

HAND and WRIST EXERCISES

GENERAL INSTRUCTIONS

This handout contains instructions for many different exercises. **It is important that you do only those exercises prescribed by your therapist.** If an exercise causes pain or if you are uncertain of how to do the exercise, leave it out and discuss it with your therapist before continuing.

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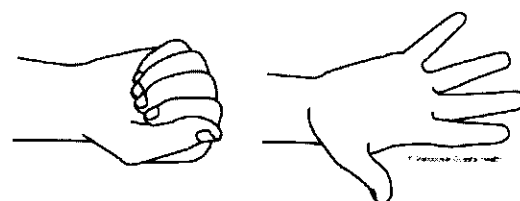
You may want to apply heat or cold to your hands / wrists for 5 –10 minutes before exercising to help decrease the pain or stiffness.

RANGE OF MOTION (ROM) EXERCISES

- ROM exercises help to maintain joint motion and decrease joint stiffness
- Recommended as a warm up activity before other exercises
- Move smoothly through your full available range
- You do not need to hold the position
- **Do 5 – 10 repetitions of each exercise daily**

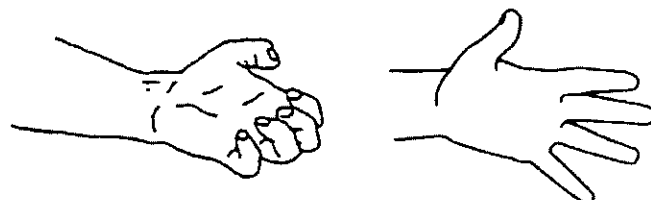
1. Gentle Fist

- Gently curl the tips of your fingers into your palm to make a gentle fist
- Slowly open to straight hand position and repeat



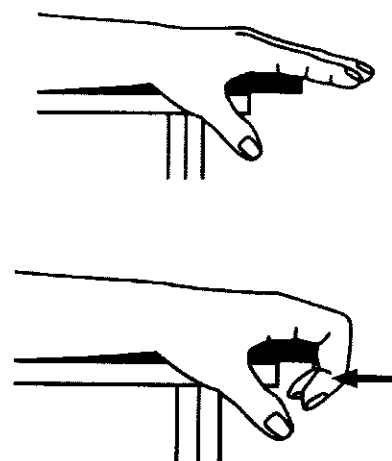
2. Hook Fist (Tuck)

- Keep big knuckle straight and bend middle and end joints of your fingers and gently curl the tips of your fingers down to touch the base of your fingers
- Uncurl to the straight hand position and repeat



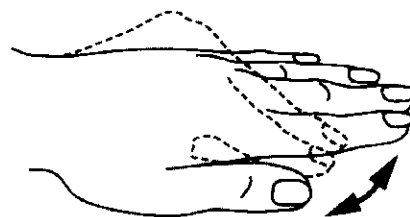
Option: Use a table or book

- Put your palm flat on a table / book with fingers straight and big knuckles blocked
- Make sure wrist and fingers are in neutral
- Gently curl the middle joints and end joints around the edge of table/ book
- Return to starting position and repeat



3. Big Knuckle (MCP) Joint Bending and Straightening

- Put your palm flat on a table
- While keeping your fingers straight, gently bend your big knuckles up and then straighten



4. Middle (PIP) Joint Bending and Straightening

- Use your opposite hand to block the big knuckle (MCP) joint (prevent bending of the joint)
- Bend the middle (PIP) joint as far as you can
- Straighten the middle joint and repeat



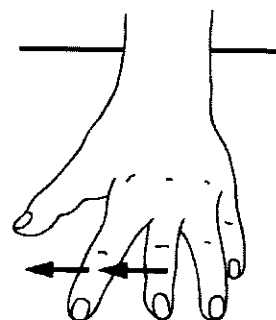
5. End (DIP) Joint Bending and Straightening

