*primary studies - published, non RCT*

# Effect of taurine supplements on fat absorption in cystic fibrosis.

**Code:** PM4011338 **Year:** 1985 **Date:** 1985 **Author:** Darling PB

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

placebo-controlled trial

### Participants

22 CF children with documented steatorrhea

### Interventions

taurine capsules (30 mg/kg/day) and placebo during separate 6-month treatment periods.

### Outcome measures

glycine/taurine conjugation pattern, steatorrhea, linoleic acid (C 18:2) excretion, fat loss, excretion of bile acids, neutral sterols, and nitrogen. Fasting plasma fatty acids, cholesterol, and triglycerides, weight, height

### Main results

Alteration of the glycine/taurine conjugation pattern was verified in two patients who showed a predominance of tauroconjugates as a result of taurine supplementation. On taurine, steatorrhea was reduced (p less than 0.05) by 17.6 +/- 9.7% in 19 patients who completed the study as was the excretion of long-chain saturated fatty acids. There was no change in linoleic acid (C 18:2) excretion. In the 10 patients with a more severe degree of steatorrhea the decrease in fat loss approached 20% and a close relationship was found (r = 0.84, p less than 0.01) between the extent of the fatty acid loss on placebo and the decrease of this loss on taurine. A linear relationship was found between the percentage decrease of individual fatty acids and their log solubility in water. No change was found in the daily excretion of bile acids, neutral sterols, and nitrogen. Fasting plasma fatty acids, cholesterol, and triglycerides were also unchanged. Monitoring of growth over the two 6-month periods revealed a marginal (p less than 0.1) increase of weight velocity expressed as a percentage expected for age (83.4 +/- 11.3----117.1 +/- 16.5). The increase in height velocity in response to taurine showed a more modest trend (95.3 +/- 7.8----110.7 +/- 10.6).(ABSTRACT TRUNCATED AT 250 WORDS)

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/640/CN-00038640/frame.html

### See also

Pediatric research YR: 1985 VL: 19 NO: 6

### Keywords

Adolescent; Child; non pharmacological intervention - diet; Supplementation; taurine; Malabsorption; Nutrition Disorders; Capsules; Amino Acids; Proteins;