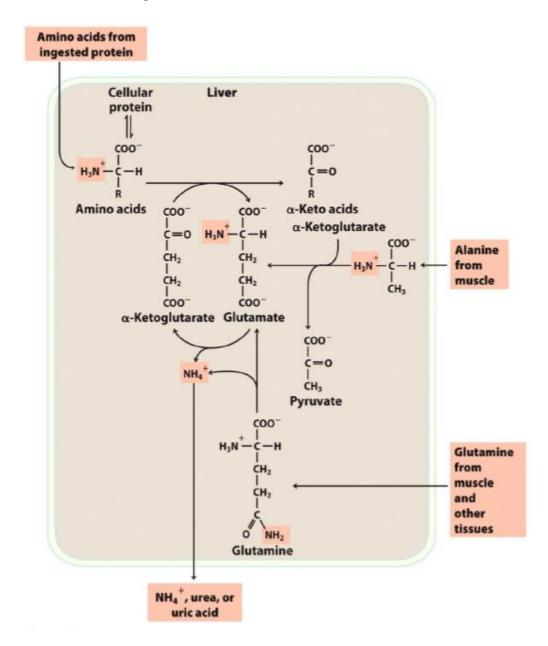
Glu – Glu cyclus



Figur 1: Amino group catabolism. Overview of catabolism of amino groups in vertebrate liver.

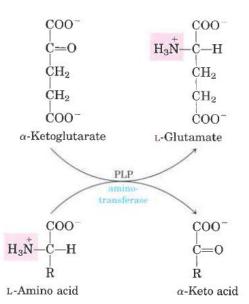


Figure 2: Enzyme catalyzed transaminations.

L-Glutamate

ÇOO CH_2 NAD(P)+ CH_2 NAD(P)H coo Glutamate CH_2 COO ÇOOc=0 H₂O CH_2 NH_4^+ CH_2 coo

Figure 3: Reaction catalyzed by glutamate dehydrogenase.

 α -Ketoglutarate

Figure 4: Ammonia transport in the form of glutamine.

Glucose – Alanine cyclus

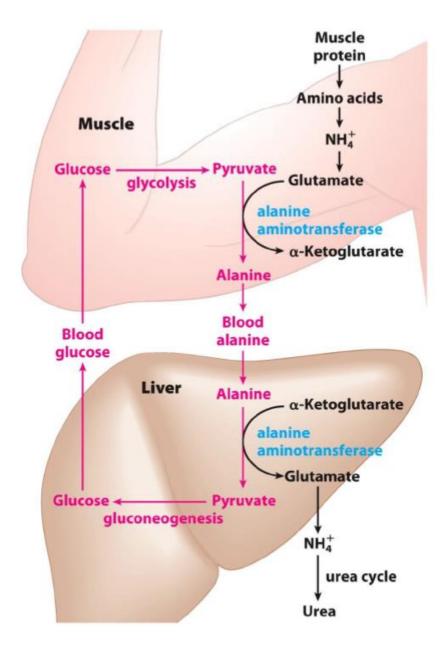


Figure 5: Glucose-alanine cycle. Alanine serves as a carrier of ammonia and of the carbon skeleton of pyruvate from skeletal muscle to liver. The ammonia is excreted and the pyruvate is used to produce glucose, which is returned to the muscle.