



CHEM 330 Biochemistry

Eighth Week

October 24 – October 28, 2011

Assignments

- Exam 2 is due Tuesday, October 25, 2011.
- If you have not already done so, please read Chapter 14.
- Chapter 16 – Reading of sections 16.1, 16.2, 16.3 should be completed before class on Monday (10/31/11)
- Chapter 19 – Reading of sections 19.1, 19.2, 19.3 should be completed before class on Tuesday (11/1/11)

Announcements

- Class will be in the Myers Presentation Room on Friday (10/28/11) as part of the IRC Undergraduate Research Symposium.

Glycolysis – from *glykos* (sweet) and *lysis* (loosening)

“Louis Pasteur established that fermentation is caused by microorganisms. It was not until 1897, however, that Eduard Buchner demonstrated that cell-free yeast extracts can also carry out this process. This discovery refuted the then widely held belief that fermentation, and every other biological process, was mediated by some “vital force” inherent in living matter, and thereby brought glycolysis within the province of chemistry. This was a major step in the development of biochemistry as a science.” – Voet & Voet (2004)

“If an attempt is made to record on a single chart all the known biochemical fates of glucose and all the compounds derived therefrom, the result is a complex network... However, glucose itself suffers only one major fate in mammalian cells – phosphorylation to glucose-6-phosphate.” – White, Handler, & Smith (1959)

The original isolation of lipoic acid, a prosthetic group in the pyruvate dehydrogenase complex and related enzymes obtained 30 mg of the compound from 10 tons of liver.