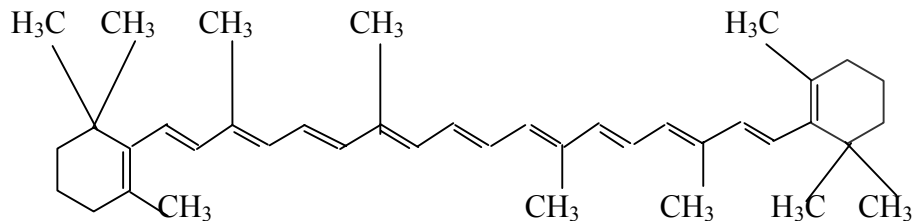


I retinoidi nella prevenzione e terapia dei tumori.

Betacarotene

C₄₀H₅₆



β - β -carotene; *trans*- β -carotene;
(*all-E*)-1,1'-(3,7,12,16-tetramethyl-1,3,5,7,9,11,13,15,17-octocanonaene-1,18-dyl)bis[2,6,6-trimethylcyclohexene]; E160a.

Il Prof. Luigi Di Bella ha inserito il Betacarotene nel suo composto plurivitaminico sia per il notevole effetto di potenziamento ed esaltazione dell'azione degli altri componenti, che per il suo effetto protettivo su di essi e sulle membrane cellulari. Inoltre il Betacarotene esercita direttamente, come molecola (C₄₀-H₅₆) una specifica azione sia preventiva che terapeutica nella patologia neoplastica, come emerge da un'ampia letteratura relativa.

Nel 2000 Basu e AA (1) hanno pubblicato su *Phytomedicine* uno studio dal titolo "Il Betacarotene prolunga la sopravvivenza, diminuisce la perossidazione lipidica e aumenta il Glutazione nei linfomi murini trapiantabili". La pubblicazione ha un indubbio valore e pertanto dà indicazioni cliniche perché si basa anche su studi epidemiologici i quali concludono che l'assunzione di sostanze vegetali ricche di carotenoidi abbatte il rischio di certe forme di cancro. Oltre gli studi epidemiologici, altri sperimentali, condotti dagli stessi autori, hanno documentato come negli animali da esperimento trapiantati con cellule tumorali ad alto tasso di proliferazione del Linfoma di Dalton (DL) il Betacarotene aumenti nettamente la sopravvivenza. La progressione del tumore fu inoltre studiata per mezzo di due indici affidabili: Glutazione, che diminuisce rapidamente in corso di patologia neoplastica e Perossidazione lipidica, la cui presenza è esaltata dal progresso del tumore, e che sono stati ricondotti alla norma dal Betacarotene con un'evidentissima riduzione dei danni prodotti dalla perossidazione e forte effetto protettivo-antitossico da incremento del Glutazione. Si è registrato un netto prolungamento della sopravvivenza dovuta ad effetto antiproliferativo e a protezione di cellule e parenchimi dall'azione tossica indotta dalle cellule tumorali. Altri studi sull'utilità del Betacarotene furono condotti sull'uomo, studiando l'effetto

preventivo nelle forme leucoplastiche precancerose orali (Liede (25), *European Journal of Clinical Nutrition*, 1998). Dato confermato da Garewal (11) (*Archives of Otolaryngology*, 1999) con uno studio clinico pluricentrico, a doppio cieco, controllato con placebo e pertanto affidabile e atto a fornire indicazioni clinico-terapeutiche. Esso conclude: “L’efficacia del Betacarotene nei pazienti con leucoplachia orale fu confermata.” Un’ampia trattazione è contenuta nello studio di Olson (33) “Carotenoidi e salute” (*Archivos Latinoamericanos de Nutricion*). Tra gli altri studi sull’effetto del betacarotene sulle lesioni precancerose orali citiamo di Sankaranayanan (44) “Chemoprevention of oral leukoplakia with vit. A and Betacarotene...” (*Oral Oncology*, 1997). Vastissima è la letteratura circa l’evidenza dell’effetto preventivo antitumorale del Betacarotene.

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