a requirement of the Scottish trial. A subsequent analysis of pathological tumour margins by age group might shed light on this issue.

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- 1 Forrest AP, Stewart HJ, Everington D, et al. Randomised controlled trial of conservation therapy for breast cancer: 6-year analysis of the Scottish trial. *Lancet* 1996; **348**: 708–13.
- Fisher B, Bauer M, Margolese R, et al. Five-year results of a randomised clinical trial comparing total mastectomy and segmental mastectomy with or without radiation in the treatment of breast cancer. N Engl J Med 1985; 132: 665–73.
- 3 Clark RM, McCulloch PB, Levine MN, et al. Randomised clinical trial to assess the effectiveness of breast irradiation following lumpectomy and axillary dissection for node negative breast cancer. *J Natl Cancer Inst* 1992; 84: 683–89.
- 4 Veronesi U, Luini A, Del Vecchio M, et al. Radiotherapy after breastpreserving surgery in women with localised cancer of the breast. N Engl J Med 1993; 328: 1587–91.
- 5 Lilegren G, Holmberg L, Adami H-O, et al. Sector resection with or without postoperative radiotherapy for stage 1 breast cancer: five year results of a randomised trial. J Natl Cancer Inst 1994; 86: 717–22.

Authors' reply

SIR—Hobohm suggests that there is a discrepancy between our figures 2 and 3 which provide data on total and event-free survival. As we indicate in figure 4, the main advantage of radiotherapy is to prevent loco-regional recurrence, which, as other randomised trials have shown, does not greatly influence survival. This difference in loco-regional control is indicated in figure 3, which also includes death without disease and distant disease as end-points. It is relevant that in this figure the curve representing the proportion of women given radiotherapy who are alive and free of disease is almost identical to that of total survival shown in figure 2: this would not be the case were radiotherapy causing harm. The only events excluded from the life-table analyses were 12 living patients with new primary tumours at various sites, seven of which were in the radiotherapy arm of the trial.

We agree with Kunkler that there is further need to examine the role of radiotherapy related to age, although from studies other than the Milan trial there is evidence that elderly women are no less at risk from relapse after local excision alone than are younger women. The operation that the Milan group describe as quadrantectomy was planned to resect a whole ductal tree from the retroareolar region to the periphery through a radial incision, including 2–3 cm of normal breast tissue surrounding the tumour and a large portion of the overlying skin and underlying pectoral fascia. In view of the small size of the tumours in the Milan trial (upper limit 2.5 cm) compared with our trial (upper limit 4 cm), their procedure was considerably more radical.

In the report of the CRC trial³ of primary tamoxifen therapy in women aged over 70 years, the frequency of locoregional recurrence in 120 women treated by local excision of an operable (presumably less than 5 cm) tumour and tamoxifen 20 mg daily was 16·7% at median follow-up time of 34 months; this has reached 20·8% at 4·4 years (T Bates, personal communication). These loco-regional recurrence rates are more in keeping with those in women over 60 years in the Scottish trial and are perhaps more representative of practice in the UK.

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- 1 Forrest APM, Fentiman IS. Breast cancer: principles of management.

- In: Fentiman IS, Monfardini S, eds. Cancer in the elderly: treatment and research. Oxford: Oxford University Press, 1994: 61–78.
- Veronesi U, Greco M, Luini A, et al. Conservative breast treatment: the Milan experience. In: Wise L, Johnson Jr, H, eds. Breast cancer: controversies in management. New York: Futura Publishing Company, 1994: 139–46.
- 3 Bates T, Riley DL, Fallowfield L, Baum M. Breast cancer in elderly women: a Cancer Research Campaign trial comparing treatment with tamoxifen and optimal surgery with tamoxifen alone. Br J Surg 1991; 78: 501-94

Selective serotonin reuptake inhibitors in anorexia

SIR—The report by Öström and colleagues (Aug 3, p 339)¹ of six suicides after overdosing with a selective serotonin reuptake inhibitor (SSRI) contrasts with that of Isacsson and Bergman (Oct 12, p 1033)² that the frequency of suicide has decreased since introduction of the SSRIs. The former report suggests caution in the use of SSRIs, whereas the latter argues that "denying depressed patients antidepressants to remove slight risk of a fatal overdose is irrational and unethical", and offers evidence that the prescribing of SSRIs has greatly increased. We believe that increased prescribing reflects an overly optimistic view of the benefits of SSRIs, a view that may have contributed to their excessive use.

