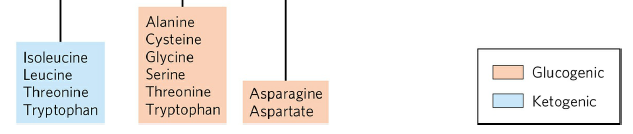
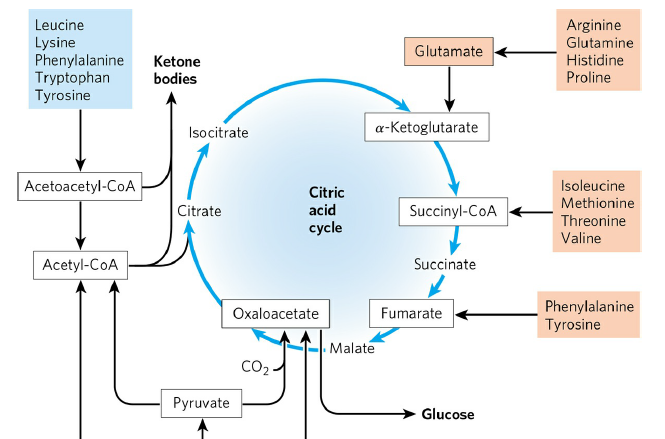
**18.3 Pathways of Amino Acid Degradation**

* The pathways of amino acid catabolism normally account for only 10% to 15% of the human body’s energy production; these pathways are not nearly as active as glycolysis and fatty acid oxidation.
* The 20 catabolic pathways converge to form only six major products.
* They are -ketoglutarate, succinyl-CoA, fumarate, oxaloacetate, pyruvate and acetyl-CoA. All of them enter the citric acid cycle (**Fig. 18-15)**.



**FIGURE 18-15** Summary of amino acid catabolism.

* Some amino acids can be converted to glucose. They are called glucogenic amino acids.
* Some amino acids can be converted to ketone bodies. They are called ketogenic amino acids.
* Some amino acids (tryptophan, phenylalanine, tyrosine, threonine, and isoleucine) can be converted to both glucose and ketone bodies.
* Remember. Catabolism of both carbohydrates and lipids produces NADH and FADH2.
* The degradation of amino acids also results NADH and FADH2 through the action of the citric acid cycle.