Our trial was planned in 1979; the first patient was entered in 1980 and the last patient completed the trial in 1985. Forty five clinicians from 40 hospitals collaborated. One hospital contributed 68 patients, 13 hospitals between 10 and 21 patients, and 26 hospitals fewer than 10 patients. It might be suggested that the dietary assessment method used was unreliable, particularly because patients wish to show their compliance with the advice given. Most patients appeared to make a sustained effort to alter their diet as advised. Even though the trial inevitably tested the advice given rather than known conformity to the diet, this is the situation in clinical practice.

It soon became apparent that some patients did not wish to continue the low refined, high unrefined carbohydrate diet. Some said that it made their symptoms worse, some that it caused weight loss, and others did not like it. About 10% of patients allocated to this diet withdrew for one of these reasons. Furthermore, a similar additional proportion of patients in this dietary group failed to attend for follow up, suggesting that more patients allocated to this diet than the other found the trial unacceptable in practice. Conversely, a few patients who normally took a high fibre diet but were allocated to take the diet low in fibre found this change difficult to tolerate.

The failure of this trial to show any convincing difference in the clinical course of the disease in the two treatment groups is disappointing. It might be argued that a therapeutic response would have been more likely among patients with active disease. The trial was not conducted among such patients because the response would be difficult to evaluate when drugs were being taken and because there is a real need to find a treatment which decreases the long term relapse rate in those with inactive disease. The cumulative probability of deterioration of the disease was similar to the 40% expected when planning the trial, but the actual proportion of patients who deteriorated resulting in the end points listed in table II was smaller (group A 32%, group B 35%). The difference between the groups was smaller than that judged clinically important when planning the trial. Even among the small group of patients who complied best with the advice given no difference was discernible; it seems unlikely that patients will alter their intake of sugar or dietary fibre, or both, to a greater extent than achieved by this group.

A high proportion of patients in whom all macroscopic disease is resected develop aphthoid ulcers at the anastomotic site within one year of operation.[20] Hence most of the 134 patients in this group (table I) probably had occult disease during the two years of the trial. The results suggest that both the course of mildly active Crohn's disease and deterioration after resection are unaffected by advising replacement of refined by unrefined carbohydrate in the diet. Whether a reduction in sugar intake without a concurrent increase in fibre intake would be beneficial cannot be determined from our study. Other reports have suggested that different dietary approaches may be beneficial,[21,22] but the results of large trials of these diets are awaited.

The following clinicians collaborated in the trial and we are very grateful both to them and to all the dietitians who took part:

Dr R N Allan, General Hospital, Birmingham; Dr A T R Axon, Leeds General Infirmary; Dr R E Barry, Bristol Royal Infirmary; Dr J R Bennett, Hull Royal Infirmary; Professor I A D Bouchier, Ninewells Hospital, Dundee; Dr H Brady, Sandwell District General Hospital, West Bromwich; Dr W R Burnham, Oldchurch Hospital, Romford; Dr A R Davidson, Kettering General Hospital; Dr E Elias, Queen Elizabeth Hospital, Birmingham; Professor I E Gillespie, Manchester Royal Infirmary; Dr S R Gould, Epsom District Hospital; Dr R F Harvey, Frenchay Hospital, Bristol; Mr P R Hawley, Mr C V Mann, Mr R J Nicholls, Mr J M A Northover, Mr J P S Thomson, and Mr I P Todd, St Mark's Hospital, London; Dr D J Holdstock, Ashford Hospital, Middlesex; Dr C D Holdsworth, Royal Hallamshire Hospital, Sheffield; Dr J Howel Jones, Walsgrave Hospital, Coventry; Dr J Hywel Jones, Singleton Hospital, Swansea; Dr G D Kerr, Royal Shrewsbury Hospital; Dr J D Kinloch, Chase Farm Hospital, Enfield; Mr R H S Lane, Royal Hampshire County Hospital, Winchester; Professor M J S Langman, City Hospital, Nottingham; Surgeon Commander R J Leicester, Royal Naval Hospital, Haslar; Dr A J Levi, Northwick Park Hospital, Harrow; Mr C G Marks, Royal Surrey County Hospital, Guildford; Dr W D W Rees and Professor L A Turnberg, Hope Hospital, Salford; Dr R I Russell and Dr D A Farah, Royal Infirmary, Glasgow; Dr K F R Schiller, St Peter's District General Hospital, Chertsey; Dr W Sircus, Western General Hospital, Edinburgh; Dr E T Swarbrick, New Cross Hospital, Wolverhampton; Mr C W Venables, Freeman Hospital, Newcastle upon Tyne; Professor D G Weir, Sir Patrick Dun's Hospital, Dublin; Surgeon Commander J G Williams, Royal Naval Hospitals, Plymouth and Haslar; Dr C P Willoughby, Basildon Hospital, Essex; Dr J M T Willoughby, Lister Hospital, Stevenage; Professor R Wright, Southampton General Hospital; Dr G R Youngs, Chester Royal Infirmary; Dr R Zeegen, Westminster Hospital, London.

We also thank all the patients, who took part so willingly and conscientiously; Professor M J S Langman for helpful advice about the analysis of the results; and Mrs Penny Jarvis, Miss Dorabella Northcott, Miss Jane Brice, Mr M Wheeler, and Mr A R Patterson for administration and clerical help. The trial was made possible by financial support from the British Digestive Foundation.

