Correspondence.

"Audi alteram partem."

CHILDREN'S DIET.

To the Editor of THE LANCET.

SIR,—I was much pleased with the kind allusion to the "Nem-System" in Professor Gowland Hopkins's Huxley lecture (THE LANCET, Jan. 1st) and with the interest taken in the research work which is being done at my clinic by Dr. Elsie Dalyell, Dr. Harriette Chick, and their assistants. Dr. Hopkins appears to consider my opinion on the question of nutrition very different from his own; I do not think that there is such a contrast. He takes a special scientific interest in the different particular foodstuffs; I have specially studied their energy value: only the combination of both our systems can solve the problem in a satisfactory way.

In order to avoid the difficulty of the separate structural elements I treated protein as an undefined substance. I require at least 10 per cent. of the Nem-quantity to be given in the form of protein. Thus, when taking an ordinary human diet into consideration, there is a probability that all the necessary kinds of the structural elements are contained in it. I must own, however, that it is only a probability. In order to be quite sure all the foodstuffs would have to be examined in order to find out their content of structural elements. In the practice of everyday life this does not seem necessary; for, in combining the customary foodstuffs of our daily fare into a diet, varied according to the difference of days and of meals, we get so large a collection of single substances that we may be quite certain of their containing structural elements of all kinds.

I must remind you of the fact that none of the nutritive systems have hitherto been based on the exact *quantity* of structural elements. If we wanted to do this we should not only have to think of protein, but also of the mineral components, such as chlorides, potash, chalk, iron, &c. At certain periods in the past doctors were rather anxious as to whether one or the other substance was contained in the food in a sufficient quantity. Think of the time when medical science thought an addition to the food of iron, chalk, or phosphorus desirable. But this has not become a lasting custom, from which fact I should like to draw the following conclusion: the food of the omnivorous of all civilised nations will rarely completely lack single structural elements that are necessary, or contain less than the minimum, so that it would not be worth while to make their calculation a daily rule. Only water, the most important element of structure, was, as a matter of principle, taken into consideration by the Nem-System. I refer to Nobel's excellent experiments,¹ an abstract of which is to be found in my "System der Ernährung," Vol. IV., p. 393, in which the laws relating to the minimum content of water in diet are explained.

It is a little different with the vitamins. Even an abundant and varied menu may be without vitamins, for example, if it is composed of preserved foodstuffs. We have made it a practical rule that the diet must contain fresh vegetables or potatoes at least once every day. This rule was based on experience, as also the rule ensuring a certain coarseness or cellulose content of the diet, which is of such vital importance for the movement of the bowels, except in the first years of babyhood. I admit that in these two cases of the vitamins and of coarse food, instead of a vague recommendation, there ought also to be a quantitative rule, especially in a system that requires such a detailed and graduated administration of food as the Nem-System prescribes. This quantitative rule might be determined by finding out the approximate content of cellulose and of the three important vitamins in all foodstuffs and then by summing them up, determining the necessary minimum that must be present in the diet, as I have done in the Nem-System for protein. I

shall be glad if the English workers here will make practical proposals of this kind, and I am quite willing to incorporate them in the Nem-System.

With regard to the observations that are being made by the mission of the Lister Institute at my clinic I think I can already make the following statement:—

Especially when tried on bigger children, there is no essential difference between our diets, composed according to the Nem-System, and containing at least 10 per cent. protein, and a diet purposely rich in vitamins, and this for the very good reason that diets, arranged according to the Nem-System, do not consist merely of caloric elements, theoretically calculated, but of the customary mixture of ordinary foodstuffs. For the feeding of babies, however, I hope to draw much benefit from the result of the English researches. We have been giving to the babies a rather unvaried food, and we are ill-informed as to the vitamin content of milk, which forms the chief article of their diet. It has happened more than once that infants have acquired scurvy under our eyes because we gave them a diet that was poor in vitamins. Our bigger children have only once suffered from a real epidemic of scurvy, and that was in the time of the worst malnutrition, when, owing to the war, our kitchen could not be supplied with fresh vegetables and meat. I must admit, however, that the criticism with regard to our practice of overcooking vegetables is justified and we will follow the advice given in that direction.

