primary studies - published RCT

Effect of pancreatic enzymes on zinc absorption in cystic fibrosis.

Code: PM9481626 **Year:** 1998 **Date:** 1998 **Author:** Easley D

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

RCT

Participants

Subjects were 4 boys and 4 girls ranging in age from 7 to 17 years of age. All were pancreatic insufficient.

Interventions

Stable isotope labels, 70Zn and 67Zn, were administered orally in divided doses on consecutive days with meals. Meals were identical on the first 2 study days. Subjects were randomized to have pancreatic enzyme replacement withheld on the first or second day.

Outcome measures

All fecal samples were collected quantitatively for 10 days after label administration and were analyzed individually for total zinc and isotopic enrichment using atomic absorption spectrophotometry and fast atom bombardment mass spectrometry, respectively. Fractional absorption of zinc was calculated from cumulative fecal excretion of unabsorbed label.

Main results

Fractional absorption while receiving enzymes was 0.50 +/- 0.29 versus 0.38 +/- 0.24 while not taking enzymes (p = 0.05).

Authors' conclusions

These results indicate that fractional absorption of zinc is impaired by pancreatic insufficiency in patients with cystic fibrosis, and is improved by exocrine pancreatic enzyme replacement.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/959/CN-00147959/frame.html

See also

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Keywords

Adolescent; Child; pharmacological_intervention; Pancreatic Enzyme Replacement Therapy; Supplementation; Pancreas insufficiency; Pancreatic Diseases; Gastrointestinal Diseases; Malabsorption; Nutrition Disorders; Oral; Gastrointestinal Agents;