hours after dosing, by 7-16%, 16 hours after dosing, and by 8-13%, 24 hours after dosing. Thus once-daily therapy with sotalol has a 24-hour effect in reducing blood pressure. (2) The dose of sotalol eventually required was related to the initial diastolic blood pressure. (3) In at least one patient there appeared to be a correlation between standing diastolic pressure, heart rate, and sotalol dosage.

Detailed analysis of these data will be published in due course.

H L SHAW

Surbiton, Surrey

¹ Brown, H C, et al, *European Journal of Clinical Pharmacology*, 1976, **9**, 367.

pH of swimming pools

SIR,—In his answer (10 April, p 893) to a question concerning a physiotherapist who acquired a skin problem on entering a hydrotherapy pool, your expert says that the pH in nine swimming pools was found to be between 6.5 and 7. It is difficult to understand the point he is making as all these pools must have been badly maintained. The pH should be greater than 7, and the Department of the Environment, in their booklet *The Purification of the Water in Swimming Pools*,¹ recommend a desirable pH range of 7.2-8.0.

HARVEY GORDON

Surrey Area Health Authority,
Mid-Surrey District,
West Park Hospital,
Epsom

¹ Department of the Environment, *The Purification of the Water in Swimming Pools*, 3rd edn. London, HMSO, 1975.

* * * We have shown Dr Gordon's letter to our expert, who replies: "These pools may have been badly maintained, but this is the actual range of pH I found. In any case, even if the pH in the hydrotherapy pool was above 7 (as the HMSO publication recommends) my other recommendations would still hold." —Ed, *BMJ*.

Thiamine in vegetarian diets

SIR,—Your expert (Any Questions? 29 May, p 1336) is misleading over the content of thiamine in the normal vegetarian diet, which includes unrefined cereals, pulses, nuts, soya flour, wheat germ, and yeast extract, all rich sources of the vitamin. Our assessments ("dayplans") of typical vegetarian meals indicate plentiful supplies of thiamine. Moreover, vegetarians take care over the preparation and composition of their foods, so they are unlikely to lose unduly in cooking and by the effects of additives (sulphites, commonly used in preserving meats, destroy thiamine).

Wernicke's encephalopathy and Haff disease are associated with diets containing fish, probably undercooked; further, the victims are usually alcoholics, whose requirements of thiamine are correspondingly elevated. Vegetarians are usually temperate in their habits, so alcoholism is most unlikely to affect them. Raw fish contains the enzyme thiaminase, which destroys the vitamin. Similar diseases occur in other carnivores—for instance, Chastek's paralysis, observed in ranch-reared silver foxes fed on carp. Some uncooked vegetables (for example, kale) contain thiaminases. Disorders in human beings have not

been attributed to consumption of such foods, although cerebrocortical necrosis (also called "star-gazing") in ruminants indicates the significance of the antinutritional factors in forage crops.

ALAN LONG
Research Adviser
The Vegetarian Society

Altrincham,
Cheshire

* * * Our expert replies: "Mr Long is obviously well versed in the biochemistry of thiamine and I respect his specialist views. However, I must point out that Wernicke's encephalopathy is by no means confined to alcoholics, although they do appear to be the main sufferers. I could quote from Spillane's work on British prisoners of war of the Japanese in Singapore from 1942 to 1945. Wernicke's syndrome was found frequently among them, and what is even more important is that if the condition was not too far advanced thiamine therapy was dramatically effective. Other conditions involving avitaminosis, like pernicious vomiting in pregnancy and severe wasting illnesses such as cancer of the stomach, can also produce the same syndrome. In any event, I still maintain that there is no direct association between depression and vegetarianism." —Ed, *BMJ*.

Defects in sphygmomanometers

SIR,—In our article on defects in sphygmomanometers (10 April, p 886) we stated that no cuff was on sale in Great Britain with a rubber bag larger than the British standard (9 × 5 in (approximately 23 × 12 cm)) designed for arm use.

Since the article was published we have been told that a larger cuff, to WHO specifications, is manufactured in this country for sale in Sweden and can be purchased on special request by doctors in Britain. It contains a rubber bag of 34 cm length which would have encircled the arms in more than 90% of the patients we studied and would have left a very small gap in the remainder. The cuff is manufactured by A C Cossor and Sons (Surgical) Ltd, London N4, and can be ordered through the usual distribution channels.

We are currently comparing this cuff with the standard British cuff in a double-blind crossover trial to see whether it does in fact result in the lower blood pressure readings that we would expect from previous studies.

S CONCEICAO
M K WARD
DAVID KERR

University Department of Medicine,
Wellcome Research Laboratories,
Royal Victoria Infirmary,
Newcastle upon Tyne

Tattooing for port-wine stains

SIR,—I cannot allow the letter from Dr G P A van Rossum (5 June, p 1402) to pass without comment. His letter was anecdotal, as mine must also be.

