

means to have a patient staying weeks in a mental hospital instead of months one has only to ask the husbands, wives, sons, or parents of such a patient.—I am, etc.,

Bodmin.

ERNEST E. FELDMESSER.

Nicotinamide and Diabetes Mellitus

SIR,—In the *Journal* of Feb. 9, 1946 (p. 218), you kindly published my results of massive nicotinamide therapy in diabetes mellitus. These investigations were prompted (as then described) by an original theory that diabetes mellitus was a vitamin deficiency disease, and when commencing "experimentation" by using massive dosages of different vitamins I was unaware that work had previously been executed on nicotinamide and carbohydrate metabolism. I have since learnt that such investigations have been reported. After publication of my results I received an overwhelming amount of correspondence from interested colleagues all over the world (some themselves diabetics), who promised to report their results to me. This was indeed welcome in view of the fact that I wished to pursue the question more extensively and the number of diabetics under my care was rather small. I have since collected an imposing and interesting amount of data which I hope to publish at a later date.

I was therefore most interested in Dr. H. J. Wade's results of nicotinic acid amide on the sugar tolerance curve in six cases of diabetes (March 27, p. 414). Dr. Wade asserts that my results prompted him to pursue this investigation further, but unfortunately he did not pursue it very far. His administration of nicotinamide was of too short duration and the numbers of cases lamentably small. This is regrettable in view of Wade's superb opportunities for exhaustive investigation (Dr. Wade is in charge of the Diabetic Clinic at the Salford Hospital, Manchester).

The fact that some workers report poor or negative results with this therapy need cause no despondency. My theory is that nicotinamide "slogs" the remaining islets of Langerhans to greater insulin production, but does not affect the sugar tolerance curve in itself. The beneficial results of nicotinamide depend upon the amount of functioning pancreatic tissue. If the pancreas is completely fibrosed or lamentably poor in islets of Langerhans, then the nicotinamide will have no effect irrespective of dosage or duration of dosage, because a general cannot exhort a non-existent army to greater endeavour. Should there be, however, a reasonable quantity of functioning pancreatic tissue, then varying good results will be obtained by means of the nicotinamide stimulating the remnant of secretory tissue to greater production. According to the amount of islet of Langerhans present, so the results will vary.

I would suggest, therefore, that every diabetic be administered with massive doses of nicotinamide. Some will receive no benefit, whereas others, with more functioning pancreatic tissue, will be able to partake of the joys of eating more liberally and extensively without constant insulin injections. I hope to publish more rather interesting data on this subject later, but meanwhile I shall be grateful if interested colleagues will send me their results.—I am, etc.,

Poole.

W. GORDON.

Folic Acid

SIR,—Dr. Cecil L. Forde reports (May 24, p. 740) the use of folic acid in a case of subacute combined degeneration which had, in addition, the peripheral blood picture of pernicious anaemia. He reports that the blood picture "responded" to "intensive" liver therapy for three weeks, but that the nervous lesions are not affected. Folic acid was given and "in a few days" there was marked improvement in the neural condition. If this improvement continues on folic acid alone this case deserves a detailed report, for it is, to my knowledge, the only example in the literature of a case of subacute combined degeneration which has responded to folic acid therapy. It is reasonable to suggest, however, that the three weeks' intensive liver treatment was the most likely cause of the improvement—nervous as well as haematological—in this case. It is an established fact that unless treatment of pernicious anaemia is adequate—i.e., red cell count of 5,000,000 per c.mm. or more, with a normal mean cell volume—subacute combined degenera-

tion may supervene. Such *adequate* treatment of pernicious anaemia is always possible in the uncomplicated case, and, unless full haematological details are given, the onset of, or the progression of, subacute combined degeneration in pernicious anaemia adequately treated with liver extract cannot be accepted.

The work of Spies in America and Davidson in this country—to mention but a few—has already made it clear that folic acid will not prevent the development of the neural complications of pernicious anaemia nor improve them if they are already present. Severely progressive subacute combined degeneration has been reported in many cases receiving intensive folic acid therapy. This is a matter of grave concern to the patient and the doctor.

Folic acid is still in the experimental stage. It is *not* adequate treatment in pernicious anaemia, for in only a handful of reported cases has folic acid restored and maintained a normal blood picture. Much more research is required for the establishment of the indications for folic acid therapy. Spies—and the manufacturers of folic acid—have already recommended that pernicious anaemia should not be treated by folic acid alone because of the danger of the onset of subacute combined degeneration in such cases treated with massive doses of folic acid. It is surprising that so far there has been lacking in British journals the warning that folic acid is inadequate for the *routine* treatment of pernicious anaemia. There is still no substitute for adequate liver therapy in this condition.—I am, etc.,

Frodsham, Cheshire.

