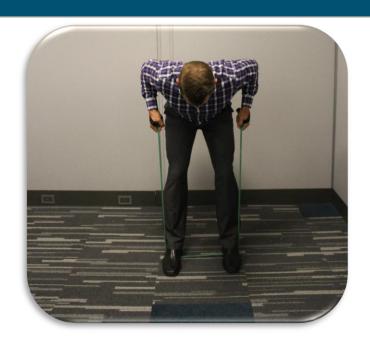


- Secure the band to the back of a chair or pole
- Sit on the edge of the chair with tall posture and with your hips level and flat
- Grab the handles/ends of the band so that the band is underneath your arms that are bent at 90 degrees
- Elbows should be below shoulder height
- Maintain good posture and a strong center, push the bands away from you fully extending your arms to shoulder height.

### BENT OVER BAND ROW







- Place the band underneath your feet and stand hip width apart
- With a flat back bend over as if you were touching your toes
- Knees bent slightly with the weight placed evenly on your feet
- Extend your head outward
- Initiate the row movement with your shoulder blades and continue to row the band in until your elbows are past your shoulders
- Avoid shrugging your shoulders during the movement

### HIGH PULL





- Place the band underneath your feet and stand hip width apart
- Keeping your wrist straight, pull the band toward your armpits
- Avoid arching your back to raise the band
- Avoid shrugging the shoulders as you raise the band

## **BAND PULL APART**







- Hold the band at shoulder height with palms facing the ceiling
- The distance between the hands is dictated by your strength, but suggest outside your shoulders as a starting point
- Stretch the band apart at shoulder level
- Squeeze the shoulder blades together
- Maintain your posture through the movement

### SHOULDER SERIES - TYW











- Start bent over with knees slightly bent and hips pushed back.
- Keep a straight line from your head through your spine
- Keep the hands rotated away from your body
- Begin each movement by first retracting your shoulder blades
- T Lift your arms up to the side to form a T
- Y Lift your arms up at a 45 degree angle to form a Y
- W –Begin this movement in a 'scare crow' type position; bring arms up to form a W 98

# CHAIR (OR DESK) TRICEPS DIPS







- Place your palms with fingers pointing towards you on the arms of a chair
- Legs can be straight or bent; heels on the ground with your foot flexed
- Lower your hips by bending at the arms
- Keep your hips as close the chair/desk as you can
- Try not to let your shoulders round forward
- Push through the palms to bring yourself back to the starting position

### **BICEPS BAND CURL**







- Place the band underneath your feet and stand hip width apart
- Hold the bands by your sides with your palms facing away from you
- Keep shoulders pulled down and elbows close to your body
- Bring your hands towards your shoulders keeping your wrists straight
- If your elbows begin to lift upwards, stop the movement and return to the start

### FINGER FLICKS







- Pull your fingers in tightly to form a quarter sized circle with your fingers placing your thumb on top
- Hold your arms out to the side at shoulder height
- Flick your fingers apart so that you can hear a "flicking" sound
- To change arm height by placing your hands by your side or overhead
- Work your way up to 50 flicks at each position

## STRENGTH MOVEMENTS: LOWER BODY

### CHAIR SQUAT







- Start with feet hip width apart and arms relaxed at your sides
- Initiate the squat with your hips sitting back keeping your chest tall and core tight
- Avoid your knees sliding forward past toes during movement
- Avoid your knees collapsing inward during the movement
- Use your arms to extended in front to allow you to sit back more

## SINGLE LEG SQUAT







- Stand on one foot
- Squat down by pushing the hips backwards towards the chair
- Keep chest up and back flat
- Bring your arms in front of your body to assist with balance and depth
- Touch/tap the chair with your glute
- Push through the floor with the front foot to return
- Keep your knee inline with your foot trying to prevent the knee to caving inward
- Do not bounce off the chair

## OVERHEAD SQUAT (MINIBAND)







- Start with your feet slightly wider than hip width; arms straight overhead with a light resistance miniband around your wrists (if you have one). Movement can be performed without the band
- Create tension on the band by pulling your arms apart to form a Y
- Initiate the squat with your hips pushing back
- Keeping the arms inline with your ears or behind squat as low as you can
- Do not allow the knees to cave inward, your arms to fall forward, and heels to lift
- Return to the starting position by activating your glutes and pushing through the floor with your feet

### FORWARD LUNGE









- Stand feet hip width apart
- Step forward and lower your body by bending at both knees
- Bring the opposite arm of the front leg forward to help balance
- Keep the knee inline with the middle of the foot (toes)
- Keep your chest up
- Avoid touching the back knee to the floor
- Push off with your front foot to return to the standing position

### LATERAL LUNGE







- Begin with your feet shoulder width apart and feet pointed forward
- Step to the side; bend the knee and lower the hip of the stepping leg keeping the opposite leg straight.
- Align the bent knee and hip (the knee should not outside the hip)
- Arms can extend outward to assist in dropping the hip down and keeping alignment
- To return, activate your glute and push into the floor with your foot
- Keep the knee behind your toes, chest up, and back flat

## CHAIR LEG CURL





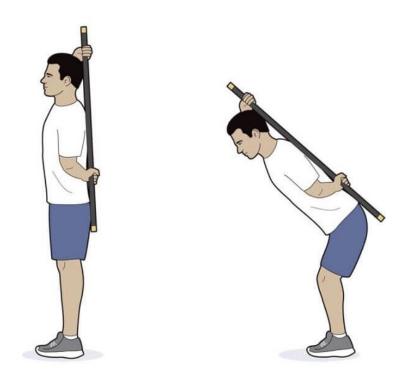




- Begin seated with tall posture with knees bent at 90 degrees
- With your feet flexed reach out with both legs touching the floor with your heels
- Dig your heels into the floor and pull your body forward until knees are 90 degrees
- The same exercise can be done with one leg as if you were doing a seated walk 123

