Vitamin	Coenzyme Form	Biochemical Reactions/Functions
Vitamin B1 (Thiamine)	Thiamine Pyrophosphate (TPP)	• Oxidative decarboxylation of α-keto acids • Transketolase reaction in pentose phosphate pathway • Acetylcholine synthesis • Myelin synthesis
Vitamin B2 (Riboflavin)	• FMN (Flavin mononucleotide) • FAD (Flavin adenine dinucleotide)	• Oxidative decarboxylation • Citric acid cycle • Beta-oxidation of fatty acids • Electron transport • Antioxidant (glutathione reductase)
Vitamin B3 (Niacin)	• NAD+ (Nicotinamide adenine dinucleotide) • NADP+ (Nicotinamide adenine dinucleotide phosphate)	• Oxidative decarboxylation • Citric acid cycle • Beta-oxidation of fatty acids • Glucose-6-phosphate dehydrogenase (NADP+) • Folate reductase (NADPH+H+)
Vitamin B5 (Pantothenic acid)	• Coenzyme A (CoA) • 4-phosphopantetheine • ACP (Acyl carrier protein)	• Oxidative decarboxylation of α-keto acids • Oxidation of fatty acids • Acetylating reactions (acetylcholine) • Fatty acid synthesis (ACP)
Vitamin B6 (Pyridoxine)	Pyridoxal Phosphate (PLP)	• Transamination • Decarboxylation • Deamination • Transsulfuration • Condensation
Vitamin B7 (Biotin)	Biocytin	• Pyruvate carboxylase • Acetyl CoA carboxylase • Propionyl carboxylase • β-Methyl crotonyl CoA carboxylase
Vitamin B9 (Folic acid)	Tetrahydrofolic acid (FH4)	• One-carbon metabolism • Amino acid utilization • Nucleic acid production • Blood cell formation • Homocysteine metabolism (with B6 and B12)
Vitamin B12 (Cobalamin)	• Methylcobalamin • 5-deoxyadenosylcobalamin	• Methylation of homocysteine to methionine • Conversion of L-methylmalonyl CoA to succinyl CoA • DNA synthesis • Myelin synthesis
Vitamin C (Ascorbic acid)	Ascorbate	• Reducing agent in various reactions • Collagen biosynthesis (hydroxylysine and hydroxyproline) • Iron absorption • Regeneration of vitamin E • Antioxidant functions