relationship between anorexia nervosa (AN) and obsessive–compulsive disorder (OCD). However, I find his analysis too selective and would like to suggest several missing points.

(a) Evidence suggestive of a positive relationship

(i) Abnormal brain serotonin has been reported in both AN and OCD. Thus tryptophan has been used to treat both conditions, while a recent open trial of fluoxetine, a serotonergic reuptake blocker, has shown favourable result in weight maintenance of AN patients (Weltzin *et al*, 1990). This trial was based on the belief that AN is related to OCD, which responds to fluoxetine treatment. This weakens Holden's conclusion that there is currently little advantage in joining the two conditions "until linkage of the syndromes is shown to have meaningful benefits for management".

(ii) Maudsley Multiphasic Personality Inventory profiles of AN and OCD patients are remarkably similar, both showing abnormal elevations on the scales of depression, psychopathic deviate, psychasthenia and schizophrenia (Goodwin & Andersen, 1984; Carey *et al*, 1986).

(b) Evidence against a positive relationship

(i) Psychodynamically, AN is a defence against underlying deficits in the sense of self, identity and autonomy, which is believed to be due to a paucity of encouraging responses to child-initiated cues in early parent–child interactions. The characteristic defence mechanism of the AN patient is rigid denial. In contrast, OCD is usually construed as a regressive fixation at the anal-sadistic era of psychosexual development, which is characterised by the defences of undoing, isolation, displacement and reaction formation.

(ii) In terms of psychological treatment, behavioural therapy alone is generally ineffective in AN patients who typically defy treatment contracts and create power struggles, but is the most important form of therapy for OCD. If AN were an authentic "compulsion neurosis" as noted by the author, it should respond well to exposure and response prevention. Besides, dynamically oriented individual therapy is the cornerstone to the management of AN, but is often pessimistically contraindicated in OCD.

(iii) Although both conditions are regarded as multifactorial in aetiology, current evidence is generally moving more towards sociocultural hypotheses for AN, but neurobiological for OCD. This is hardly examined by the author.

Overall, there is suggestive neurochemical and psychometric evidence, debatable phenomenological resemblance, tenuous genetic and epidemiological data, and contradictory treatment results to support AN as an OCD. Theoretical arguments apart, anyone who has worked in psychotherapy with these two groups of patients will not dispute the striking dissimilarity in the therapist's reaction towards the resistant, unconcerned ("let me be") anorectic patient, and the distressed, eagerly help-seeking ("let me not be") obsessive–compulsive patient. For this reason alone, I believe they are disparate conditions!.

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## Toad-lickers psychosis – a warning

SIR: Since we in England generally follow our American colleagues in experiencing novel epidemics of psychoactive substance abuse, the following warning may be timely. The skin glands of bufo toad species secrete the hallucinogen bufoterine, which although having only 0.1% of the hallucinogenic potency of lysergide, is active orally and produces the same effects. The Australian cane toad is popularly kept as a pet in the US, and licked by its owners for the resulting hallucinatory effects. The phenomena has caused so much concern that the state of South Carolina is considering legislation to ban ownership of cane toads. Bufoterine is a monoamine oxidase inhibitor, blocks uptake of noradrenaline and has complex effects on reflex activity in the spinal cord (Bowman & Rand, 1980). These active properties are responsible for the more unpleasant side-effects of toad-licking: sweating, distressing palpitations, vomiting and involuntary defaecation.

https://doi.org/10.1192/bjp.157.5.779 Published online by Cambridge University Press

The two native English species of toad, the common toad (*bufo bufo bufo*) and the natterjack toad (*bufo calamita*) share the cane toad's hallucinatory potential. There are as yet no reports of toad-licking in the UK, and we would be very interested to hear from any psychiatrists whose patients admit to this bizarre form of drug abuse.

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## Self-catering during rehabilitation

SIR: Self-catering is an important element of rehabilitation. We investigated the food purchases of a self-catering ward for rehabilitation of drug abusers (80–90% former opiate addicts), located in Springfield Hospital in south-west London. Establishing good dietary habits may aid recovery from the accumulated effects of chaotic or debilitating life-styles, and may also help to sustain a drug-free state. A good nutritional state can be an indicator of successful treatment of dependence (Kleber, 1989).

The initial request for the study came from the patient community meetings. During four weeks in Autumn 1989, all self-catering patients cooperated in a survey of their expenditure on food and non-food items, using an itemised food diary. Data on 126 patient-days were collected. Nutritional analysis of these food items was performed, using the DIET 2000 programme, for each week. Results were compared with the recommended daily amounts (RDA) for nutrients (Department of Health & Social Security, 1979) and the recommendations of the National Advisory Committee on Nutrition Education (NACNE, 1983). Food expenditure was compared with values from the latest Ministry of Agriculture, Fisheries & Food (MAFF, 1989) national food survey. Of course, purchases do not equal intake because of wastage and nutrient loss in preparation, and it was necessary to make a (generous) estimate of milk consumption – 1 pint/patient-day.

Overall, the patients purchased food with high energy values (maximum week = 4336 kCals, 18.23 MJ), reflecting excessive amounts of sugar and fats and disproportionately low contributions of protein and starch. Absolute amounts of vitamins, minerals and fibre were often very low. Such purchases are typical of the clinical picture of the 'obese malnourished' frequently encountered in clinical dietetics.

For example, the percentage of energy derived from sugar peaked at 30.1% total kCals (NACNE recommendation = 12%). Fat contributed up to 51.6% of the total energy (NACNE recommendation = 34%, and the average for south-east England is 40%), and protein contributed as little as 7.5% (NACNE recommendation = 11%). Nutrient balance was worst during a week when only three male patients were shopping. At that time, amounts below the RDA were purchased of protein, fibre, iron and certain vitamins (thiamine, riboflavin, B6, C). Very low amounts of zinc (5.6 mg) and folate (98.5 μg) were bought (compared with the US National Academy of Sciences' RDAs). Three kilograms of white sugar were purchased during this week, and frozen chips and baked beans were the only vegetables. No fresh fruit was purchased during the whole four weeks.

The food budget was funded by the hospital catering department on the basis of in-patient food allowances: £12–£18 was the hospital's weekly patient food cost during the study period. Such hospital food costs are based on large-scale contract purchasing at lower prices than retail supplies. The specific purpose of this budget was not clear to the patients, and only £10–£15 was used for food purchases. This was well below the 1988 National Food Survey average values for food (£17.01 for adults, all sources) and below the 1988 values for the poorest 'E2' non-earner sector of society (£15–£36, all sources). Food expenditure is higher in south-east England than the national averages, and figures for inflation in food costs for 1989 were about 7% (unpublished, MAFF). A total of £12–£18 is thus considerably less than the likely food costs of even the poorest section of the local community at that time.

It seems imprudent to set convalescent patients a task at which they are bound to fail. Unrealistic resourcing, inadequate shopping skills, poor knowledge of meal planning and limited cooking skills combined to produce a poor diet and unhealthy eating patterns in these self-catering patients. On completion of this study, the researchers involved presented the findings to the patients. Subsequently the ward gained a full-time occupational therapist who, together with the ward nurses, incorporated budgeting, shopping and cooking into the therapeutic programme. The food budget was reviewed by the managers and additional funds are now available from a non-catering source, given that additional

https://doi.org/10.1192/bjp.157.5.779 Published online by Cambridge University Press