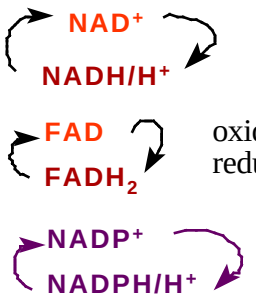
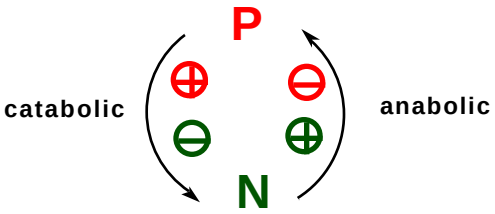
GENERAL FEATURES OF METABOLISM

Carbohydrates Protein Fat	**CATABOLISM** *(degradation)* *(oxidation)* *(exergonic)*	Carbohydrate phosphates α-Ketoacids Amino acids Acyl-CoAs	**ANABOLISM** *(synthesis)* *(reduction)* *(endergonic)*	Proteins Polysaccharides Lipids Nucleic acids Membranes Organelles Cells



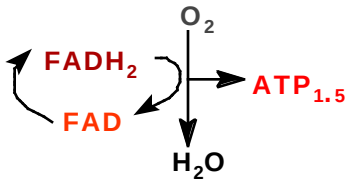
oxidation of metabolites,
reduction of coenzymes

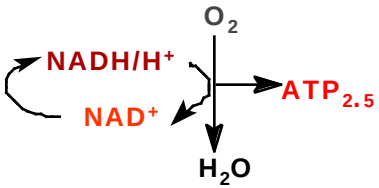
RECIPROCAL REGULATION



irreversible opposing steps

reduction of metabolites,
oxidation of NADPH





energy storage

oxidative phosphorylation

energy supply

reaction coupling