



## US FedEx Shipping Instructions

- 1) Ship specimens Monday through Friday. If you complete the collection on the weekend, hold the specimen until the following Monday to ship.
- 2) Place the cardboard kit box containing the specimens and the completed test requisition form into the FedEx Clinical Pak.
- 3) Write your name and address in the space provided on the prepaid Billable Stamp and tear off the Customer Receipt for your records.
- 4) To schedule a pickup, call FedEx toll-free at 1-800-463-3339 (1-800-GO FEDEX). When you hear the automated greeting, say "Schedule a Pick-up." At the next prompt, say "Schedule a Pick-up with a Label or Stamp." You will then be asked if the word "Stamp" is written on the waybill; reply "Yes". You will be asked if your pickup location is a residence or a business; respond with your location type. You will then be prompted for your address information.

**Do not use a drop box.** FedEx will not accept specimens placed into a drop box.

If you are located in the United States and choose to use a different courier or level of service than provided or are located outside the United States, you must make your own shipping arrangements at your own expense.



US & CANADA: 1.800.323.2784 - UK: 0871.218.0052  
ELSEWHERE: 1.630.377.8139 - FAX: 1.630.587.7860  
3755 Illinois Avenue, St. Charles, IL USA 60174-2420  
inquiries@doctorsdata.com - www.doctorsdata.com

## Intestinal Permeability

### Before You Start:

Please read all of the directions, and familiarize yourself with the collection procedures. This test will require the preparation of a Lactulose/Mannitol drink containing specific amounts of Lactulose and Mannitol - see the instructions for preparation on page 3 of these instructions. The test consists of collecting urine over a 6-hour period of time after having consumed the Lactulose/Mannitol drink.

This collection must be done immediately after a minimum of an 8-hour overnight fast. During the 6-hour urine collection time period you must avoid any foods that contain Mannitol such as food with reduced-calorie sweetener, chocolate-flavored coating used in ice cream and candy, and powdered chewing gum. You should refrain from taking non-essential medications or dietary supplements before or during this collection time period. *Never discontinue prescription medications without first consulting your physician.*

### Verify Kit Contents:

- 1 Test requisition form
- 1 Specimen collection cup
- 1 Clear collapsible 2 liter container
- 1 Yellow/Red-capped 8 ml tube
- 1 Plastic transfer pipette
- 1 Zip-lock bag with absorbent material
- 1 FedEx Clinical Pak with Billable Stamp

- ◆ If you are missing kit components, please call Doctor's Data's Customer Service department for assistance.
- ◆ Save the cardboard collection kit box to ship your samples back to the laboratory. Leave the absorbent material in the zip lock bag. Do not put it in the specimen vial.

### Collection Instructions:

- 1) This collection consists of collecting urine throughout a 6-hour period. When you wake up and get out of bed for the day, urinate into the toilet and flush the urine - do not save this urine.
- 2) Consume the entire Lactulose/Mannitol drink supplied by your doctor. Set a timer for 6 hours.
- 3) Open the collapsible container by loosening the cap and grasping both ends of the container and pulling completely open.
- 4) Begin to collect all urine for the next 6 hours, including a final sample at the 6-hour mark.
- 5) Collect each urination in the specimen collection cup, then pour the urine into the large clear collection container. Keep the urine cold during the 6-hour period (in a refrigerator or cooler).
  - a. Do NOT eat or drink anything for the first two hours of the collection period. After the first two hours you may eat and drink as usual but remember to avoid consuming food that may contain Mannitol. You should drink at least one glass of water every hour for the remaining four hours.
- 6) After all urine has been collected, place the clear collection container on a level surface and read the volume from the markings on the container. In the collection information section of the test requisition form (located in the upper right hand corner) fill in the date and time you finished the collection along with this 6-hour volume.
- 7) Mix the urine by inverting several times then using the plastic transfer pipette, fill the yellow/red test tube. Mix the urine in the tube by inverting several times.
- 8) Write the patient's name, date of birth, date and time of completion and the 6-hour volume on the specimen vial. ***This test cannot be performed without the patient information on the vial.***
- 9) Put the yellow/red tube with urine into the ziplock bag and place the bag into the cardboard box for shipping.
- 10) Discard the pipette, collection cup, any remaining urine and the large collection container.
- 11) Fill out the test requisition form completely and sign it. ***The test cannot be performed without a properly filled out requisition.*** Place the form in the cardboard shipping box. The specimen is now ready for shipment.

To obtain the best results, Doctor's Data recommends shipping specimens as soon as possible. If you cannot arrange shipping on the same day you finish the collection, refrigerate the specimen until you are ready to ship.

### Pharmacist Information:

#### Lactulose Mannitol drink formula 1

5.0gm lactulose  
1.0gm mannitol  
8.0mL glycerol  
QS to 100mL with H<sub>2</sub>O

#### Alternate formula

Lactulose is available as a 66.7% solution under the trade name of Cephulac or Chronulac syrup. Mannitol is available as a 25% solution.

7.5mL Cephulac or Chronulac  
4.0mL 25% mannitol solution  
8.0mL glycerol  
QS to 100mL with H<sub>2</sub>O

1Tepper RE, et al. Am J Gastro 1994;89[6]:878-882



To open the collapsible container, loosen but don't remove the cap, Grasp both ends, and pull open.



**Consult your physician if you have any questions during the test collection process.**