Glutaminolysis

Produced for the CRC for Premium Quality Wool undergraduate program by;
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Glutaminolysis

- Intermediates and end products:
  - Alanine
  - Aspartate
  - Glutamate
  - Lactate
  - NADPH
  - $\text{NH}_4^+$
  - ATP

- Glutamine
- Alanine
- Pyruvate
- Acetyl-CoA
- Oxaloacetate
- Aspartate
- Fumarate
- $\alpha$-Ketoglutarate
- Glutamate
- Glutamine

TCA cycle
8 individual pathways identified

- pyruvate $\rightarrow$ lactate (9 ATP)
- pyruvate $\rightarrow$ $\text{CO}_2$ and $\text{H}_2\text{O}$ (27 ATP)