primary studies - published RCT

Effect of a dietary intervention on growth and energy expenditure in children with cystic fibrosis.

Code: PM24518280 **Year:** 2014 **Date:** 2014 **Author:** Groleau V

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

Randomized, double blind, placebo-controlled trial.

Participants

children (5 to 17yrs) with cystic fibrosis (CF) and pancreatic insufficiency (PI).

Interventions

The organized lipid matrix LYM-X-SORB (LXS) vs. placebo dietary supplements with similar calories, total fat and fatty acids. Dietary intake was assessed using 3-day weighed food records.

Outcome measures

Dietary intake was assessed using 3-day weighed food records. Height (HAZ), weight (WAZ), BMI (BMIZ), mid-upper arm muscle (UAMAZ) and fat area (UAFAZ) Z-scores were calculated. Fat mass (FM) and fat-free mass (FFM) were obtained by whole body DXA. REE (kcal/d) was evaluated by indirect calorimetry at baseline, 3 and 12months and %REE calculated using Schofield equations.

Main results

63 children (57% males, age 10.6+/-2.9yr, 43% receiving LXS) completed REE measurements. Caloric intake increased from a median of 2502 [1478, 4909] to 2616 [1660, 4125] kcal/d at 12months. HAZ, WAZ and UAMAZ increased (p

Authors' conclusions

Over a 12month nutrition intervention with either LXS or placebo, the growth status, muscle stores and REE improved. Sustained increased energy intake improved energy metabolism, growth and nutritional status in school age children with CF, PI and mild lung disease.

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See also

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Keywords

Lym-X-Sorb; Phosphatidylcholines; Child; Adolescent; Gastrointestinal Agents; pharmacological_intervention;