

Glycolysis

C-C-C-C-C-C Glucose

ATP → ADP



ATP → ADP



use 2 ATP

energy investment phase

Ⓟ-C-C-C-C-C-Ⓟ Fructose-1,6-biphosphate

2-3C sugars

C-C-Ⓟ

C-C-C-Ⓟ

PGAL (phosphoglyceraldehyde)

NAD⁺

NADH

oxidation

NAD⁺

NADH

generation of 2 NADH reduced electron acceptors

ADP

ATP

ADP

ATP

ADP

ATP

ADP

ATP

Synthesis of 4 molecules of ATP

energy payoff phase

substrate level phosphorylation

2-3C acids

Pyruvic acid
C-C-C

Pyruvic acid
C-C-C

Yield (captured energy)

2 ATP + 2 NADH