Cochrane Database of Systematic Reviews - - Cochrane Review

Oral protein calorie supplementation for children with chronic disease

Code: CD001914 **Year:** 2015 **Date:** 2009 - updated: 20 MAY 2015 **Author:** Francis Damian K

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

Randomised or quasi-randomised controlled trials

List of included studies (4)

Bayram 2009; Hanning 1993; Kalnins 1996; Poustie 2006

Participants

Children with chronic disease

Interventions

Oral protein calorie supplements for at least one month to increase calorie intake vs existing conventional therapy (including advice on improving nutritional intake from food or no specific intervention)

Outcome measures

Indices of nutrition and growth; anthropometric measures of body composition; calorie and nutrient intake (total from oral protein calorie supplements and food); eating behaviour; compliance; quality of life; specific adverse effects; disease severity scores; and mortality; we also assessed the risk of bias in the included trials.

Main results

Four studies (187 children) met the inclusion criteria. Three studies were carried out in children with cystic fibrosis and one study included children with paediatric malignant disease. Overall there was a low risk of bias for blinding and incomplete outcome data.Two studies had a high risk of bias for allocation concealment. Few statistical differences were found in the outcomes we assessed between treatment and control groups, except change in total energy intake at six and 12 months, mean difference 304.86 kcal per day (95% confidence interval 5.62 to 604.10) and mean difference 265.70 kcal per day (95% confidence interval 42.94 to 485.46), respectively. However, these were based on the analysis of just 58 children in only one study. Only two chronic diseases were included in these analyses, cystic fibrosis and paediatric malignant disease. No other studies were identified which assessed the effectiveness of oral protein calorie supplements in children with other chronic diseases.

Authors' conclusions

Oral protein calorie supplements are widely used to improve the nutritional status of children with a number of chronic diseases. We identified a small number of studies assessing these products in children with cystic fibrosis and paediatric malignant disease, but were unable to draw any conclusions based on the limited data extracted. We recommend a series of large, randomised controlled trials be undertaken investigating the use of these products in children with different chronic diseases. Until further data are available, we suggest these products are used with caution.

http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001914.pub2/abstract

See also

Francis DK, Smith J, Saljuqi T, Watling RM. Oral protein calorie supplementation for children with chronic disease. Cochrane Database of Systematic Reviews 2015, Issue 5. Art. No.: CD001914. DOI: 10.1002/14651858.CD001914.pub2.

Keywords

Adult; Caloric Intake; Child; non pharmacological intervention - diet; Nutrition Disorders; Oral; Supplementation; Malnutrition; Proteins;