primary studies - published RCT

Behavioral intervention to improve calorie intake of children with cystic fibrosis: treatment versus wait list control.

Code: PM8708877 **Year:** 1996 **Date:** 1996 **Author:** Stark LJ

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

Parallel RCT

Participants

N = 10. Age range: 5.3 years to 10.1 years. Mean age: 7.3 years (SD = 1.7). 1 withdrew from control group after randomisation. Total sample n = 9.

Interventions

Parent meeting and 7-day food diaries at times corresponding to baseline and last week of intervention. 7 weekly sessions - baseline assessment plus snack, breakfast, relaxation skills training, lunch, dinner and maintenance strategies targeted over following 7 sessions. 2. Wait list control (n = 4). 1. Group Behavioural Intervention (n = 5).

Outcome measures

1. Calorie intake. 2. Anthropometric measures - weight, height and skinfold. 3. Pulmonary functioning (PFT). 4. Resting energy expenditure (REE). 5. Physical activity - Caltrac electronic accelerator. Assessments at baseline, then 3 months and 6 months post-treatment.

Main results

The behavioral intervention group increased their calorie intake by 1,032 calories per day, while the control group's intake increased only 244 calories per day from pre- to posttreatment [t(6) = 2.826, p = 0.03]. The intervention group also gained significantly more weight (1.7 kg) than the control group (0 kg) over the 6 weeks of treatment [t(7) = 2.588, p = 0.03] and demonstrated catchup growth for weight, as indicated by improved weight Z scores (-1.18 to -0.738). The control group showed a decline in weight Z scores over this same time period (-1.715 to -1.76). One month posttreatment, the intervention was replicated with two of the four children from the control group. Improved calorie intake and weight gain pre- to posttreatment were again found in these children. At 3- and 6-month follow-up study of children receiving intervention, maintenance of calorie intake and weight gain was confirmed. No changes were found on pulmonary functioning, resting energy expenditure, or activity level pre- to posttreatment.

Authors' conclusions

This form of early intervention appears to be promising in improving nutritional status and needs to be investigated over a longer period of time to evaluate the effects of treatment gains on the disease process.

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See also

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Keywords

Caloric Intake; Child; exercise; Food; non pharmacological intervention - diet; non pharmacological intervention - devices OR physiotherapy; non pharmacological intervention - psyco-soc-edu-org; Supplementation; Behavioural interventions;