

Connected Fingers

The hands are composed of 27 bones including the wrist, and they represent the highest concentration of interlinked bones in the human body. Research on the neuromuscular activation patterns show that **all fingers are responsive to every flex and twitch of the other fingers**, even the ones with independent anatomy like the thumb and the index digits. This connection between fingers is best seen in the relationship between the ring finger and the pinky. Let's try some exercises first.

Exercise #1

Sequentially straight each finger starting with your thumb to the pinky, trying to keep the rest of the fingers straight.

1.



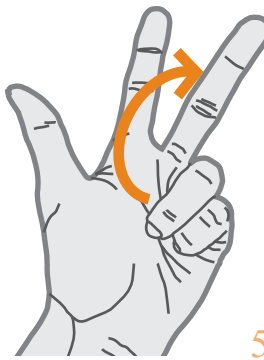
2.



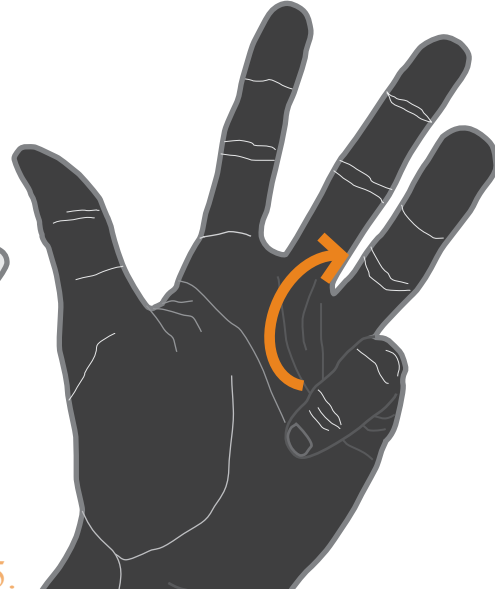
3.



4.



5.

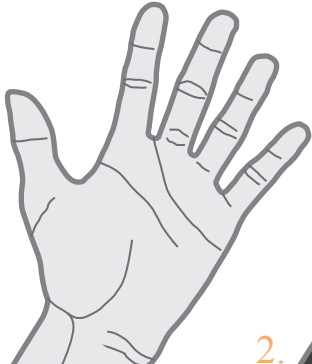


Observing the behavior of each finger, you could see how the thumb and the index finger move freely from the other fingers but when you start straighten your middle fingers it starts to get a little more difficult. When trying with **the ring finger is almost impossible to straighten out** keeping your pinky curled.

Exercise #2

With your palm face up and your fingers completely straight try to curl your pinky without flexing any other finger.

1.



2.

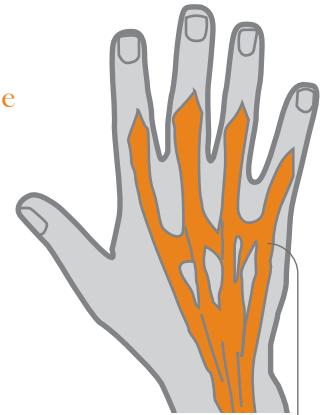


Curling your pinky makes your ring finger joints curl too. Because the ring finger **does not have** an independent extensor muscle it must flex along with the pinky.

What happens?

Your fingers have **one common extensor muscle** that is connected to all four fingers. Your index and little finger have their own extensor muscles in addition to extensor digitorum. That is why they are so much easier to extend.

1 out of 20 people have independent extensor muscles for the middle fingers.



extensor digitorum