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

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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
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University Department of Medicine,
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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.