- Use your opposite hand to block the middle (PIP) joint of your finger
- Bend the end (DIP) joint as far as you can
- Straighten the end joint and repeat
- *Do this exercise for finger with Boutonnière Deformity*



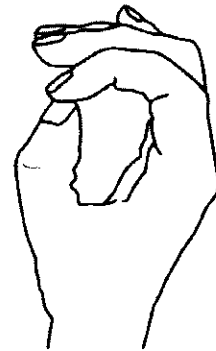
6. Finger Walking towards the Thumb (Radial Finger Walking)

- Put your palm flat on a table
- Make sure wrist and fingers are in neutral position
- Slide your fingers one by one towards your thumb
- **Do not slide your fingers back**
- Lift your arm up and return to starting position and repeat



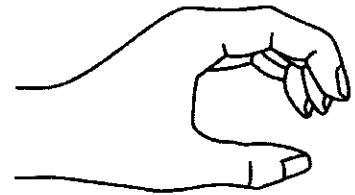
6. Thumb Tip to Fingertips

- Touch the tip of your thumb to the tip of each finger to make a circle
- Slowly open to the straight hand position after each touch and repeat



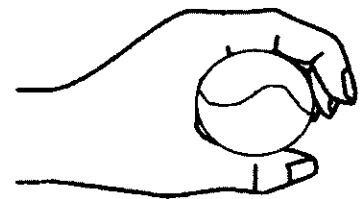
7. Thumb: "C" Position

- Curve your thumb and fingers into a "C" position as shown
- Relax and repeat



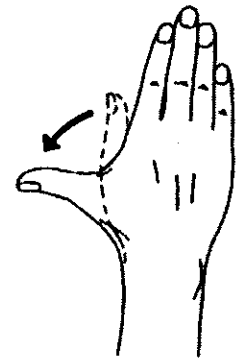
Option: Use a ball

- Use a ball (e.g. tennis ball) to help perform the exercise



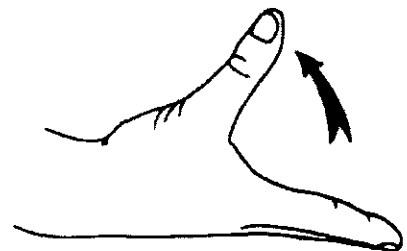
8. Thumb (CMC Joint) Extension

- Place the palm of your hand on table
- Bring your thumb away from the index finger and then back again



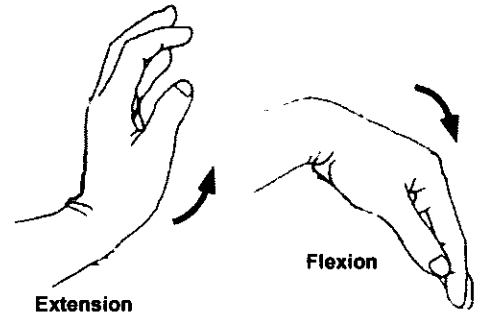
9. Thumb (CMC Joint) Abduction

- Place the back of your hand on table with palm up
- Move your thumb towards the ceiling
- Always keep the thumb in line with the index finger



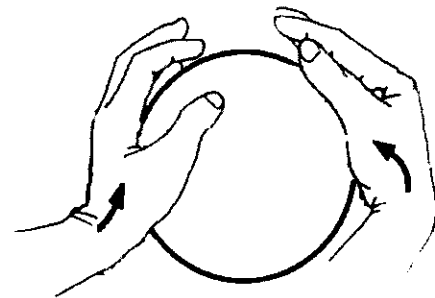
11. Wrist Bending (Extension/ Flexion)

- With your fingers relaxed, bend wrist towards back of hand as far as you can and then bend wrist towards palm as far as you can



