

magnitude of possible causative agents over a long period. It is for this reason that the first studies suggesting dietary sugar is such an agent deliberately excluded information from subjects who admitted to changing their intake of sugar.¹ It is, of course, not possible to measure precise sugar consumption over a lifetime, but since habitual intakes of sugar differ widely between individuals we believe it can be adequately measured by a careful dietary questionnaire. We feel too that this assumption was supported by the findings, in two separate surveys, of considerable differences between individuals with and without occlusive arterial disease, and by the fact that the values were very similar in the three groups of controls that we studied, and in the three groups of patients.

Although Mr. R. W. Howell and Dr. D. G. Wilson (19 July, p. 145) include separate data for subjects who claim not to have changed their intake of sugar, they do so almost as an afterthought. Similarly, having given the figures for all their subjects, they match for age only at the end of their presentation, although in early studies^{1,2} it was pointed out that sugar intake varies with age. These factors of age and of reasonable constancy of sugar intake were thus made essential features of the design of the investigations by my co-workers and myself, whereas Mr. Howell and Dr. Wilson refer to the introduction of these features as "considerable manipulations." This is almost as if one were reporting on the incidence of myocardial infarction in two groups of people, and only at the end of the report took into account the sex and age of the people comprising the groups.

When these essential features are taken into account, then there is indeed a higher intake of sugar in those subjects of Mr. Howell and Dr. Wilson with confirmed disease, though not of the same magnitude as that found in the earlier work. Moreover, Mr. Howell and Dr. Wilson were then left with a total of 29 subjects and 29 controls; the studies of ours which they refer to as having small numbers had in fact twice as many.² Both sugar intake and the chances of developing ischaemic heart disease are also affected by class and occupation. In each of the studies reported,^{1,2} there was—to some extent fortuitously—an almost exactly similar distribution according to these criteria. It would be interesting to know the precise occupations of the subjects with ischaemic heart disease and of the control subjects in the study of Mr. Howell and Dr. Wilson.

There is one conclusion of these authors that we find impossible to understand. They write: "These results suggest that considerably more confirmation is required before acceptance of Yudkin's hypothesis that high sugar intake is the chief dietary factor causing ischaemic heart disease." Where in their paper is there evidence that there is some other, more important, dietary factor? And if the chief dietary factor is not sucrose, are we supposed to believe that it is fat, which is the dietary factor most actively canvassed as being implicated in causing ischaemic heart disease? But Mr. Howell and Dr. Wilson would obviously reject this for the same reasons they reject sucrose. For, as far as we know, properly conducted and controlled investigations of the sort we have discussed here have never revealed differences in the intake of fat between individuals that

developed ischaemic heart disease and individuals that did not.—We are, etc.,

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REFERENCES

- 1 Yudkin, J., and Morland, J., *American Journal of Clinical Nutrition*, 1967, 20, 503.
- 2 Yudkin, J., and Roddy, J., *Lancet*, 1964, 2, 6.

Hazard of Self-inflating Resuscitation Bags

SIR,—We would like to draw attention to a hazard of the use of resuscitation bags of the self-inflating type, such as the Ambu bag, which depend on a sponge foam insert for their self-inflation properties.

In this hospital Ambu bags are used regularly, not only as a simple device for providing intermittent positive pressure ventilation in an emergency, but also to achieve forced expansion of the lungs to aid chest physiotherapy in patients treated by mechanical ventilation, or in those whose vital capacity is severely diminished.

Recently a patient suffering from tetanus was curarized and ventilated for two weeks. Chest physiotherapy aided by inflation with an Ambu bag was performed three times each day. On the tenth day some small pieces of sponge foam were aspirated from the tracheostomy. Fig. 1. The Ambu bag was at once examined, and it was found that further identical pieces of sponge foam could be expelled from it on forcible compression. We cut the outer rubber bag open and exposed the interior to find that the sponge

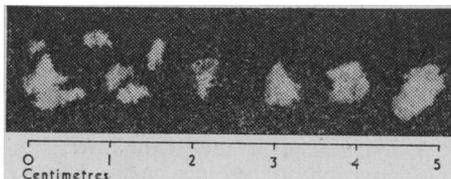


FIG 1

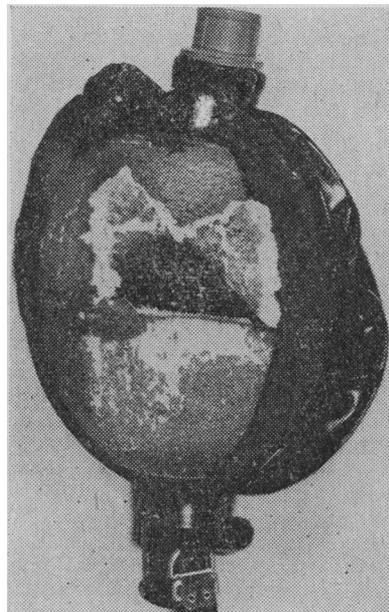


FIG. 2

foam insert had torn across at one point and small fragments were breaking away from the torn edge and falling into the lumen of the bag. Fig. 2.

