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LUNG ALERT

Need for oral protein energy supplements in CF: fact or myth?

▲ Poustie VJ, Russell JE, Watling RM, *et al.* and the CALICO Trial Collaborative Group. Oral protein energy supplements for children with cystic fibrosis: CALICO multicentre randomised control trial. *BMJ* 2006;**332**:632–5

Due to a multitude of causes, cystic fibrosis (CF) is characterised by poor nutrition which is an important predictor of decline in lung function. Oral protein energy supplements are used widely to improve energy intake and nutritional status in patients suffering from CF. These supplements are costly and a significant proportion of patients find them unpalatable.

The CALICO trial (Calories In Cystic Fibrosis-Oral) is a multicentre randomised control trial which evaluated the role of protein energy supplements in improving or preventing the deterioration in body mass index centile of children with CF. 102 children with CF (age 2–15 years) with suboptimal nutrition (body mass index 0.4–25th centile, no gain in weight over the previous 3 months, or 5% decrease in weight over a 6 month period) were randomised to receive protein energy supplements plus dietetic advice or dietetic advice alone. There was no difference in the mean change in body mass index between the two groups over a 12 month period (mean difference 2.9 centile points; the study was powered to detect a 10 point difference). No significant difference was observed in the other anthropometric parameters (weight and height centile and mid arm circumference), change in lung function, activity, and gastrointestinal score.

The authors concluded that there was no added benefit of protein energy supplements over regular dietetic advice in children with CF with moderate malnutrition. However, they may have a role in the treatment of malnourished children, especially during acute weight loss.

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