

Renal Vignettes

Plasma Osmolarity is Normally Regulated By ADH and Thirst

HUMAN vignettes are brief, highly targeted exercises aimed at reinforcing single basic physiological points. The student may then continue to explore by further modifying the experimental design as they wish.

Changes in sodium intake challenge plasma osmolarity regulation.

In this experiment challenge plasma osmolarity by increasing dietary salt intake and then follow 1) how well plasma osmolarity is regulated 2) whether the response in output (renal) or intake (drinking) regulated or both.

Below please find the experimental protocol to carry out this investigation. Note well that *you should understand each of the variables employed*; use Help info on: or from a Help screen pick the View summary of [all variables](#) link.

View Output:

DIETNA ▾ PNA ▾ EXNA ▾ H2OIN ▾ ADH ▾ POSM ▾

as: graph ▾ graph ▾ graph ▾ text ▾ graph ▾ text ▾

Experiment Controls

Change Variable	Enter New Value	Info on Variable
DIETNA ▾	360	180 mEq/Day
Choose ▾		

Run Experiment:
for 10d minutes at 1d minute intervals.

Go Start Over

Help

Help info on: DIETNA ▾

Tips: Control Dietary Intake ▾

View

Variable Value: Choose ▾

Patient Charts or Lab tests:
Choose One ▾

Graph Style Size: 600 ▾

Normalized, one graph ▾

To repeat the questions:

1) how well plasma osmolarity is regulated and 2) is the response in output (renal) or intake (drinking) regulated or both.