Teach yourself – Pressure Diuresis

Ref. (Guyton 12th edition Ch 27, pg. 337-8)

Note: Unlike many of our web-HUMAN activities, this activity is of very limited scope and has as its objective to allow you to employ HUMAN to check your understanding of a sub-topic you have taught yourself.

The major "automatic" early mechanism available to the kidneys to correct volume overloads is pressure diuresis. This mechanism exits even in those animals that lack classical mineralocorticoid-based regulatory systems (e.g. aldosterone).

The text cites 3 mechanisms by which a rise in arterial pressure itself (AP) will initiate a self-correcting Pressure-Diuresis and Pressure-Natriuresis that tend to work toward restoring a raised arterial pressure toward normal.

Induce a pressure diuresis In *web*-HUMAN by infusing 600 ml. over a 10 min. period.

Present evidence from *web*-HUMAN that

1) A Pressure-Diuresis is occurring

2) A Pressure- Present evidence from *web*-HUMAN that

1) A Pressure-Diuresis is occurring
2) A Pressure-Natriuresis is occurring
is occurring
3) That each of the three* mechanisms cited as involved in these processes indeed occur and play a role.

BRIEFLY write up your results (in Word*) and present annotated screen snapshots that support your points.

Note that in this exercise *you* have total responsibility for finding those variables that are useful in investigating and substantiating your points. Use either the main screen Help sections or/and the Summary of all variables list to choose your variables wisely.

* see assignment modifications in Email