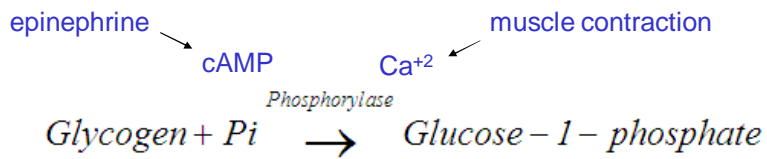
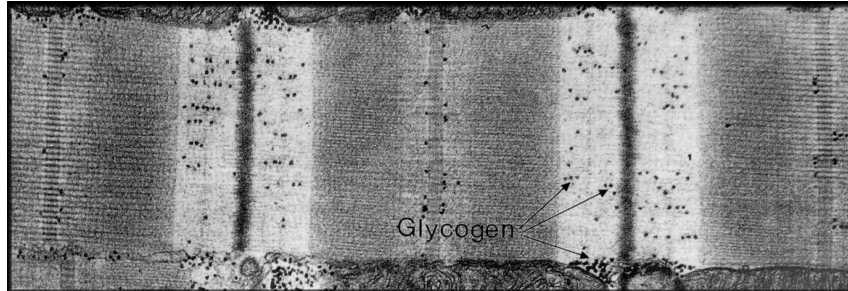
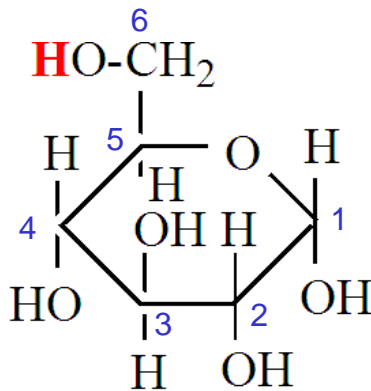


Glycogenolysis, Glycolysis and Lactate

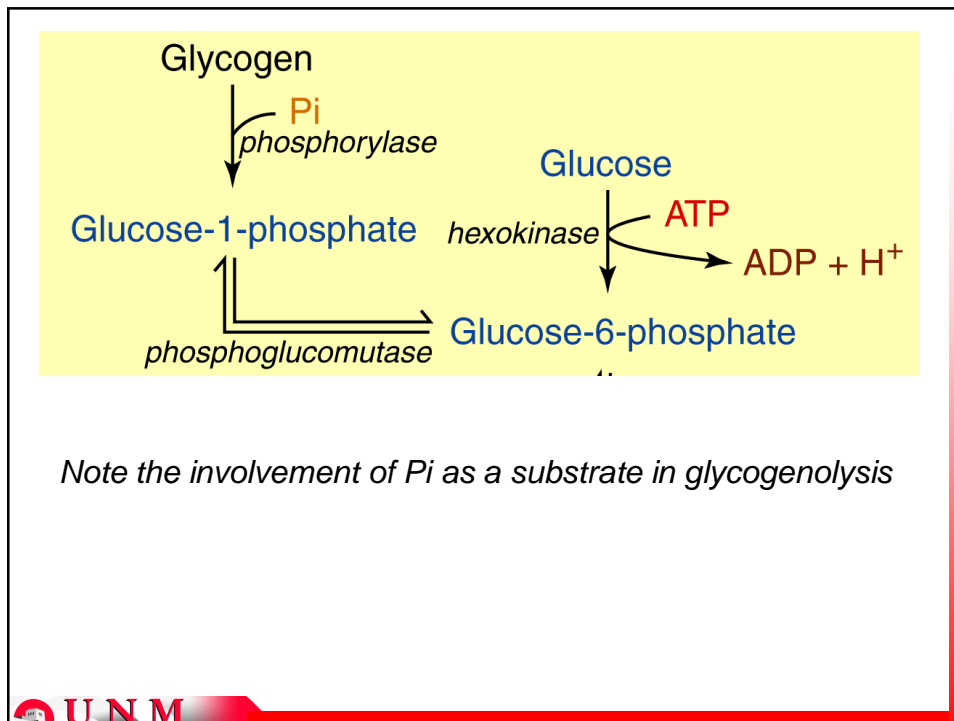
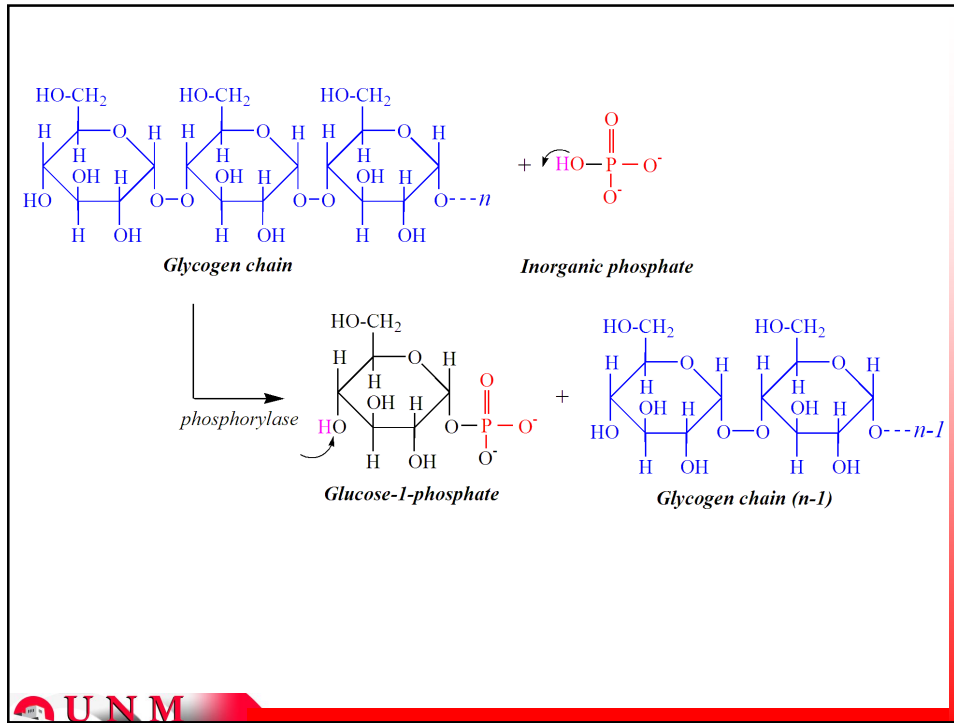


