

between the two groups, especially as regards, age, sex, education, occupation or marital status. There is a need for research on biological parameters to further validate the sub-types.

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Quetelet's Index and Appetite and Weight Change in the Context of Depression

Sir: A study of 168 mild to moderately depressed out-patients presenting over a period of six years at St Thomas's Hospital, London, and involved in a series of antidepressant trials, showed that factors linked to appetite and weight change were previous appetite and weight history. Patients gaining appetite and weight with depression had a previous history of overeating in response to the normal stresses and strains of everyday life, and of variable weight history (Harris *et al.*, 1984a). With recovery after six weeks' treatment, these patients tended to lose appetite and weight (Harris *et al.*, 1984b). A possible explanation for this is to be found in the concept of restraint. According to Polivy & Herman (1976) restraint is characterised by preoccupation with the caloric values of food, dieting, and guilt feeling on diet-breaking. It is high in obese and latently obese subjects, and in normal or even under-weight individuals who respond to societal pressure to be slimmer and run below their "set-points" of body weight. They hypothesised that with anxiety and depression such individuals lose restraint, and there is increase in food intake and weight. Obviously, in large populations of depressives, there will be overlap with factors linked to obesity, and the further question arises as to whether or not it is the fatter patients (i.e., fat relative to height, not fat relative to pre-episode weight), who gain appetite and weight with depression and then lose appetite and weight with recovery. To examine this, we looked at subjects in terms of Quetelet's Index (QI) $\text{Weight}/\text{Height}^2$ (Quetelet, 1869). QI has recently been validated as a convenient formula and reliable indicator of obesity (Garrow & Webster, 1985): 20–24.9 representing

desirable weight, 25–30 mild overweight, and over 30 being clinically relevant.

The method of the study has been reported elsewhere (Harris *et al.*, 1984a). At presentation, height and weight were measured, and after six weeks' treatment, patients were weighed again. QI was calculated in terms of the patient's stated normal weight. Appetite was scored at presentation and at six weeks, relative to patient's own norm. Standard statistical methods were used, including the unpaired t-test and the product-moment correlation coefficient.

Appetite and QI. At presentation, appetite was more often reduced than increased, and the relative appetite was positively correlated with QI ($r=0.15$ $0.05 < P < 0.1$). After six weeks' treatment this was reversed and there was a negative association between appetite and QI ($r=-0.18$ $P < 0.05$). The patients were also divided according to appetite into groups with marked increase, moderate change and marked decrease. These groups were delineated by boundaries approximately one standard deviation either side of the mean. If delineation was by initial appetite, the differences between groups were not significant. When groups defined by appetite at six weeks were examined, subjects whose appetite was severely decreased were significantly fatter (QI mean 28.2) in comparison with those who had both marked increase and moderate change ($P < 0.01$). When projected back to what they were at presentation, the same group had had relatively high appetite.

Weight and QI. Weight at presentation showed no significant associations with QI. Patients were also divided into three groups: those with marked increase in weight (109% of their normal weight), those with moderate change (95 to 109% of normal), and those with marked decrease in weight (95% of normal weight). These groups were delineated by one standard deviation beyond the mean (102%). There were no significant differences at presentation but at six weeks the group currently less than 95% of customary body weight had a higher mean customary QI of 25.8 ($P < 0.05$).

A number of practical implications result from our findings concerning QI. First, there is a tendency for fatter individuals to increase appetite with depression. Therefore, identification and management of depressive mood changes is an important factor in the management of obesity. Secondly, the question arises as to whether or not further weight gain will occur with antidepressant treatment, e.g., due to tricyclic-induced carbohydrate craving. Our findings indicate that in the short term this is not the case, but that loss of appetite occurs, probably due to regain of control. It might be possible, therefore, to use a first line antidepressant drug such as a tricyclic

for a short period without producing further appetite and weight gain.

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Smoking in Chronic Schizophrenia

Sir: While studying obesity in our patients (Gopaldaswamy & Morgan, 1985) we asked them about their smoking habits and 100 men and 70 women replied: 123 of them had chronic schizophrenia, most were in their 50's and 60's with many years of illness behind them, 82% had never been married, and the majority were working class.

Smoking was more prevalent among the men ($P < 0.05$) and among the schizophrenic patients ($P < 0.001$): 87% of the men and 74% of the women schizophrenic patients smoked, compared with 60% and 58% respectively among the non-schizophrenic patients. These differences within the patient sample were trivial compared with the significant differences among the patients (83% of all men and 67% of all women smoked) and among the general population, of whom 36% of men and 32% women are known to smoke.

The proportion of smokers in the general population falls year by year in response to anti-smoking propaganda which most patients choose not to heed. This is very understandable. There may be few pleasures left in life for a person with chronic schizophrenia and smoking may be one of them. Indeed, for the schizophrenic it may be even more pleasurable than for a healthy person. Nicotine in large doses depresses a person's level of arousal. Schizophrenics suffer from heightened arousal and for them a packet of cigarettes represents a way of suppressing the discomfort of hyper-arousal which they may find more acceptable and effective than the major tranquillisers which we prescribe for them.

Our findings match quite closely those of Masterson & O'Shea (1984) who reported smoking by 92% of their male and 82% of their female schizophrenics. Rice (1979) questioned how heavily his schizophrenic patients smoked and whether they ever developed lung cancer. The proportion of patients with schizophrenia who die of lung cancer is surprisingly no higher, and may even be slightly lower, than in the general population—when it seems that it ought to be double or treble (O'Shea, 1984 Craig & Lin, 1981). This suggests either that people with schizophrenia enjoy partial protection against developing lung cancer or that cigarette smoking is not such an important aetiological factor as is thought. Either way the subject requires fuller investigation.

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Psychotherapy in the Third Reich

Sir: Henry Rollin (*Journal*, March 1986, 148, 345-346) reminds us that the ghost of Hitler still stalks the world. I am reminded of an anecdote told by the late Willie Mayer-Gross, himself a victim of Nazi oppression, about the high esteem in which Hitler was held by some psychiatrists. A German research fellow working at the Maudsley came to see Mapother after the Reichstag fire and the plebiscite in 1982. He wanted to discontinue his fellowship and return to the Fatherland. "If 92% of the German people have voted for Hitler, he must be a great man". Mapother replied: "I am of Irish stock, if 92% of the Irish would vote for one man I would be certain that he is worthless".

Mayer-Gross' own researches into the fate of neurotics under the Third Reich confirmed the patho-plastic influence of culture on the manifestations of neuroses. Comparatively few German servicemen were shot for "lack of moral fibre"; neurotic anxiety and depression were somatised, generally taking the