

Biochemistry Study Guide

Heme Biosynthesis:

Mnemonic	Disease
All	Acute Intermittent Porphyria
Congenital	Congenital Erythropoetic Porphyria
Porphyrias	Porphyria Cutanea Tarda
Have	Hereditary Coproporphyria
Variable	Variagate Porphyria
Presentation	Protoporphyria

Enzymes are in the same order as in synthesis:

Defect	Disease
Urogen I Synthase	Acute Intermittent Porphyria
Urogen III Cosynthase	Congenital Erythropoetic Porphyria
Urogen III Decarboxylase	Porphyria Cutanea Tarda
Coproden III Oxidase	Hereditary Coproporphyria
Protogen IX Oxidase	Variagate Porphyria
Ferrocheletase	Protoporphyria

Non-Essential Amino Acids:

CAAATS GGGP

Cysteine
Aspartate
Alanine
Asparagine
Tyrosine
Serine

Glycine
Glutamate
Glutamine
Proline

Urea Cycle:

Mnemonic	Disease
Ordinarily	Ornithine
Careless	Carbamoyl
Crappers	Citrulline
Are	Arginosuccinate
Also	Aspartate
Frivolous	Fumerate
About	Arginine
Urination	Urea

Citric Acid Cycle:

Mnemonic	Disease
Can	Citrate
I	Isocitrate
Keep	alpha-Ketogluterate
Selling	Succinyl-CoA
Sex	Succinate
For	Fumerate
Money	Malate
Officer?	Oxaloacetate