

INSTRUCTION MANUAL

Congratulations!

Your practice now features one of the most advanced medical devices on the market today. In less than three minutes, the portable, non-invasive **LifeMeter** objectively measures carotenoid levels in your patients. Over 30 peer-reviewed publications show that knowing the presence of these nutrients in the skin, coupled with proper targeted nutritional supplementation, enhances your patients' overall health and significantly improves visual performance.

Now you have a safe and convenient way to ensure any patient — regardless of age^{*}, socioeconomic status, race, ethnicity and gender — is getting an appropriate amount of carotenoids in their diet. These nutrients can support the prevention and management of age-related macular degeneration (AMD) and enhance general health. This knowledge will empower you to discuss positive dietary choices and treatments.

*LifeMeter has been validated for use in those between the ages of 9 to 85.

BOX CONTENTS



Not pictured: microfiber cloths and alcohol wipes.



SETUP

Follow each step in order to ensure proper setup.

- 1. Connect the **laptop** to a power outlet using the **AC power adapter**.
- 2. Power on the laptop by pressing the power button in the upper right corner of the keyboard.
- 3. When the laptop is powered on, tap on the trackpad to activate the screen.
- 4. Enter the password: project.
- 5. Connect the micro-USB end of the USB cable to the micro-USB port located on the back of LifeMeter (as shown in image A).
- 6. Insert the USB cable into either port on the left or right side of the laptop (as shown in image B).
- 7. Wait approximately 3 seconds for the connection notification to sound through the laptop.
- 8. The app icon for LifeMeter should appear on the top right corner of the laptop's screen (as shown in image C). Open the app.
- 9. The three panels of the LifeMeter program will display on the screen:

a. Subject Demographics: A panel for entry of patient information

b. Measurements: The selection of the desired measurement mode ("Single Scan" or "Average of 3 Scans") and calibration measurements ("Dark Reference" and "White Reference" buttons)

c. A large blank display panel that will feature calibration scans and patient results after testing

10. Calibrate LifeMeter before use, per the instructions on page 4.



CALIBRATION

LifeMeter should be calibrated:

Whenever the laptop is shut down and restarted / Every two hours of operation

You do NOT need to shut down the laptop and restart for calibration; simply conduct the calibration steps listed below beginning with Dark Reference:

Dark Reference:

- Open the lid by pressing the indent on the top of 1. LifeMeter.
- 2. Wipe the lens with the supplied microfiber cloth.
- Slide the dark reference stick. felt side down. 3. with its two side rails over the finger cradle (as shown in image D). Note: Do not touch the black felt.
- 4. Allow the lid to close to hold the dark reference
- stick in place and select the "Dark Reference" button.
- 5. The display panel will show the reflection spectrum for the dark reference. Note: It should look somewhat jagged, with a maximum intensity below 350 (refer to image H on page 6).
- Remove the reference stick and place it back in 6. the plastic bag.

White Reference:

- 1. Open the lid by pressing the indent on the top of LifeMeter.
- 2. Slide the thin end of the white reference stick, white side down, over the finger cradle (as shown in image E).

Note: Position the reference stick into the finger cradle such that the indentation in the white plastic material fits snugly over the internal lens, with the lip flush against LifeMeter (as shown in image F).

- 3. Allow the lid to close to hold the white reference stick in place and select the "White Reference" button.
- 4. The display panel will show the reflection spectrum for the white reference. Note: It should look smooth, with a peak between 42,000 and 52,000 (refer to image I on page 6).
- 5. Remove the reference stick and place it back in the plastic bag.





PATIENT MEASUREMENT

- 1. To begin, enter the patient information. These parameters do not affect the patient's LifeMeter result.
- 2. Clean the index fingertip of the patient's non-dominant hand with an alcohol wipe (i.e., if the patient is right-handed, select the left index finger).

a. If the index finger is unusable, select another finger on the non-dominant hand; index, middle, or ring finger are preferred.

i. If the non-dominant hand is unusable, the dominant hand may be used (index, middle or ring finger are preferred).

- 3. Wait 10 seconds after using the alcohol wipe before using LifeMeter.
- 4. Open the LifeMeter lid and instruct the patient to insert their fingertip into the device, centering it on the top of the raised lens.
- 5. Close the lid over the patient's fingertip (as shown in image **G**). Note: There will be some slight downward pressure on the finger.
- 6. Select "Average of 3 Scans."
- 7. Instruct the patient to hold their hand still. Select the "Start" button.
- 8. Follow the prompts to obtain the patient's score.

a. The patient will be asked to remove their finger after each measurement and wait five seconds before re-inserting.

b. The patient's carotenoid level will be displayed after three measurements^{**}. Select "Close" to return to the measurements window.

c. Wipe the LifeMeter lens with the supplied microfiber cloth before the next patient's measurements.

9. Measurement data is automatically saved in a folder on the laptop's desktop titled "Results."



*'If you receive a message stating, "Score is out of range," you will need to repeat the calibration process.

CALIBRATION CONTINUED

Dark Reference Example



White Reference Example



SHUT DOWN

- 1. When you are finished using LifeMeter, select the "X" in the upper right corner of the program on the laptop,
- 2. then select the "OK" button on the following window.
- 3. Disconnect the USB cable from LifeMeter.
- 4. Disconnect the USB cable from the laptop.
- 5. Select the Windows icon on the taskbar, select the power icon and then select shut down.

NOTES

- C The patient's finger should be cleaned with an alcohol wipe before session.
- The LifeMeter lens should be cleaned with the supplied microfiber cloth before each patient's session.
- Avoid placing LifeMeter in extreme heat, cold or sunlight.
- C Follow the Shut Down procedure daily to maintain communication between the laptop and LifeMeter.
- To re-establish communication between the **laptop** and **LifeMeter**, shut down the program, then unplug and reconnect the **USB cable**.
- C Do not open the file ResultsM.csv ("Results" shortcut) while the software is running.



SUPPORT

Call (866) 704-0845 or email support@lifemeter.com for customer or device support.

This LifeMeter unit has passed all inspection, calibration and scanning requirements.

PLACE INSPECTION LABEL HERE



Know your level, enhance your life



Improve your patients' quality of life at LifeMeter.com

