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Name: _____

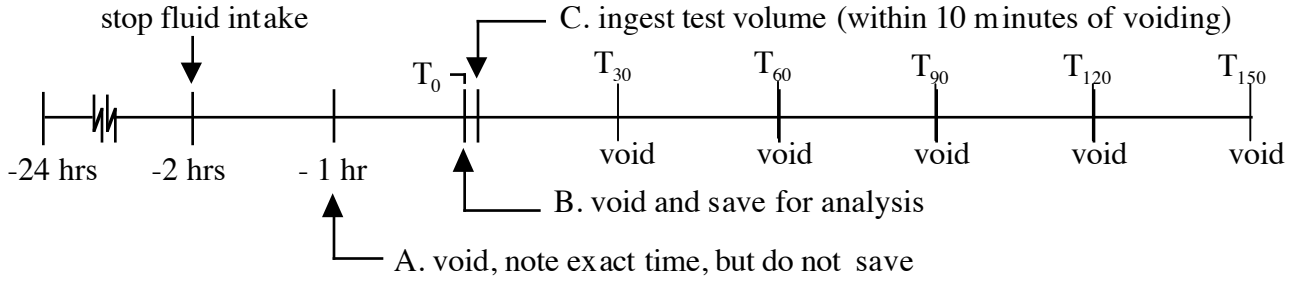
Renal Physiology II:
Fluid Balance - Preparation Notes

Preparation for this experiment begins 24 hours prior to the start of the laboratory.

A. Normal Fluid Intake / Water Loaded - this individual will maintain a normal level of hydration during the 24 hour period prior to the lab and will ingest a water load at the start of lab.

B. Normal Fluid Intake / Volume Loaded - this individual will maintain a normal level of hydration during the 24 hour period prior to the lab and will ingest an isotonic saline load at the start of lab.

Timeline:



A. Approximately one hour before the start of the lab, void (empty the bladder) completely, noting the exact time. Discard the urine. Your bladder should now be empty. DO NOT void again until the lab begins. This is the control period and will establish a preloading urine flow rate and composition. (note: if you have to urinate during the control period do not discard the urine, save all of it for measurement in the lab).

Time of void: _____

B. At the start of the lab void completely and note the exact time (save the entire volume in a labeled container). This is your control urine sample.

Time of void: _____

C. At the "bar" ingest a test volume (fluid load) of either water or isotonic saline. The test volume to be consumed is 10 milliliters per kilogram of body weight (10 ml / kg). The entire volume should be ingested within ten minutes of collecting your control urine sample and need only be done once.

Your weight in Kg: _____ Volume of fluid load in mL: _____

D. While waiting to collect your next urine sample analyze the previously collected sample. Measure the volume, chloride ion content, and specific gravity.

E. Every 30 minutes collect a new full volume urine sample and measure the volume, chloride ion content, and specific gravity. Keep an accurate record of the elapsed time between each sample.