During the past year eight of 30 patients (27%) referred to our clinic with anorexia nervosa have been treated with an SSRI (citalopram); all the eight, and 19 of the others, have also been given psychotherapy without success. The eight patients treated with both SSRI and psychotherapy were somewhat older than the 19 who received only psychotherapy (median 20.5 [range 10-34] vs 16.5 [10-29] years); there was no difference in body mass index (BMI) (mean 15.3 [range 11.3-18.4] vs 15.6 [10.6-18.3] kg per m2). However, clinical records showed that the body weight of the eight patients dropped while they were on citalopram by a mean of 5.4 (0.7-11) kg (p<0.02, Wilcoxon test); their BMI was, therefore, very low (12.2 [10.6-16.7] kg/m²). Of the 19 patients not treated with SSRIs, nine were given psychotherapy for a duration similar to the psychotherapy period of eight who also received citalopram. The body weight of these nine patients decreased only slightly (0.2 [-4.7 to +2.4] kg), which is significantly less than that of the eight SSRI-psychotherapy patients (p<0.02, Mann-Whitney U-test). The bodyweight of the ten other patients given psychotherapy alone (but at a time that did not correspond to that of the other groups) did not change significantly during a period equal to the duration of combined psychotherapy and drug treatment for the eight patients (0.5 [-3 to +3] kg).

There is no evidence that antidepressants have a favourable effect on anorexia nervosa,³ but it is known that serotonin suppresses food intake through its actions on the brain and gastrointestinal tract.⁴ Serotonin agonists are in fact used to reduce body weight in the obese.⁵ For these reasons we are surprised that SSRIs, which will enhance serotoninergic activity in both brain and gut, are used in anorexia nervosa. One woman informed us that all patients in the anorexia clinic that she previously attended were treated with SSRIs. Our data suggest, but do not prove, that SSRIs reduce body weight in anorexic patients. For ethical reasons, however, it would be difficult to formally investigate this issue. Although it may be true that SSRIs are effective in treating those who are depressed and perhaps suicidal, we believe these antidepressants are being used indiscriminately.

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- 1 Öström M, Eriksson A, Thorson J, Spigset O. Fatal overdose with citalopram. *Lancet* 1996; **348**: 339–40.
- 2 Isacsson G, Bergman U. Risks with citalopram in perspective. Lancet 1996; 348: 1033.
- 3 Adokat C, Kutlesic V. Pharmacotherapy of the eating disorders: a commentary. *Neurosci Biobehav Rev* 1995; **19**: 59–66.
- 4 Cooper SJ, Clifton PG. Drug receptor subtypes and ingestive behaviour. London: Academic Press, 1996: 59–97.
- 5 Guy-Grand B, Apfelbaum M, Crepaldi G, et al. International trial of long-term dexfenfluramine in obesity. *Lancet* 1989; ii: 1142–44.

Blood pressure and cholesterol in fish-eaters versus vegetarians

SIR—Pauletto and colleagues (Sept 21, p 784)¹ assert that freshwater fish consumption by Tanzanian Bantu villagers (the Lugalawa study) is associated with lower blood pressures and plasma cholesterol concentrations as compared with a separate community of vegetarian villagers. By contrast, Thorogood and colleagues² had shown that plasma cholesterol concentrations were lower in strict vegetarians than in fish-eaters.

A previous publication from the Lugalawa study indicated that the non-fish dietary components of the two groups of villagers were dissimilar.³ Although the present study mentions that the vegetarians ate maize and rice *inter alia*, the previous study indicated that their diet consisted of maize, beans, potatoes, bananas, and low-alcohol beverages; the fish-eaters, on the other hand, were said to have derived almost half their total calories from a cassava root preparation.³ This difference may be important, since there is experimental evidence that cassava root may have both hypocholesterolaemic⁴ and hypotensive⁵ properties—along with some less desirable effects. Therefore, the high cassava intake by the fish-eaters may account for the lipid and blood pressure findings.

