

"βCATECHIN": An Antioxidant Cocktail
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"βCATECHIN" (a product of Sky Food Co. Ltd., Osaka, Japan.) is an antioxidant cocktail, that is made of natural antioxidants and phytochemicals. Earlier, using electron spin resonance spectroscopy and specific spin traps, we have demonstrated *in vitro* free radical scavenging action of "βCATECHIN" on a wide variety of reactive species including, superoxide, singlet oxygen, hydroxyl and 1,1-diphenyl-2-picrylhydrazyl radicals. Our work has also depicted that in Wistar rats, a one month administration of "βCATECHIN" inhibited lipid peroxidation in various tissues. In another study we obtained an enhancement in the life span of senescence accelerated mice (SAMP8 strain) by long term administration of "βCATECHIN".

In the present report we discuss the protecting effects of "βCATECHIN" on the oxidative DNA damage in: (a) an *in vitro* experiment, where "βCATECHIN" reduced the oxidative damage in calf thymus DNA induced by the ultraviolet light and (b) in Wistar rats, where a one month administration of "βCATECHIN" decreased the damage induced by an iron chloride (FeCl₃) injection in the rat brains. In both the experiments, the production of 8-hydroxy-2-deoxyguanosine (8-OHdG) per 10⁵ deoxyguanosine (dG) bases was considered as a parameter of oxidative DNA damage and the samples were analyzed by using a high performance liquid chromatography with an electro-chemical array detection (EC-HPLC) method.

In nutritional prophylaxis and preventive medicine 'antioxidant mixtures' are highly recommended for the general improvement of health and enhancement of life span of normal human beings. "βCATECHIN" offers one such 'designed health supplement'.