UNM

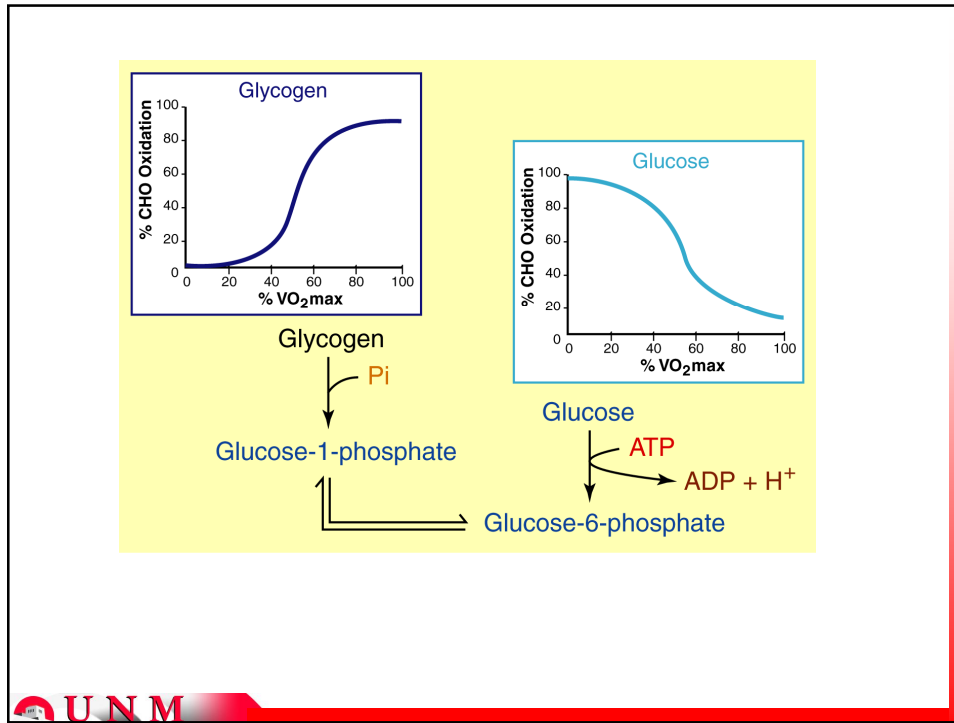


Glucose

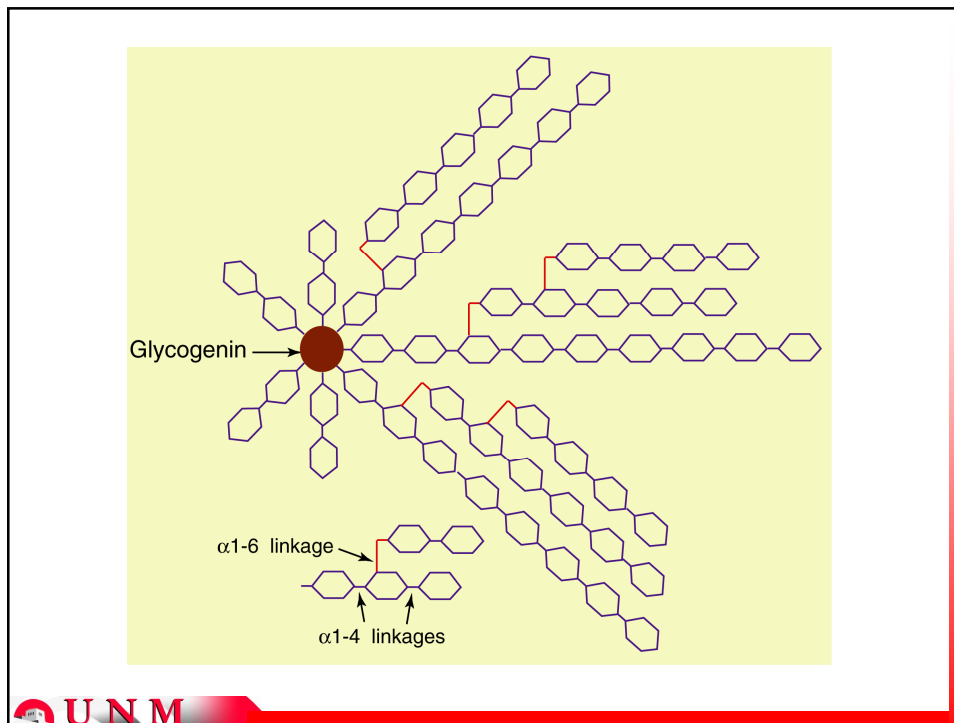
UNM



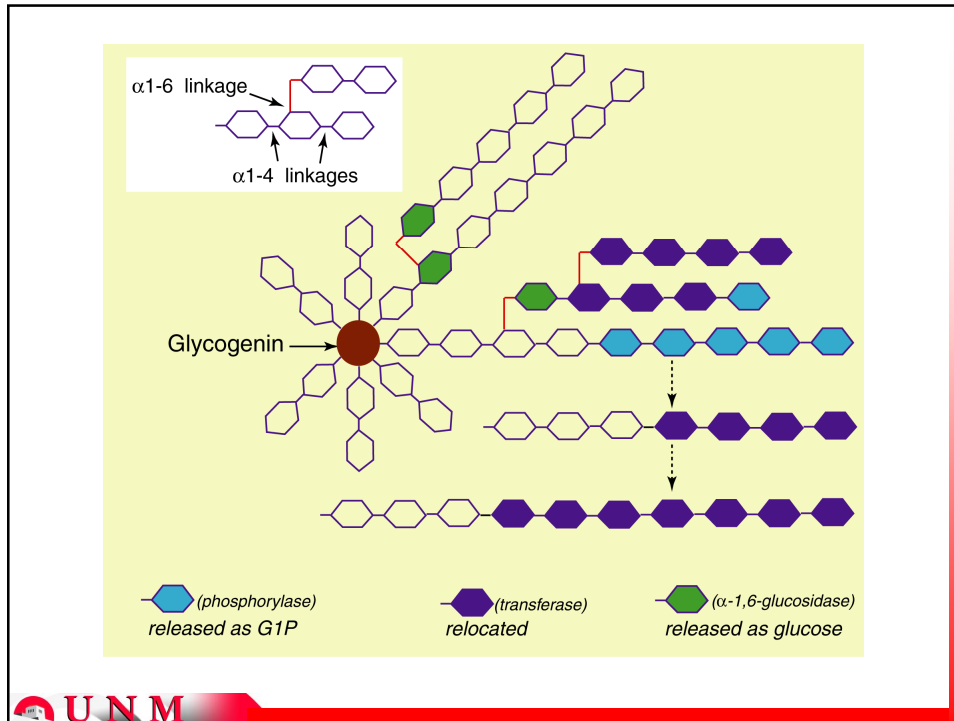
Note the involvement of Pi as a substrate in glycogenolysis



