

Physiotherapy Exercise for Hands



The structure of the hand is very sophisticated. A simple movement like making a fist requires synchronized actions of many small joints and muscles. It is important to maintain the hand dexterity and strength in the elderly, as most of the daily activities require a pair of healthy hands. In view of this, physiotherapists from the Department of Health have designed the following exercises for the elderly so as to prevent and treat hand disorders.







Appropriate exercises can increase the range of motion, muscle strength and flexibility of the hand so as to improve the hand dexterity

Hand Exercise Precautions

- The elderly should perform the exercises according to their ability and progress gradually. As a general rule, these exercises should not cause any pain
- The elderly with the following conditions should consult a physiotherapist or other healthcare professionals before starting these exercises:
 - Joint deformity of hand
 - Unhealed wounds in hand
 - Unhealed fracture, sprain, dislocation or other discomfort of upper limbs
- Stop immediately if you feel any discomfort while exercising. If the discomfort is severe, persists or worsens, please seek urgent medical advice

Caring Tips for Hand

The elderly should reduce loads of hand and avoid prolonged use of hands:

- Use stronger and larger joints or body parts to support the weight of the objects (such as using backpack or shoulder bag instead of carrying groceries by hands)
- Use assistive aids to replace repetitive movements or reduce loads of the hands (such as using blender to replace mincing meat by knife, using trolley to carry objects or shopping)

Joint Mobility Exercise (Suggest to perform 1-3 sets daily,

10 repetitions per set)

Palm Up and Down:

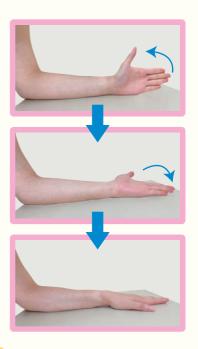
Put the left forearm near the edge of the table and support it with a towel. Secure the left forearm with the right hand. Relax the hand to allow fingers spreading out. Slowly move the wrist up and down. Repeat the movement with right hand.



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Forearm Rotation:

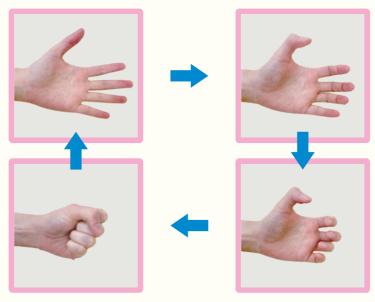
Lay the forearm and hand on the table vertically with the elbow bent. Rotate the forearm until the palm faces up. Then rotate the forearm with opposite direction until the palm faces down. Repeat the movement.



3

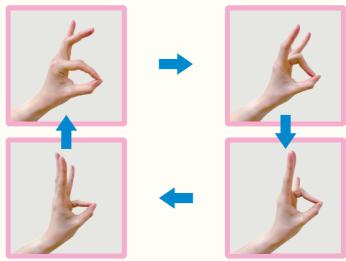
Fist Open and Close:

Bend each finger joint progressively and make a fist as tight as possible, then straighten out the fingers slowly and progressively.



Finger Counting:

Touch the tip of each finger to the tip of the thumb one by one.



Stretching Exercise (Suggest to perform once a day, 2-4 repetitions each time)

Palms Out:

Interlock the fingers, then turn the outwards. Push forward and keep the elbow straight until you can feel a slight stretch over forearms and wrists. Hold for 10-30 seconds, then relax. Repeat the movement.







Fist Press:

Straighten left elbow while left hand holding a fist. Press left fist down with right hand until you can feel a slight stretch over the forearm and wrist. Hold for 10-30 seconds, then relax and repeat. Repeat the movement with right hand.



7 Thumb Extensor Stretch:

Secure left forearm with right hand near the edge of the table. Put left thumb into palm and clench a fist. Slowly bend the fist down until you can feel slight stretch over thumb. Hold for 10-30 seconds, then relax and repeat. Repeat the movement with right hand.







Thumb Flexor Stretch:

Place the thumbs and index fingers of both hands together and push them against each other until you can feel slight stretch over the web space. Hold for 10-30 seconds, then relax and repeat the movement.





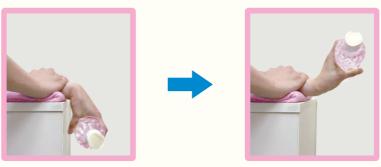


Strengthening Exercise

(Suggest to perform 2-3 days a week (on alternate days), 10 repetitions a set, 1-3 sets a day)

Water Bottle Lifting:

1. Support left forearm with wrist slightly bend down at the edge of a table. Left palm faces down while holding a plastic water bottle (500 ml) filled with water or any other object that weighs about 1 pound. Secure left forearm with right hand. Lift left wrist up and hold for 5 seconds, then relax and repeat. Repeat the movement with right hand.



2. With the back of left hand facing down, bend the wrist down slightly. Secure left forearm with right hand. Lift left wrist up and hold for 5 seconds, then relax and repeat. Repeat the movement with right hand.



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Tennis Ball Grabbing:

Grab a tennis ball, hold for 5 seconds, then relax and repeat.





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Rubber Band Spreading:

Wrap a thick rubber band (5-7mm in thickness) around the fingers and spread the fingers and thumb as far apart as possible. Hold for 5 seconds, then relax and repeat.









Please consult a physiotherapist or other healthcare professionals if you have any queries about this pamphlet.

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