tional group with covert respiratory illness who present with an irritant cough and tiredness, but who have no abnormal physical findings. My patient load is 1100 with an additional 400 girls at a boarding school. The practice nurse performed the majority of the lung function tests and I read the tracings — the combined time taking approximately 20 minutes.

During the five years we have performed lung function tests on 100 patients: 133 tests were done, 14 patients had two tests, six patients had three tests, and one had eight tests. In four patients we were unsuccessful owing to bad technique (three in children less than eight years old and one in a man aged 84 years). Twenty one patients had known respiratory illness. mainly bronchial asthma; but 19 patients who presented with a cough and nonspecific complaints, who were clinically normal, had abnormal lung function tests. This group received specific therapy after a diagnosis was made, and good results were obtained.

My experience with the Vitalograph has given me an aid in diagnosis and treatment as important as the electrocardiograph machine. I am aware that availability might have caused increased use but pathology was found in nearly 20% of those examined.

I am in total agreement with Dr Smith as to the use of spirometry as an aid for assessment and diagnosis of lung disease. However, in the light of my positive experience I believe that lung function test measurement should be carried out in primary care centres. I do not accept that hospital referral is required because 'few health centres are able to offer their patients this facility'. The spirometer is relatively inexpensive and easy to use.

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## Direct access for GPs to pulmonary function laboratory

Sir,

We have recently evaluated whether direct access for local general practitioners to our pulmonary function laboratory is of value in the management of breathless patients. Over a six month period, 24 general practitioners referred 73 patients to the laboratory where simple spirometry and peak flow measurements were performed, with reversibility studies and education in inhaler technique when appropriate. These tests were performed within one

week of referral by an experienced technician, the patients not being seen by a physician. A total of 27 patients had normal results. Although the general practitioners had correctly predicted an obstructive defect in 38 (88%) of the 43 patients with airflow obstruction, their assessment of the severity of the obstruction was accurate in only 22 (51%) patients. Half of the patients in whom the general practitioner thought the airflow obstruction would be irreversible showed significant reversibility in the laboratory. As a result of the tests, the medication of 35 patients was changed by their general practitioner, and in reply to questionnaires the general practitioners of 21 patients said that the tests had prevented referral to a respiratory outpatient clinic. We believe that this service is a cost effective alternative to hospital referral for selected patients with breathlessness.

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## Dietary advice and health

Sir,

The National Association of British and Irish Millers (NABIM) represents the UK flour milling industry and therefore has a natural interest in nutritional matters. For many years, much of nutrition was seen in terms of obesity and its prevention and starchy foods such as bread were mistakenly labelled as fattening. The position was, however, transformed in the early 1980s, with various reports by the Committee on Medical Aspects of Food Policy (COMA) recommending a fundamental shift in dietary patterns away from fat, and particularly saturated fats, towards carbohydrate, and particularly complex carbohydrates.

Despite this advice, the relationship between the main sources of energy in the diet has changed barely at all since 1980. At that time, 44.4% of calories in the UK diet derived from carbohydrate, 42.6% from fat and 13.0% from protein. By 1988, the figures were 44.4%, 42.0% and 13.6%, respectively, as drawn from the national food survey carried out by the Ministry of Agriculture, Fisheries and Foods.<sup>1</sup>

The public has become much more aware of nutrition and food matters. For

example, a MORI survey reported in the Sunday Times on 1 October 1989 found that a healthy diet was important for 39% of people, with another 39% trying to eat healthily, but not at the expense of enjoyment. Common fallacies, however, continue to abound; in the same survey, nearly half the responders wrongly believed that starchy foods gave more calories ounce for ounce than foods high in protein. Perhaps as a consequence, more than half thought that most of our energy should come from protein.

Clearly, medical practitioners have an important role to play as a source of authoritative advice on healthy eating. On the other hand, they may not always be equipped to give it. An interesting study of local general practitioners by Bradford university published in February 1989<sup>2</sup> discovered an impressive correlation, in most cases, between responses and current dietary recommendations. The recommendations were not, however, always converted into practical advice. Furthermore, understanding in some areas was deficient. For instance 43% of general practitioners considered that complex carbohydrates were calorie-rich and should be avoided, especially on a weight reducing diet. In similar vein, a study of general practitioners and their practice team members by the National Dairy Council<sup>3</sup> found that 99% considered it important to have more fibre in the diet and 95% to have less fat. However, when asked about a principal source of this fibre and alternative to fat, only 36% recognized the importance of eating more starchy foods such as bread.

Perhaps doctors suffer from the welter of information on diet as much as their patients do. Certainly, there seems to be a lack of coherent advice drawing all the established recommendations together and converting them into practical form. In the continued absence of such advice, any change in dietary patterns is likely to be slow and haphazard. The medical profession has a part to play in rectifying this situation.

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