UNM



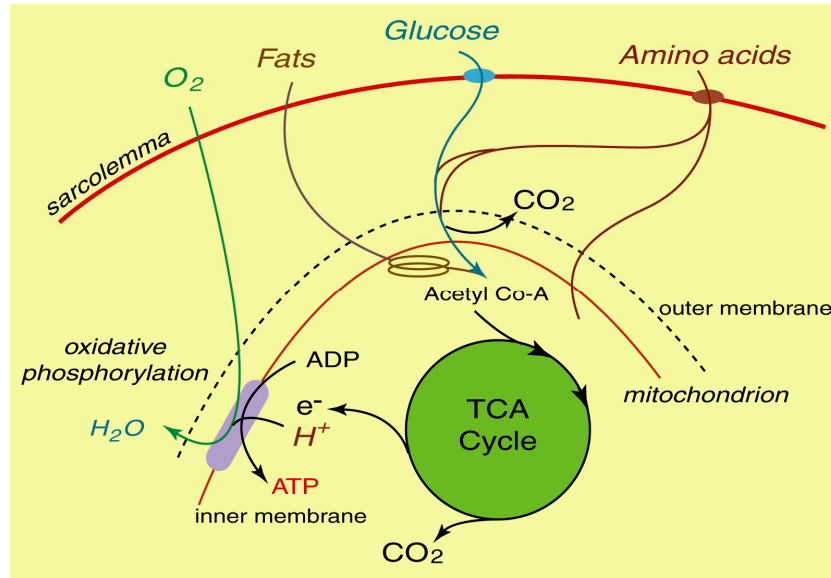
UNM



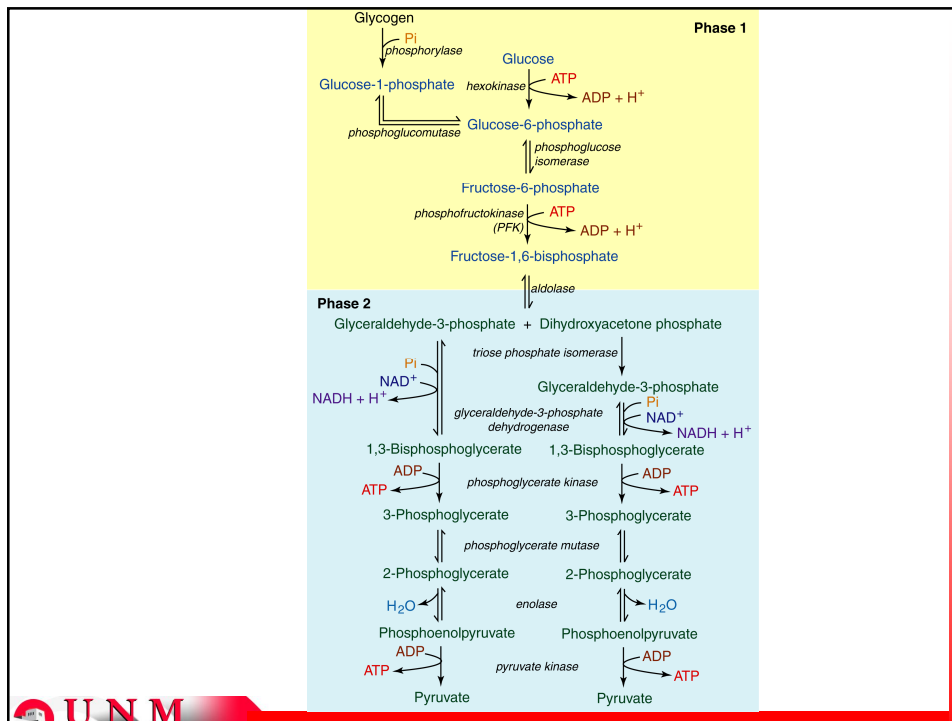
The more intense the exercise, the greater the rate of glycogenolysis.



