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コエンザイム Q の基礎と応用

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Basic and Application Research in Coenzyme Q10

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Abstract

Coenzyme Q10 (CoQ10) is a fat-soluble substance that is biosynthesized in cells. It was first isolated in 1950s and had been developed as a drug to improve congestive heart failure in Japan in 1970s. CoQ10 is now used worldwide as a food supplement. CoQ10 has a significant role in the proper mitochondria electron transfer and the synthesis of ATP. It has stronger anti-oxidant function than vitamin E and can regenerate vitamin E radical to vitamin E. In addition, its other attractive functions have been revealing recently. Its most common use is for preventing heart disease, neurological disease and side-effect of Statin therapy because of its deficiency. Moreover, CoQ10 are being paid attention to the protective material for skin.

Key words: coenzyme Q, mitochondria, anti-oxidant, vitamin E.