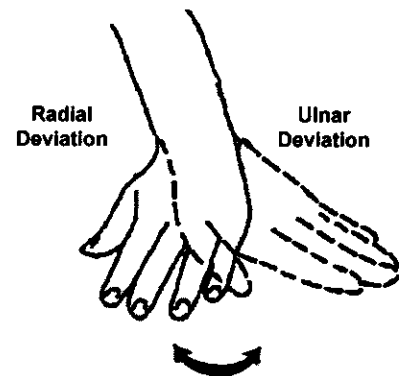
Option: Both hands using a ball

- Hold a ball on a table between the palms of both hands
- Using the wrists to perform slow and controlled motion of the ball on the table to produce a balanced wrist motion



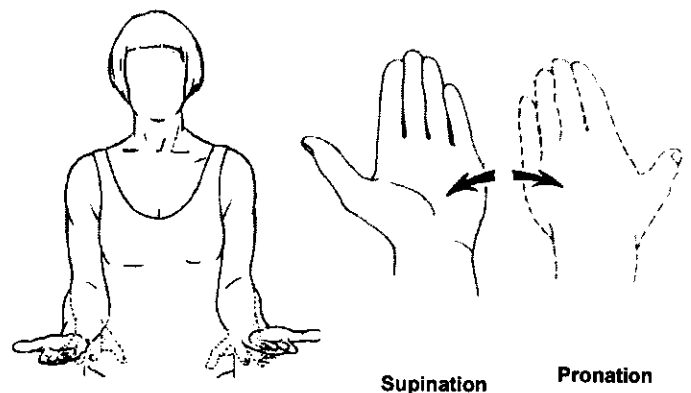
12. Wrist Side to Side Motion (Radial / Ulnar Deviation)

- With your forearm and palm resting on a table, move your wrist to one side and then to the other side



13. Palm Up and Down (Forearm Supination and Pronation)

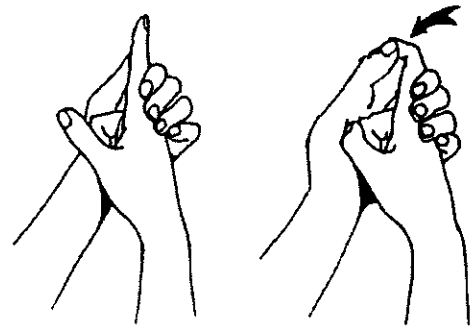
- Bend your elbows and keep elbows tucked by your side
- Slowly turn your palms up and then turn your palms down



Passive ROM Exercises

14. Passive End Joint Bending (DIP Flexion / Extension)

- Use opposite hand to gently bend your finger at the end joint as far as possible
- Straighten the finger and repeat with other fingers



Option: Boutonnière Deformity Stretch

- Apply downward pressure to bend the end joint of the finger with Boutonnière Deformity until a gentle stretch is felt
- Hold stretch for 10 – 30 seconds
- Repeat 3 – 4 times, once or twice daily

15. Passive Middle Joint Bending (PIP Flexion / Extension)

- Use opposite hand to gently bend your finger at the middle joint as far as you can
- Straighten the finger and repeat with other fingers

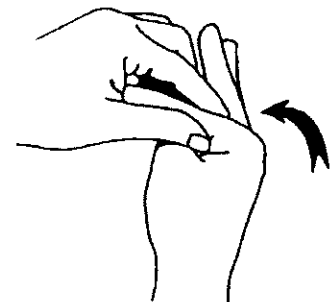


Option: Swan Neck Deformity Stretch

- Apply downward pressure to bend the middle joint of the finger with Swan Neck Deformity as far as possible
- Hold for 10 – 30 seconds. Repeat 3 – 4 times, once or twice daily
- Stop exercise if the middle joint is swollen or painful

16. Passive Big Knuckle Joint Bending (MCP Flexion / Extension)

- Use opposite hand to gently bend your finger at the big knuckle joint as far as possible
- Straighten the finger and repeat with other fingers

