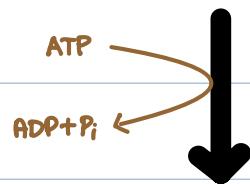


GLYCOLYSIS

- ATP investment
- ATP payout
- Inhibition
- Activation

Glucose



Glucokinase + Insulin Low affinity, high Km, Liver
 Hexokinase - Glucose bP High affinity, Low Km, Brain

Glucose bP

1

Phosphoglucom isomerase

Fructose bP



Phosphofructokinase 1 - rate limiting step
 - ATP, Citrate
 + Fructose 2,6 Bisphosphate, AMP, Insulin

Fructose 1,6 BP
 (6C)



(3C)
Dihydroxyacetone

Triose phosphate isomerase



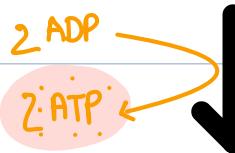
2NAD + 2Pi → 2NADH + 2H+

2NAD + 2Pi → 2NADH + 2H+

(3C)
Glyceraldehyde 3P

Glyceraldehyde 3P Dehydrogenase in arsenic

1,3 Bisphosphoglycerate (2)



Phosphoglycerate kinase

Phosphoglycerate Kinase is 1st ATP producing step (irreversible)

3 Phosphoglycerate (2)

1

phosphoglycerate
mutase

↓
2 Phosphoglycerate (2)

↓
Enolase
Phosphoenolpyruvate (2)

Pyruvate Kinase is
2nd ATP producing
Step
(irreversible)

2 ADP
2 ATP:

Pyruvate Kinase
① Fructose 1,6 Bisphosphate
② ATP, Alanine

↓
Pyruvate (2)