tion improves) this will bring the percentage due to these two conditions up to 90%. And this, of course, explains the second plateau, which will continue until we get some answer to these two conditions—the only improvement so far is with congenital abnormalities.

R R GORDON

Sheffield S11 9NN

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Dietary supplementation in pregnancy

SIR,—Mr A Malhotra and Mr R S Sawers (23 August, p 465) referred to the first paper from the Sorrento Maternity Hospital concerning dietary supplementation¹ but did not refer to the second,² which immediately followed it in the same edition of the *BMJ*. The papers have similar titles and were obviously intended to be read in tandem.

The Sorrento trials suggested three points. Firstly, unselective supplementation for all Asian mothers during pregnancy is of no clear value,¹ as they quote. Secondly, however, a protein energy supplement when given selectively to Asian mothers (mainly Pakistanis) who had evidence during the second trimester of nutritional stress (inadequate increase in triceps skinfold during the second trimester—that is, some evidence of a compromised energy balance) did enhance birth weight.² Thirdly, a protein energy supplement given to mothers who did not have evidence of nutritional stress did not enhance birth weight and may have had an adverse effect.^{2,3} Selection is essential.

We accept that the numbers were small (but statistically significant; further analysis by another group confirmed this³) and that what applies to mainly Pakistani patients in central Birmingham does not necessarily apply elsewhere. However, a larger study at Sorrento has subsequently confirmed the relation between triceps fat deposition in the middle trimester and fetal growth.⁴ Furthermore, these observations are paralleled by those published from The Gambia shortly afterwards.⁵ A protein energy supplement given to mothers during the wet season, when food supplies are less, work is harder, and energy balance may therefore be compromised, enhanced birth weight. When given during the dry season the supplement did not enhance birth weight; indeed, there was a suggestion of an adverse effect.

The authors are surely correct to emphasise dietary education; the snag is what does one teach? "Eat to appetite," "An extra pint of milk a day," "More protein foods," "More fibre" all appear in various leaflets. Apart from urging a vitamin D supplement to prevent maternal osteomalacia, neonatal hypocalcaemia, enamel hypoplasia, etc (for which the evidence is very strong from two other trials^{6,7} apart from the one they quote⁸), we are not sure what to say specifically about pregnancy. Until we do know what to say perhaps we should concentrate on the vitamin D. It is stated DHSS policy,^{9,10} but few hospitals follow it.

B A WHARTON

Sorrento Maternity Hospital,
Birmingham 13

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- 10 Department of Health and Social Security. *Present day practice in infant feeding*. London: HMSO, 1980:38.

SIR,—We read with interest the leading article on dietary supplementation in pregnancy (23 August, p 465). We performed a dietary recall survey of 43 women, all between the 6th and 22nd weeks of pregnancy. Thirty two had their plasma concentrations of vitamin D and folate estimated in addition to giving a recall of dietary intake over 24 hours. The racial distribution of the women was representative of the mixed population in west London (81% white, 12% black, 7% Asian). The mean age of the patients was 26 years (range 17 to 41 years).

Average intakes of the major nutrients, with the exception of folate, vitamin B₆, and vitamin D, were all above DHSS (1979) recommended daily intakes for pregnancy. On the other hand, the proportions of patients not having the recommended intakes were: energy 46%; protein 14%; vitamin B₁ 19%; riboflavin 23%; nicotinic acid 40%; vitamin C 28%; fibre 46%; iron 48%; calcium 48%. Of the 43 women, only two were taking the DHSS recommended doses of folate (500 µg/day), only two were taking the recommended vitamin B₆ (2.5 mg/day), and none were taking the recommended vitamin D (10 µg/day). None the less, 27 patients had serum folate values of above 6 µg/l, and 23 had 25-hydroxycholecalciferol levels above 7 ng/ml.

There was no correlation between any of the dietary variables and maturity at delivery, birth weight, or birthweight centile. The proportion of low birthweight babies (<10th centile) was 5%, which is below the national average. No fetal abnormalities were detected.

The DHSS recommendations may therefore be set at too high a level. We have attempted to ascertain their scientific basis without success—apparently they are based on the opinions of a "group of experts."

It is unwise to review the recommendations without more scientific fact. Reduction of dietary intakes to ascertain if any harm resulted would be unreasonable. The only sensible approach is a series of large scale controlled prospective studies in which patients are given modest supplements of an individual dietary constituent to ascertain any possible benefit. Let us get our facts correct on the dietary factors of known importance before looking into plasma molybdenum concentrations.

I H TEBBUTT
D F HAWKINS

Department of Obstetrics and Gynaecology,
Hammersmith Hospital,
London W12 0HS

Graduated elastic stockings

SIR,—The leading article by Messrs K G Burnand and G T Layer (26 July, p 224) has provoked an interesting correspondence. It is odd that there is great enthusiasm for accurate measurement of the pressures produced by an elastic stocking on devices such as the medical stocking tester but much less for relating what actual effects these pressures have on venous physiology in a limb fitted with a stocking.

Mr S D Blair and others (16 August, p 447) would have been in a position to do this, but their use of ulcer healing alone as an end point is unsatisfactory, especially as they had no control group. Many studies of bandaging with varying types of new dressing produce apparent improvements in ulcer healing. Unfortunately, once these studies are completed the enthusiasm for assiduous care wanes and the ulcers recur.

We still need to know what bandages really do. They certainly promote healing, but is graduated compression really superior to ordinary compression? We often seem to be optimistic about the degree of graduation obtained. We think that it will reduce reflux but have little evidence that this is so; in the papers quoted in support of this by Messrs Burnand and Layer, and in others, the actual changes in ambulatory venous pressures and reflux produced by stockings were minor and disappointing^{1,2}; in my own study I was greatly disappointed by the lack of reduction of reflux.³ Only in the study by Partsch were some values returned to normal, and then significant changes were obtained only by the use of the tightest grades of Sigvaris stockings, 504 and 505.⁴ However, the results are confused because most of these patients had long saphenous vein incompetence, rather than deep venous incompetence. This is shown by the fact that the better results were obtained by digital pressure over the saphenous opening than by the use of stockings. These grades of stocking are rarely if ever prescribed in Britain and are extraordinarily difficult to get on unaided, even by the young and able bodied.

So until a large study relates three factors—changes in venous pressures and reflux, accurate measurements of compression provided by the stocking, and ulcer healing rate—in legs with proved deep venous incompetence, and not just long saphenous vein incompetence, one must be circumspect in believing that graduated compression is the answer. This matters economically, as getting effective graduated support is expensive and venous ulceration is a common disease.

ANDREW J MCIRVINE

Dulwich Hospital, London SE22 8PT

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Obstetrics at the London Hospital Medical College

SIR,—Both before and after the report of the Beaumont inquiry and the welcome restoration of Mrs Savage's honorary consultant contract by Tower Hamlets District Health Authority there has been much criticism in the press of Professor Grudzinskas, professor of obstetrics and gynaecology of this college.

Among other allegations, it is said that Professor