Review Function of  $\beta$ -Carotene and Tocopherol in Photosystem II

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New and known structural and functional insights in the role of  $\beta$ -carotene and of  $\alpha$ -tocopherol in photosytem II are reviewed. A concept is presented connecting the failure of P680 triplet quenching by  $\beta$ -carotene with the formation of singlet oxygen and its scavenging in the turnover of the D1 protein and by tocopherol in the maintenance of PS II structure

Key words: Chlorophyll Triplet, D1 Protein Turnover, Singlet Oxygen