J. G. A. MCSORLEY.

Vitamin C Deficiency

SIR,—In *The Russells in Bloomsbury*, by G. S. Thomson, there is a passage referring to a treatise on scurvy circulated in 1665: "He [Dr. Maynwaringe] was referring particularly to that disease [scurvy] and to nervous complaint or complaints which went by the name of melancholia or hysteria and were associated by Maynwaringe with the Scurvy," and later: "The real root of the trouble lay in the quantity of salt meat eaten of necessity by both rich and poor." In the *Journal* of May 17 (p. 679) Dr. L. I. Hatherley reports a case of vitamin C deficiency lasting six years which, within half an hour of the injection of ascorbic acid, instead of being weak, apathetic, and apparently dying became alert, bright, and cheerful. Later a deficiency of vitamin P was thought to be present in addition. Many years ago at a meeting of the Royal Society of Medicine I heard an Arctic explorer quoted as saying that he only once had any trouble with scurvy, and that was when a party instead of shooting bears for food lived on tinned food found in a cache.

As a poor substitute for lightly cooked meat for the past few years I have prescribed black-currant purée in a number of cases suspected of vitamin C and P insufficiency and more especially recurrent subconjunctival haemorrhage. At present I have a case of intra-ocular haemorrhage under treatment, as no other treatment has had any success. From clinical experience and the studying of numerous reports, etc., I suggest: (1) that much of the present tiredness, ill-health, etc., is due to deficiency of vitamin C and P; (2) that more fresh meat should be on the ration; (3) tinned meat should not be included in the meat ration, as its position in our diet is misleading; (4) we are certainly being starved, as with the present calories, sufficient or insufficient, the chance is remote of a sufficiency of vitamins being present.—I am, etc.,

Southsea, Hants.

F. C. B. GITTINGS.

The Nation's Food

SIR,—I find your "Medical Notes in Parliament" (May 31, p. 790) most interesting, for it appears that in the House of Lords on May 22 Lord Addison proceeds to prove Dr. Bicknell's statement to be true and anything but false, sloppy, or inaccurate. It seems generally agreed that the domestic rations yield 1,600 calories per day and that unless one is financially placed so that one can afford to eat in restaurants, the remaining 1,300 calories per day, which are necessary for normal health, have to be made up of bonus issues of sugar, jams, meat pies, sausages, and the sweets ration. Lord Addison states that if the total quantity of food going into consumption is divided by

the total population it will show that each person gets 2,900 calories per day, but of course this gives a wholly wrong interpretation of the facts, since those who can eat in restaurants must consume more calories than those who cannot afford to do so.

Many of my national health insurance patients cannot afford to purchase meals in restaurants, and, as Lord Cherwell has so wittily pointed out, these unfortunate people will have to consume either 100 oz. (2.8 kg.) of fish, or 5 lb. (2.2 kg.) of potatoes, or 200 oz. (5.7 kg.) of cabbage in order to make up a deficient 1,300 calories. This is a gargantuan task which is beyond the ability of any patient I have at the present moment.—I am, etc.,

Lewes, Sussex.

E. J. S. BARTHORPE.

De Morgan's Spots

SIR.—Since it is impossible to prove the exact nature of De Morgan's spots by experiment, I venture to suggest that dialectic consideration supplies us with a plausible explanation of their occurrence. I believe I was justified in writing (*Med. Pr.*, 1943, 210, 219; and *Rare Diseases and some Debatable Subjects*, 1946, London, p. 51) the following: "They are apparently true benignant neoplasms (minute capillary angiomas), and, although some of them disappear by spontaneous involution (? thrombotic or atrophic closure of the supplying blood vessel), they tend on the whole to increase in number with the individual's age . . . I regard them as simple *mutational* tumours (rather than telangiectases) of the cutaneous capillaries."

I can think of no other equally plausible explanation of their occurrence. They apparently illustrate only one type of common non-malignant mutation of somatic cells at the surface of the body; some other types doubtless contain pigment, as the one did which was microscopically examined by Sir John Bland-Sutton, if indeed the pigment in that particular "spot" was not due to a capillary rupture which led to involution.

I certainly am not the first to have suggested this mutational explanation for various "spots" which appear spontaneously on the surface of the body (cf. allusion by Lockhart Mummery when discussing malignant mutations of somatic cells), but I believe that "ruby spots" will come to be regarded as the most conspicuous illustrations of non-malignant mutations of somatic cells.—I am, etc.,

London, W.1.

F. PARKES WEBER.

SIR.—The very careful and convincing paper on De Morgan's spots by Capt. A. R. Murison, Lieut. J. W. Sutherland, and Flying Officer A. M. Williamson (May 10, p. 634) is a final refutation of the idea that these spots have any connexion with cancer, and Dr. Parkes Weber, in his letter of May 24, has underlined this conclusion, which I think is universally accepted. These spots are flattened circular lens-shaped islets of connective tissue lying in the thickness of the epithelial layer of the skin and slightly raising it above the level of the surrounding skin. Each of them has a narrow vascular pedicle, like the stalk of a mushroom, through which blood vessels reach it. Owing to lateral movements of the skin this pedicle is subject to frequent obstruction, too temporary to be called strangulation, and capillary angiectasis consequently occurs in the spot, which assumes its characteristic scarlet colour with a sharp well-defined margin. Gentle rotary pressure with a glass slide can be made to empty the dilated vessels and the colour disappears to return as soon as the pressure is released.