If at that time we had known what we are now learning from the English school of nutrition, we should not have been so inactive in providing the necessary fresh foodstuffs, contenting ourselves with the fact that they did not arrive on the market of their own accord; but, like our English colleagues, we should have tried to get the necessary foodstuffs direct from the peasants. On the other hand, I hope, our English colleagues will have learned from us how to base their observations of nutrition upon a quantitative caloric foundation. It is not possible to regulate the details of *qualitative* feeding of human beings without first having discovered the caloric requirements of the child apart from the irregularities of preparation and of the child's appetite.

Thus we may both learn from each other, and I hope that these international studies will have good practical results which will make it clear to both the British and the continental practitioners who have hitherto disregarded the vitamin theory as well as the principles of quantitative nutrition, that the results of the new work on this subject are now ready to be carried into practice.

I am, Sir, yours faithfully,

Vienna.

CLEMENS PIRQUET.

* * * Professor v. Pirquet writes from an unrivalled experience. The only adverse comment to be made upon the Nem-System is its apparent neglect of the fat supply. In the diet of children can fat be replaced by sugar of the same caloric value?—ED. L.

THE CONTROL OF BIOLOGICALS.

To the Editor of THE LANCET.

SIR,—Whilst the subject of standardisation of therapeutic substances is occupying the attention of scientists is it not incumbent upon us, in our own sphere, to remove an unnecessary inaccuracy in therapeutic usage by standardising the dosage of the product derived from thyroid gland more accurately than is at present the case? As has been pointed out elsewhere,¹ a considerable confusion has arisen in the administration of thyroid gland substance, which confusion is due, in part, to the discrepancies existing between the standard unit of dose used respectively in the British Pharmacopœia and by the commercial houses which supply the product; and, in part, to a lack of uniformity in the terms used in prescribing the substance. In the B.P. the dose is stated in terms of the dried gland; whereas, commercially, it is, with only one exception I believe, stated in terms of the fresh gland, which, bulk for bulk, contains much less of the active principle than does the desiccated substance. If thyroid tablet, gr. v., be prescribed, this can be rightly dispensed in terms either of the dried

¹ Zeitschrift für Kinderheilkunde, vol. xxii.

¹ Brit. Med. Jour., 1917, ii.

gland or of the fresh gland; and upon the same prescription a patient may receive a dose equivalent to thyroideum siccum B.P. gr. i. from one chemist and a dose equivalent to thyroideum siccum B.P. gr. v. from another chemist. This error is constantly occurring and must potentially continue so long as the two units of dosage are available; but the difficulty would be entirely overcome if the nomenclature of the B.P. only were adopted by the profession. In this connexion such terms as thyroid extract, thyroid tablet, thyroid gland, or thyroid substance have no exact meaning, and the use of them leaves the intention of the prescriber a matter of uncertainty and doubt, which is neither scientific nor conducive to attainment of the best clinical results.—I am, Sir, yours faithfully,

Torquay, March 5th, 1921.

A. E. CARVER.

AS OTHERS SEE US.

To the Editor of THE LANCET.

SIR,—The letters on this subject in your issues of Feb. 26th and March 5th are of psychological interest. If we class our profession as a *mixed group*,¹ "partly traditional and partly purposive," its spirit appears disturbed by threats at the tradition that the interest of the patient must come first and at the purpose of ameliorating the lot of humanity. It recoils from the attempt of the commercial spirit to lower the group ideal to a selfish financial level. This is an old trouble. The strength and truth of our traditions so ably upheld by your correspondents should soon reduce it again to unimportance.

Our group spirit seems to find a threat also in the various proposals for a (whole or partial) State service of medicine. Is this justifiable? The implied object of a State service should be to further the ideal objects of the profession. Experience suggests that this might be overlooked if the service had not the advantage of an inspiring declaration of ideals from leaders like Sir George Newman and Lord Dawson. The group ideal would be obscured or annihilated if the primitive altruistic tendencies of the individual doctor were not encouraged and utilised. Crude individualism would then triumph. I gather that this has happened to some degree in the panel service.

Again, recent experience suggests that such systems tend to subdivide into (1) an administrative, (2) a clinical service. The first rules the second. They become divided sharply in sentiment and purpose. Disaster to professional ideals follows. With administration as a detached end—a thing of supervenient forms, statistics, and costs—the interests of the patient disappear, and the amelioration of the human lot sinks to a secondary level. The clinician finds himself paralysed. He may submit to see his clinical and ethical standards destroyed. He may protest and starve. Perhaps then our group spirit is rightly perturbed. It wishes to be sure that no possible State service will injure our traditions and purpose in the slightest degree. Its anxiety is not allayed by critical examination of such experiments in State service as are now in progress. Without unity of spirit and purpose no group service can flourish; without declared and re-declared ideals it must fail. Once declared, ideals spread by "example, suggestion, and emotional contagion." The responsibility of maintaining them by appeal to the group spirit lies with those who occupy positions of prestige.—I am, Sir, yours faithfully,

March 6th, 1921.