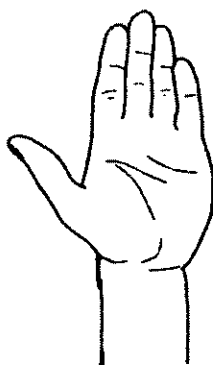


TENDON GLIDING EXERCISES

- Tendon gliding exercises help to increase circulation in your hand and wrist, which in turn reduces swelling and promotes healthier soft tissue (muscles, tendons and ligaments)
- These exercises allow tendons to reach their greatest amount of tendon length and can prevent or reduce tendon adhesions
- **Do these exercises 2 – 3 times daily**

17. Tendon Gliding

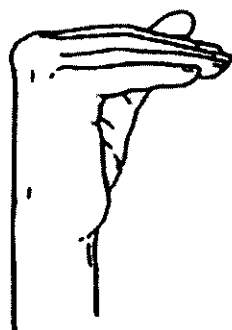
- Start with “**straight hand position**”



- Do 3 – 5 repetitions of the FOLLOWING sequence

Straight Hand → **Table Top** → *Straight Hand* → **Hook Fist** →
Straight Hand → **Straight Fist** → *Straight Hand* → **Full Fist** →
Straight Hand

Table Top



Hook Fist



Straight Fist



Full Fist



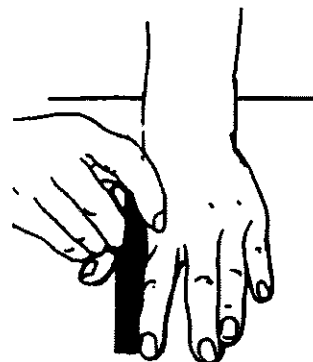
STRENGTHENING EXERCISES

Isometric Strengthening Exercises

- Isometric exercises involve contracting the muscles but not moving the joint. Use a fixed object such as a ruler or another body part to provide resistance. This is a good and safe way to initially strengthen muscles around painful joints.
- ***Use only 60 – 70 % of your maximum effort when doing the exercise***
- ***Hold for 5 – 6 seconds and slowly relax. Do 5 – 10 repetitions***

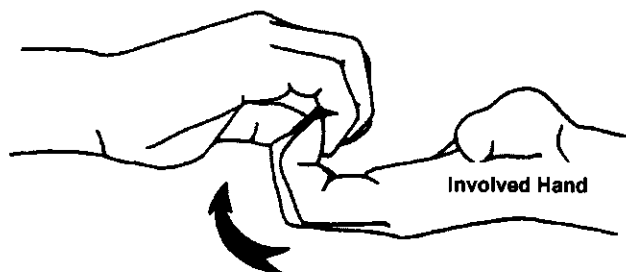
18. Fingers: Isometric Holding towards Thumb Side (Radial Holding)

- Place your palm flat on a table with fingers straight in neutral position
- Place a pencil / ruler along the side of your finger (the thumb side only)
- Press finger gently against the pencil / ruler



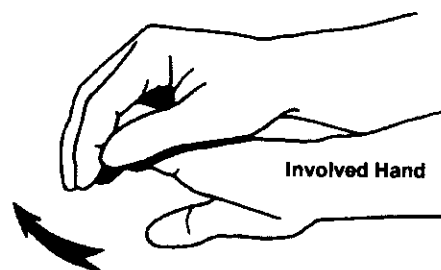
19. Fingers Bending (Finger Flexion)

- Apply light to moderate resistance with opposite hand as you curl fingers of involved hand



20. Fingers Straightening (Finger Extension)

- Apply light to moderate resistance with opposite hand as you straighten fingers of involved hand



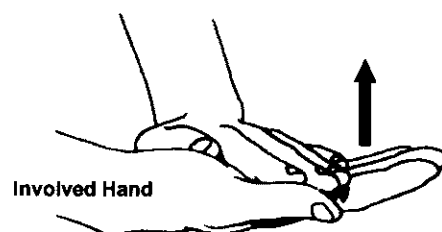
21. Wrist Bend towards Back of Hand (Wrist Extension)