The invasion of epithelium by connective tissue is a reversal of the process which produces carcinoma. I have never known a malignant growth of any kind originate in one of these spots, and they must be regarded as entirely benign and unimportant products of advancing years, especially liable to appear in the region of the waist, where the skin is subject to pressure and to lateral displacement.—I am, etc.,

London, W.1.

W. SAMPSON HANDLEY.

Passive Immunization against Measles

SIR.—It would appear from all reports that for children under five years old the gamma globulin fraction is the safest and most reliable method of obtaining passive immunization against measles, an added advantage being the smallness of the dose when dealing with these small children. As far as I can ascertain the only material readily available for this purpose

(apart from the parent's whole blood) is convalescent measles serum. With this the dosage is rather bulky, and there is the danger of the serum containing the icterogenic agent of homologous serum jaundice. In this connexion I have heard that one or two deaths have occurred, and this has deterred me from using this substance. I should be grateful for an authoritative opinion as to whether this risk is such as to contraindicate the use of convalescent serum.

My main point in writing this letter, however, is to inquire why gamma globulin is not manufactured in this country, and if for some reason it cannot be manufactured, then why is it not imported? The substance must have been in use and favourably reported on for over two years, yet none of the local chemists can obtain it from the wholesale chemists, as it is apparently manufactured solely in America and is not being exported to this country. Surely, Sir, it would be of far more value, if it is a question of dollars, to have gamma globulin rather than American brands of iron compounds, antacids, and the like, of which we already have a surfeit of efficient English makes.—I am, etc.,

Harrogate.

J. C. WARD.

Acid Drinks and Sulphonamide Therapy

SIR.—While agreeing that natural fruit acids are oxidized and cannot therefore be suspected of altering the blood acid-base ratio to the acid side. I must protest at the illogical attitude taken regarding their administration during sulphonamide therapy. It is not enough to continue the fashion of prescribing fruit juice drinks on the lame excuse that they do no harm. It is abundantly evident from others' as well as my own clinical experience that thorough alkalization to the extent of rendering the urinary reaction alkaline is the surest method of obviating toxic reactions such as crystalluria, focal nephritis, haematuria, etc. The greatest risk of renal complications attaches to sulphapyridine, sulphadiazine, and sulphathiazole. At a urinary pH of 8 the solubility of these sulphonamides is approximately 2.2, 11, and 8.5 times as great as when urinary reaction is pH 5 to pH 6.¹

The obvious method of ensuring the necessary alkalization of the patient is the liberal exhibition of easily assimilable alkalis in the form of sodium bicarbonate, carbonates, phosphates, and citrates (where there is good tolerance to the last) in physiological proportion.—I am, etc.,

Bognor Regis, Sussex.

ARTHUR A. BRADLEY.

REFERENCE

Med. Res. Cncl. War Memo. No. 10, 1945, pp. 12, 21, London.

Local Penicillin and Endaural Cortical Mastoidectomy

SIR.—Endaural mastoid surgery—i.e., mastoid surgery performed through incisions in and about the external auditory canal and meatus—is gaining in popularity. Advantages of the method as contrasted with the post-aural approach include less haemorrhage and post-operative pain, speedier convalescence, and almost complete absence of scarring. The exposure obtained is such as to permit uncovering of the lateral sinus and dura mater, removal of the mastoid tip if desired, and complete exenteration of the mastoid cells in all except perhaps the most cellular mastoids.

In endaural cortical mastoidectomy as usually described a wedge of skin is excised at the posterior and superior aspects of the external auditory meatus; this "window" is left open for post-operative drainage and heals in a few weeks. I have employed the following modification successfully in some dozen cases. The incision—which is extracartilaginous—is made parallel to and a millimetre or two behind and above the posterior and superior borders of the external auditory meatus respectively, and upwards along the root of the helix for about 1 cm.; the lower part of the incision is made down to bone, the upper part down to temporal muscle. The periosteum over the mastoid process and posterior zygomatic root is elevated, retractors placed, and the bone operation performed as usual. The external auditory canal is not disturbed.

At the conclusion of the bone operation the cavity is filled with a paste of penicillin solution and serum or plasma powder as described elsewhere (Harpman, J. A., *Lancet*, 1946, 2, 808). The incision is then closed with a few fine sutures and the external auditory canal, concha, and fossa triangularis (the concavity behind the anterior part of the helix) are packed with ribbon gauze. The sutures are removed in about one week and the pack omitted a few days later. The stenosis of the external auditory canal fre-