



Spaghula seed hulls enclosed in their husks

Fibre: not just a load of old bran

Recent research in Peter Whorwell's department has indicated that bran, currently almost universally recommended in IBS, is actually making patients worse. Its routine use in IBS has to be seriously reconsidered.

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Since the work of Burkitt in the 1950s and 1960s, it has become clear that fibre is a very important component of our diet, modifying gastrointestinal function as well as having metabolic effects such as influencing the levels of blood lipids. Unfortunately, as is so often the case with new concepts, this led to the view that fibre is good for everybody and a panacea for a multitude of ills. Furthermore, the idea of fibre deficiency became fashionable, with IBS being cited as a classic example of this problem.

It was also generally considered that fibre was an inert substance that passed through the gastrointestinal tract unchanged, although nothing could be further from the truth. Dietary fibre can be soluble or insoluble, it varies widely in its chemical constitution according to its source and is metabolised in the colon into a variety of different products depending on its original molecular configuration. Some of these products appear to 'irritate' the bowel more than others.

It is not exactly clear why IBS became classified as one of the fibre deficiency diseases but one reason may be because constipation can be a feature of the disorder. Undoubtedly, fibre can improve constipation, and clinical trials of its use in IBS have revealed beneficial

effects on this symptom. However, more careful review of trial data shows that the effects of fibre were generally disappointing with respect to the other features of IBS. Despite this, fibre, particularly bran, was adopted as the treatment of choice for IBS and even today is almost universally advised as the first measure in the management of this condition.

Bran on trial

For some time the author has been suspicious that bran not only fails to improve IBS but may actually make the condition worse. Therefore he undertook a prospective study of this issue in 100 consecutive newly diagnosed patients referred to his clinic.

All the patients had been advised to use bran for their problem and the effect of this and other types of fibre on their symptoms is shown in Table 1. Only 10 per cent of patients derived any benefit from bran whereas 55 per cent claimed that it made them worse. Other sources of fibre did not worsen symptoms in as many but only the proprietary soluble fibre preparations seemed to be actually helpful.

These results obviously call into question the routine use of bran in patients with IBS but have a number of other practical implica-

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tions. For instance, many patients are aware of the fact that bran seems to worsen their symptoms, making them doubt the accuracy of their diagnosis when the most frequently recommended treatment for the condition actually causes deterioration. This problem can be compounded when they confront their GPs with this information, as they are often then told that they are not taking enough of the supplement and should increase their intake of the product even further.

It is interesting to note that in the author’s study patients found that all the symptoms of their IBS (pain, distension and bowel function) could be upset by the use of bran. With regard to bowel habit, patients with a tendency to loose stools were most intolerant but even some constipated subjects developed problems. Some commented that their constipation improved but was accompanied by more pain and distension — a price they were not prepared to pay when a simple over the counter laxative could have the same beneficial effect on bowel habit without the other detrimental effects.

One major criticism that might be levelled at this study is related to the fact that it was conducted on hospital outpatients and it might be supposed that if patients were being improved by bran, they would not be referred to hospital and would therefore not be included in such a study. In fact, the results showed no differences between patients whether they were classed as having mild or severe symptoms, but the only way this question can be satisfactorily resolved is by repeating the exercise on a group of IBS ‘non-complainers’ derived from the community.

The use of bran in the management of IBS provides a good example of how a treatment can be almost universally adopted on the basis of a shaky hypothesis and without good evidence of efficacy. This does not mean that healthy people should stop eating it; it is an important constituent of food with a number of beneficial effects. However, as is seen with vitamins, universal ‘extra supplementation’ may not be in the best interests of everybody and indeed may adversely affect some groups of people.

How to advise IBS sufferers about fibre

It is probably best to explain that a certain amount of fibre in the diet is essential and that different types of fibre exist, some of which may upset the bowel more than others.

Patients should then be left to judge for themselves which forms of dietary fibre they can and cannot tolerate. They should not feel guilty if they find they are better on white bread rather than brown just because they have been indoctrinated that brown bread is best. If they like eating cereals then Cornflakes and Rice Krispies would appear to be the most neutral.

If fibre supplementation is judged necessary, particularly in order to improve constipation, the proprietary fibre preparations, such as ispaghula, would appear to be the best option. ■

Reference

1. Francis CY, Whorwell PJ. Bran and irritable bowel syndrome: time for reappraisal. *Lancet* 1994; **344**: 39-40.

Table 1. Symptomatic response to fibre

Fibre source	Better	Worse	Unchanged
Bran	10 (10%)	55 (55%)	35 (33%)
Cornflakes	0	0	88 (100%)
Rice Krispies	0	0	81 (100%)
Porridge	0	9 (12%)	66 (88%)
Muesli	0	21 (27%)	58 (73%)
Vegetables	3 (3%)	24 (25%)	71 (72%)
Fruit	5 (5%)	42 (45%)	47 (50%)
Pulses	0	22 (25%)	65 (75%)
Nuts	0	23 (27%)	61 (73%)
Proprietary fibre	27 (39%)	15 (22%)	27 (39%)