A female relative in her mid-twenties was born with her face disfigured by an extensive port-wine stain. However, the skin texture was normal and it was possible to conceal it by make-up. Throughout her youth it was a source of great mental anguish to her and her immediate family. Three years ago, the girl was treated, in a reputable centre, by a

tattooing technique similar to that set out in your columns, having been assured that no change in skin texture would occur. The result to this day is quite appalling, with extensive scarring impossible to conceal with any cosmetics. Whether this was due to faulty technique, postoperative infection, or previous thorium X treatment given in childhood I do not know, nor am I qualified to speculate.

In describing this case I do not intend to condemn the method, as anything which may alleviate this dreadful condition deserves consideration. However, I feel I must warn sufferers (and their medical advisers) that it is by no means always the success described in Dr van Rossum's letter and that extreme caution should be adopted before allowing this (or any other) procedure to be carried out.

STUART HISHON

Norwich

New-product pruritus

SIR,—I read with interest Dr J D Little's letter on bath additives as a cause of pruritus (5 June, p 1407). Some time ago in this area there was a sales drive for cinnamon-flavoured "Close-up" toothpaste. We, like hundreds of others, got our free sample through the letter-box. Inside three days each member of the family had a very sore tongue and mouth. The physical signs and symptoms of this reaction to cinnamon were constant in all of us and, inevitably, very many patients were seen with the same condition for weeks after.

Recently the manufacturers of "Tic-Tac" mints have introduced a new cinnamon flavour. Patients with the same trouble now answer my questions with: "Goodness me, doctor, how did you know I'd been eating cinnamon Tic-Tacs?"

The latest problem concerns a soap called "Protect" (also "Shield"), which was "on offer" in the stores. We tried it; I got itching after 24 hours and a faint rash after 48 hours and my wife began scratching two days later. Needless to say, being armed with this knowledge saved a lot of time in diagnosing the 18 itching patients seen so far.

These conditions clear quickly when use of the product is discontinued, so it pays to know what new products are being promoted locally—even though one may suffer personal discomfort as a result.

MICHAEL J ROBERTS

Buckley, Clwyd

Erythema infectiosum (fifth disease)

SIR,—We have read with interest the article by Drs H E Cramp and B D J Armstrong (10 April, p 885) concerning an epidemic of erythema infectiosum (fifth disease) in north Devon during the spring of 1975 as we have wondered why this exanthematous disease until now had been mentioned in Britain only in case histories and reports of minor outbreaks.¹⁻³

We recently⁴ described an epidemic of erythema infectiosum in a Danish nursery school on Funen, also during the spring of 1975. Of 27 children in the nursery school, 18 (67%) were affected during 11 weeks from February to April. Among the 27 brothers and sisters living at home, 10 were affected, and two of the fathers were similarly affected.

In this epidemic too the clinical picture was characteristic and the course mild. The exanthem lasted for an average of nine days (2-17 days). In four cases it was possible to determine the interval between the onset in a schoolchild and in brothers or sisters at home. This was on average 23 days (7-30 days), which is nearly the same as that found in the epidemic in north Devon. The difficulties of diagnosis are illustrated by the fact that out of 10 children with the exanthem who were seen by their general practitioner, only two were diagnosed as having erythema infectiosum; four were thought to have rubella and in four cases an allergic rash was suspected.

A case history was sent with colour photographs to 20 general practitioners in the district of Funen. Out of 18 doctors who answered the questionnaire nine gave the right diagnosis, seven did not know about the disease, and two doctors thought it was some viral exanthem. Only two doctors had not seen a similar case in the past. Thus it can be concluded that a more precise diagnosis might be achieved when the characteristics of the disease are emphasised, as in the article by Drs Cramp and Armstrong. In that way unnecessary treatment will be avoided as well as exclusion from school and uncertainty in doctors and parents concerning epidemiological regulations.

Transient arthritis has been described as a complication of the disease, together with one case of haemolytic anaemia and one case of encephalitis in a boy of eight five days after the onset of erythema infectiosum.⁵ In the epidemic described by us no such complications were found.

F BRANDRUP
P ØLHOLM LARSEN

Department of Dermatology and
Venereology,
Odense University Hospital,
Odense, Denmark

¹ Watts, C A H, *Lancet*, 1954, **1**, 573.

² Watts, C A H, *British Medical Journal*, 1974, **4**, 466.

³ Medhurst, A W J, *British Medical Journal*, 1975, **1**, 394.

⁴ Brandrup, F Ø, and Larsen, P Ø, *Ugeskrift for Læger*, 1976, **138**, 737.

⁵ Balfour, H H, *Clinical Pediatrics*, 1969, **8**, 721.

Quality of life

SIR,—Dr A C D Cayley's letter on this subject (5 June, p 1406) applies not only to the geriatric patient but also to the severely disabled or handicapped.

If the patients were kept at home and looked after by members of their own families it would save a lot of money and a lot of beds. This becomes a practical proposition only if the "carers" are given adequate support and regular times off. With the knowledge that should they become ill or in need of a rest the support is available to take complete charge of the patient and the house; with the knowledge that, in addition, they can rely on having a whole 24 hours off every 8-10 days; then they can face the future of caring for the patient for an indefinite period with confidence and peace of mind.

