primary studies - published RCT

Starch digestion in young children with cystic fibrosis measured using a 13C breath test.

Code: PM1635844 **Year:** 1992 **Date:** 1992 **Author:** Dewit O

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

RCT

Participants

8 healthy children and 5 with cystic fibrosis

Interventions

subjects were given a test breakfast of corn starch cooked in milk with sugar. The cystic fibrosis group repeated the test with the addition of an enzyme supplement containing alpha-amylase. Subjects accepted variable amounts of starch (range 0.2-2.8 g/kg body wt).

Outcome measures

13C recovered

Main results

The percentage of ingested 13C recovered during the 6 h after the meal increased with age in the healthy children (range 15-53%). Three children with cystic fibrosis had negligible 13C recoveries, and the other two had lower recoveries than expected for their age. The addition of enzymes did not consistently improve 13C recovery

Authors' conclusions

13C breath test based on corn has potential for investigating starch digestion in young children. Initial results suggest that starch digestion is impaired in some children with cystic fibrosis and that enzyme supplements do not improve digestion consistently or completely

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See also

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Keywords

Child; Food; non pharmacological intervention - diet;