- Rest the involved forearm on table with palm facing down
- Using opposite hand, resist upward movement of the involved hand at wrist



22. Wrist Bend towards Palm (Wrist Flexion)

- Rest the involved forearm on table with palm facing up
- Using opposite hand, resist upward movement of the involved hand at wrist



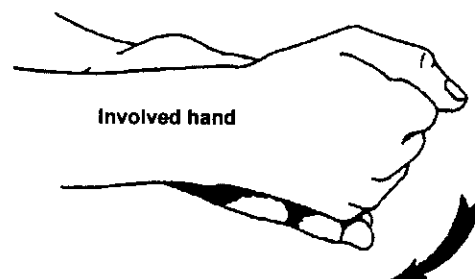
23. Wrist Side Motion towards Thumb Side (Radial Deviation)

- Rest the involved forearm on table, thumb up
- Using opposite hand, resist upward movement of the involved hand at wrist



24. Wrist Side Motion towards Little Finger Side (Ulnar Deviation)

- Rest the involved forearm on table, thumb up
- Using opposite hand, resist downward movement of the involved hand at wrist

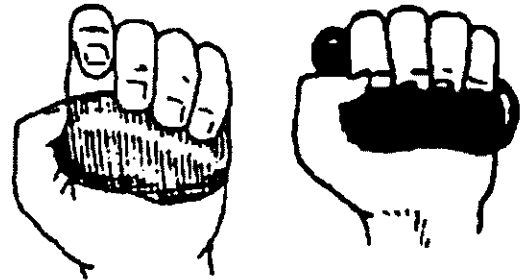


Resisted Strengthening Exercises

- You can use putty, elastic band or weight to provide resistance as you move the joint through its range of motion
- ***Begin with 6 – 8 repetitions and build up to 15 repetitions***
- ***Do 3 days a week on alternate days (unless advised differently by your therapist)***

25. Full Fist with Putty

- Shape putty into a ball
- Place putty in the palm of your hand
- Gently press the fingers into the putty to make a fist



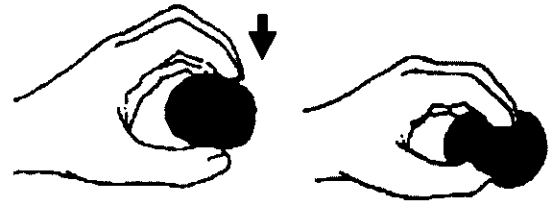
26. Hook Fist (Tuck) with Putty

- Shape putty into a ball
- Place putty at the base of the fingers
- Gently press only with the fingertips while keeping the palm of hand open



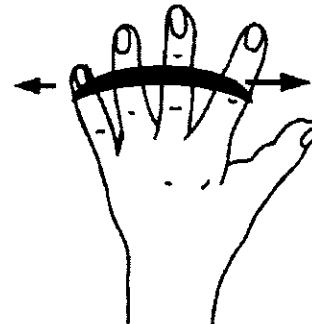
27. Finger Pinch with Putty

- Shape putty into a ball
- Gently press the putty between the finger and thumb



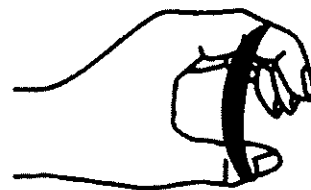
28. Fingers Spread with Rubber Band

- Wrap rubber band around fingers
- Spread the fingers apart as far as you can
- Slowly relax and repeat



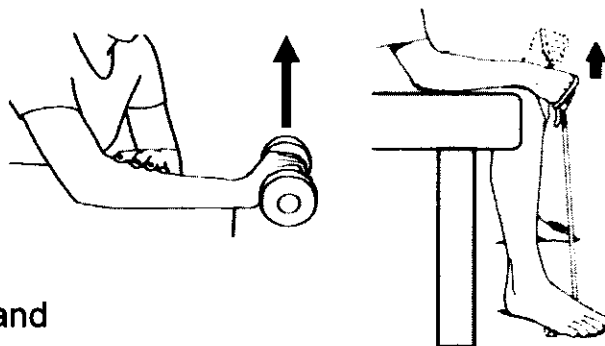
29. Thumb "C" Position with Rubber Band

- Place a rubber band around your thumb and 4 fingers and open your thumb and fingers into a "C" position
- Slowly relax and repeat