H. LAING GORDON.

To the Editor of THE LANCET.

SIR,—The letter of Dr. Harry Roberts in your issue of Feb. 26th lays bare the sad position into which the profession has fallen in the esteem of the public. Can anyone wonder when the public sees how doctors treat each other? Take a striking example. There are doctors with anything from 1000 to 4000 panel patients (I write with personal knowledge), and with good private practices, increased when we were on active service, remaining on the Pensions Medical Boards, absolutely indifferent to the struggle which many

ex-Service men are having to make ends meet. These doctors have apparently no qualms in competing with the hard-hit ex-Service men, though they remained at home in safety of body and security of practice.

I am, Sir, yours faithfully,

March 4th, 1921.

AN EX-SERVICE MAN.

REFERRED PAIN.

To the Editor of THE LANCET.

SIR,—There are two statements in Mr. J. E. Adams's letter in your issue of Feb. 19th which, I feel, call for comment: 1. That when the appendix is abnormally placed the cutaneous hyperalgesia has always been over the situation of this organ, as revealed by subsequent abdominal section. This has certainly not been my experience. I have operated upon many abnormally placed appendices, and have always found the cutaneous hyperalgesia, if present, to be over the typical "functional" area in the right iliac fossa, my observations in this respect agreeing with those of Ligat. The most striking instance was in an early case of acute appendicitis with epigastric pain, cutaneous hyperalgesia limited to the right iliac fossa, but with no deep tenderness anywhere. Operation revealed the entire absence of the cæcum, appendix, and omentum from the right iliac fossa. Eventually the cæcum and appendix were found deeply placed in the region usually occupied by the splenic flexure of the colon; the appendix was hugely and tensely distended with mucus and its mucosa quite gangrenous. 2. That in assessing the value of clinical observations "negatives are surely of the same relative value as positives." It depends upon what one understands by "relative." As a positive clinical observation the presence of the sign of "loss of liver dullness" is of undoubted importance in the diagnosis of perforation of the alimentary canal, whereas its absence is of no value whatever in excluding such. Surely in a suspected case of early renal tuberculosis one positive finding of the tubercle bacillus in the urine is of greater value than 50 or more negative findings. As positive findings I consider the hyperalgesic "functional" areas of great value in determining the viscus primarily responsible in both acute and chronic abdominal lesions; I pay no attention whatever to negative findings. My experience is mainly with the "appendix," "gall-bladder," "gastro-duodenal," and "small intestine" areas, but last Friday night I was interrupted in my reading of Mr. Adams's letter of condemnation by a call from a practitioner in a neighbouring town to see with him an acute abdominal crisis, which we recognised as an intraperitoneal hæmorrhage from rupture of an ectopic gestation, but with absolutely no clue as to which Fallopian tube was concerned. The application of the "cutaneous hyperalgesia" test to the "functional" area for each Fallopian tube gave a most striking response on the left side, and at the operation the left tube was found to be the one ruptured.

I am, Sir, yours faithfully,

Manchester, Feb. 21st, 1921.

ARTHUR H. BURGESS.

VITAMINES AND COMMON SENSE.

To the Editor of THE LANCET.

SIR,—Professor W. D. Halliburton, in the course of his letter on this subject in THE LANCET of March 5th, takes the opportunity of raising again the much-debated question of heated *v.* unheated milk. He says that he cannot see that "the simple process of pasteurisation is the danger that some extremists allege it to be from the point of view of vitamins." This, no doubt, is true as far as the vitamins are concerned, but Professor Halliburton has forgotten one or two essential facts in the biological properties of milk and of the infant. Escherich and Baginsky showed over 30 years ago that there is a direct antagonism between the fermentative and putrefactive organisms in the child's intestine, and Bienstock in 1901 demonstrated the fact that raw milk cannot be made to putrefy by inoculating it with putrefactive germs, whilst if the fermentative germs are destroyed by heating the milk putrefaction at once takes place.

¹ The Group Mind, by McDougall, 1920, p. 92.