All the Ambu bags in this hospital were originally supplied with Ambu non-return valves. These had been changed for Ruben valves as a matter of personal preference. Examination of the original Ambu valves showed that they were fitted with wire mesh filters which would prevent any but the minutest of sponge foam particles from passing from the bag into the patient. The Ruben valves had no such filter, and thus could readily transmit relatively large particles from the disintegrating insert of the bag. The Ambu bag in question had been in use for about one year, had never been autoclaved or subjected to any sterilizing technique, and had not been stored near a radiator, so the deterioration of the insert is, we presume, due to normal wear and tear in normal usage.

We believe that there may well be others who, like us, have been using alternative non-return valves on these commonly used bags without realizing the importance of a wire mesh filter, and may thus be exposing their patients to accidental insufflation of foreign matter into the airways. Fortunately our patient suffered no irreparable harm from this unfortunate accident.—We are, etc.,

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Azathioprine for the Nephrotic Syndrome

SIR,—We have read with great interest the report by Dr. M. W. Moncrieff and others (15 March, p. 666) on the use of cyclophosphamide in the treatment of the nephrotic syndrome.

We present here results achieved with the exclusive use of azathioprine in 12 adult subjects with an age range from 15 to 55 years, all with the nephrotic syndrome. On the basis of light microscope examination they were subdivided as follows: glomerulonephritis with minimal changes (1 case); membranous nephritis (6 cases); membranous-proliferative nephritis (5 cases). The glomerular filtration rate was, in all patients, within normal limits. Azathioprine was administered daily for at least one year at a dosage of 100 mg./day. Evaluating the efficacy of the drug by proteinuria (as did Dr. Moncrieff and colleagues) we have obtained complete remission in one case; partial remission in nine cases (decrease of at least 50% of proteinuria); and in two cases there was no effect. In 11 of our patients the administration of azathioprine, mostly at half-dosage, has been continued without interruption up to the present time (in three cases for more than three years, in four cases for more than two years); a complete remission was achieved in another two patients, while the situation in the other patients remains unchanged, except for one who has deteriorated. Leucopenia (less than 2,000 leucocytes/cu. mm.) occurred in three patients, of whom, however, only one had to stop treatment for a prolonged period.

Nine of our patients had had steroids without any beneficial effect before starting

on azathioprine. In seven an evident improvement was observed after commencement of azathioprine. For these reasons we believe an immunosuppressive drug for such cases has definite advantages.—We are, etc.,

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Testing for Phenylketonuria

SIR,—Your news paragraph headed "Testing for Phenylketonuria" (20 September, p. 725) referring to the Health Department's circular H.M. 69/72 is an inaccurate extract when you state that "Hospitals will be responsible for babies born in their wards." How can they, when there is an increasing number of "48-hour" discharges, and the circular states that the blood shall be taken between the sixth and fourteenth day?

Further, despite the circular of the Department of Health, which is based on C.M.O. 12/68, the Guthrie test¹ has already been replaced in several areas—for example, Manchester,² Kingston upon Hull,³ Birmingham,⁴ and just recently Lewisham—by the Scriver test⁵ (where a specimen of blood is taken in a capillary tube for plasma chromatography). Among other advantages^{6,7} this method helps to differentiate between the urgent cases of true hyperphenylalanemia and those which are transient in association with raised plasma tyrosine levels, which the Guthrie test is unable to do.

In the Lewisham area, specimens are taken for the Scriver test by the ward midwives from all babies still in hospital on the ninth day, and the remainder are taken at home by the local authority midwives (this is also the practice in Norway).⁸ The specimens are delivered to the hospital for chromatography, and further communication is by telephone if there is any abnormality in the pattern of amino-acids on the chromatogram.

Your inaccuracy is serious, as, compared with the thousands who will read the paragraph, only a small percentage will ever set eyes on, and far less will read, the H.M. 69/72 which the hospital secretary has today sent for the file that we keep in the mess.—I am, etc.,

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SIR,—The medical news paragraph on testing for phenylketonuria (20 September, p. 725) in quoting out of context gives misleading information. The Phenistix

test was never unsuitable, but the Guthrie is an improvement. "Hospitals will be responsible for babies born in their wards. . . ." This is not the case where an early discharge before the sixth day occurs.

