may be related to the incompletely understood changes in sodium and water homeostasis.\(^5\) The reverse side of the coin also applies in that in diabetes insipidus, the classical high osmolarity situation, both thirst and hunger are experienced.\(^9\)

Perhaps the weight loss of the aged, along with relative inability to recognize dehydration, is the result of diminished hypothalamic sensitivity.

Palpated fever may be potent anorectic stimuli and both may have much to do with the dietary abstention of advanced malignancy. But in chronic painful illness adequate analgesia should restore appetite, always provided that the analgesics used are not themselves too irritant to the gut. In phobic states and hypochondria the effects of reassurance and treatment with drugs such as diazepam may overcome the anorexia. Though psychiatric influences on appetite are common, they can be misleading: the physician should remember that hypercalcaemia can cause both anorexia and depression,\(^19\) and that mental changes and loss of appetite may antedate the usual diagnostic features by some months in carcinoma of the pancreas.\(^11\)

Hypercalcaemia may also be the earliest biochemical pointer to adrenal deficiency,\(^12\) and may be part cause of the mood and appetite disturbance noted in that disease. Infective endocarditis is another condition in which anorexia and depression occur. If the disease is not suspected at that stage more serious sequelae may result.

Anxiety, though a cause of gain in weight in some subjects, is a common cause of anorexia. The agitation and weight loss may suggest thyrotoxicosis, but in that condition appetite is characteristically excellent. Functional vomiting and anorexia nervosa are examples of the influence which a disturbed and determined mind may have over the body. The bradycardia, cold extremities, and amennorhoea of the latter disease illustrate the extent of the abnormality in the cortico-hypothalamic axis. The anorexia of alcoholism and narcotic dependence is at least partly dictated by the relegation of food in the patient's order of priority.

Certain experiments by Schachter\(^13\) suggest that obese people may be less influenced by their internal visceral state whereas thin people may subordinate their pleasurable gastronomic sensations to feelings of fullness. The human race is subdivided into various somatotypes best recognized for the characteristics of their appetite and personality. The real iniquity of amphetamines as appetite suppressants is that personality factors override the inhibitory action on the hypothalamic feeding centre. The psychiatric and sleep disturbances caused by this class of drug are in any case totally unacceptable. Fenfluramine, though a relative of the amphetamines, does not cause these problems.\(^14\)\(^15\) But it seems unrealistic to use a drug to stop a patient doing what he still basically wants to do. As with disulfiram in alcoholism, the patients may tend to stop the drug, thereby losing any additional benefit which might have resulted from its effects on lipid metabolism. Diguanides such as phenformin or metformin also have anorectic effects, probably due to gut irritation and this may be useful in securing weight loss in obese diabetics—and may be an important factor in reducing their blood sugar levels.

The importance of anorexia cannot be overemphasized. This symptom, and its usual comitant weight loss, are among the most vital clues in medicine. To fail to interpret them is to invite delay in diagnosis right across the spectrum of human disease.

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Towards an Artificial Liver

Acute hepatic failure due to hepatitis is fortunately rare and may indeed be decreasing in frequency in Britain. However, the current epidemic of paracetamol poisoning and to a lesser extent cases of acute hepatic necrosis associated with halothane and other drugs provide a continuing need for an effective form of treatment. Despite enthusiastic claims for therapies as diverse as massive doses of corticosteroids, exchange transfusion, pig-liver perfusion, and intermittent heparin, world-wide mortality remains between 80% and 90% for a condition which often affects the young and previously healthy. Over the past 15 years a great deal of effort has been put into developing an artificial support system comparable with haemodialysis for the failing kidney, and a recent report from King's College Hospital Liver Unit\(^1\) of the use of haemoperfusion through an activated charcoal column raised hopes of a significant breakthrough. Last week\(^2\) an international symposium was held in London to discuss the implications of haemoperfusion; it was organized by the King's College group and sponsored by Smith and Nephew Associated Companies Ltd., the developers of the column. A good part of the two days was spent grappling with some of the more difficult aspects of liver failure such as the nature of the encephalopathy and criteria for prognosis, without an understanding of which it is impossible to plan effective treatment or to assess its value.

It is not yet known why the brain is affected in liver failure. There are rises in serum concentrations of ammonia, amino-acids, free fatty acids, phenols, and thiols such as mercaptans, some of which could be toxic, but it is not clear whether any of them cause the encephalopathy or are merely associated phenomena of the illness. Removal of ammonia by haemodialysis, for example, does not influence the course of coma. On the other hand, accumulation of tyrosine, phenylalanine, methionine, and tryptophan, which are precursors of cerebral dopamine and serotonin, could result in decreased adrenergic activity or in the production of false neurotransmitters like octopamine, which may themselves inhibit cerebral activity. Some improvement has been said to follow the use of L-dopa if it is given early. Disturbances in brain cell metabolism have also been postulated, but careful work in animals reported by J. F. Biebuyck, in which environmental conditions were rigorously controlled, did not reveal any change in energy reserves of cyclic-AMP. The most striking finding was reduced brain concentrations of aspartate and glutamate, which in normal circumstances may play a more important role in neurotransmission than noradrenaline.

Even if the riddle of encephalopathy were solved (and absence of a protective factor produced by the healthy liver cannot be entirely ruled out) the clinician would still be faced
Experts and Child Abuse

In the last few months before Maria Colwell was beaten to death by her stepfather her pitiful appearance became a talking point among neighbours. They reported incidents to the N.S.P.C.C., several times; they contacted the social services department, and the police were called in; and Maria’s schoolteachers also asked for help from the education welfare department. Yet the social worker responsible for the child, the inspector from the N.S.P.C.C., and her general practitioner all examined her and found no undue cause for alarm. None of them, it seems, knew all the facts, and the parents managed to conceal the worst of the child’s sufferings from the authorities.

The committee of inquiry repeated the familiar charge that society as a whole must bear the ultimate blame—but surely in this case society, in the shape of neighbours and the school, did its best; it was the professionals who failed. Maria Colwell’s death was not unique—other children have died in similar circumstances: so what are the lessons to be learned?

One change that has already occurred is that the courts and social services no longer give as much emphasis to the importance of the blood-tie. Maria was returned to her parents without any serious opposition from the social services because they believed—probably correctly at the time—that a request to a court by a mother for the return of her child from foster-parents was unlikely to be refused unless she was demonstrably an “unfit person.” Since then legal attitudes have changed, and judges are now paying more attention to the interests of the child and less to the “rights” of a parent. The Secretary of State for Social Services has said that the Government will introduce a Children’s Bill in the autumn concerning adoption, guardianship, and fostering, and one of the proposals is that children at the centre of disputes about custody and control should have separate legal representation. This is a necessary reform: with so many cases coming before the courts the child’s interests are often overlooked simply because no-one has drawn attention to them.

In the current political situation, however, promises of future legislation carry little certainty, and furthermore many cases of battering occur in families which have had no legal disputes about custody. The solution offered by the committee of inquiry and endorsed by Mrs. Castle is improvement of communications within and among the agencies and departments which encounter children at risk. Certainly the inquiry showed that information about Maria was not passed on from one department to another, and this led to decisions being taken on inadequate data. Possibly communications will be improved by the area review committees now being set up throughout the country, which will have the task of coordinat-