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-

quently observed after cortical mastoidectomy performed by the post-aural route has not been found following this endaural technique. The lesion in the cases in question was acute or subacute mastoiditis; the ear drums and wounds were healed within a week of operation.

Convalescence appeared to be aided by pre- and post-operative systemic penicillin treatment.—I am, etc.,

Warwick.

J. A. HARPMAN.

Treatment of Acute Mastitis

SIR,—From the beginning of August until the end of October I encountered twelve cases of acute mastitis in thirty-two consecutive midwifery cases of which half were confined at the local maternity hospital. Cases showed evidence of acute inflammation of a breast from the 7th to the 21st day after confinement, local inflammation, high fever, and rigors. All cases except two resolved without surgical interference with penicillin *cum* stilboestrol therapy: 100,000 units twice daily and stilboestrol 1 mg. orally t.i.d. 600,000 units was administered in nine cases, 1,000,000 in one case. In the two remaining cases evidence of abscess was evident on the 3rd day of treatment. Both were dealt with surgically, and penicillin was continued until temperature and local condition indicated that inflammatory mischief was well controlled. These two received 1,000,000 units.

Occurring so late the infection was deemed to be not of haematogenous origin, while on the other hand careful investigation failed to reveal evidence of case-to-case infection. Moreover, inquiry in domiciliary practice showed that cases were common in the district in the practices of different midwives. The contingency of the epidemic is therefore difficult to explain.

The following preventive treatment appears to have been successful, as no case has occurred in my practice since it has been carried out as routine. The nipple is cleansed with warm normal saline and dried with sterile cotton-wool. It is then smeared thinly over with fresh penicillin cream. I have great hopes that many cases of mastitis can successfully resume breast feeding after treatment has been successfully completed, but so far I have failed to persuade any mother to make the attempt.—I am, etc.,

Fraserburgh, Aberdeenshire.

J. MACLEOD.

Poisoning by "Lethane" Insecticide

SIR,—In the article by Dr. C. V. Harrison (May 24, p. 722) the composition of lethane 384 special is given as: "12.5% of lethane 384 (N-butyl carbital thiocyanate), 37.5% of lauryl thiocyanate, [etc.]." So far as my information goes this is incorrect. I believe the composition to be (as stated in the paper by Prof. Buxton and myself in the *Journal* of April 11, 1942, p. 464) as follows: 12.5% N-butyl carbital thiocyanate (or, alternatively, *beta*-butoxy *beta*'-thiocyano diethyl ether), 37.5% *beta*-thiocyanoethyl laurate, 50% refined paraffin.

The main constituent (*beta*-thiocyanoethyl laurate) was not investigated by Cameron, G. R., Doniger, C. R., and Hughes, A. W. M. (1939), *J. Path. Bact.*, **49**, 363, but some data regarding its toxicity to mammals are given by Main, R. J., and Haag, H. B. (1942), *Industr. Med.*, **11**, 531. The M.L. doses found for intraperitoneal and subcutaneous injections to guinea-pigs and rats were 1.48 and 4.3 ml./kg. These figures fall into the range given for lauryl thiocyanate, and the error (if it be such) does not necessarily invalidate Dr. Harrison's conclusions. Nevertheless it may be well to publish this correction unless he has information that the composition of lethane special has been changed.—I am, etc.,

London, W.C.1.

J. R. BUSVINE.

"Tuberculous"

SIR,—I should like to draw attention to the all too frequent and improper use of the word "tubercular" when "tuberculous" is what is really meant. "Tubercular" is a general term used to describe any condition characterized by rounded nodules—for instance, a new growth—and exostoses might be described as tubercular in appearance when they are nodular. "Tuberculous" has a limited and special application; it is the adjective which should be used instead of "tubercular" to describe a condition due to tuberculosis. One should say a tuberculous (not a tubercular) lesion, a tuberculous (not a

tubercular) abscess, when it is intended to convey that these conditions are due to tuberculosis. The distinction may appear to be meticulous, but precision in language makes for clarity of thought and exposition, and the reader of an article is entitled to expect this from the writer.—I am, etc.,

London, W.14.

J. M. HAMILL.

Sir Joseph Barcroft and Drugs in Asphyxia

SIR,—I am sorry that my paper on the use of drugs in asphyxia appeared by some means as a letter in the *Journal* (June 7, p. 825). It was originally prepared for the use of a medical committee in I.C.I., and it was my intention, before it appeared in print, to preface it with a paragraph explaining the part that the late Sir Joseph Barcroft had in its composition. As it stands it might well be the theorizing of a medical scribbler. In fact it was the culmination of a correspondence over many years, and it incorporated several alterations made by Sir Joseph himself. As the matter is one of great practical as well as theoretical importance I think it is only right that it should be known that my "letter" had this authoritative backing. Sir Joseph's letter returning it (with the caveat that he would not personally like to be responsible for giving strychnine to infants) was one of the last he wrote, and I should like to take this opportunity of recording that his interest and help in the work of a general practitioner who did not happen to have been one of his pupils were as keen and as generous as in that of the many research workers who did have that privilege.—I am, etc.,

Winsford, Cheshire.

W. N. LEAK.

State Medical Service in New Zealand

SIR,—In response to Sir William Fletcher Shaw's letter (May 31, p. 782) I would point out that my quotation from Mr. Porritt's article in *St. Mary's Hospital Gazette* contained the whole of his comments on medical service. I must dissent from Sir William's description of *St. Mary's Hospital Gazette* as "almost a private publication"; Sir William will find a copy, I believe, in every medical library. That Mr. Porritt's article was not intended to be a private communication is perhaps shown by the introduction to the paragraph on medical services, which runs as follows:

"This leads me to a few words on things medical in New Zealand. For ten years the country has had a partial State medical service and a dispassionate appraisal of this is perhaps not without interest at the present juncture in this country."

I would also point out that Mr. Porritt, as a native of New Zealand, would perhaps be in a better position than Sir William to appraise the present position in New Zealand as compared with that position when he left the country 23 years ago. But it so happens that Mr. Porritt's conclusions, to which Sir William takes exception, are strongly fortified by a much fuller exposition furnished by Mr. Douglas Robb in a recent little book, *Health Reform in New Zealand*, sent to me for review. Mr. Robb is a distinguished consulting surgeon, a member of the Council of Auckland University College and of the New Zealand Medical Council. He criticizes the absence of arrangements for postgraduate teaching and research. He remarks that the "impetus for introduction of the State service was a political one and the conception of the details of the service was almost 100% political—few medical men appear to have been consulted as such." While recognizing the increased financial prosperity of general practitioners, he states his belief that "the service has been accompanied by a steady demoralization of the profession." His sense of general dissatisfaction with the present medical position is summed up in his request, to urge which is the real purpose of his book, for "the appointment of a Health Service Commission to inquire into all the aspects of the subject, with a view to plans for the future." This suggestion is of particular interest to me as I begged the Prime Minister in a Parliamentary Question (*Hansard*, Jan. 21, 1941) to appoint a Royal Commission which would take evidence from all sections of the community concerned with the Health Service before any definite steps were taken which would revolutionize existing arrangements. This request was refused, but was repeated later by the Negotiating Committee of the medical profession, and again refused.—I am, etc.,

House of Commons.

E. GRAHAM-LITTLE.