

Correspondence

Cyclamates

SIR,—Your leading article "The Cyclamate Bandwagon" (*Nature*, **224**, 298; 1969) claims that "health authorities in Sweden . . . were clamouring for a ban on cyclamates within 72 hours of Mr Finch's announcement. . . . Unless these organizations were better informed than their counterparts in Britain, they possessed no further evidence against cyclamate than what had already been published in the literature". I would like to make some clarification on these points.

Cyclamates were included among permitted food additives in Sweden in 1953, and their use has increased progressively. From January 1969, however, maximal level in drinks was set at 0.1 per cent in an effort to keep intake at reasonably low levels, and limits for cyclamate in other foods had been decided for 1970.

The US ban on cyclamates was announced on Saturday, October 18, and detailed statements by secretary Finch and deputy assistant secretary Steinfeld were made available.

It was evident from these statements that a 10:1 cyclamate-saccharin mixture had been given orally to rats for two years and produced malignant tumours in the urinary bladder in the high-dosage group. The slides had been reviewed by three experts in experimental pathology and experimental carcinogenesis at the National Cancer Institute and by one expert on bladder tumours. The full data had been reviewed by the National Academy of Sciences National Research Council Ad Hoc Subcommittee reviewing cyclamate safety.

In his statement, Dr Finch referred to the Delaney Amendment of 1958 which states that any food additive must be removed from the market if it has been shown to cause cancer when fed to humans or animals. The World Health Organization in one of its technical reports (techn. rep. ser. No. 220, *Evaluation of the Carcinogenic Hazards of Food Additives*, fifth report of the Joint FAO/WHO Expert Committee on Food Additives, 1961) gives recommendations in the same line.

On the basis of the above information it was predicted that cyclamate would not be accepted as a food additive in the future in Sweden. Under those circumstances the food industry decided to follow the US timetable of withdrawing cyclamate-containing beverages and food from the market.

Original data from the rat experiments were obtained later in the week from the Abbott Laboratories and were reviewed at the National Institute of Public Health. The Board of Commerce then, at a meeting with the health authorities on October 28, formally decided to delete cyclamate from the list of approved food additives, effective January 1, 1970. This decision does not affect the possible residual occurrence of cyclamate-containing foods on the market up to February 1970. (Most cyclamate-containing foods have already been withdrawn from the market.) The Swedish Diabetes Society has declared that there is no need to make any exceptions for diabetics, and therefore no exception will be made.

It may also be noted that the official ban on cyclamates was decided five days later in Sweden than in the United Kingdom (Ministry of Agriculture, Fisheries and Food, October 23, 1969).

The Swedish health authorities agree with the US and UK health authorities that there is no evidence whatsoever that cyclamates have caused cancer in humans. On the other hand, we see no reason to prolong the exposure of human beings to a food additive proven carcinogenic,

because it may take decades to detect the carcinogenic properties in man^{1,2}.

Yours faithfully,

FREDRIK BERGLUND

National Institute of Public Health,
Stockholm, Sweden.

¹ Hultengren, N., Lagergren, C., and Ljungqvist, A., *Acta Chir. Scand.*, **130**, 314 (1965).

² Angervall, L., Bengtsson, U., Zetterlund, C. G., and Zsigmond, M., *Brit. J. Urol.*, **41**, 480 (1969).

Diagnosis of Tay-Sachs

SIR,—Since we published our work on the absence of hexosaminidase A in nine patients with Tay-Sachs disease (*Science*, **165**, 698; 1969), we have examined serum, fibroblasts, or tissues from fourteen additional patients; all demonstrate the absence of hexosaminidase A. We take issue with your correspondent's statement (*Nature*, **224**, 113; 1969) that our "neat picture of a missing degradative enzyme in Tay-Sachs disease is unfortunately upset by a patient in Sandhoff's investigation", a patient with Tay-Sachs disease who did not lack hexosaminidase A. The score now stands at 25 patients lacking this enzyme against Sandhoff's patient. It is logical to suspect a misdiagnosis in the latter case, rather than shroud the subject with mystery.

Yours faithfully,

JOHN S. O'BRIEN

University of California, San Diego,
Department of Neurosciences,
School of Medicine,
La Jolla, California.

Informational DNA

SIR,—Reductionism scores one point when Professor E. Bell, presenting his results on informational DNA (*Nature*, **224**, 326; 1969), omits to mention the animal species from which his 13 day embryonic muscle tissue was obtained.

Yours faithfully,

GIORGIO GABELLA

Department of Anatomy,
University of Turin.

University News

Dr R. M. Dixon, University of Sheffield, has been appointed to the chair of theoretical chemistry at the **University of Bristol**, in succession to Professor A. D. Buckingham.

Professor J. M. Ziman has been appointed to the Melville Wills chair of physics at the **University of Bristol**.

Dr W. L. Edge has been appointed to a personal chair in mathematics (geometry) at the **University of Edinburgh**.

Dr J. F. Wilkinson has been appointed to a personal chair in microbiology in the department of agriculture, **University of Edinburgh**.

Dr W. Parker, New University of Ulster, has been appointed to the new chair of organic chemistry at the **University of Stirling**.

Announcements

The **Medical Research Council's Laboratory Animals Centre** has appointed **Dr G. Clough**, an environmental physiologist, to be responsible for the determination of the optimum environmental requirements for laboratory animals. Enquiries and information concerning environmental problems, animal house and cage design, should