

## APPENDIX—Special Chemistry

### Xylose Absorption

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#### COLLECTION INSTRUCTIONS

The *d*-Xylose Absorption test is primarily used to evaluate intestinal malabsorption syndromes.

#### Patient Preparation

Patient must fast for a minimum of 8 hours prior to the test and must not eat during the test.

Patient should refrain from eating foods containing pentose, e.g. fruits, jams, jellies, and pastries, for 24 hours before the test.

A number of drugs can interfere with the test results: Aspirin, Atropine, Colchicine, Digitalis, Indomethacin, MAO inhibitors, Nalidixic Acid, Neomycin, Opium Alkaloids, Phenelzine

#### Test Procedure

##### Adults

1. Ask the patient to void and discard urine. Record the time on a 24 hour urine collection container.
2. Just prior to the start of collection, collect the first serum (0.5 mL). Label this sample as FASTING serum.
3. Immediately give the patient the 25 grams of *d*-xylose dissolved in the 8 ounces of water, followed by an additional 8 ounces of water.
4. Ask the patient to collect all urine in the container provided for the 5 hours after administering *d*-xylose.
5. Two hours after the administration of the *d*-xylose, obtain a second serum sample. Label sample as 2-hour serum.
6. Five hours after the administration of the *d*-xylose, ask the patient to void one last time in the collection bottle. The container should now contain all the urine voided in the 5 hours following the administration of the *d*-xylose.
7. For patients who do not tolerate the 25 grams xylose dose, a 5 gram dose can be used.

##### Children

Please follow the same procedure as above except that the *d*-xylose dose should be 0.5 grams/kg (0.23 grams/lb) of body weight up to 25 grams. Give xylose in water (5.0 mL of water per 0.5 g of xylose, up to 250 mL of water). Encourage the patient to drink additional water following the xylose dose. The patient may have water as desired but no other food or fluids.