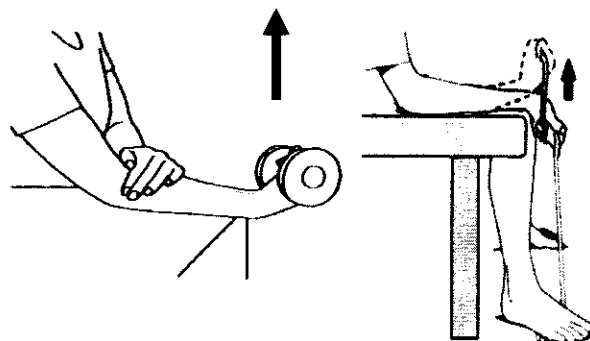
30. Wrist Bend towards Back of Hand (Wrist Extension)

- Rest your forearm on a table with the wrist over the edge (palm facing down towards floor)
- Hold weight / theraband in the hand (use foot to secure the theraband)
- Bend your wrist up towards back of hand
- Slowly lower hand down and repeat



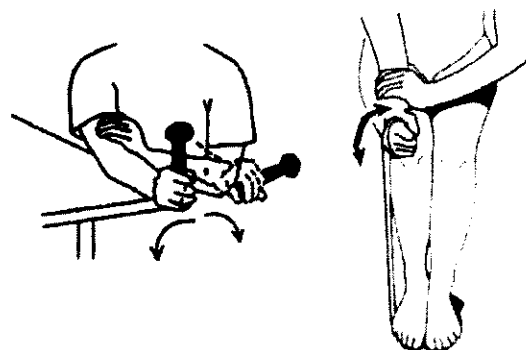
31. Wrist Bend towards Palm (Wrist Flexion)

- Rest your forearm on a table with the wrist over the edge (palm facing up)
- Hold weight / theraband in the hand (use foot to secure the theraband)
- Bend your wrist up towards palm
- Slowly lower hand down and repeat



32. Palm Up and Down (Forearm Rotation)

- Rest your forearm on a table with the wrist over the edge as shown
- Hold weight / theraband in the hand (use foot to secure the theraband)
- Turn your palm up and then down
- Return to starting position and repeat



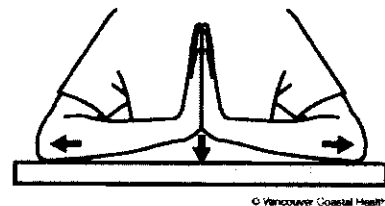
STRETCHING EXERCISES

- Stretching exercises help to increase flexibility in the soft tissues around the joints. Ideally, warm up the muscles before stretching (e.g. do ROM exercise, warm shower, soak in warm water etc.)
- Use caution when stretching muscles over an inflamed or swollen joint
- ***Stretch gently. Hold each stretch for 20 – 30 seconds and relax slowly. Do 3 – 4 repetitions on both sides.***
- ***Do not hold your breath while stretching (e.g. try counting out loud)***

33. Fingers / Wrist Palmar Side Stretch

a) Two Hands Together (Prayer Stretch)

- Place your palms together, gently move your elbows out to the side until you feel a mild stretch at palmar side of wrist and fingers



b) Single Hand Stretch

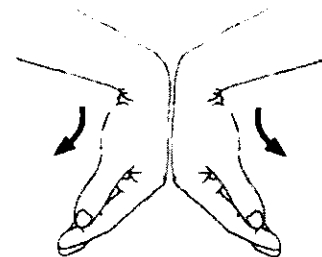
- Use opposite hand to slowly bend wrist towards back of hand until a mild stretch is felt at the forearm muscle and palmar side of wrist and fingers



