Achieving high energy intakes in cystic fibrosis: total fat versus percent fat

¹CE Collins, ²EV O'Loughlin, ³RL Henry

¹Dept of Paediatrics, John Hunter Children's Hospital, New Lambton Heights, NSW 2305
²Department of Gastroenterology, The New Children's Hospital, Westmead, NSW 2145
³Faculty of Medicine and Health Sciences, The University of Newcastle, Callaghan, NSW 2308

Higher fat and energy intakes were shown to confer a survival advantage in CF in the early 1980s (1). Despite this, and recommendations in 1992 from the Nutritional Assessment and Management consensus report of the Cystic Fibrosis Foundation (2) little refinement has been made to dietary advice in CF since then. There is a need to develop effective nutrition programs that ensure optimal energy intake in CF.

This study was a cross-sectional measure of clinical characteristics, energy and fat intakes in subjects attending the CF outpatients clinic of the John Hunter Hospital, Newcastle. Twentynine subjects (seven males, 12 females, mean age 12 yr), completed weighed food records to determine the contribution of fat to the percent of the recommended energy intake obtained and document use of pancreatic enzyme replacement therapy.

Diets with a high percent of energy derived from fat did not guarantee that individuals with CF met their energy requirements. Subjects with total fat intakes of 100 g per day or greater however were assured of achieving in excess of 110% RDI for energy. Up to 47% of subjects consumed more pancreatic enzyme replacement capsules than shown to give maximum effectiveness (3).

Setting a 100 g daily fat target is a realistic way of ensuring high energy intakes in CF. Individual fat ready reckoners will be required. These will identify the fat content of food and prescribe specific numbers of pancreatic enzyme replacement capsules to be consumed with each meal or food item.

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- 3. Robb T, Lewindon P, Davidson GP, Moore D, Daniels LA, and Martin A. The natural history of enteric coated microsphere (pancrelipase) in a CF clinic. Sixth Annual North American CF Conference, Washington 1992;108-16.