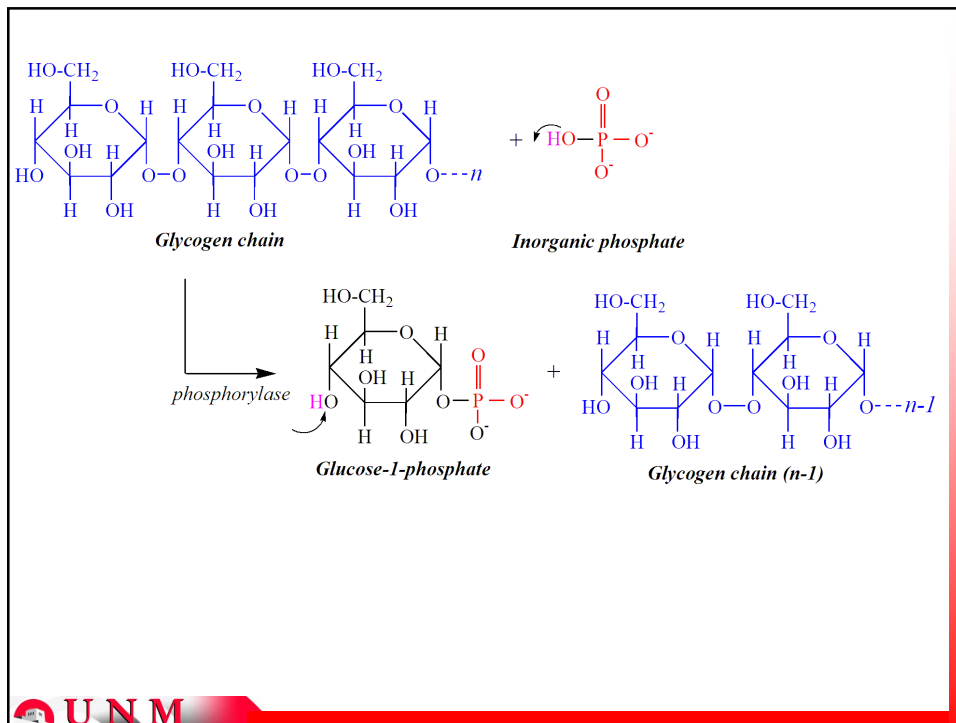
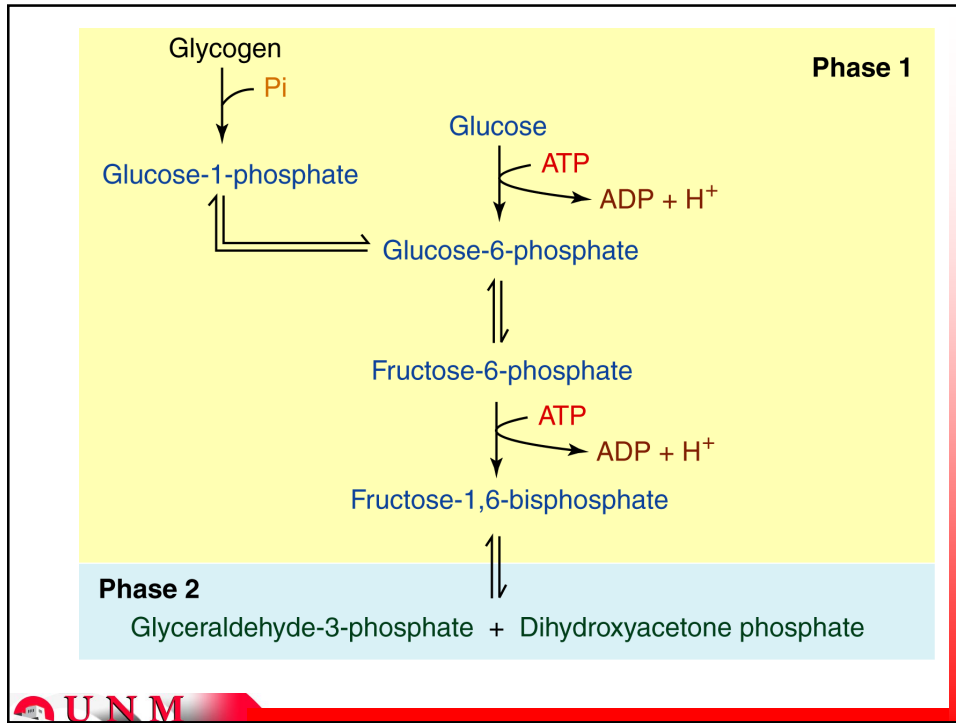
Glycolysis

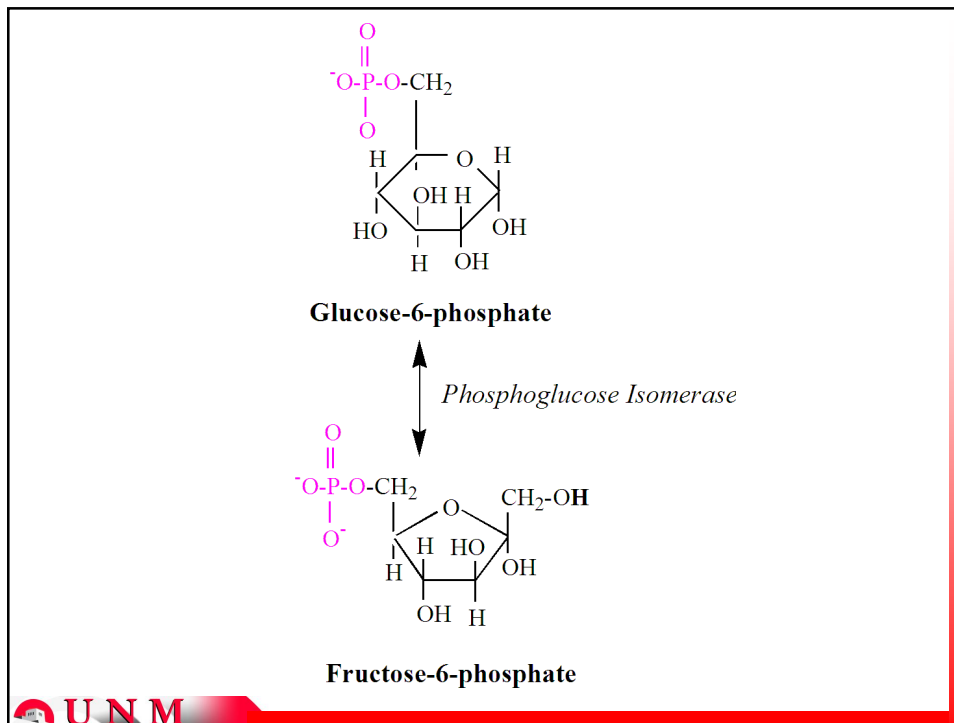
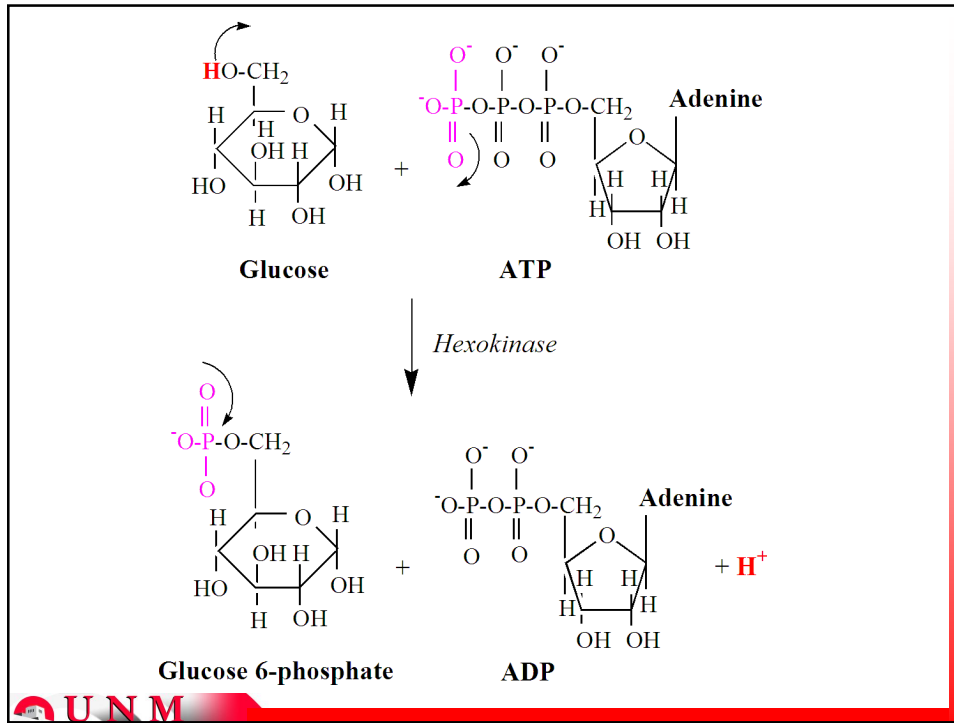


