The two industries recognise the potential importance of the hypothesis to matters of health and well-being but are not themselves attempting to prejudge the outcome of the impartial review. They wish to know the facts. They believe this to be a reasonable attitude. They are concerned that some contributors in the lay press and media are more than ready to assume the hypothesis already proved, and quite prepared as a result to impose personal dietary prejudices on to all consumers regardless.

Much careful study has been devoted by other research workers over the years which points, on epidemiological grounds, to the possibility of dietary factors other than fibre, notably fats¹ and meat,² being associated with the causation of bowel cancer, and these and the other hypothesis³ that the retention of flatus within the body may be the cause of diverticular disease doubtless need further investigation before final conclusions are forthcoming.

With the nutritional standard of all flour and bread assured under the statutory Bread and Flour Regulations, millers and bakers deem their responsibility to be to satisfy consumer requirements. In this, demand and scale of production and of distribution have to play their part. Demand for white bread is very large—representing around 90% of total bread consumption. Demand for wholemeal bread is relatively small. Wholemeal flour is available for consumers wishing to bake their own bread or for any who find difficulty in obtaining wholemeal bread in the baker's shop. Brown (wheatmeal) bread is widely available. Bran in breakfast cereal form is also available, as is bran in health food stores. There are many other forms of dietary fibre constantly available.

Millers and bakers are not opposed—as is sometimes imagined—to the production of wholemeal bread or to its increased production if consumer demand should so require. They dislike unreasonable pressure on the very large majority of consumers who much prefer white bread by some individuals among those who prefer wholemeal bread. Such pressure is felt to be unreasonable when in the form of unjustified and inaccurate nutritional criticisms or suggestions of harmfulness without valid evidence. The principal authors of the high-fibre hypothesis have not associated themselves with criticism of the nutritional value of white bread per se or with charges of harmfulness. They have indicated that they would wish to see an altogether higher consumption of cereal fibre, that they would like to see more bread eaten but would much prefer this to be in the form of wholemeal bread.

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- ¹ Hill, M J, *Digestion*, 1974, 11, 289.
- ² Howell, M A, *Journal of Chronic Diseases*, 1975, 28, 67.
- ³ Wynne-Jones, G, *Lancet*, 1975, 2, 211.

Health Service administration

SIR,—I am anxious about the tone of some of your recent articles. There seems to be general agreement that the Health Service is becoming over administered and that the introduction of a fourth tier has done nothing to improve conditions in the Service but has made its administration very cumbersome,

some, very expensive, and less efficient. In much of your correspondence and articles the suggestion emerges that the region should go. It seems to me that to pension off the region would be to compound the serious error which was made when the area was introduced.

The sharp end of the Health Service, where the patient receives his care, is at district level. The district and the district management team are natural units which must clearly stay and be developed as far as they can go. There are some decisions affecting the Health Service which cannot reasonably be taken at district level—the siting of a neurosurgical unit, the boundaries of the district, etc. In these circumstances, however well organised and efficient the district is, it has to refer to a higher authority. The next higher natural authority should be the region because these decisions have to be taken on a regional basis, especially where the region is based on a teaching centre. A one-district area or a two-district area is a complete and utter anomaly. It is not in any position to make decisions which are too big for the district to make itself. The area seems to have been introduced as a sort of political gimmick. It seems that most areas have not yet discovered what they are expected to do. Being new, they say that they have not had time to get their organisation going and that it is going to take several more years before they have really discovered their role and are able to make a contribution. In my opinion, an area can never have a real and satisfactory role. It can ever be only an artificial impediment between district, where the work is done, and region, which has to take an overall view.

It is very sad that attempts at bringing the voice of the consumer to the Health Service should be remote from the district. It is very sad that the layman's contribution that we used to have via the hospital management committees has been lost. It is very sad that so much money is being spent on administration at any time, but particularly when money is short, but it would be an utter tragedy if the region was destroyed in an attempt to cure. The area is an anomaly which is not in a position to take overall wide-ranging decisions. Does anyone seriously suggest that these overall wide-ranging decisions should be carried out by the Department of Health and Social Security, an organisation which till now has shown itself to be very remote and very ill informed about the day-to-day problems of the Health Service? Please do all you can to keep our regions.

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Drugs for rare diseases

SIR,—We were interested to read Dr J M Walshe's letter (20 September, p 701) about difficulties in introducing new drugs in the management of rare diseases. We have found similar problems in treatment of idiopathic orthostatic hypotension. It had previously been shown^{1,2} that some patients with this disorder respond to treatment with a combination of tyramine and monoamine oxidase inhibition. Tyramine had been given by asking patients to eat a large amount of cheese every day. We have developed the treatment

further by giving oral tyramine prepared in a capsule by the hospital pharmacy. The drug is at present proving useful in several of our patients.³

Like Dr Walshe we have been concerned about the preparation of the drug, for although we are using a chemically pure form of tyramine it is not produced by a pharmaceutical company under a product licence. We had hoped to interest a drug company in examining the drug and producing it for clinical use on a wider basis, as a number of other physicians with patients with this problem have been interested in our results. We have, however, failed to get any company to consider producing a preparation for general clinical use. Moreover, a further problem has arisen. Although doctors are allowed to prescribe drugs which have not been covered by a product licence (Medicines Act (19, 8)) we have been informed by the area pharmacist that if a doctor prescribes a drug in this way then he must accept full legal responsibility. This seems a situation on which the medical defence societies and others concerned with the problem may care to make comment.

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- ¹ Lewis, R K, *et al*, *Archives of Internal Medicine*, 1972, 129, 943.
- ² Frewin, D B, *et al*, *Australian and New Zealand Journal of Medicine*, 1973, 3, 180.
- ³ Nanda, R N, Keogh, H J, and Johnson, R H, *Clinical Science (P)*. In press.

Management of acute asthma

SIR,—Any doctor called upon to manage acute asthma should have a clearer understanding of the issues involved than that imparted by your leading article (11 October, p 65). "Acute asthma" suggests an attack which has arisen suddenly. This is not commensurate with severity—indeed, many acute attacks respond readily to treatment without any necessity for admission to hospital.

Far more difficult to assess and potentially much more dangerous is the situation where asthma has become progressively more severe for several hours or even days. In the epidemic of asthma deaths during the 'sixties patients were said to have died suddenly and unexpectedly, yet retrospective inquiry showed that in many cases severe asthma had been present for a long time before death, suggesting that its gravity had not been recognised by the patients themselves or their general practitioners.

The severe degree of airways obstruction existing under these circumstances can be relieved only by a high dose of steroid, whose anti-inflammatory action is probably of greater importance than its ability to restore responsiveness to endogenous or exogenous catecholamines. During recovery from severe asthma treated with a steroid the response to inhaled isoprenaline shows little variation.¹ The statement in your article that intravenous salbutamol can cause a mean increase in peak expiratory flow of 44% is less impressive than it sounds if the resting value is only, say, 60–80 l/min. Complete