In giving publicity to the facilities available for general practitioners to do the test themselves, confusion could be caused in areas like this where arrangements have been made for local health authority midwives to attend babies who are at home on the sixth neonatal day in order to take a blood sample. General practitioners will, of course, be notified immediately as soon as any untoward results become available.—I am, etc.,

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Functions of the G.M.C.

SIR,—I followed the discussion at the Annual Representative Meeting on the finances of the General Medical Council (*Supplement*, July 19, p. 72) in the hope that someone would challenge the assumption that the G.M.C. is doing properly, or in some cases at all, the job for which it exists. It was formed to protect the public from incompetent or improper medical practice, in four ways:

(1) Compilation and publication of the *British Pharmacopoeia*. This has been done in exemplary fashion, but is to be handed over to the Medicines Commission, together with the losses incurred in the task.

(2) Maintenance of the standards of medical examination (and thereby of education). The qualifying examinations are in a state of flux, and the closely related subject of medical education has become so chaotic that a Royal Commission on Medical Education was set up and has reported.¹

(3) Publication of the *Medical Register*, and prevention of those not on the *Register* from issuing certificates and claiming court fees or pretending to be registered practitioners. This was intended to ensure adequate standards of medical practice, but has not prevented legally registered practice by many doctors who understand and speak so little of the English language that they cannot communicate effectively with their patients or their colleagues. This incompetence of the G.M.C. became a continuing national disgrace, and the Department of Health had to take over the task of maintaining the standard of practice in this respect. A draft Hospital Memorandum requires that as from 31 October 1969 applicants for hospital posts must, if graduates of medical schools outside the British Isles and not previously employed in National Health Service hospitals, provide evidence of satisfactory completion of a period of attachment in an N.H.S. hospital unless they are in certain exempted categories. This compulsory scheme replaces a voluntary scheme which was introduced in 1966. In it paragraph 6 states that its provisions include the ability to communicate in English (and the use of colloquial English is mentioned), all the provisions being additional to "provisional," "full," or "temporary" registration with the G.M.C.

(4) Maintenance of ethical standards of those on the *Register*, and removal of offenders from the *Register*.

Of these four functions the first will soon be terminated; the second seems largely ineffective in that the control by the G.M.C. of the qualifying examinations has no effect on the continuing postgraduate education without which none of us can hope to maintain our continued competence to practise; the third has as mentioned above in one important respect been taken over, by default, by the Department of Health; and it is hardly surprising that the public and professional image of the G.M.C. is that of a private court obsessed by advertising, alcohol (and other drugs), and adultery, basing its standards on a code which in the case of advertising at least has not been re-examined in the light of modern methods of communication and education of the general public. And in the case of adultery its code would be unacceptable to almost any other section of the population, which marvels at the plight of those erring doctors who lose their livelihood because they are found out doing what the rest can indulge in with relative impunity.

I submit, Sir, that the G.M.C. does not do the job for which it exists. It should be seen to do its job before there is any question of providing it with more funds, whether by annual retention fee or otherwise; and, as suggested by Dr. A. M. Spencer (*Supplement*, 19 July, p. 72), a firm of management consultants should be engaged by the G.M.C. forthwith to advise on the efficient conduct of its affairs.—I am, etc.,

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REFERENCE

- Royal Commission on Medical Education. *Report 1968*. London, H.M.S.O.

SIR,—I wholeheartedly agree with Dr. J. W. Maltby (4 October, p. 53). The G.M.C. surely is an independent statutory body which exists chiefly to protect the public. The profession should no longer seek any special relationship with its own G.M.C. to be mystically cemented with extra funds levied for that Council's upkeep.

This reform might well lead to others. Only this year a controversial judgement of the G.M.C.'s disciplinary committee has met with widespread criticism from respected sources. This is by no means the first such controversial decision, however excellent the vast majority of disciplinary decisions might be. The fact that no single appeal to the judicial committee of the Privy Council against a decision of the G.M.C. disciplinary committee has ever been successful is cause for alarm, not congratulation. Appellants to the Court of Appeal and the House of Lords enjoy considerable success.

The integrity and standing of members of the G.M.C. are never in question. Some of the Committee's disciplinary procedures are. Its refusal to give reasons for its decisions. The distressing fact that prosecutors, judges, and jury are in effect one and the same body. The suspicion that in sifting non-medical evidence and assessing testimony even eminent doctors are no substitute for a legally qualified judge.