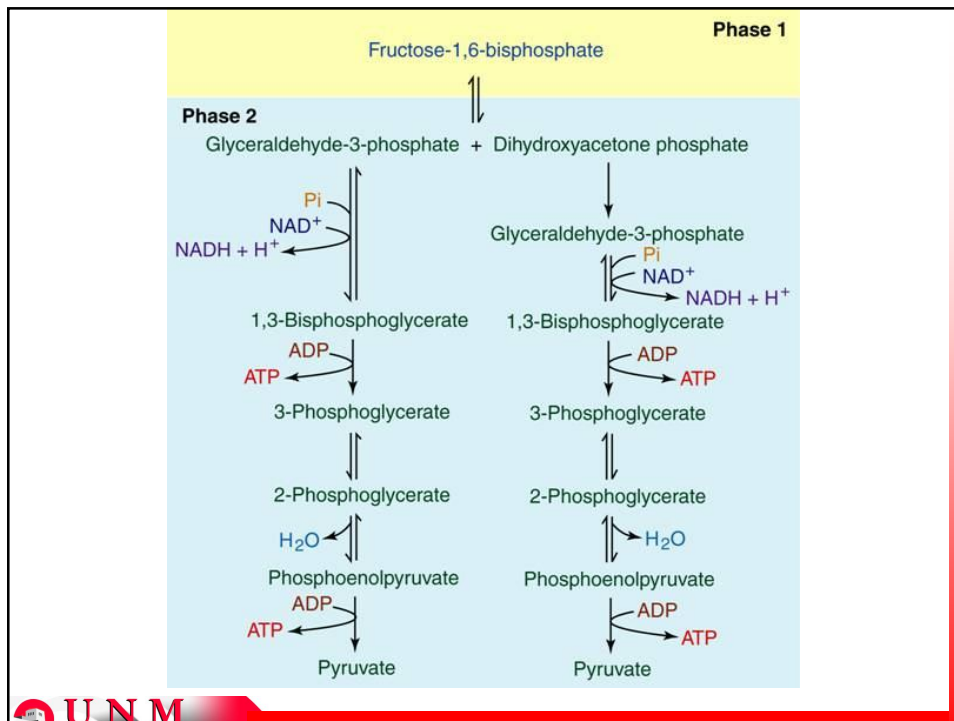
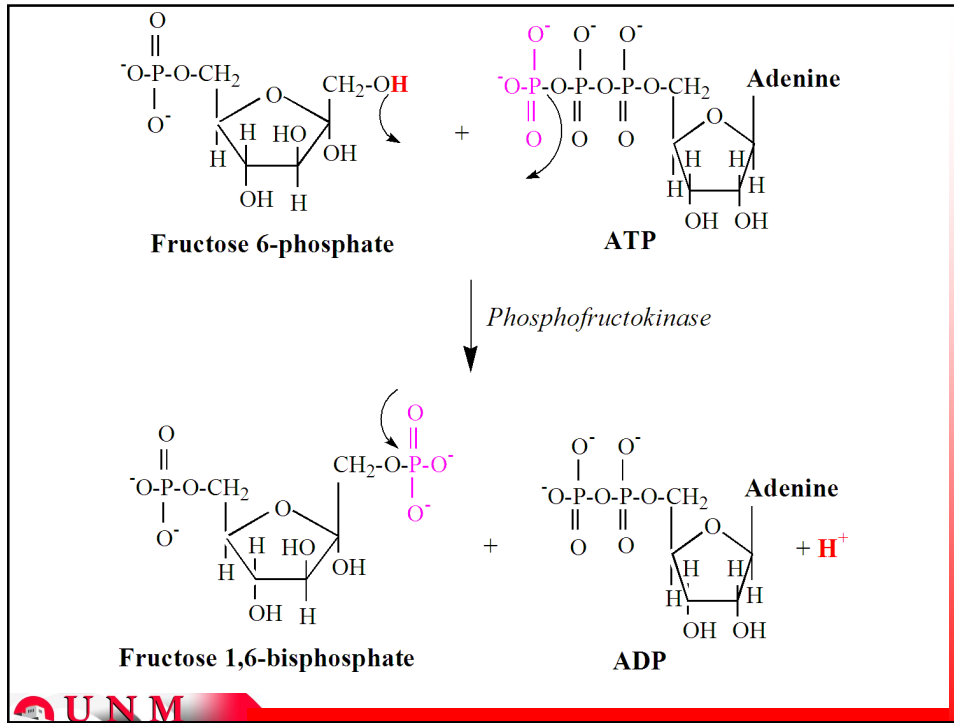
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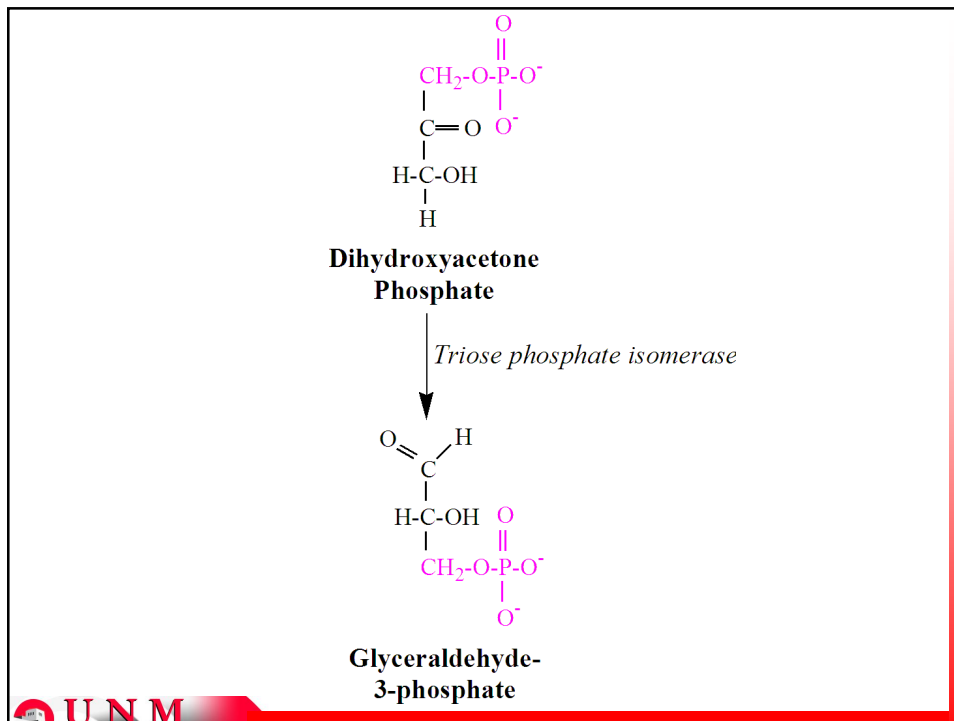
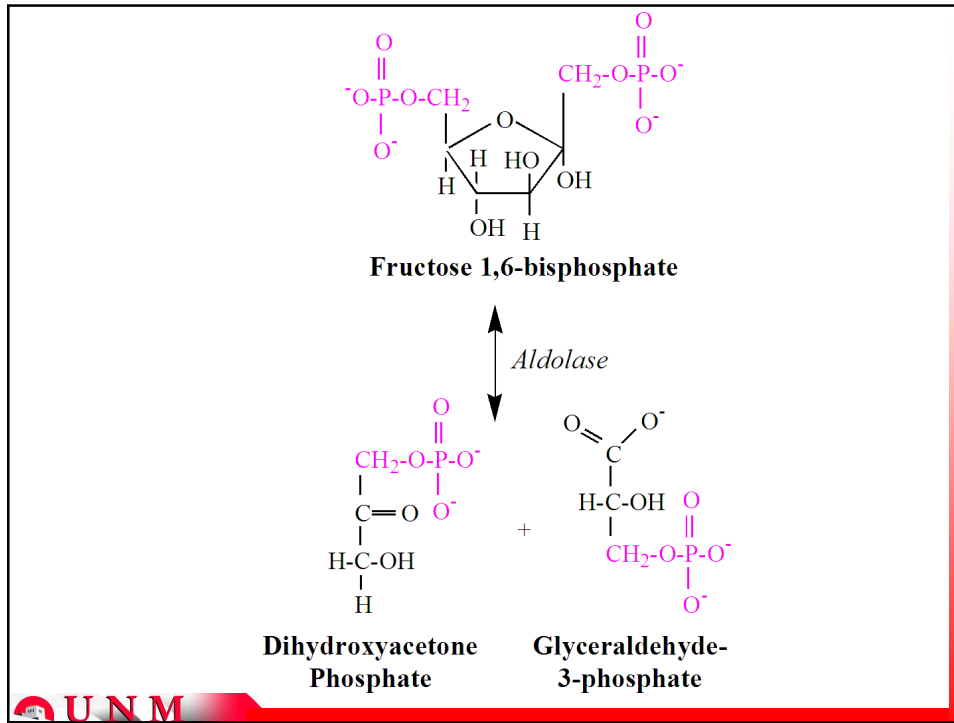


