primary studies - published RCT

Relationships among nutritional status and skeletal and respiratory muscle function in cystic fibrosis: does early dietary supplementation make a difference?.

Code: PM8460615 **Year:** 1993 **Date:** 1993 **Author:** Hanning RM

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

Parallel design RCT

Participants

20 children with CF and mild to moderate lung disease, aged 7 - 15 years: 20 randomised, 16 studied

Interventions

No intervention in control groups Dietary supplements, drink powders, milk shakes, tinned puddings to achieve 25% of normal energy recommendations in addition to normal diet for six months

Outcome measures

Pulmonary function* and respiratory muscle strength Skeletal muscle strength and power Laboratory measures of nutritional status (e.g. albumin, amino acids) Height*, weight* and anthropometric measurements* Habitual physical activity Dietary energy* and nutrient intake* Energy* and nutrient* intake from supplements Body composition

Main results

Stepwise-regression analysis indicated that changes in skeletal muscle strength and energy intake correlated significantly with growth [weight (kg) = 1.90 - 0.60 (Tanner Stage) + 0.49 (maximum voluntary strength (Nm) + 0.03 (energy intake, % RNI), r = 0.76, P

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/036/CN-00092036/frame.html

See also

Am J Clin Nutr. 1993 Apr;57(4):580-7.

Keywords

Adolescent; Caloric Intake; Child; exercise; non pharmacological intervention - diet; non pharmacological intervention - devices OR physiotherapy; Supplementation; Powders;