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- 1 Pauletto P, Puato M, Caroli MG, et al. Blood pressure and atherogenic lipoprotein profiles of fish-diet and vegetarian villagers in Tanzania: the Lugalawa study. *Lancet* 1996; **348**: 784–88.
- 2 Thorogood M, Roe L, McPherson K, Mann J. Dietary intake and plasma lipid levels: lessons from a study of the diet of health conscious groups. BMJ 1990; 300: 1297–301.
- Galli C, Angeli MT, Puato M, Caroli G, Pauletto P. Serum lipids and fatty acids in populations on a lake-fish diet or on a vegetarian diet, in Tanzania. Adv Prostaglandin Thromboxane Leukot Res 1995; 23: 393-96
- 4 Ononogbu IC, Emole I. The effect of garri on rat plasma cholesterol. Atherosclerosis 1978; 31: 101–04.
- 5 Obidoa O, Obasi SC. Coumarin compounds in cassava diets: 2 health implications of scopoletin in gari. *Plant Foods Hum Nutr* 1991; 41: 283–89.

Authors' reply

SIR—We believe that comparison of our data from Lugalawa with the data of Thorogood and colleagues, as proposed by Lavine, is not appropriate. Fat intake of the fish-eaters studied by Thorogood was much higher than that of the Bantu fishermen $(38\cdot2-40\cdot5\%\ vs\ 12\%\ of$ the energy). Supplementation studies have shown that intake of n-3 polyunsaturated fatty acids may increase low-density lipoprotein cholesterol if dietary saturated fat supplies greater than 10% of the individual's energy requirements.

Our dietary study was based on individually recalled data, as well as on a family-based questionnaire. The first approach provided more details about diet composition, but there were discrepancies between individual recollections, family-supplied information, and our own observations. Although not reported by them, tapioca (a cassava root

preparation) was present in the homes of vegetarian villagers. Fish-diet villagers did not usually report their consumption of potatoes, rice, and other vegetables. With the family-based questionnaire, our estimate of cassava consumption by the fisherfolk was 150–350 g per day (theoretically, 15–70% of calories, depending on their overall calorific intake, and the method of food preparation). Among the vegetarians, who had a slightly lower overall calorie intake, cassava consumption exceeded 50 g per day, on average.

Although cassava consumption was higher in the fishing community than among the vegetarians, it seems unlikely that this difference consistently affected the cholesterol and blood pressure profiles we obtained through our Lugalawa investigation. As mentioned by Lavine, there is experimental evidence that cassava derivatives may reduce circulating cholesterol and lower blood pressure. A comparison between cassava-consuming and non-consuming populations in Tanzania³ showed slightly lower cholesterol concentrations in the former than in the latter (3.7 [SD 0.91] vs 3.8 [0.97] mmol/L in men; 3.9 [0.94] vs 4.1 [0.88] in women). However, malnutrition was more often present among the cassava consumers, and this condition may have affected their cholesterol concentrations. Data on blood pressure were not reported by Swai and colleagues,3 nor by McLarty and colleagues,4 who investigated the prevalence of diabetes in cassava consumers. Finally, it is worth noting that our Lugalawa study found an inverse relation between plasma n-3 polynsaturates and blood pressure* (ie, the higher the former the lower the latter); this, we believe, sustains the view that the fish diet was the main determinant of the findings on cardiovascular risk factors we reported.

*Data available from *The Lancet* or the authors, on request.

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- 1 Thorogood M, Roe L, MacPherson K, Mann J. Dietary intake and plasma lipid levels: lessons from a study of the diet of health conscious groups. *BMJ* 1990; 300: 1297–301.
- 2 Harris WS. Fish oil and plasma lipid and lipoprotein metabolism in humans: a critical review. J Lipid Res 1989; 30: 785–807.
- 3 Swai ABM, McLarty DG, Mtinangi BL, et al. Diabetes is not caused by cassava toxicity. A study in a Tanzanian community. *Diabetes Care* 1992; 15: 1378–85.
- 4 McLarty DG, Kitange HM, Mtinangi BL, et al. Prevalence of diabetes and impaired glucose tolerance in rural Tanzania. *Lancet* 1989; i:

The B₄-you-conceive pill

SIR—Folic acid is an unfortunate name for the vitamin that needs to be taken before pregnancy to prevent neural tube defects. The term "acid" can suggest that the substance may be harmful, rather than beneficial. Folic acid is a vitamin in the B group but has no number associated with it (for example, $B_{\rm 12}$), and since there is at present no vitamin B_4 , why not classify folic acid as vitamin B_4 ? Calling it B_4 instead of folic acid would fill the nomenclature void and may even have the advantage of reinforcing the need to take it before pregnancy.

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DEPARTMENT OF ERROR

The fragile heart—In this television review (Nov 9, p 1297), the author's name and address, omitted in the US edition of *The Lancet*, should have been "Pia Pini, *The Lancet*, UK".

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