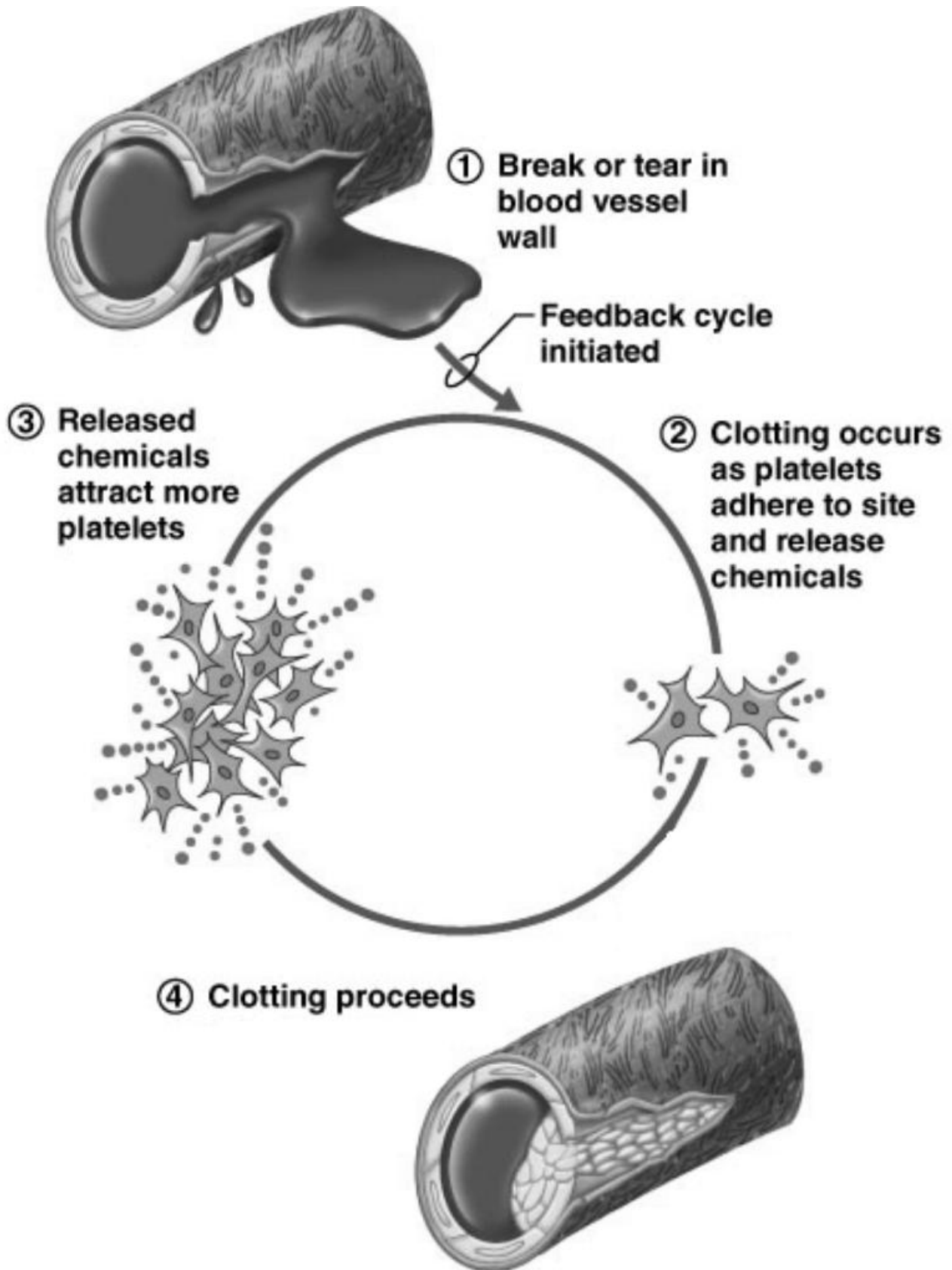


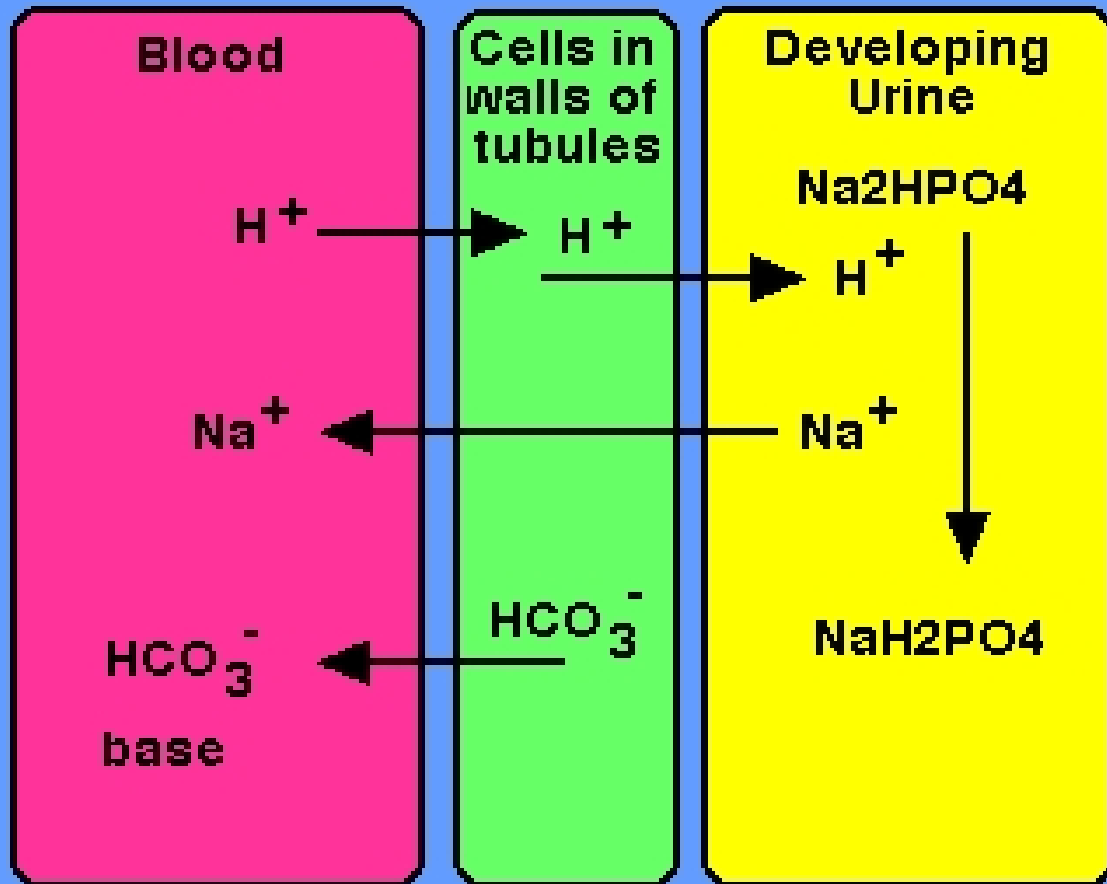
# Feedback Mechanisms Inquiry Activity

## Station 1



Feedback