Many local anaesthetics are known adversely to affect *in vitro* tests of platelet function,³ but it is unlikely that lignocaine in the concentrations present in donor blood will have any detrimental effect. At high concentrations (10 mg/ml) lignocaine inhibits clot retraction⁴ and platelet aggregation and adhesion, but at concentrations of about 1 mg/ml no effect was seen.³ The satisfactory clinical results obtained from many thousands of platelet transfusions would also support this optimism.

Hypersensitivity reactions to blood in the form of urticaria have been estimated to occur in 3% of all transfusions⁵ and are generally attributed to the presence in the recipient's plasma of antibodies to IgA⁶ or IgG allotypes,⁷ or to the presence of reagins.⁸ It is possible that some of these reactions are caused by prior sensitization of the recipient to local anaesthetics. The opportunity for sensitization of the general public is high through the widespread use of local anaesthesia for dental, radiographic, and minor surgical procedures as well as through blood donation and transfusion.

These findings emphasize the wisdom of using some form of deplasmatised red cell preparation (such as red cell concentrates or frozen red cells) whenever the patient's requirement is only that of increased oxygen-carrying capacity.—We are, etc.,

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¹ *Lancet*, 1972, **1**, 477.
² Prescott, L. F., and Nimmo, J., in *Lidocaine in the Treatment of Ventricular Arrhythmias*, ed. D. B. Scott and D. G. Julian, p. 168. Edinburgh, Livingstone, 1971.
³ Aledort, L. M., and Niemetz, J., *Proceedings of the Society for Experimental Biology and Medicine*, 1968, **128**, 658.
⁴ O'Brien, J. R., *Journal of Clinical Pathology*, 1961, **14**, 140.
⁵ Stephen, C. R., Martin, R. C., and Bourgeois-Gavardin, M., *Journal of the American Medical Association*, 1955, **158**, 525.
⁶ Schmidt, A. P., Taswell, F., and Gleich, G. J., *New England Journal of Medicine*, 1969, **280**, 188.
⁷ Fudenberg, H. H., Stihem, E. R., Franklin, E. C., Meltzer, M., and Frangione, B., *Cold Spring Harbor Symposium on Quantitative Biology*, 1964b, **29**, 463.
⁸ Mounsell, K., *British Medical Journal*, 1944, **2**, 236.

Congenital Hemihypertrophy

SIR,—In their paper on congenital hemihypertrophy Dr. M. Henry and others (13 January, p. 87) state that there are three principal hypotheses of pathogenesis, one postulating a chromosomal abnormality, which was suggested by the finding of congenital asymmetry in patients with diplo/d/triploid mosaicism. These observations stimulated the late Professor Penrose and me to study the chromosomes of nine patients with congenital asymmetry.¹ Three had hemihypertrophy in the strict sense, three had hypertrophy affecting predominantly one limb, while in two hemiatrophy appeared to be a more accurate description. The final patient had hypertrophy of her right arm and her left leg. This was the only patient in whom we found any suggestion of a chromosomal abnormality. There were two or possibly three triploid cells in a skin biopsy specimen from the affected arm but none in that from the leg. We concluded that although diploid/triploid mosaicism can be

associated with marked asymmetry of the body, it seems to be rare in those selected on account of asymmetry. We also noted that there was no indication of a uniform aetiology for this malformation.—I am, etc.,

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¹ Johnston, A. W., and Penrose, L. S., *Journal of Medical Genetics*, 1966, **3**, 77.

Day Hospitals and Day Centres

SIR,—The recent report by Dr. D. H. Gath and others (13 January, p. 94) on psychiatric day hospitals in Birmingham draws attention to problems surrounding day patient care. These problems are not peculiar to psychiatric day hospitals; many also apply to local authority mental illness day centres and to both day hospitals and day centres for the elderly, the physically handicapped, the mentally handicapped, and psychogeriatric patients.

In preparatory work at the University of Kent and the London School of Hygiene and Tropical Medicine for a study of day hospitals and day centres, I have collected together the official guidelines for provision of day-care facilities for these five groups. The figures, taken from many sources, are given in the table, and this is, as far as I am aware, the first time these figures have been presented together.

