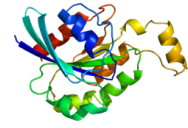




Chem 331 Biochemistry

Blood Gasses, Acidosis and Alkalosis

Learning Objectives, Study Guides
and Practice Questions



Chapter 2 pp 37

Learning Objectives

- Know, write and understand the complete reaction(s) of water with carbon dioxide
- Explain how the blood pH can become acidic or basic.
- Understand the difference between metabolic and respiratory acidosis and alkalosis
- Predict which compensation method is used based on specific input
- Relate the blood pH to equilibrium in an open system
- Describe why the pKa is considered off but appropriate to for the bicarbonate system to be effective in the human body

Study Notes from Dr P: *This is a simple but cool application of what we've learned about water, pH and buffers in a clinical setting. The information in the book is only one box and is pretty good (Box 2-2) . The web link is a little more than we need but is also very helpful to understand the concept beyond what is presented. Remember this is an open system so what you understand about equilibrium is going to be challenged. It will be critical to know what is happening biochemically at either end of the buffer system.*

Chapter Questions (not assigned for homework but to help you practice, don't turn in. BUT some may or will show up on the exam).

- None in the book.