When contacted, the manufacturers (Bostik) reported that *Blu-Tack*'s constituents could give rise to glaucoma, lung damage and ultimately death if abused. In order to determine the constituents responsible for any psychotropic effect and clarify the nature of any potential toxicity, we requested an analysis of *Blu-Tack* residue from the Department of Chemistry at the University of Edinburgh. Electron ionisation mass spectrometry was unhelpful, but useful results were obtained from pyrolysis of a dried sample followed by gas chromatography separation and further mass spectrometry. A complex mixture of hydrocarbons was revealed, whose principal constituents included butene, heptadiene, propene, pentene and hexadiene. It may therefore be presumed that *Blu-Tack* smoking has attractions and risks similar to those of inhaling lighter gas, a common and well-documented phenomenon.

Blu-Tack is fairly readily available via art groups, noticeboards and wall posters even in a locked ward setting. In view of the above findings and the consequent possibility of serious risk to the physical and mental health of those attempting this activity, we wish to draw attention to it as a novel substance of abuse.

We wish to thank Professor John Monaghan (Department of Chemistry, The University of Edinburgh) for his helpful advice, and Mr W. E. Morden (I.C.I.C. & P. Ltd, Runcorn Heath, Cheshire) for performing the analysis.

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Scale for assessing hedonic tone

SIR: Snaith *et al* (1995) have developed a new pleasure scale (the Snaith Hamilton Pleasure Scale, SHAPS) corresponding to the need for a simple scale, not affected by socio-demographical factors and allowing an easy translation in other languages. They criticised the existing pleasure scales (Fawcett Clark Pleasure Capacity Scale or FCPCS; Chapman's scales) that are too long and presented cultural bias. Indeed several studies (Loas *et al*, 1992) have shown a weak discriminant validity of the FCPCS in other cultures mainly due to differences in cultural backgrounds and in socio-economic levels. Consequently we have built up (Loas *et al*, 1994) a shortened version of the FCPCS containing 12 items assessing only sensorial and physical features of pleasure. These items can be considered as being less sensitive to cultural biases.

In two studies including both healthy subjects (n=314) and patients with major depressive disorder (n=103) we demonstrated that the subscale (FCPCS-PP) has good construct and discriminant validities and a satisfactory reliability (Loas *et al*, 1994, 1995).

LOAS, G., SALINAS, E., GUELFI, J. D., *et al* (1992) Physical anhedonia in major depressive disorder. *Journal of Affective Disorders*, **25**, 139–146.
—, —, PIERSON, A., *et al* (1994) Anhedonia and blunted affect in major depressive disorder. *Comprehensive Psychiatry*, **35**, 366–372.
—, BOYER, P., FREMAUX, D., *et al* (1995) The physical pleasure–displeasure scale (P-PDS): Study of validation on 295 subjects. *European Review of Applied Psychology*, in press.
SNAITH, R. P., HAMILTON, M., MORLEY, S., *et al* (1995) A scale for the assessment of hedonic tone. The Snaith-Hamilton Pleasure Scale. *British Journal of Psychiatry*, **167**, 99–103.

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Neuroleptic associated extrapyramidal symptoms

SIR: It is generally agreed that, according to the dopamine hypothesis, the antipsychotic effect of neuroleptics is mediated by blockade of mesolimbic or mesocortical D_2 dopamine receptors whereas the mechanism by which neuroleptic drugs cause extrapyramidal side-effects is not yet entirely understood. It has recently been established that Parkinson's disease, which is clinically similar to neuroleptic-induced parkinsonism, is associated with oxidative damage due to mitochondrial dysfunction (Schapira, 1994). A defect of complex I of the mitochondrial respiratory chain has been reported in platelets, muscle and brain tissue of patients with Parkinson's disease. MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) which may cause Parkinson's disease, inhibits complex I of the respiratory chain. It is a substrate for the dopamine reuptake pathway and is concentrated into mitochondria. It seemed therefore possible that neuroleptics might cause extrapyramidal side effects via a similar mechanism to that of MPTP, especially since haloperidol is structurally similar to MPTP and may be converted to a haloperidol pyridinium product analogous to MPP^+. Further evidence was derived from studies in rats which showed that neuroleptics block complex I of the respiratory chain *in vitro* (Burkhardt *et al*, 1993). We therefore