

to an afternoon surgery. A general practitioner who holds no evening surgeries will force many patients to take time off work to visit his doctor instead of coming to surgery in the evening after work. I presume Dr. Smith prefers to fall in line with the working hours of branches of the medical service working "9 to 5" rather than with his junior hospital colleagues or the majority of general practitioners.—I am, etc.,

RICHARD E. G. SLOAN

London N.W.11

SIR,—In reply to Dr. R. B. Smith's letter (20 January, p. 177), for the past six years I have had afternoon surgery from 4-6 p.m., although my surgery is open for appointments to be made from 3 p.m. As far as I am aware this is to the satisfaction of all concerned.—I am, etc.,

E. M. ROSSER

London S.W.1

Ampicillin Rash and Influenza

SIR,—The high incidence (16.6%) of ampicillin rash in patients with proved viral infection of the respiratory tract reported by the Collaborative Study Group (6 January, p. 7) is of great interest and it raises important problems over the choice of antibiotic in pneumonia and bronchitis. Unfortunately, the authors did not give information about the types of virus which were isolated. However, their observation prompts one to wonder whether the current epidemic of influenza A virus infection has been accompanied by an increased incidence of ampicillin rash or whether this has been noted during previous epidemics.

I have recently seen a patient in whom influenza was complicated by pneumonia—the clinical diagnosis was confirmed by chest x-ray and a complement-fixing titre of 1/320 to influenza A virus. This patient, an active woman of 79 years had previously enjoyed excellent health. Signs suggestive of consolidation were noted about 12 hours after the first onset of typical symptoms of influenza. Ampicillin was given immediately in a dose of 500 mg 6-hourly by mouth and continued for eight days. Her temperature fell to normal within three days. On the 11th day she developed a low-grade fever and over the next two days a maculopapular rash appeared which coalesced until eventually hardly any part of her body remained unaffected by it. Apart from severe irritation, which was not relieved by antihistamine, she felt more ill than at any time during her initial illness. Whereas it had been possible to treat her pneumonia at home, the complication of the ampicillin rash made it necessary to admit her to hospital for continuous nursing care.

If there is, indeed, an increased liability to ampicillin rash in patients infected by influenza A virus, the choice of antibiotic when pneumonia or bronchitis complicates the illness will pose difficult problems. Ampicillin (alone or with cloxacillin or flucloxacillin) is widely advocated as the antibiotic of first choice in this situation, not only because many strains of pneumococci are now resistant to the tetracyclines, but also because of the risk of secondary staphylococcal infection.—I am, etc.,

IAN GREGG

London S.W.15

Digestive Disease: The Changing Scene

SIR,—In his Harveian Oration Dr. Thomas Hunt (23 December, p. 689) set forth changes that have occurred slowly over the past two centuries in Europe and during recent decades in Africa. In this oration the role of fibre was stressed. The change in fibre intakes in the British diet over the past century has revealed that the total mean daily intake of fibre has probably altered little from 1860 to 1970, but that the source has changed. Persons consume less fibre in their wheat flour and grain products but more fibre in fruit and vegetables.¹

It is important to understand what we mean by the term fibre. Dr. Hunt refers to the roughage in our food as consisting of "crude fibre made up of cellulose, hemicellulose, pectins, and lignin." Unfortunately, the term fibre, more correctly called crude fibre, to a cereal chemist means the portion of the carbohydrate that resists hydrolysis by boiling first with sulphuric acid and subsequently with sodium hydroxide,² and as such is reported in certain food tables³ but not in others.⁴ Crude fibre contains all the lignin and most of the cellulosic substances, but the hemicelluloses have been extracted in the alkalis.⁵ In most Western diets the hemicelluloses (pentosans) are usually twice as much by weight as the crude fibre (cellulose and lignin).⁶ In wheat and most whole cereal grains there is far more hemicellulose than crude fibre; the ratio is 2:1 or 3:1. In fruit and vegetables the hemicellulose content is far less than that of crude fibre; the ratio is often 0.5:1.⁵ There is considerable uncertainty about whether hemicellulose has any function in human nutrition. A prolonged search of the literature has not revealed any study either of its role in human nutrition or of its specific function in animal nutrition. No reports were found concerning its digestion in ruminants,⁷ this is surprising, considering the large amount of study of the role of fibre-rich foodstuffs in animal feeding.

A recent inquiry for a complete bibliography concerning fibre and bulk-forming agents in the stools in the context of human nutrition (1950-70) failed to provide any reference at all to the numerous clinical studies on the possible role of fibre-depleted foods as factors in the pathogenesis of diverticular disease, cancer of the colon, or irritable colon. It also took no cognizance of the fact that the fundamental work had been done under the terminology of unavailable carbohydrates.⁸⁻⁶ This might have been a satisfactory term until it was demonstrated that lignin is not carbohydrate and that cellulose and hemicellulose make a small contribution to calories.⁶ The term "dietary fibre" was therefore proposed and defined to include the remnants of the vegetable cell walls unhydrolysed by human alimentary enzymes.^{8,9} In the present state of knowledge dietary fibre is identical to the unavailable carbohydrates and lignin. No food table records dietary fibre, hemicelluloses, or pectic substances.

A recent review of bile salt metabolism produced evidence that fibre-rich foods increase bile salt excretion, decreasing thereby reabsorption in the small intestine.¹⁰ If so, fibre-rich foods reduce serum cholesterol levels and might be one of the protective factors against coronary heart disease.¹¹

A general review of the role of fibre in human nutrition is overdue. The whole ter-

minology is antiquated: thus the term hemicellulose should be replaced by that of the various polysaccharides, mannan, xylans, glycuronans, and so forth.¹² It is as if we were talking still in terms of water-soluble and fat-soluble vitamins.—I am, etc.,

HUGH TROWELL

Woodgreen,
Fordingbridge, Hants

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Side Effects of the Pill

SIR,—It is unfortunate that Dr. D. A. Varvel (23 December, p. 729) should seek to castigate the contraceptive pill on the basis of his impressions rather than on factual evidence. The national press was not slow to disseminate his views, no doubt to the further discomfort of anxious patients. The occurrence of depression, loss of libido, headaches, etc., has been reviewed and reported relatively recently,¹ but perhaps the experiences of another general practitioner may be of interest.

For the past 10 years I have kept for each case in which I have prescribed an oral contraceptive a record of the patient's age, marital status and parity, the product and when it was first prescribed, specific symptoms volunteered or elicited at follow-up (see table), when treatment was discontinued, and the reason for discontinuing it. During this period a combined or sequential preparation was prescribed for 476 patients, 61 of whom never returned after their initial prescription, leaving 415 in the series. As in Dr. Varvel's experience, there were no serious sequelae and only one pregnancy resulting from pill failure (with a sequential preparation).

Overall Incidence of Symptoms in 415 Patients

	No.	%
None	137	33.3
Anxiety (overt)	27	6.5
General malaise	21	5.1
Depression	41	9.9
Headaches	37	8.9
Loss of libido	42	10.1
Breast symptoms	6	1.5
Nausea	17	4.1
Weight gain	50	12.1
Vaginitis	42	10.1
Oligomenorrhoea	28	6.8
Amenorrhoea	48	11.6
Spotting	16	3.9
Breakthrough bleeding	39	9.4
Other	29	7.0

Weight gain (defined as an increase of 10% or more) headed the list of symptoms. Apart from this, only amenorrhoea, monilial vaginitis, reduced libido, depression, breakthrough bleeding, and headaches occurred in the region of the 10% level. Some patients,