### HIP HINGE





- Imagine a broomstick placed against the back of your head through your tailbone
- Grab the broomstick with one hand behind your neck and the other behind your lower back.
- Slightly bend your knees forward 10-15 degrees
- Begin to push your hips back
- Keep contact of the imaginary broom stick at all spots
- Push through your feet to drive upward to return to the starting position

# MINIBAND SERIES – GLUTE ACTIVATION STANDING INTERNAL & EXTERNAL HIP











- <u>Pic 1</u> In a quarter squat position the feet at hip width with band just below your knees. Maintain a neutral spine position keeping your head in line with your spine
- <u>Pic 2</u> Internally rotate your right knee inward while keeping the left leg fixed.
- Key: Do not allow either foot to come off the floor or rotate. Return to the start position
- Pic 3 Internally rotate both knees at the same time
- <u>Pic 4</u> Externally rotate the right knee outward; keep the opposite leg still

## MINIBAND SEATED LEG LIFTS





Place a miniband around the middle part of your feet

- Maintain good posture; keep both hips on the chair
- Keeping your foot flexed, drive one knee upward and pause
- Avoid altering your posture when lifting your foot
- Return to the floor

### MINIBAND WALKS – FORWARD & BACKWARD







- In a quarter squat position the feet at hip width with band just below your knees.
- Maintain a neutral spine position keeping your head in line with your spine
- FORWARD: Step forward 4-6 inches allowing the heel to hit the ground first
- Step forward with the trail leg so that foot is halfway in front of the other foot.
- Maintain tension on the band avoiding any knee collapse as you step
- BACKWARD: Repeat the same movement pattern, but allow the front part of your foot to hit the ground first.

### MINIBAND LATERAL WALKS









- In a quarter squat, position the feet at hip width with band just below knees.
- Maintain a neutral spine position keeping your head in line with your spine
- With the right leg take a 4-6 inch step laterally to the right pushing with your left leg
- With the left leg take a 4-6 inch step laterally and pause
- Repeat leading with opposite foot this time (the other direction)
- Be sure not to sway or have the knees cave inward

### MINIBAND DIAGONAL TOE TOUCHES -







- In a quarter squat, position feet at hip width with band just below knees (or above the ankles.
- Maintain a neutral spine position keeping your head in line with your spine
- Diagonally step backwards 45 degrees touching the ground with your ball of your foot
- Return to the starting position
- Avoid moving any other part of your body besides the leg stepping diagonally

# APPENDIX: ADDITIONAL RESOURCES; SAMPLE WORKOUTS



# ADDITIONAL LINKS FOR MOVEMENTS, GUIDELINES, SELF TISSUE MANIPULATION TECHNIQUES



### Pillar Wake Up Techniques

TPTherapy.com

### Pillar Stability

www.msn.com/en-ph/health/strength/exercise/Ex756/kneeling-plank

### Strength Training Guidelines

American College of Sports Medicine

### Exercise Library

www.acefitness.org/acefit/excercise-library/

Questions? – Email Deskercise@bcbsnc.com

### SAMPLE WORKOUT – FULL BODY



- + Target Pain: Trigger Point Glutes/Hips pg 11
- + Flexibility: Bench Stretch Position 1 & 2 pg 45
- + Lower Strength: Miniband Lateral Walks pg 134
- + Core Movement: Desk Plan with Alternating leg lift pg 62
- + Upper Strength: Bentover Rows pg 92
- + Lower Strength: Chair Squat pg 109
- + Upper Strength: Bicep Curl pg 106
- + Metabolic Movement: March in Place pg 76

### SAMPLE WORKOUT – FULL BODY



- + Target Pain: Anterior Tibialis (Shin) pg 7
- + Flexibility: Bent Over Reach Out pg 31
- + Flexibility: Seated Thoracic Spine Mobility pg 25
- + Core Movement: Desk Plank pg 59
- + Metabolic Movement: Quick Feet in Place pg 82
- + Lower Strength: Miniband Diagonal Toe Touch pg 133
- + Upper Strength: Desk Push Up pg 89
- + Lower Strength: Chair Leg Curls pg 123
- + Upper Strength: Band Rows Single Arm pg 92
- + Metabolic Movement: Side Step Jax pg 78
- + Flexibility: Reverse Lunge with Rotation pg 46
- + Flexibility: Sumo Squat Progression pg 47

# SAMPLE WORKOUT – TARGET SHOULDER PAIN/DISCOMFORT



- + Trigger Point
  - Pectorals/Deltoids pg 16
  - Trapezious pg 13
  - Neck with Peanut pg 12
- + Stretch
  - Cross Body pg 26
  - Sleeper Stretch pg 24
- + Strength
  - Shoulder Series pg 98
  - Band High Pulls pg 95

### SAMPLE WORKOUT – LOWER BODY FOCUS



### + Trigger Point

- Quad and IT Band pg 10
- Hamstring pg 9

### + Strength

Miniband Forward and Backward Walks – pg 133

#### + Stretch

- Standing Quad & Hip Flexor pg 51
- Seated Single Leg Hamstring pg 42

### + Strength

- Forward Lunge pg 116
- Chair Leg Curl pg 123
- Single Leg Balance pg 127

### SAMPLE WORKOUT – LOWER BODY FOCUS



### + Trigger Point

- Glute/Hip pg 11
- Hamstring pg 9

### + Strength

- Wall/Chair Squat Hover pg 112
- Good Morning pg 126

### + Stretch

- Standing Quad & Hip Flexor pg 51
- Seated Single Leg Hamstring pg 42

### + Strength

- Single Leg Toe Touch pg 122
- Lateral Lunge pg 118