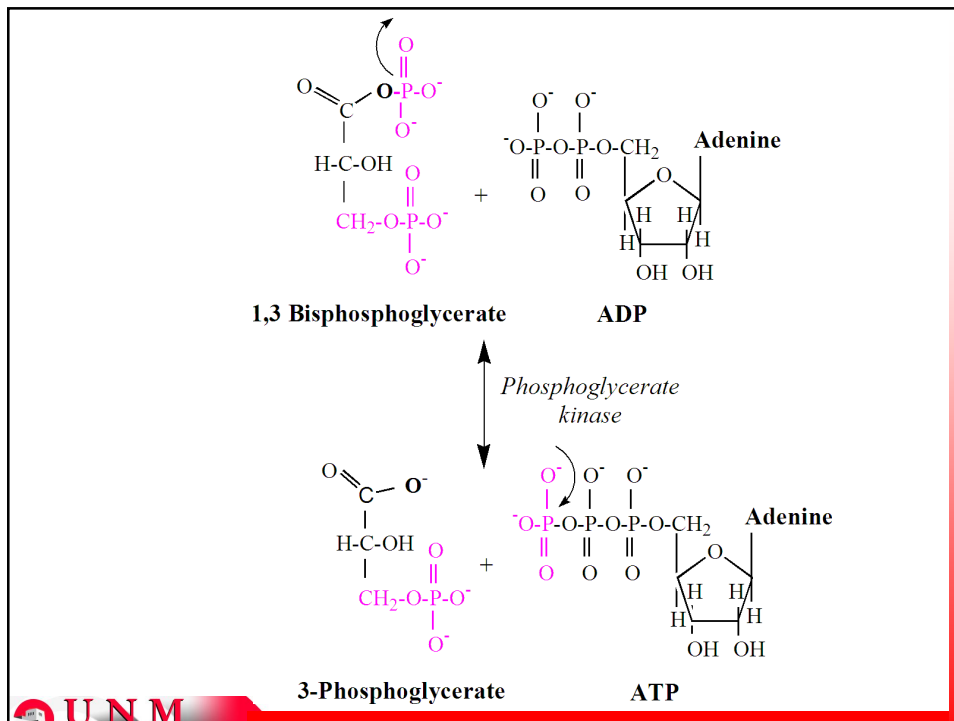
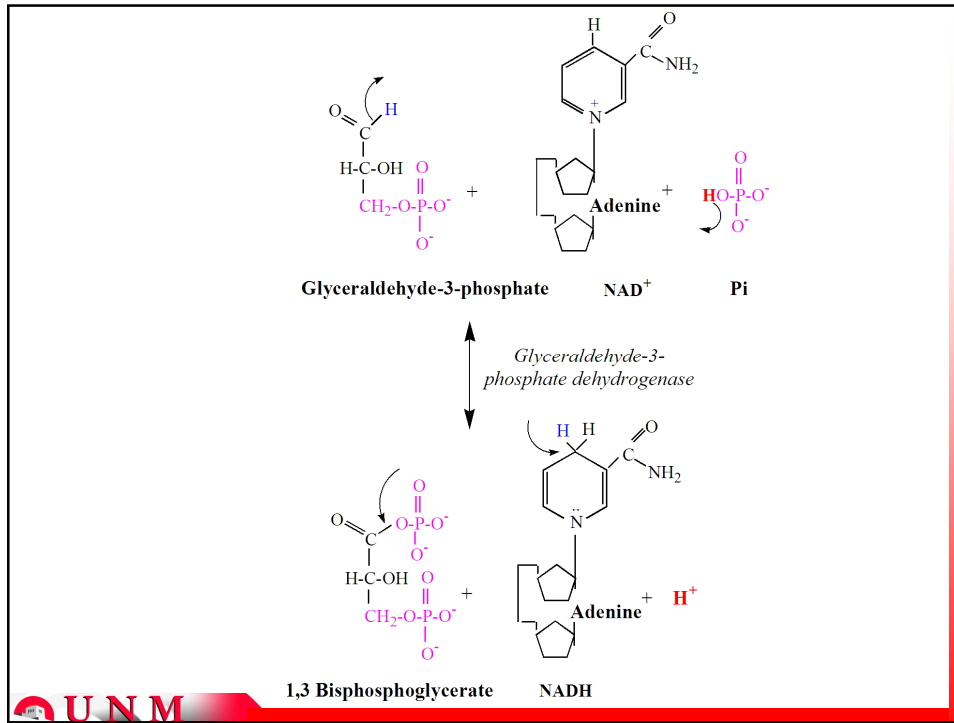
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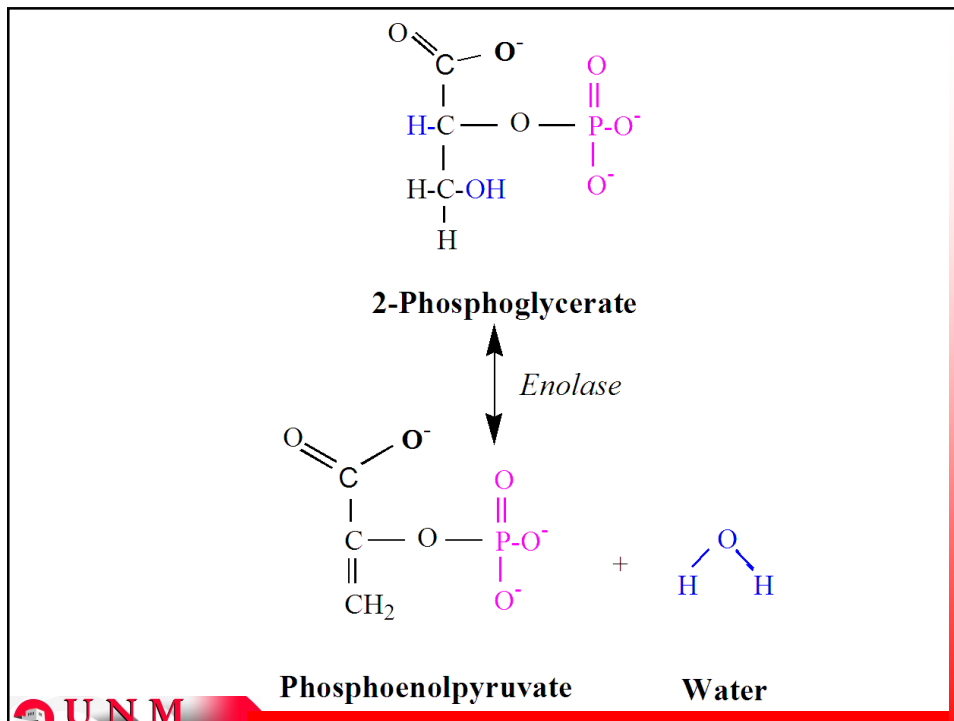
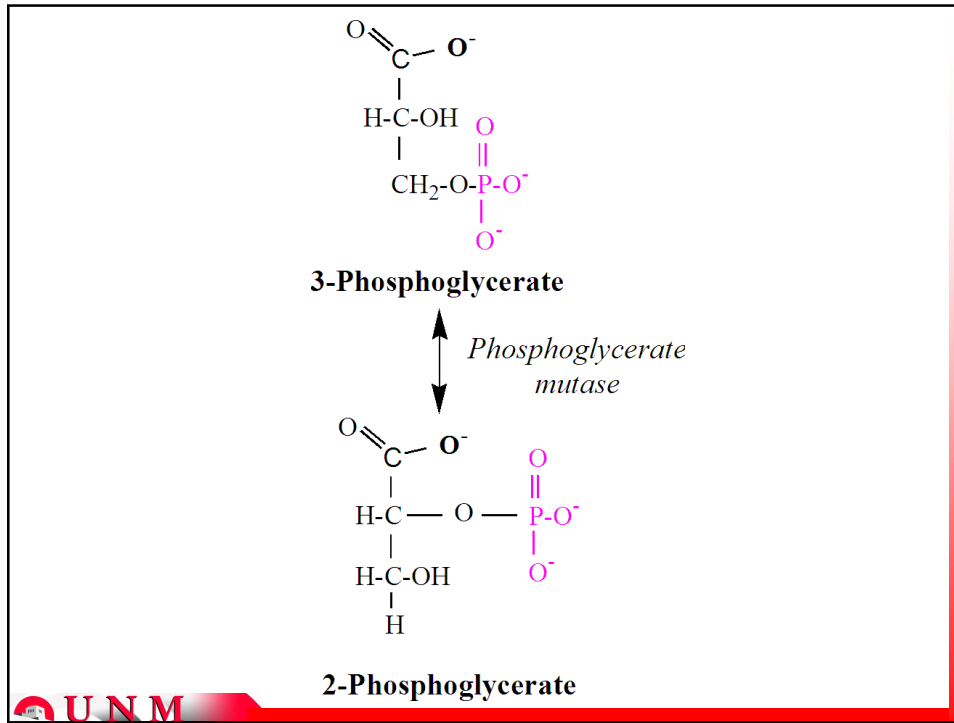


