

worth trying a phenothiazine such as promazine in doses of 50 mg. three times daily. If at certain periods during the day this produces undue drowsiness a change should be made to the longer-acting promazine resinate, 50-200 mg. twice daily.<sup>1</sup> But phenothiazines with marked extrapyramidal side-effects should be avoided; these include perphenazine and trifluoperazine. If anxiety and depression are marked features some of the newer antidepressant drugs are effective tranquillizers.<sup>2</sup> Phenelzine, which is an amine oxidase inhibitor, may be tried in a dose of 30 mg. twice a day. It should be recognized, however, that the relief of depression may be less satisfactory if there is considerable arteriosclerotic brain damage.

To date, muscle-relaxant drugs have not proved of value in reducing the spasticity of neurological disorders. But if the clinical picture is that of arteriosclerotic Parkinsonism, in which spasticity of the legs is often a marked feature, benzhexol in gradually increasing doses up to a total of 20 mg. per day or chlorphenoxamine up to 450 mg. per day should be tried.

## REFERENCES

- <sup>1</sup> Llewellyn, A., *Brit. J. clin. Pract.*, 1961, 15, 839.  
<sup>2</sup> Sargent, W., *Brit. med. J.*, 1958, 2, 1031 and 1095.

## NOTES AND COMMENTS

**Calcium and Teeth.**—Dr. J. P. W. HUGHES (London S.W.1) writes: Your expert's first sentence ("Any Questions?" May 5, p. 1228): "It is not possible to distinguish any clinical condition of the teeth or gums which necessitates the administration of calcium" appears to be at variance with his last sentence giving advice on diet for "the best way of maintaining an adequate calcium intake." McClure and Muller<sup>1</sup> and Strålfors<sup>2,3</sup> found that the addition of di- and tribasic calcium phosphate reduced the prevalence of dental caries in man and experimental animals. More recently Strålfors<sup>4</sup> has shown that a control diet (i.e., without the addition of calcium phosphate) and distilled water containing 600 mg./litre of calcium chloride for drinking purposes given to hamsters equally inhibited caries. When 2% tribasic calcium phosphate was added to the diet and given with CaCl<sub>2</sub> in the drinking water the inhibitory effect was much greater. Strålfors's work is continuing and there are, in my opinion, some anomalies in his findings, but there seems adequate evidence that calcium, whether in conjunction with naturally occurring phosphate in the diet or added phosphate (as Ca<sub>3</sub>HPO<sub>4</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>), reduces the amount of caries. Strålfors considers the action is local and purely an ionic effect.

OUR EXPERT replies: While Dr. J. P. W. Hughes's remarks upon the work of Strålfors and others are quite correct, he fails to point out that this work was virtually all carried out on hamsters fed upon a highly cariogenic diet and is in no way applicable to *Homo sapiens* living in normal circumstances. There has as yet been no large-scale field survey to indicate whether, in fact, a similar or any effect at all would be observable in man. In the opinion of most research workers in this field it is the phosphate radical and not the calcium radical which is responsible for this increased resistance to dental caries, and Bibby is, at the moment, doing a large-scale experiment to elucidate this point. Another point arises, and that is that the reduction of caries may be due to the mixture of phosphates with a specific foodstuff (flour in the case of Strålfors's experiment) and not upon the action on the teeth themselves. This matter is therefore, as will be seen, in an early and highly experimental phase and of no clinical value whatsoever at the moment. I fail to see how my remarks are at any variance with my last sentence, which would, it would seem to me, apply to the calcium intake during the formative period of the teeth previously mentioned.

## REFERENCES

- <sup>1</sup> McClure, F. J., and Muller, A., *J. Amer. dent. Ass.*, 1959, 58 (1), 36.  
<sup>2</sup> Strålfors, A., *Odont. Revy*, 1961, 12, 124.  
<sup>3</sup> ———, 1961, 12, 136.  
<sup>4</sup> ———, 1961, 12, 225.