Mechanisms Inquiry Activity  
Station 2

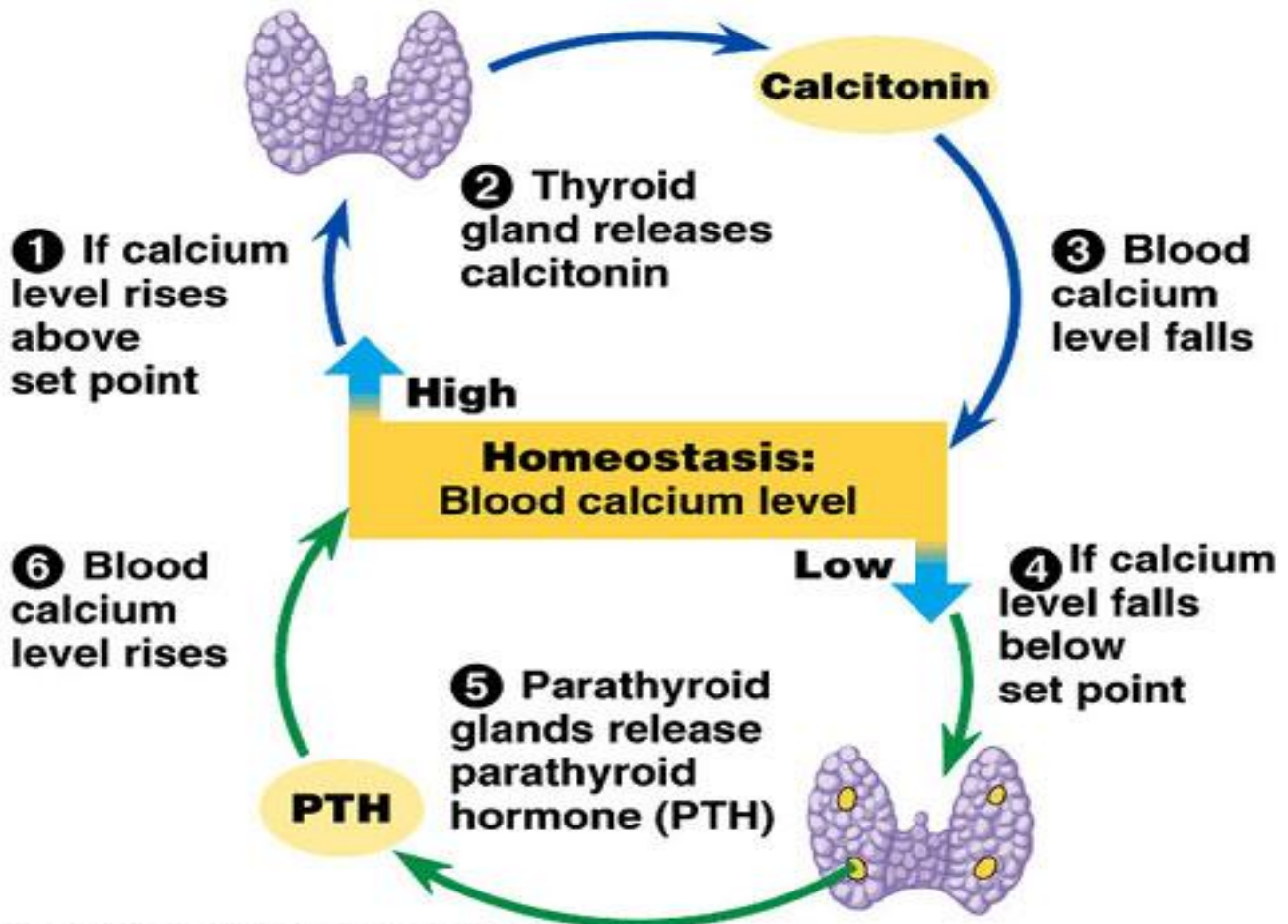
## pH Control in Kidneys



C. Ophardt c. 2005

When blood pH levels fall below a set point, the kidneys collect and remove more  $H^+$  (hydrogen ions) from the blood, thus bring the blood pH levels back to normal.