Day Hospitals and Day Centres: Guidelines on Provision per 100,000 Population

Need Group	N.H.S.	Local Authority	Total
Elderly	26 ¹	50 ⁵	76
Mentally ill	65 ²	60 ⁵	125
Psychogeriatric	52 ³	—	52
Mental handicap	10 ⁴	130 ⁴	140
Physical handicap	—	30 ⁵	30
	153	270	423

The sum of these guidelines on day provision is over 400 places per 100,000 population and is greater than the present acute bed provision. Clearly a major effort of expansion is required if these guidelines are to be met. More data need to be collected about the function of each type of day unit and much more thought given to the particular purpose of each kind of provision and their relationships to other branches of the health and social services.—I am, etc.,

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¹ Department of Health and Social Security, *Hospital Geriatrics Services*, letter to hospital authorities. London, D.H.S.S., 1971.
² D.H.S.S., *Hospital Services for the Mentally Ill*, HM(71)97. London, D.H.S.S., 1971.
³ D.H.S.S., *Services for Mental Illness Related to Old Age*, HM(72)71. London, D.H.S.S., 1972.
⁴ D.H.S.S., *Better Services for the Mentally Handicapped*, Cmnd. 4683. London, H.M.S.O., 1971.
⁵ D.H.S.S., *Local Authority Social Services 10-year Development Plans 1973-1983*, Circular 35/72. London, D.H.S.S., 1972.

Diseases of Western Civilization

SIR,—With regard to the article by Mr. Denis P. Burkitt (3 February, p. 274) I hope that, on the grounds of their being constructive, I may be forgiven if I add the reasons why I consider it so important,

with our refined Westernized diet, to distinguish the conditions directly due to fibre loss from those indirectly due to fibre loss, via over-consumption.

In the first place, though there is only a loose clinical association between all the manifestations of what I have termed the saccharine disease (pronounced like the river Rhine and meaning related to sugar(s), into which all carbohydrates are converted in the gut), there is a decidedly close clinical association between the conditions in the group caused by fibre loss, such as intestinal stasis, varicose veins, and diverticular disease; and likewise between the conditions in the group caused by over-consumption, such as obesity, diabetes, and gall stones. And these clinical associations can throw a penetrating light on aetiology. For example, I believe that perhaps the most vital clinical association of all is that between coronary disease and diabetes, for since, as I have tried to show, there are the strongest reasons for believing that diabetes is caused by the over-consumption of refined carbohydrates, especially sugar, it is clear that coronary disease may well have this basic causation, too, quite apart from other strong reasons.

But in the second place, and far more important, there is the question of treatment. Thus adding fibre like unprocessed bran to the diet, as set out in an earlier letter (13 May 1972, p. 408), will have a magical effect on the first group of conditions, caused by direct fibre loss, but almost none on the second group, caused by over-consumption. The reason is that though such bran will correct over-consumption arising from white flour, it will do nothing to correct over-consumption arising from sugar, which for many cogent reasons I consider far the more serious of the two.

Thus adding bran to the diet to prevent the advance of coronary disease would be as futile as adding it to prevent the advance of diabetes or, for a slightly different reason, the advance of dental decay. To cope with these conditions, not directly caused by loss of fibre, it will be essential for any fibre added to bear on sugar consumption, and bran neither supplies the bulk, nor the natural amount of sugar, needed to be successful over this. What is required here is the replacement of sugar by natural sweet things such as raw fruit, sweet vegetables, and dried fruits, as I have tried to set out.¹

It may be added here that the importance of over-consumption (especially of sugar), as distinct from direct loss of fibre, in the production of many manifestations of the saccharine disease is well seen in the explosive outbreak of this disease now taking place in the Canadian Eskimos since their sugar consumption passed 100 lb (45.4 kg) per head per year. This has recently been set out in a comprehensive manner.² Dental caries, appendicitis, diabetes, and gall stones are now rampant among these people, and in my opinion other manifestations (especially coronary disease) will certainly follow. But it is impossible to explain these events by much loss of fibre. For the natural diet of these Eskimos has always been conspicuously lacking in fibre, which has seldom exceeded the fibre found in the faeces of the reindeer, sometimes eaten by them as a vegetable during the summer months, and in bilberries, also eaten at that period. In fact, the Eskimos pursuing a sophisticated existence today consume far more fibre—