Copies of the complete protocol and of the clinical and dietary assessment forms used in the trial may be obtained from JKR.

References

1 Miller B, Fervers F, Rohbeck R, Strohmeyer G. Zuckerkonsum bei patienten mit morbus Crohn. *Verh Dtsch Ges Inn Med* 1976;**82**:922-4.
2 Martini GA, Brandes JW. Increased consumption of refined carbohydrates in patients with Crohn's disease. *Klin Wochenschr* 1976;**54**:367-71.
3 Kasper H, Sommer H. Dietary fiber and nutrient intake in Crohn's disease. *Am J Clin Nutr* 1979;**32**:1898-901.
4 Thornton JR, Emmett PM, Heaton KW. Diet and Crohn's disease: characteristics of the pre-illness diet. *Br Med J* 1979;ii:762-4.
5 Mayberry JF, Rhodes J, Newcombe RG. Increased sugar consumption in Crohn's disease. *Digestion* 1980;**20**:323-6.
6 Silkoff K, Hallak A, Yegena L, *et al*. Consumption of refined carbohydrate by patients with Crohn's disease in Tel-Aviv-Yafo. *Postgrad Med J* 1980;**56**:842-6.
7 Mayberry JF, Rhodes J, Allan R, *et al*. Diet in Crohn's disease. Two studies of current and previous habits in newly diagnosed patients. *Dig Dis Sci* 1981;**26**:444-8.
8 Jarnerot G, Jarnmark I, Nilsson K. Consumption of refined sugar by patients with Crohn's disease, ulcerative colitis or irritable bowel syndrome. *Scand J Gastroenterol* 1983;**18**:999-1002.
9 Heaton KW, Thornton JR, Emmett PM. Treatment of Crohn's disease with an unrefined-carbohydrate, fibre-rich diet. *Br Med J* 1979;ii:764-6.
10 Summers RW, Switz DM, Sessions JT, *et al*. National cooperative Crohn's disease study: results of drug treatment. *Gastroenterology* 1979;**77**:847-69.
11 Multicentre Trial Group. Sulphasalazine in asymptomatic Crohn's disease. *Gut* 1977;**18**:69-72.
12 Fleiss JL. *Statistical methods for rates and proportions*. New York: John Wiley, 1973.
13 Paul AA, Southgate DAT, eds. *McCance and Widdowson's the composition of foods*. London: HMSO, 1978.
14 Harvey RF, Bradshaw JM. A simple clinical index of Crohn's-disease activity. *Lancet* 1980;i:514.
15 Siegel S. *Non-parametric statistics for the behavioral sciences*. New York: McGraw-Hill, 1956: 116-27.
16 Peto R, Pike HC, Armitage P, *et al*. Design and analysis of randomized clinical trials requiring prolonged observation of each patient. II: Analysis and examples. *Br J Cancer* 1977;**35**:1-39.
17 Bingham S, McNeil NI, Cummings JH. The diet of individuals: a study of a randomly-chosen cross section of British adults in a Cambridgeshire village. *Br J Nutr* 1981;45:23-35.
18 Brandes JW, Lorenz-Meyer H. Zuckerfreie diat: eine neue perspektive zur behandlung des morbus Crohn? *Z Gastroenterol* 1981;**19**:1-12.
19 Levenstein S, Prantera C, Luzi C, D'Ubaldi A. Low residue or normal diet in Crohn's disease: a prospective controlled study in Italian patients. *Gut* 1985;**26**:989-93.
20 Rutgeerts P, Geboes K, Vantrappen G, Kerremans R, Coenegrachts JL, Coremans G. Natural history of recurrent Crohn's disease at the ileocolonic anastomosis after curative surgery. *Gut* 1984;**25**:665-72.
21 O'Morain C, Segal AW, Levi AJ. Elemental diet as primary treatment of acute Crohn's disease. *Br Med J* 1984;**288**:1859-62.
22 Jones VA, Workman E, Freeman AH, Dickinson RJ, Wilson AJ, Hunter JO. Crohn's disease: maintenance of remission by diet. *Lancet* 1985;ii:177-80.

(Accepted 23 June 1987)

Corrections

How much energy does the breast fed infant consume and expend?

An error occurred in the table in this paper by A Lucas and others (11 July, p 75). Some of the 95% confidence intervals for differences were given in kcal not MJ; these should have read, respectively, −6·8 to −1·8, −0·06 to −0·02, −0·05 to 0·15, −0·10 to 0·13, −0·04 to 0·004, 0·13 to 0·65, 0·04 to 0·07, 0·10 to 0·72, −0·14 to 0·13, 30 to 172, and −0·02 to 0·05.

Radiological progression and lung function in silicosis: a ten year follow up study

Two errors occurred in this paper by Ng Tze-Pin and others (18 July, p 164). In table V the regression coefficients for average silica concentration (mg/m^3) should both have negative signs, reading −36 (17) for forced expiratory volume in one second and −40 (19) for forced vital capacity. In paragraph 8, line 12, of the discussion the figure should read 0·10 mg/m^3 and not 0·010 mg/m^3.