

Unit Four Homework Assignment w answers  
Electrolyte and Water Balance (C24)

Overview of Fluid and Electrolyte Physiology (8 min)

1. How many the body be divided? Percent of each?
2. What factors may cause difference between males and females?
3. How is total water volume subdivided? Percent of each?
4. How is extracellular fluid further subdivided?
5. How much water intake do we need to balance the average water loss?
6. How does water move between the three fluid compartments? f
7. What will cause water to move from one compartment to another?
8. How do we lose water?
9. When water accumulates in the interstitial space, how is it returned to the plasma?
10. What are the major electrolytes in the extracellular fluid? How do these electrolytes move between plasm and interstitial space?
11. May electrolytes freely diffuse across the cell's plasma membrane?
12. What is the main cation and anion in the extracellular space?
13. What is the main cation and anion in the intracellular space?
14. What is the main protein in the plasma? Purpose?
15. What is the main anion in the interstitial space? Purpose?
16. What may happen if you have high concentrations of potassium or calcium in plasma or extracellular fluid?
17. What fluid compartment is monitored by homeostatic mechanisms?

Electrolyte and Fluid Balance for Nursing Students (14 min)

1. What are the important functions of water?
2. What are the major intracellular electrolytes?
3. What are the major extracellular electrolytes?
4. What are electrolytes?
5. Important cations?
6. Important anions?
7. What is magnesium major function?
8. What may cause hyperkalemia?
9. How much calcium is dissolved in blood?
10. How is calcium found in the blood?
11. What does hypercalcemia cause?
12. What does hypocalcemia cause?
13. What is main cause for symptoms of hyponatremia?
14. What are symptoms of hypernatremia?

## Fluid Volume Deficit (8 min)

1. What term describes fluid volume deficit? Symptoms? /
2. What are the top four causes of dehydration?
3. What are top three reasons for dehydration in clinical setting?
4. What are the compensations for dehydration? i