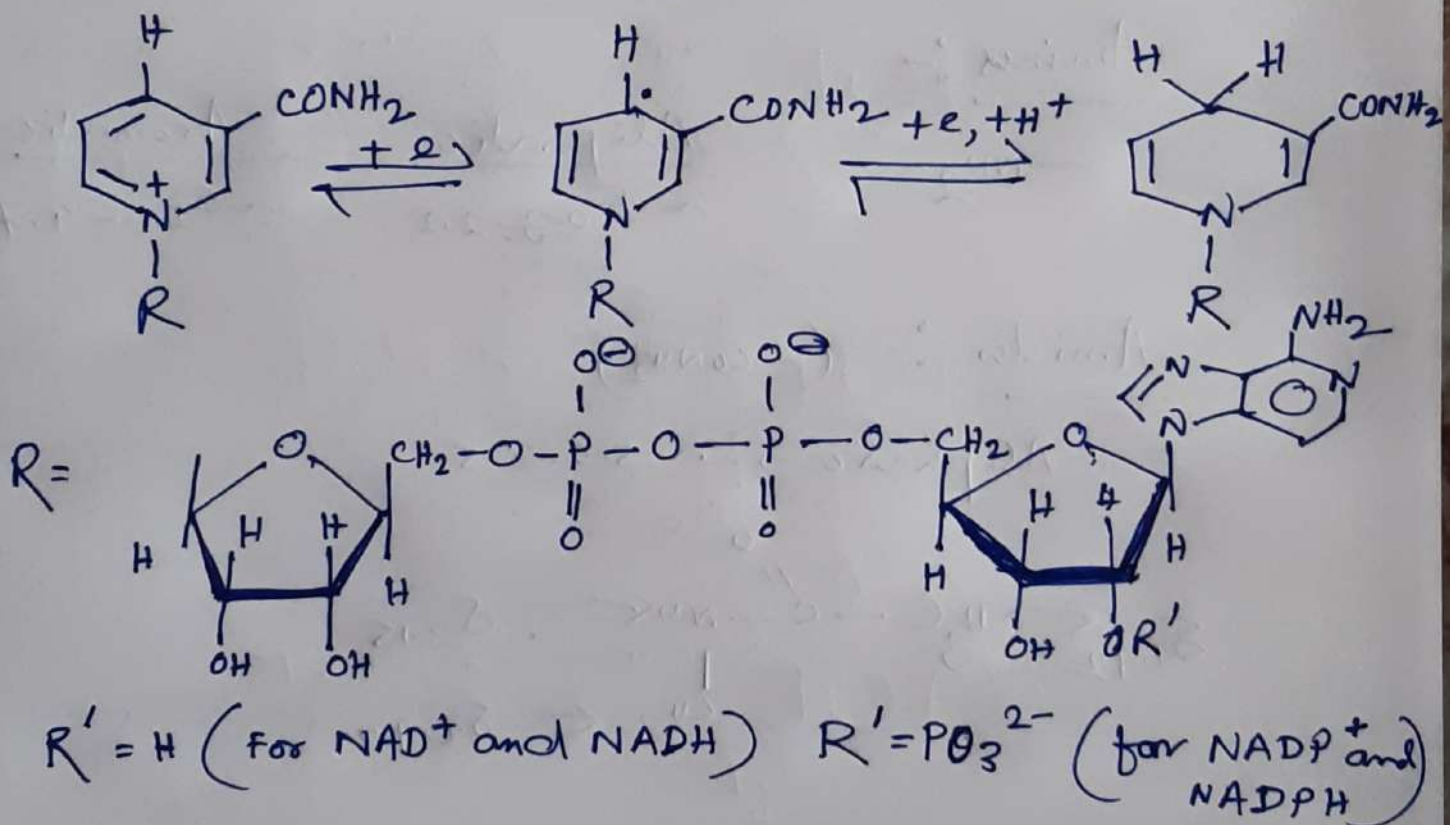


## NADH, NADPH, FADH<sub>2</sub>, FMNH<sub>2</sub> - Electron Carriers in the oxidation of Fuel molecules

Nicotinamide adenine dinucleotide (NAD<sup>+</sup> oxidised form, NADH reduced form), nicotinamide adenine dinucleotide phosphate (NADP<sup>+</sup> oxidised form and NADPH reduced form) can act as 2e<sup>-</sup> transfer agents. The one electron reduced intermediate radical product is not stable and this is why they participate in two electron transfer processes. Their structures and involved redox couples are given in the following schemes.