34. Fingers / Wrist Back Side Stretch

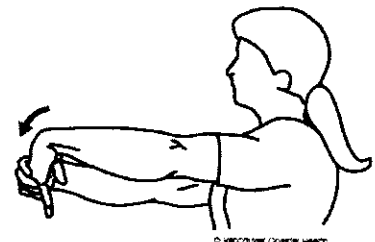
a) Two Hands Together

- Place back of your hands together, gently bend your wrists until you feel a mild stretch



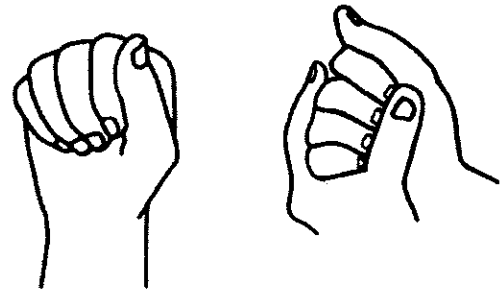
b) Single Hand Stretch

- Use opposite hand to slowly bend wrist towards palm side until a mild stretch is felt at the forearm muscle and the back of wrist and fingers



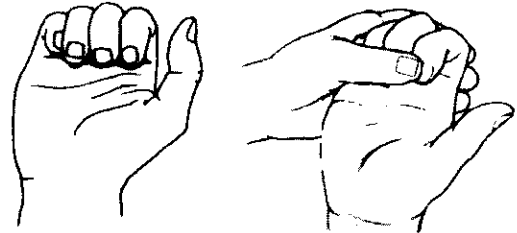
35. Passive Full Fist Stretch

- Use opposite hand to gently bend fingers into a fist position until a mild stretch is felt
- Slowly open your fingers and repeat



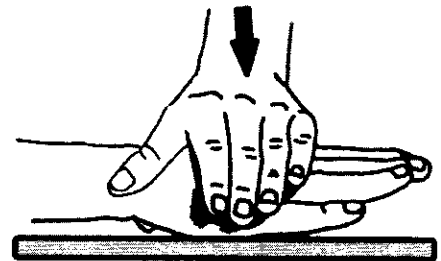
36. Passive Hook Fist (Tuck) Stretch

- Keep your big knuckle straight and use opposite hand to gently bend the middle and end joints of your fingers until a mild stretch is felt
- Slowly open your fingers and repeat



37. Finger Joints Straightening Stretch (MCP, PIP and DIP Joints)

- Place the involved hand flat on a table with palm down
- Use opposite hand to gently push down on the back of the fingers towards the table to straighten the finger joints on the bottom until a mild stretch is felt
- Try to get the entire surface of all fingers and the palm to touch the table



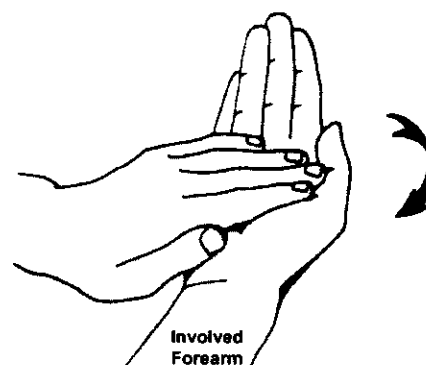
38. Thumb Web Space Stretch

- Gently slide your thumb web space from the wrist of the opposite arm along the forearm until you feel a mild stretch in the web space between your thumb and index finger of involved hand



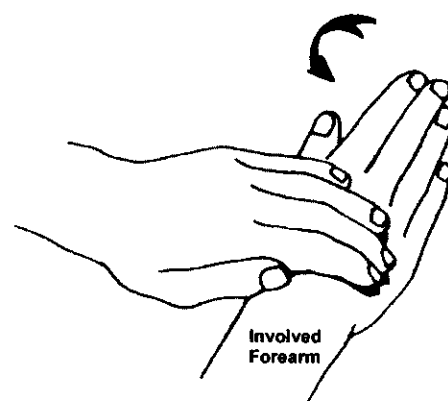
39. Palm Up (Forearm Supination) Stretch