You may ask where we are going to get such paragons of virtue who are willing to work unsocial hours and be trained in the skills of heavy nursing care, pressure sore prevention, manual evacuation of bowels, catheter care etc? There is already a charitable trust that has run exactly this sort of domiciliary service for the past two years. It is called the Crossroads Care Assistant's Scheme and has been

operating very successfully in the Rugby district since Spring 1974. We have had no difficulty in recruiting suitable people—applications being around 15 people for one job on one advertisement in the local paper. The trustees consist of four people: a representative of Associated Television, who put up the money (£10 000); a doctor; a retired principal nursing officer of the DHSS (an expert on district nurse training); and a district nursing sister (who is also a practical work teacher). The expenses of administration have been some £160-180 per year and the balance of £6200 has been spent on the care attendants' wages. Over the past two years we have cared for some 28 households a year (each including one heavy nursing care case) at a cost of £5 per week per family. You must realise that sometimes in times of stress one family might require some 40 or more hours in a week, whereas another family might not require help for more than five or six hours in 6-12 months.

We have been awarded a grant from the DHSS to keep the Rugby project going to the next 2-3 years while we try to spread the service. At present we have the expertise of running this scheme and have overcome most of the snags or difficulties, which, incidentally have been insignificant, but we have not the money to open new branches. However, a working party is being formed and we hope to "take off" and spread the scheme to other areas in the not too distant future. We are hoping that the scheme will spread by contact with adjacent communities in the same manner as we have been led to believe will occur if rabies arrives and establishes itself in Britain, but with more beneficial results.

R HUDSON-EVANS

12 Manor Green,
Stratford-upon-Avon

Danger of instant adhesives

SIR,—I should like to add to the warnings given by Dr W G C Strawbridge (5 June, p 1405) about instant adhesives lest any one of your readers be tempted to use them as a means of closing tissues. They do not always cause tissues to adhere; this depends on the type of tissue and on whether it is moist or dry. When adhesion occurs, however, it is not permanent as the adhesive forms a barrier preventing the two layers of tissue from making a cross-union, and the adhesive is subsequently extruded at about 14 days after being applied to the raw surface, usually with a rather unpleasant inflammatory reaction. The dangers of this are obvious, especially if significant blood vessels are involved.

Finally, might I make a plea that these adhesives be kept away from those with a practical-joke mentality as the results could sometimes be quite tragic.

G T WATTS

General Hospital,
Birmingham

Nitrazepam and diazepam

SIR,—Your leading article (12 June, p 1424) on "Glutethimide—an unsafe alternative to barbiturate hypnotics" is very much to be welcomed. Here in Ipswich, where we have had positive thinking on the control of the

misuse of drugs prescribed by doctors, we have included glutethimide with the barbiturates (and Mandrax (diphenhydramine and methaqualone)) in our overall policy of reduction. Indeed, my partners and I have not prescribed glutethimide for many years.

Your ultimate conclusion, however, that "if doctors must prescribe hypnotics they should think twice before prescribing anything other than nitrazepam" is open to slight dispute. This is only because another, even better known benzodiazepine—diazepam—is known to be as safe and, in the opinion of many doctors including myself, is just as effective as nitrazepam, which is much more expensive. Undoubtedly it has been a marketing policy of those manufacturers producing benzodiazepines that there should be different indications for different members of the group; however, research does not really confirm that any of the group are any more effective than the most widely prescribed member, which in appropriate dosage is as effective a hypnotic as it is a tranquilliser. That being so, the conclusion that diazepam is the hypnotic of choice, if a hypnotic is to be prescribed at all, should be generally acceptable. Certainly the new edition of the *British National Formulary* confirms this impression.

F O WELLS

Ipswich

Training of medical laboratory technicians

SIR,—It would seem that the staff requirements of many laboratories are forgotten by those (29 May, p 1339) who protest against the recent proposals by the Department of Health and Social Security that (1) only 25% of those technicians holding a Higher National Certificate should proceed to further training, and (2) the fellowship requirement for promotion to senior grades should be removed.

In many laboratories there are too many highly qualified technicians and insufficient staff for the many tasks which require simple training. This means that highly qualified staff have often to do simple tasks, which leads to boredom so that these tasks are less well done than by more junior or unqualified staff. Also, the refusal of the Institute of Medical Laboratory Sciences to accept laboratory aides is a failure to recognise the actual needs of many laboratories.

Although I appreciate the concern of technicians that their career structure should not be jeopardised, I think that a more realistic view of the staffing needs of medical laboratories would not only give more job satisfaction but also save money.

CONSTANCE A C ROSS

Microbiology Laboratory,
Ayrshire Central Hospital,
Irvine

Future of community medicine

SIR,—I should like to endorse many of Dr L M Mayer-Jones's comments (5 June, p 1406). I was one who viewed reorganisation with a mixture of trepidation and qualified optimism, hoping that the integration of the former public health medical personnel with the main stream of medicine would result in benefits for the community. It was not to be.