SIR: Had we no further data, we would have agreed and withheld our paper. However, we also presented in Fig. 1 detailed longitudinal data from four patients in whom weight gain was apparently accompanied by no change in aMTs excretion. Furthermore, although our sample of ten patients in Table I was small, it was sufficient to detect statistically significant weight related changes in FSH, LH and oestrogen.

As far as we know, ours is the first such study of melatonin with gonadotrophin secretion in anorexia nervosa and we agree that further studies are needed.

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Elderly Offenders

SIR: I wish to comment on certain areas of the relationship between psychiatric morbidity and criminality in the elderly raised by Taylor & Parrot (*Journal*, March 1988, **152**, 340–346). I dispute the assumption that criminality necessarily decreases with age. There are several reasons why the elderly may show lower figures in findings of guilt (Bergman & Amir, 1973), including a tendency to avoid prosecution by the police, the Courts simply dismissing cases, and families hiding deviance of elderly members.

Other explanations considered are due to age-related changes, but as can be seen there may be important social biases to consider before interpreting criminal statistics. Moberg (1953) cautioned against the interpretation of criminal statistics in the USA several decades ago, as these sources of bias existed and small changes in these small numbers produce large changes in apparent criminal trends. In studying the findings of guilt and cautioning figures for those over 60 in England and Wales between 1970 and 1985 (HMSO, 1970–85) there is a great increase in the use of cautioning in this age-group. This helps explain the apparent fall in findings of guilt in this age group. So, there is weak evidence that a change in attitude of the Criminal Justice system may be occurring – this is one example of how vulnerable such statistics are to such pressures (and different interpretations) (Lynch, 1988). To bring this home, by 1985 in England and Wales, cautioning was as common a disposal for all but the most serious crimes in the elderly (over 60) as Court conviction; and trends from the criminal statistics indicate that the proportion cautioned is increasing.

It is unknown how many elderly offenders never get as far as cautioning; such 'dark crime' is at least three or four times commoner than reported crime in the general population, and may well be higher in the elderly. Other factors are important, e.g. elderly offenders may drift into offences with a lower risk of detection, or authorities may unknowingly 'screen' those with highest psychiatric morbidity prior to reporting the crime in the first place, and dismiss cases.

I would like to make some comments on the representative 'elderly' offences in those over 60, based on retrospective data from Chester and Liverpool Magistrates' Courts between 1970 and 1985 (Lynch, 1988). As in the statistics of England and Wales for 1970–85 the five major offences were drunkenness, theft (90% of which was shoplifting, for both sexes), criminal damage (including arson), violence, and sexual offences (mostly minor).

Few elderly offenders receive psychiatric opinions (1–2%); this is an under-representation of recent estimates of psychiatric morbidity in Liverpool (Copeland *et al*, 1987). Finally, perhaps it would be useful to study the outcome of the large numbers of 'missed' positive psychiatric cases in the elderly offenders not referred for a psychiatric report?

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Psychosis, Body Weight and Plasma Sodium

SIR: Delva & Crammer (*Journal*, February 1988, **152**, 242–245) have made an important contribution to our understanding of water metabolism among chronically psychotic patients subject to water intoxication. In showing a strong correlation (r between -0.65 and -0.99) between changes in plasma sodium and body weight, they have confirmed earlier observations by our group (Vieweg *et al*, 1987*a*)

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($r = -0{\cdot}95$) and Koczapski *et al* (1985) ($r = -0.89$). Also, their observation that weight gain was greatest during the fourth quartile of the day (6 p.m. to 12 midnight) is consistent with our finding that fluid consumption is greatest during that quartile among chronically psychotic polydipsic patients. (Vieweg *et al*, 1986).

We offer another explanation as to why their patient receiving lithium had the poorest correlation between plasma sodium and body weight, since our work (Vieweg, 1987*b*) and that of Goldman *et al* (1988) provide compelling evidence that levels of antidiuretic hormone are inappropriately present among hyponatraemic chronically psychotic patients subject to water intoxication. Also, we have used lithium to promote diuresis in such patients (Vieweg *et al*, 1988*a*).

Sleeper (1935) and we, more recently (Vieweg *et al*, 1988*b*), have emphasised the importance of an empty bladder in assessing water dysregulation among chronically psychotic patients. Such patients, particularly those likely to experience water intoxication, may have residual volumes of up to 3 l of urine. We suspect that Delva & Crammer's patient receiving lithium had varying degrees of urinary retention at the time of weighing which confounded their findings. The data on their other seven patients offer compelling evidence that the haemodilution secondary to antidiuresis explains the relationship between plasma sodium and body weight. Thus, unless they suggest that lithium promotes brisk natriuresis, methodological error must be operative.

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SIR: We agree that the lower correlation between plasma sodium and body weight ($r = -0.65$) in the lithium-treated patient may have been due, at least in part, to variably incomplete bladder emptying. This is one possibility among several; another is that variable amounts of unabsorbed water may have been present in the gut at the time of weighing.

Although the cause of the lower correlation in this patient remains unclear, the problem of incomplete bladder emptying is one that should be taken into account in the design of studies for this group of patients. Incomplete emptying can be prevented by bladder catheterisation, and though this method is used routinely in animal experiments, complications, especially in males, make its use problematic in human subjects. In addition, many chronic psychiatric patients with polydipsia would find this procedure unacceptable. At present, therefore, the simplest way to correct for incomplete urine samples is to measure urinary creatinine excretion and we have used this method in all our recent work.

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The Mind-Body Problem: Another Defect in Training

SIR: Yorke (*Journal*, January 1988, **152**, 159–163) has recently discussed the lack of confidence that assails many psychiatrists as a consequence of their failure to acquire a systematic grasp of psychological theory. Training in this subject is clinical, empirical, and piecemeal, and the result is optimism in the presence of patients we can treat, and helpless amateurishness with the rest, whom we are at a loss to

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