- Bend your elbow and rest forearm on table, palm facing up
- Use opposite hand to gently push the involved hand towards the table till you feel a mild stretch in the forearm



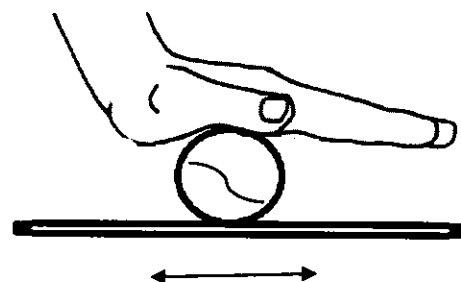
40. Palm Down (Forearm Pronation) Stretch

- Bend your elbow and rest forearm on table, palm facing down
- Use opposite hand to gently push the involved hand towards table till you feel a mild stretch in the forearm



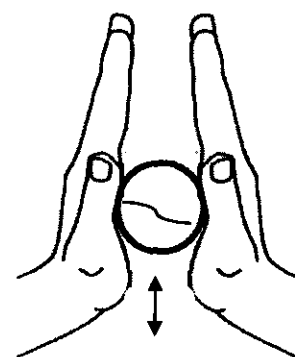
41. Palmar Fascia Stretch

- Place a ball (e.g. tennis ball) under the palm of hand and gently press down
- Roll the ball under your palm with gentle pressure to massage and stretch the palmar fascia of the involved hand



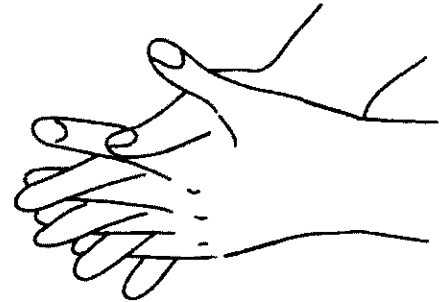
Option: Two Hands Together

- Place a ball (e.g. tennis ball) between the palms of your hands
- Roll the ball between your palms with gentle pressure to massage and stretch the palmar fasciae of both hands



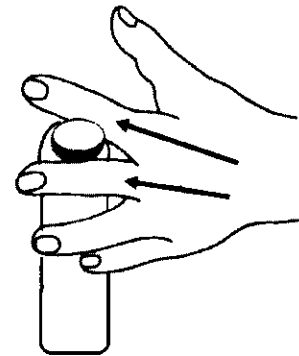
42. Finger Web Space Stretch

- Interlace your fingers and try to slide the fingers all the way down till you feel a mild stretch at the finger web spaces



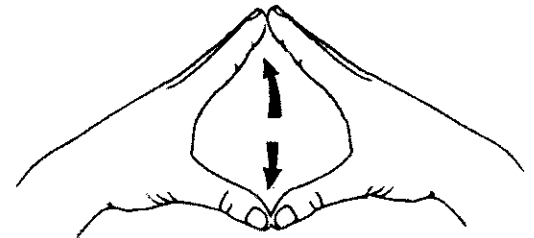
Option: Use a water bottle

- Place the top of a water bottle between two of your fingers and slide it down as far as possible
- Repeat with other fingers



43. Thumb and Index Finger Web Space Stretch

- Place the pads of the thumb and index fingers of both hands together and push the thumbs away from the index fingers as far as possible until a mild stretch is felt



44. Middle (PIP) Joint Straightening Stretch

- Place your involved hand flat on the table
- Use the thumb of opposite hand to press down on the back of the middle joint of involved finger and use the index finger to lift up underneath the tip of the involved finger to try to straighten the middle joint as far as possible
- Repeat with other fingers