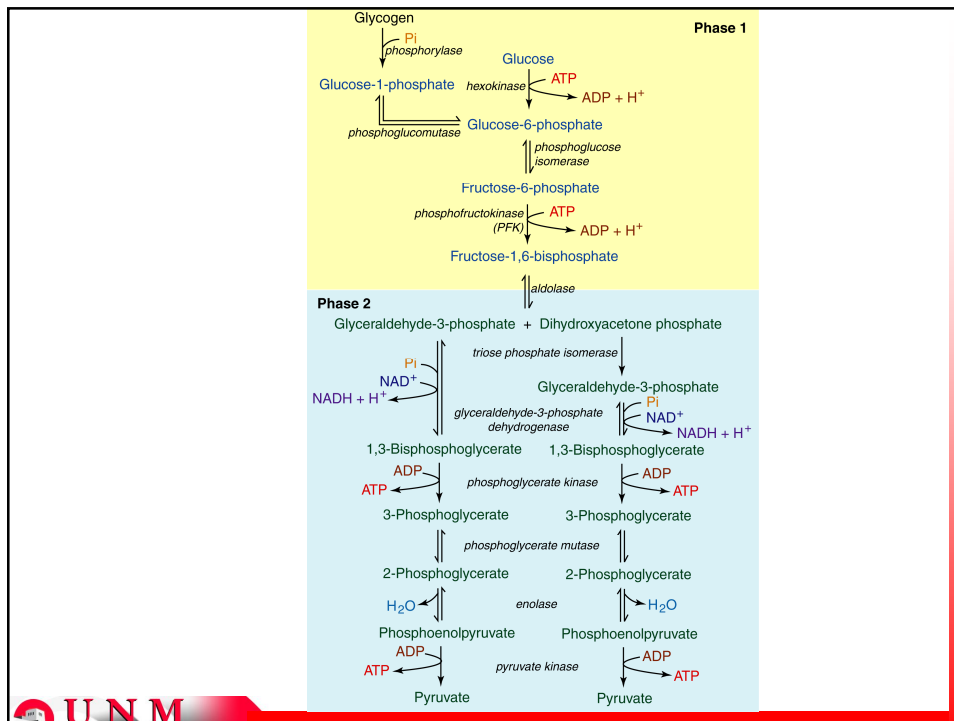
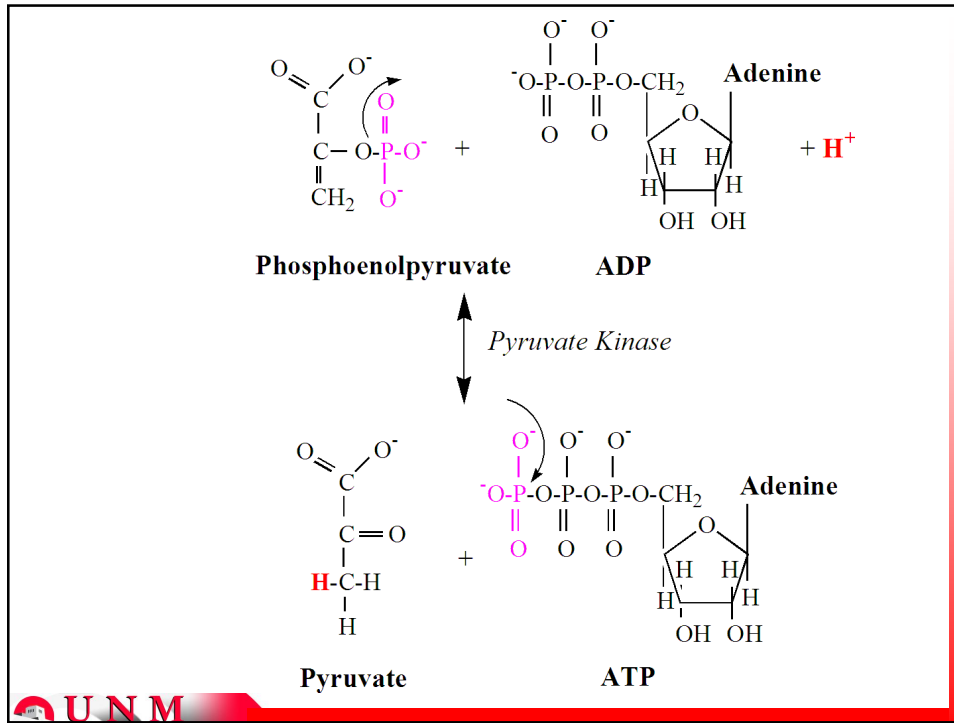




