

MEASUREMENT GUIDE

ASSESSMENT OF UNILATERAL LEG LYMPHOEDEMA

1. Patient lies in a supine position on a non-metallic surface.

Have the patient remove shoes and socks, watches, bracelets and anklets. Ask the patient to lie on their back with feet shoulder width apart and hands by their sides. If necessary, place a towel or sheet between the patient's legs or between the arms and torso in order to prevent skin-to-skin contact.







2. Clean sites of electrode placement.

Identify the sites where the electrodes will be placed on the wrist of the right arm and on the ankle of each foot. Clean the sites with an alcohol swab. Allow these sites to dry for 30 seconds before placing electrodes in position.



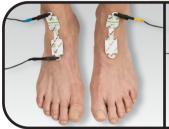


3. Apply the electrodes.

Using the anatomical locations described, carefully place electrodes in position. Do not press down on the electrodes too firmly while applying.

Feet: Place the proximal end, with the green line between the medial and lateral malleolus bones, on the ankle, and run the distal tab down towards the toes.

Hand: Place the proximal end, with the green line on the midline of the ulnar styloid process, on the wrist, and run the distal end down towards the fingers.





4. Right leg measurement.

Attach the colour coded alligator clips to the tab of the electrodes for measurement of the right leg. Do not place clip into the gel of the electrode. 1. Red toward the fingers of the right hand. 2. Yellow at the ankle of the left leg. 3. Black toward the toes of the right foot.

4. Blue at the ankle of the right leg.





5. Left leg measurement.

Rearrange the colour coded alligator clips to the electrodes for measurement of the left leg.

- **1.** Red toward the fingers of the right hand.
- 2. Yellow at the ankle of the right leg. 3. Black toward the toes of the left foot. 4. Blue at the ankle of the left leg.



HELPFUL HINTS

- **1.** Run the test cell each day that a reading will be taken.
- **2.** Inform the patient prior to a visit to come normally hydrated:
- Voided (empty bladder)
- No exercise 2 hours prior to reading
- * No caffeine 2 hours prior to reading
- No alcohol 12 hours prior to reading
- 3. Inform the patient not to wear stockings or pantyhose as an electrode will be placed on the ankle.
- 4. When assessing a patient in therapy for lymphoedema, a measurement should be taken prior to any massage therapy, bandaging or wrapping. A patient wearing a compression garment should be assessed immediately after the garment is removed.
- **5.** Attempt to take measurement at the same time during the day or month for each patient.
- **6.** Be certain the patient is not pregnant and does not have a pacemaker or other implanted electronic devices.
- 7. Take note if the patient has a metal implant in the arm or shoulder. Metal implants may alter the measurements made by the L-Dex® device. This offset may affect the initial reading relative to the normal L-Dex range but should not affect the ability to track the change in the L-Dex value over time.

- 8. Use an alcohol swab to clean the skin prior to electrode placement, especially if the patient is wearing any gels, lotions or sunscreen. Make sure to allow the alcohol to dry completely before placing the electrodes on the skin.
- **9.** If the electrode sites have excess hair and do not allow proper electrode adherence, shave the sites.
- **10.** Place the electrode so it lies flat on the skin and press gently to ensure entire electrode is sticking. Do not press down so firmly that gel squeezes out from under the electrode.
- 11. Make sure the electrode packs are zip sealed after you are done with them so they do not dry out.
- **12.** When attaching a lead to the tab of an electrode, do not place the clip into the gel.
- **13.** When the subject is in the supine position, ensure the skin between the legs is not touching; use a towel to separate if required. Also ensure the arms are not touching the torso.
- **14.** Ensure the person remains supine for at least 3 minutes, but no more than 10 minutes.
- **15.** Make sure the patient is not touching metal when they are in the supine position.
- **16.** Have the patient remain still and relaxed during the measurement.
- **17.** Double check the dominant/affected side information before proceeding with the measurement.
- **18.** Always check to ensure that the electrodes are properly positioned and that the colour coded leads are in the correct position prior to taking a measurement.