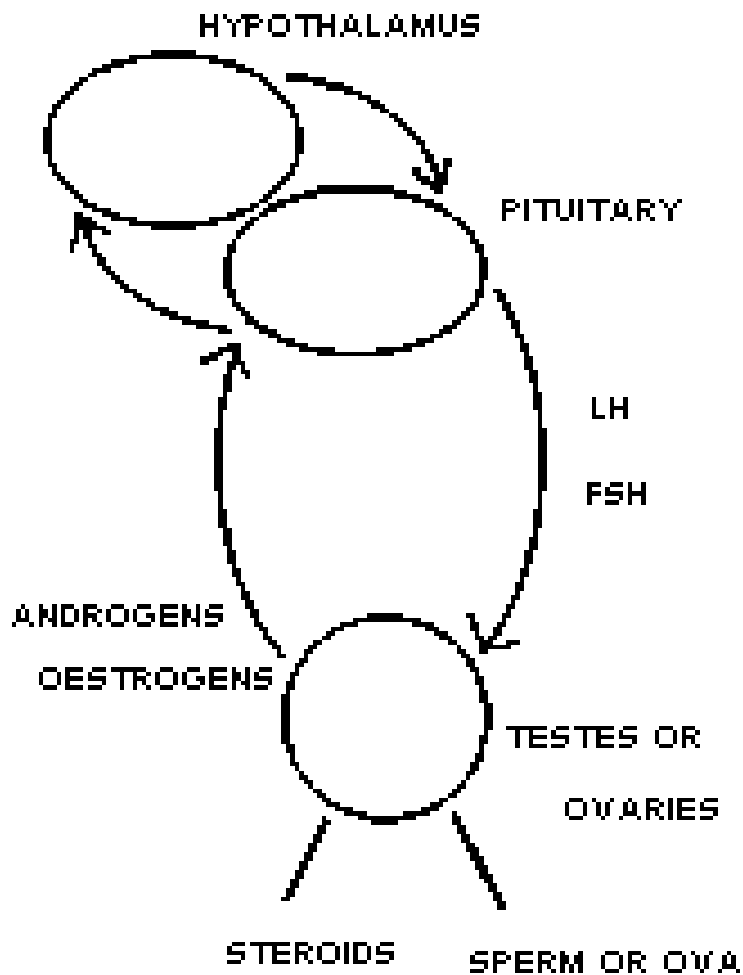
## Feedback Mechanisms Inquiry Activity Station 3



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When blood calcium levels rise above a set point (hypercalcemia) specialized cells in the thyroid secrete a hormone called calcitonin. Calcitonin causes specialized cells in bone tissue to take calcium out of the blood and store it in bone tissue.

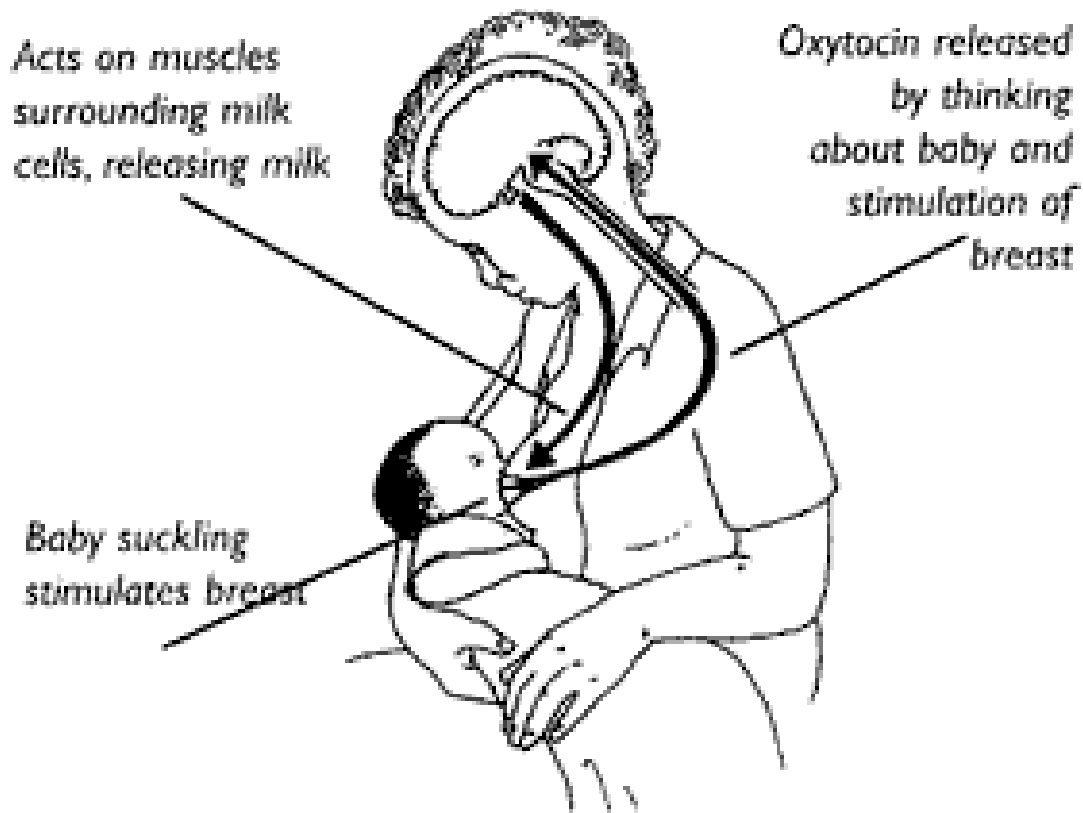
## Feedback Mechanisms Inquiry Activity Station 4