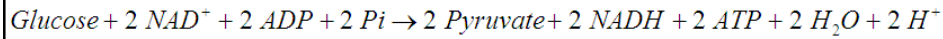








Glycolytic glucose oxidation:



| Enzyme Reaction | Gluc ATP | Glyc ATP | NADH | ATP Eq |
|--|----------|----------|----------|---------------|
| Phosphorylase* | | | | |
| Phosphogluco mutase | | | | |
| Hexokinase | -1 | | | -1 or 0 |
| Phosphoglucose isomerase | | | | |
| Phosphofructokinase | -1 | -1 | | -1 |
| Aldolase | | | | |
| Triose phosphate isomerase | | | | |
| Glyceraldehyde-3-phosphate dehydrogenase | | | 2 | 4* |
| Phosphoglycerate kinase | 2 | 2 | | 2 |
| Phosphoglyceromutase | | | | |
| Enolase | | | | |
| Pyruvate kinase | 2 | 2 | | 2 |
| Glycolysis Totals | 2 | 3 | 2 | |
| <i>Total ATP Equivalents - Aerobic</i> | | | | 8 or 9 |
| <i>Total ATP Equivalents - Anaerobic</i> | | | | 2 or 3 |

*assumes glycerol-3-phosphate shuttle



Lactate Production