**Soluble Aspirin or Aspirin?**—Dr. R. J. SELICK (London S.E.26) writes: One further point arises in discussing the relative merits of soluble aspirin and aspirin ("Any Questions?" April 7, p. 1025, and "Notes and Comments," May 19, p. 1430). Aspirin is a most useful analgesic in cases of sore throat, after tonsillectomy, etc., when used as a suspension<sup>1</sup> or tablets crushed in water 10 gr. (0.65 g.) to be gargled and swallowed. Soluble aspirin in the same dosage does not appear to be nearly so

effective. The reason for this, I suppose, is that particles of aspirin cling to the pharyngeal mucosa, where they dissolve slowly, giving a higher local concentration and acting for longer than a solution which passes too quickly to have much local effect. In this case the action of the drug depends on those same physical conditions which would be expected to enhance its action as a gastric irritant. Complications are rare and in otherwise fit subjects the use of aspirin gargle would seem to be justified. Soluble aspirin is not an effective substitute in this instance.

OUR EXPERT replies: Dr. Selick suggests that aspirin has some local analgesic effect in addition to its action after absorption into the blood stream. Although gargles or mouth-washes containing aspirin are frequently recommended in cases of tonsillitis or other forms of sore throat I know of no definite evidence that aspirin has such a local effect, and I do not believe that in cases of sore throat the effect of an aspirin gargle is any greater than that of the same amount of aspirin or soluble aspirin when it is swallowed directly. In any event the original questioner asked whether soluble aspirin had any advantage over aspirin and not the reverse, so that Dr. Selick's comments are not really relevant to the point at issue.

## REFERENCE

- <sup>1</sup> *British Pharmaceutical Codex*, 1959. Pharmaceutical Press, London.

**Seasonal Incidence of Sonne Dysentery.**—Professor A. CHARLOTTE RUYLS (University of Amsterdam) writes: In your answer on the seasonal distribution of Sonne dysentery ("Any Questions?" April 21, p. 1158) the peak in spring is explained by alteration in dietary habits. In my opinion also other explanations are possible. Our experience in Amsterdam is that school and kindergarten play an important part in the spread of this disease. From there it is carried home into the families where especially younger children are susceptible. Dysentery is mainly a contact infection. The experiments of Hutchinson<sup>1</sup> have proved that water closets cause an aerosol by which small particles laden with bacteria are spread. When children with diarrhoea had visited the lavatory Sonne bacteria were found on the seat and the children's hands. That the highest figures are seen in the beginning of the year might be explained by the longer survival time in cold weather. The lower frequencies of dysentery coincide in many years with the holidays and especially the summer holidays. The English curves of 1956, 1957, 1958, and 1960 all show this picture.

OUR EXPERT replies: I agree with everything that Professor Ruyls states, but would change the words in the second sentence from "other explanations are possible" to "additional factors are also present." The factors such as attendance at kindergarten and the aerosol effect of water closets cannot explain the rise in incidence of dysentery during the spring months, for they are equally operative throughout the autumn and greater part of the winter. It is for this reason that it was earlier suggested that the trigger mechanism might well be a change in diet. Once this has been brought into play, factors such as those listed by Professor Ruyls clearly must play an important part in spreading infection.

## REFERENCE

- <sup>1</sup> Hutchinson, R. I., *Mthly. Bull. Minist. Hlth*, 1956, 115, 110.

**Correction.**—Dr. B. GOTTLIEB informs us that in his letter "Metformin in Treatment of Diabetes Mellitus" (June 16, p. 1692) the following sentence from the third paragraph should be read as corrected here: "It would be helpful to know how many patients they have actually treated, what their ages were at the onset of the diabetes, and their weights, for in our experience at St. Mary Abbots Hospital a response is most likely to occur in non-ketotic patients whose diabetes started over (not 'under') the age of 40 and whose weights were over 10 st. (63.5 kg.)."

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