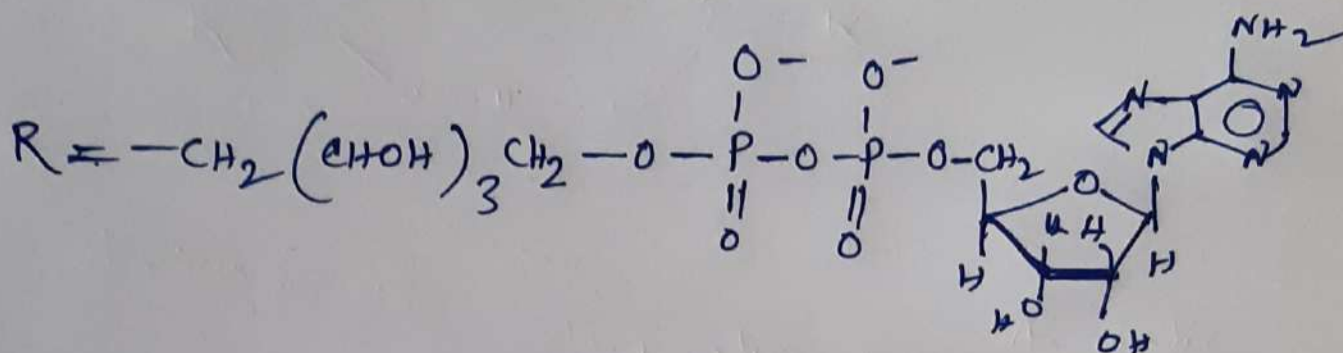
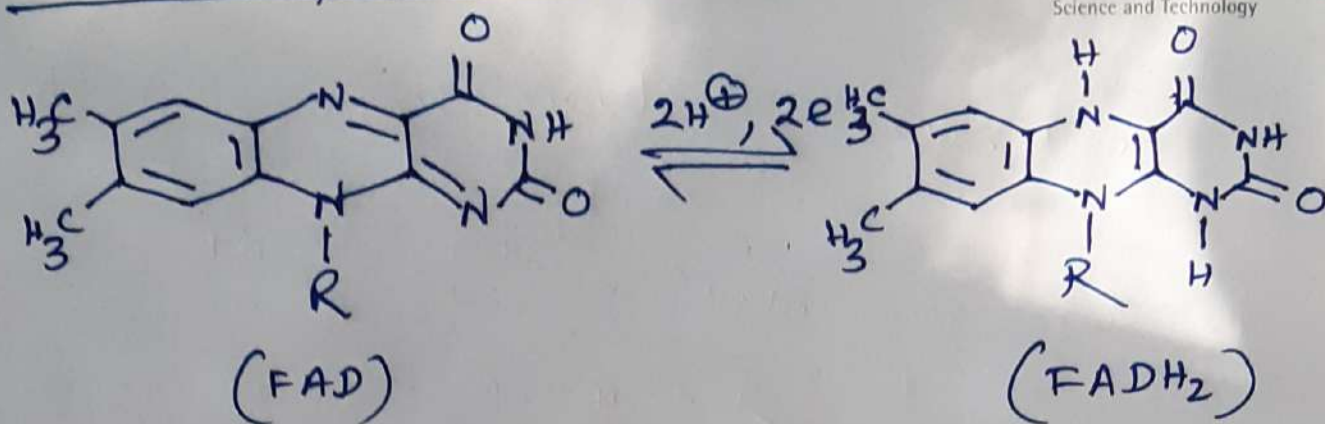


Flavin adenine dinucleotide (FAD oxidised form, FADH<sub>2</sub> reduced form) also participates in 2e<sup>-</sup> transfer reactions.



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## Redox Couple of FAD/FADH<sub>2</sub>



Flavin mononucleotide (FMN oxidised form, FMNH<sub>2</sub> reduced form) also participates in the same type of electron transfer process.

