

Starting a Metabolic Test

Technical Note



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Starting a Metabolic Test

Once you have completed the **Metabolic Cart Setup Checklist**, you are ready to take metabolic data from a human subject by following this procedure.

Prepare the hardware and software

- 1) To use the Metabolic Calculations, choose **Metabolic** from the *LabScribe2* **Advanced** menu and select **Mixing Chamber: Online Calculations**.
- 2) In the online calculations dialog:
 - Click the arrow next to **Metabolic**.
 - Make sure the correct channels are chosen for CO₂, O₂ and Volume.
 - Select averaging time of 20 seconds.
 - Enter the subject's weight.
 - Make sure the known concentrations of O₂ and CO₂ are correct.
 - Click **OK**.
- 4) Have your subject get into position for the test and fit your subject with the mask.
- 5) Click **Record**.
- 6) Have your subject inhale and exhale and look for changes in the Air Flow channel. You should see an oscillating wave of air flow.
- 7) If there is no movement in the recording, check all connections. Also check that the flowhead has its red-tagged connector facing the Mixing Chamber and that the red ports on the flowhead and the TA Control Module or the SP-304 Spirometer are connected via the ribbed tubing.
- 8) Once the recording shows breathing movement, click **Stop**.

Recording

- 1) Remove the large clean bore tubing from the mixing chamber and place it away from the chamber.
- 2) Type the subject's name and the type of test in the text box to the right of the **Mark** button.
- 3) Click **Record**.
- 4) Wait at least 10 seconds to allow the **Expired Air** channel to return to zero.
- 5) Reconnect the clean bore tubing to the mixing chamber.
- 6) Press the computer's Enter key to place the mark in the recording.
- 7) **AutoScale** all channels.
- 8) Check the **Expired Air** channel to be sure you are seeing an oscillating wave of airflow. You may need to click **AutoScale** after about 30 seconds to see good waves.
- 9) Collect the required data for the experiment you are running.
- 10) Remove the mask from the subject's face at the end of the test.
- 11) Click **Stop** and **Save** the file.