



Hyponatremia

True hyponatremia

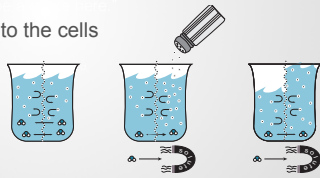
True hyponatremia

Low serum sodium concentration associated with

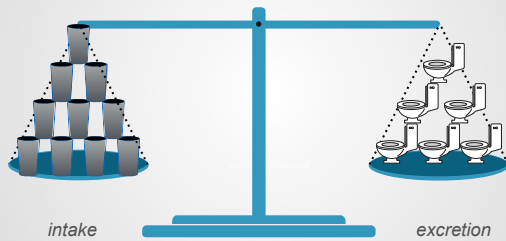
→ low osmolality

→ low tonicity

causes water to move into the cells



As long as water in equals water out the sodium remains in balance

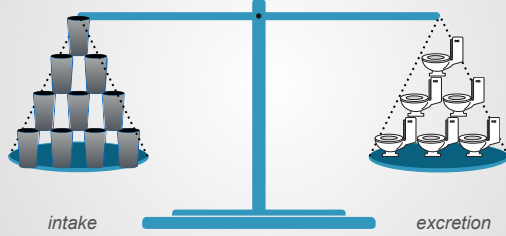


If fluid intake exceeds urine excretion the sodium falls



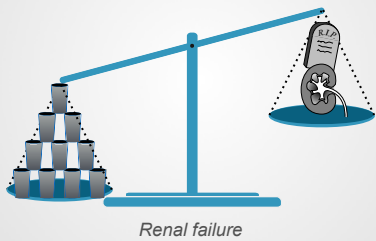
If fluid intake exceeds urine excretion the sodium falls

There are 3 scenarios where this occurs



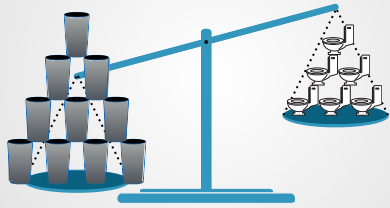
If fluid intake exceeds urine excretion the sodium falls

There are 3 scenarios where this occurs



If fluid intake exceeds urine excretion the sodium falls

There are 3 scenarios where this occurs



Obsessive water drinking

If fluid intake exceeds urine excretion the sodium falls

There are 3 scenarios where this occurs



normal water intake, with low urine output, not renal failure

True hyponatremia



No urine output with normal water intake



normal water intake with decreased urine output



Compulsive water drinking with maximal but inadequate urine output



True hyponatremia

No urine output with normal water intake



True hyponatremia



No urine output with normal water intake



normal water intake with decreased urine output



Compulsive water drinking with maximal but inadequate urine output



True hyponatremia



Compulsive water drinking with maximal but inadequate urine output



schizophrenia

stupid radio games

water poker

fraternity hazing

Girl drinks herself to death in 'water poker'



Death in Underground Frat's Hazing Ritual Shakes a SUNY Campus

CHICO / Fraternity pledge died of water poisoning / Forced drinking can disastrously dilute blood's salt content

Woman dies after water-drinking contest

18 liters is the maximum daily urine output

People need to drink more than 18 liters to get into trouble

True hyponatremia		
No urine output with normal water intake	X	↔
normal water intake with decreased urine output	↓	↔
Compulsive water drinking with maximal but inadequate urine output	↑	↑↑