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-