The female hormone estrogen triggers the release of the luteinizing hormone (LH); increased production of LH increases the production and release of estrogen.

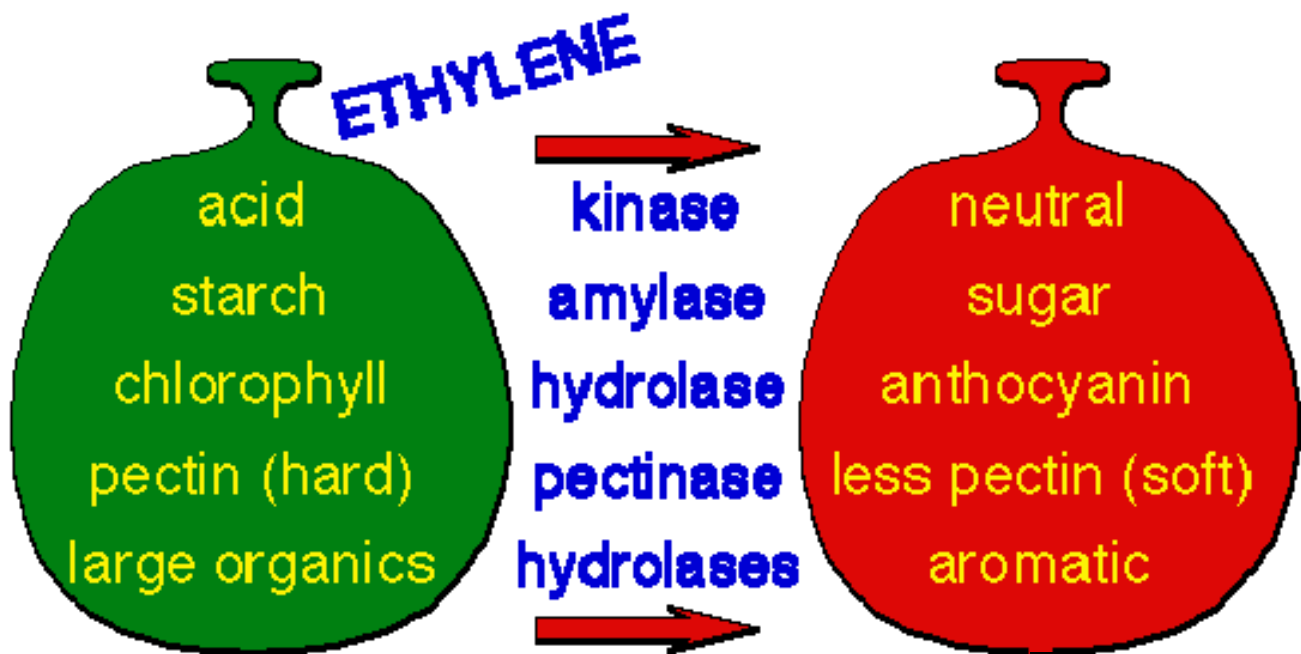
## Feedback Mechanisms Inquiry Activity Station 5

### Oxytocin - delivers milk



A baby begins to nurse her mother's breast and a few drops of milk are released. This encourages the baby and releases a hormone in the mother which further stimulates the release of milk. The hungry baby continues to nurse, stimulating more milk release until she stops.

Feedback Mechanisms Inquiry Activity  
Station 6



A ripening apple releases the volatile plant hormone ethylene. Ethylene accelerates the ripening of unripe fruit in its vicinity so nearby fruit also ripens, releasing more ethylene. All the fruit quickly becomes ripe together.