Vitamins, Cofactors and Coenzymes

Nonprotein components of certain enzymes are called cofactors. If the cofactor is organic, then it is called a coenzyme. Coenzymes are relatively small molecules compared to the protein part of the enzyme and many of the coenzymes are derived from vitamins. The coenzymes make up a part of the active site, since without the coenzyme, the enzyme will not function.
Nicotinamide Adenine Dinucleotide

Vitamin A: β-Carotene