## INSTRUCTIONS TO REFERRING LABS FOR MULTI-TEST URINES MULTIPLE TESTS FROM A SINGLE 24-HOUR COLLECTION

All of the following tests may be reliably performed on a single 24-hour urine collection using Marshfield Laboratories' EDTA-Thymol preservative mixture using the following collection and processing procedure:

Calcium Chloride Citrate Creatinine Cystine (qual. and quant.)

Magnesium Oxalate Phosphorus T. Protein Sodium Uric Acid

- 1. Transfer pre-measured preservative powder (Multi-Test Urine Preservative) to your routine collection container.
- 2. Special Patient Instructions:
  - a) Keep urine cold during the entire collection and refrigerated following collection.
  - b) Bring collection to lab within one day after completion of collection.
- 3. To aliquot, shake vigorously for minimum of 30 sec to assure homogeneity of all sediment.
- 4. Measure urine volume.
- 5. Fill three containers:
  - a) Sage cup (100-120 mL).
  - b) Oxalate Aliquot Tube (if oxalate is ordered): Add urine and mix by inversion to dissolve dry preservative.
  - c) Uric Acid Aliquot Tube (if uric acid is ordered). If the urine volume is <1500 mL, fill aliquot tube approximately half-full. If the urine volume exceeds 1500 mL, fill tube to near capacity (8-10 mL).
- 6. Label aliquot tubes with patient identification information.
- 7. Transfer capped aliquot tubes to zip-lock bag. Store and ship refrigerated. Unused aliquot tubes may also be returned in bag for recycling.

## **NOTES TO LAB PERSONNEL:**

- Potassium or pH. If potassium is required, collection method is unacceptable due to the potassium contribution from the preservative which will cause falsely high results. Likewise, the pH is altered by the specimen used. A "p-splitter" device (available from Marshfield Labs) should be used collecting with one portion having no preservative (for potassium) or thymol only (for pH) and the other portion using EDTA-Thymol for the remaining tests.
- Calcium/Magnesium. Measurement of Ca and Mg by atomic absorption is required. Non-Marshfield-based lab clients assaying these analytes should contact Marshfield Laboratories as falsely low results will be obtained with commonly used colorimetric methods.