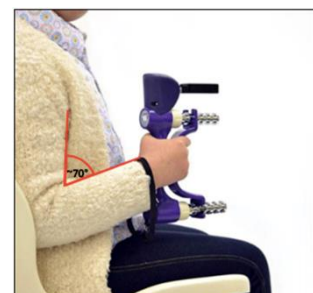


Grip strength test

Contraindications – fresh hand injury, painful hand/foot syndrome

- Explain “For the test, I will ask you to squeeze this hand grip as hard as you can. You will sit or stand with a straight back and your toes pointing forward. You will hold your hand so that it’s not touching your body and squeeze the handle. I want you to try not to lean back when you squeeze. You will take a breath in, then blow out while you squeeze. You will squeeze as hard as you can until you can’t squeeze any harder.” Do a squeeze demonstration. “We will test each hand 3 times”.
- Emphasize that the patient should sit with the feet hip width apart with their toes pointing forward.
- Ask the participant, if she/he is left-handed or right-handed and record it on the testing sheet. If the participant was forced to be right-handed during childhood and is only writing with the right hand but still working with the left arm make a note on the testing sheet.
- Instruct the participant to grasp the dynamometer between the fingers, the palm at the base of the thumb and an approx. angle of 70° between forearm and upper arm. The wrist should be at 0° of ulnar/radial deviation.
- Instruct the participant to hold the dynamometer in line with the forearm at the thigh level so that it’s not touching the body.
- Instruct the participant not to hold his or her breath by explaining “Take a breath in before starting the squeeze, then slightly blow out the air during the squeeze”.
- Emphasize the quickness and hardness of the squeezing motion (with fist slightly shaking).
- Adjust handle position 2 by opening the clip, swinging the handle over and putting it in the second position. Then you swing it back and fix it again
- If handle position 2 is very uncomfortable for the participant, change the handle to a position comfortable for the participant. Record the handle position on the testing sheet. Ensure to use the same handle position for follow-up assessments.
- Explain “Now try it once just to get the feel of it. Take a breath in, let it out and squeeze.”
- Start the testing now. Explain “You may squeeze either hand first, whichever is more comfortable for you. You will do it 3 times in a row with 30 seconds rest between the trials, before conducting the test with the other hand”.



- After each trial, record the reached outcome in kg on the testing sheet and turn the dial back down to reset it. After conducting the 3 trials for each hand, select the best attempt (kg_{max}) for the left and right hand, respectively, and record it on the testing sheet.