

9 Tuesday 14th Dec

Experiments on Diuresis

These experiments are designed to show the normal diuretic response to the ingestion of water and the effect of various factors which can influence this response.

All groups: Obtain resting outputs of urine over a 15 min. interval. Then start the experiment in 4 groups.

N.B. For all samples of urine collected measure i) the volume  
ii) the specific gravity.

1) Control Group (Normal water diuresis)

- a) 500 ml water taken
- b) Urine collected at 15 min. intervals and measured, until flow is back to resting value.

2) Effect of alcohol

- a) 500 ml 3% alcohol (A.R.) taken in place of water
- b) Urine collected at 15 min. intervals and measured.

3) Effect of Antidiuretic Hormone (ADH)

- a) 500 ml water taken
- b) ADH taken as directed
- c) Urine collected at 15 min. intervals and measured. Note - in this case it may not be possible to continue the experiment until normal flow is regained.

4) Effect of exercise

- a) 500 ml water taken
- b) 15 min. sample of urine collected and measured
- c) Strenuous exercise is taken between the collection of the next two 15 min. samples
- d) Further 15 min. samples collected and measured.

Construct histograms from the results of all the groups.

November 1981.