primary studies - published RCT

Behavioral and nutritional treatment for preschool-aged children with cystic fibrosis: a randomized clinical trial.

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

Randomized clinical trial

Participants

78 children aged 2 to 6 years (mean age, 3.8 years) with CF and pancreatic insufficiency (intervention, n = 36 and control, n = 42). The study was conducted at 7 CF centers between January 2006 and November 2012

Interventions

Behavioral intervention combined individualized nutritional counseling targeting increased energy intake and training in behavioral child management skills. The control arm provided education and served as a behavioral placebo controlling for attention and contact frequency. Both treatments were delivered in person or telehealth (via telephone). Sessions occurred weekly for 8 weeks then monthly for 4 months (6 months). Participants then returned to standard care for 1 year, with 12-month follow-up thereafter.

Outcome measures

Changes in energy intake and WAZ score were examined from pretreatment to posttreatment (6 months) and change in HAZ score was assessed pretreatment to follow-up (18 months). Covariates included sex, Pseudomonas aeruginosa status at baseline, and treatment modality (in person vs telehealth).

Main results

At baseline, mean (SD) energy intake was 1462 (329) kcals/d, WAZ score was -0.44 (0.81), and HAZ score was -0.55 (0.84). From pretreatment to posttreatment, the intervention increased daily energy intake by 485 calories vs 58 calories for the control group (adjusted difference, 431 calories; 95% CI, 282 to 581; P

Authors' conclusions

Behavioral and nutritional intervention improved energy intake and HAZ score outcomes but not WAZ score outcomes. Our results provide evidence that behavioral and nutritional treatment may be efficacious as a nutritional intervention for preschoolers aged 2 to 6 years with CF and pancreatic insufficiency.

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See also

JAMA Pediatr. 2015 May 4;169(5):e150636. doi: 10.1001/jamapediatrics.2015.0636. Epub 2015 May 4.

Keywords

Child; Gastrointestinal Diseases; non pharmacological intervention - psyco-soc-edu-org; Pancreas insufficiency; Pancreatic Diseases; Malabsorption; Nutrition Disorders;