the difference in any summary where a difference is stated to be significant in the statistical sense? This is not perhaps always possible, because some experiments are planned to tell only whether A is better than B with some predetermined probability, and not how much better. However, when the difference is given in the summary the skimming reader in his bee-like flight can better judge where to pause for the sort of honey he likes.—I am, etc.,

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Lipid Lowering Agents

SIR,—In the Today's Drugs article "Lipid Lowering Agents" (10 June, p. 642) your contributor misses an important point. In the common type II hyperlipoproteinaemia (Fredrickson classification), unless reduction of saturated fats in the diet is matched with an increased amount of polyunsaturated fat (cod liver oil, or polyunsaturated plant oils), therapeutic effects are minimal, even if lipid lowering agents are used.¹ In type I and type V hyperlipoproteinaemias drug therapy is not indicated, and in type III dietary restrictions alone will produce normal lipoprotein levels.

Clearly lipoprotein typing is obligatory before commencing treatment.—I am, etc.,

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¹ Betro, M. C., *New Zealand Medical Journal*, 1972, 75, 131.

Ankylosing Spondylitis

SIR,—It is with dismay that I read this "Second Opinion, Please" exchange of letters (13 May, p. 400) about a boy aged 19 who presented his ankylosing spondylitis to his general practitioner and his consultant in physical medicine in an unusual way. One cannot take issue with the management until the definitive diagnosis of ankylosing spondylitis is reached six or seven months after the onset of knee joint pain. At that time his E.S.R. became elevated and the radiologist was confident of the diagnosis on the appearances in the sacroiliac joint.

The treatment suggested ranged through phenylbutazone, oxyphenbutazone, to ACTH and steroids. X-ray therapy was dismissed as too risky and temporary in its effects, but from the correspondence this assessment does not appear to have been made by a radiotherapist. During the course of the illness the boy had a bout of diarrhoea with blood and pus which was referred to a surgeon for management. One is entitled to ask why referral to a radiotherapist to consider the place for irradiation in the management of the disease was not considered necessary. The drugs used and indeed all therapeutic manipulations carry their own risks. Radiotherapist are, if anything, more self critical than any other specialists (after all the irradiation/leukaemia story was elucidated by a radiotherapist), and I would have thought they would have been better able to weigh the benefits against the pos-

sible sequelae in any particular case. Would his apparently prolonged period off work and his continued discomfort have been shortened by judicious radiation? Is this worth raising the natural incidence of leukaemia from 1:10,000 to 1:1,000?

Finally and possibly more important, has either of the writers done a rectal examination in this case? Prostatic massage and culture of his urine for mycoplasma might have been instructive.—I am, etc.,

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Lead Poisoning in Rural Wales

SIR,—I would agree with Dr. Beattie and his colleagues (27 May, p. 488) that the true incidence of lead poisoning in rural areas must be determined.

A farmer, born in 1914, had lived on a Carmarthenshire hill farm since the age of 8. He was admitted to hospital in 1951 complaining of abdominal pain and vomiting, and when readmitted in 1955 was also anaemic: Hb 10 g/100 ml. A gastric ulcer demonstrated radiologically healed in response to treatment, and though he was then free of pain for some time he remained anaemic and in two years was transfused with 21 pints of blood. In 1958 gastrectomy was performed. A benign ulcer was found on the lesser curvature of the stomach and in another part of the gastrectomy specimen there was a shallow malignant ulcer with metastasis into glands. In 1964 he had gout and thereafter became increasingly disabled with pain in many joints. In June 1970 he was admitted urgently with colicky abdominal pain and vomiting, was also uraemic—blood urea 104 mg/100 ml—and during admission he had a grand mal fit. Pain, however, disappeared, only to return at home in attacks of increasing severity.

Lead poisoning was diagnosed when it was found that water to the farm house was conveyed through lead pipes from a remote well. Water drawn from the kitchen tap on separate days contained 18.8 mg lead/litre and 12.7 mg lead/litre; the patient's urine on separate days contained 540 µg lead/litre and 880 µg lead/litre, and a sample of the patient's blood contained 114 µg lead/100 ml. The pipes were replaced and when the patient was seen in June 1972 he had no symptoms apart from an occasional mild joint pain, and he had gained 42 lb (19.1 kg) in weight. His blood urea was still raised.

The farmer's wife, born in 1912, was admitted in 1949 for blood transfusion after an abortion. Recurring abdominal pain and constipation were attributed to a spastic colon and she also complained of backache, nervousness, insomnia, headache, and fatigue, which were considered to be largely psychosomatic. In May 1970 laparotomy was performed because pain and constipation were now associated with anaemia. A small Meckel's diverticulum was excised, but she remained anaemic—Hb 9 g/100 ml in August, and on one occasion stippled cells were seen in a blood film. Her husband's illness had now been diagnosed, and it was decided that she too had lead poisoning. Her blood contained 143 µg lead/100 ml, and urine 418 µg lead/litre. In June

1972 she felt better, had gained 28 lb (12.7 kg) in weight, and her haemoglobin was 12 g/100 ml.

The cause of these patients' early symptoms is uncertain, though it could be argued that lead had played a part. More recently they were clearly the victims of severe lead poisoning.—I am, etc.,

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Discharge from Psychiatric Hospitals

SIR,—Dr. D. A. Spencer's account (10 June, p. 653) of the position of long-stay patients is timely and, for the most part, beyond dispute. The conclusion reached in his final paragraph, however, is not borne out by my experience.

He advises us to review cases and notify local authorities when patients are fit for discharge, and tells us that this will avoid giving the public the impression that we wish to keep people in hospital unnecessarily. I had done exactly this. I did review the cases. I did again notify the local authorities in this area, in December of 1971, about 190 cases who no longer required hospital treatment, including the two patients who were the subject of considerable press publicity (*Sunday Times*, 21 May). This hospital and its staff were berated in that article and others, and this gave the public the impression that the staff of subnormality hospitals are incompetent. It seems extraordinary that a story like this could have been distorted, and so little effort made to find out the facts.—I am, etc.,

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Treatment of Tumour Metastases by Defibrination

SIR,—Your leading article on "Fibrin and Cancer" (11 December 1971, p. 641) reviewed attempts to interfere with the relationship between malignant cells and their surrounding latticework of fibrin with anticoagulants and fibrinolytic agents but did not discuss the effect of defibrination. It has been shown that complete defibrination in mice with anacrod (Arvin) retards growth of the experimental sarcoma¹ and we report here results of a preliminary trial of this agent in patients with tumour metastases.

Six patients with extensive malignant disease were treated with anacrod, which was administered at 2 units/kg every 12 hours by intravenous infusion for induction and maintenance. After two days maintenance was continued for a further five to seven days by twice daily intravenous injections of the same dose. No cytotoxic or irradiation therapy was given to these patients before or during the anacrod treatment.

Defibrination was complete in each case, fibrin degradation product (F.D.P.) levels were high and large monomer fragments such as fibrin X were demonstrated by a modified Ratnoff and Menzies fibrinogen assay, which included all thrombin clottable or precipitable degradation products.

Temporary regression of a primary anaplastic carcinoma of the breast was obtained in one patient and of a single peripheral