primary studies - published RCT

Effects of beta-carotene supplementation for six months on clinical and laboratory parameters in patients with cystic fibrosis.

Code: PM11120904 **Year:** 2001 **Date:** 2001 **Author:** Renner S

Study design (if review, criteria of inclusion for studies)

Single centre randomized controlled trial

Participants

Austria. 24 people with CF; 6.7 - 27.7 years of age (18 females, 6 males) diagnosed by sweat test taking regular vitamin supplements and pancreatic enzymes.

Interventions

Dose/frequency/duration: 1 mg/kg/day (max 50 mg/day) for 3 months followed by 10 mg/day for 3 months taken once per day. Control: placebo. Intervention: Î²-carotene.

Outcome measures

Pulmonary exacerbations and adverse events were also recorded. Lung function (FEV1 % predicted), plasma Î²-carotene status and BMI measured at 0 and 6 months.

Main results

The plasma concentration of beta-carotene increased significantly to the normal range during the three months of high dose supplementation (baseline 0.08 (0.04) micromol/l to 0.56 (0.38) micromol/l; p

Authors' conclusions

Oral beta-carotene supplementation in a dose of 1 mg/kg/day only was effective in normalising the plasma concentration of beta-carotene and resulted in a decrease in pulmonary exacerbations. These data suggest that patients with CF may benefit clinically from supplementation with beta-carotene and further studies are warranted.

http://dx.crossref.org/10.1136%2Fthorax.56.1.48

See also

Thorax. 2001 Jan;56(1):48-52.

Keywords

Adolescent; Adult; Antioxidants; Child; non pharmacological intervention - diet; pharmacological_intervention; Supplementation; Vitamin A; Vitamins; Malabsorption; Nutrition Disorders;