

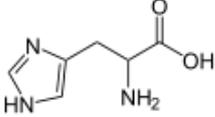
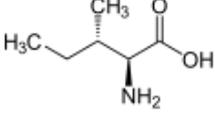
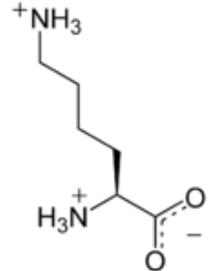
Task:

List three other essential amino acids.

Answer:

The essential amino acids are the amino acids that the body cannot synthesize on its own. They must be supplied in the diet.

There are 9 essential amino acids: histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine

Histidine	 <p>The chemical structure of histidine shows a central alpha-carbon bonded to a hydrogen atom, an amino group (NH₂), a carboxyl group (COOH), and a side chain consisting of a methylene group (-CH₂-) attached to an imidazole ring.</p>
Isoleucine	 <p>The chemical structure of isoleucine features a central alpha-carbon bonded to a hydrogen atom, an amino group (NH₂), a carboxyl group (COOH), and a side chain with a chiral center. This side chain consists of a methylene group (-CH₂-) bonded to a carbon atom that is also bonded to a methyl group (CH₃) and a propyl group (H₃C-CH₂-CH₂-).</p>
Lysine	 <p>The chemical structure of lysine is shown in its zwitterionic form. It consists of a central alpha-carbon bonded to a hydrogen atom, a protonated amino group (H₃N⁺), a carboxylate group (COO⁻), and a long side chain consisting of a four-carbon alkyl chain ending in a protonated primary amino group (+NH₃).</p>