Pyorala *et al*⁴ suggested the possibility that this decreased anticoagulant tolerance was not due to a retardation of the metabolism of the anticoagulant drugs. Their results suggested that C₁₇-alkylated steroids affect the turnover of vitamin-K-dependent clotting factors, an impairment of synthesis being a likely mechanism. It was thought possible that C₁₇-alkylated steroids might diminish the stores of this vitamin available for metabolic competition with anticoagulant agents.

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¹ Dresdale, F C, and Hayes, J C, *Journal of the Medical Society of New Jersey*, 1967, **64**, 609.

² Pyorala, K, and Kekki, M, *Lancet*, 1963, **2**, 360.

³ Murakami, M, *et al*, *Japanese Circulation Journal*, 1965, **29**, 243.

⁴ Pyorala, K, Myllylä, G, and Kekki, M, *Annales Medicinæ Experimentalis Fenniae*, 1965, **43**, 95.

Tuberculosis among immigrants in Glasgow

SIR,—We take your correspondents' point on the subject of tuberculosis notifications (Dr W Ducat and his colleagues (21 May, p 1346)). We did not in fact have the figures for the immigrant children population in Glasgow and were more concerned to discover the actual number of cases in the two schools selected for this investigation.

As far as the incidence of BCG vaccination is concerned, this was determined by questioning the parents and by observing the BCG scars on the children's arms. This is presumably a matter either of sampling or perhaps the accuracy of central records. On the question of overcrowding we should perhaps have made it clear that the figures for the number of people per room were obtained by health visitors who visited each home and questioned the householders. We have no hesitation in accepting their findings in preference to census reports for the whole of Glasgow in 1971.¹

Finally, we were very concerned to think that our survey would give the impression that the incidence of tuberculosis no longer warranted further action in Glasgow. It is indeed difficult to see how the finding of the same incidence or primary tuberculosis in Scottish as in Asian children and three times as many in Chinese children could give rise to such an idea. We yield to no one in our desire for an intensive and concerted effort to eradicate tuberculosis from Glasgow. Indeed we consider such a project considerably overdue.

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¹ Registrar General, *Scotland 1971 Census*. Edinburgh, HMSO.

Diet and coronary heart disease

SIR,—As chairman of the committee which organised the Bromley Area Health Authority campaign I feel I must reply to Sir John McMichael's letter (4 June, p 1467). The leaflet we produced contained only advice given by the Joint Working Party of the Royal

College of Physicians and the British Cardiac Society. It was written by a senior dietitian with great experience in the paediatric field. Apart from advice aimed at reducing the total family fat intake it dealt with many other aspects of diet such as reducing sugar and spending the family food budget more wisely. The leaflet was only given to mothers by health visitors after discussion, and I strongly resent the statement that it could be a cruel and terrifying imposition.

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Risk of coronary heart disease in different populations

SIR,—We were greatly interested in the recent contribution by Dr T Khosla and others (5 February, p 341) on attempts to measure the risk of developing coronary heart disease (CHD). In South Africa we live in juxtaposition with populations having contrasting pronenesses to CHD. Accordingly, we have wondered to what extent the variables cited by the above workers (age, serum cholesterol, blood pressure, tobacco usage) have different connotations of risk in different populations.

In their comparisons of CHD incidence and mortality rates in the United States and countries in Europe Keys *et al*¹ stated: "Rules for clinical judgments and ECG criteria and the details of the examinations and their spacing were identical, yet the US men had an incidence rate of hard CHD roughly double that of European men of the same age, blood pressure, serum cholesterol and smoking habit. Even consideration of relative body weight and of physical activity does not change the discrepancy. The conclusion seems inescapable that the incidence of CHD is strongly influenced by one or more variables unrelated to any considered in these studies." In the study on CHD in seven countries,² in the case of Greece the observed CHD mortality rate was only 30% of the expected rate.

The CHD position in Third World countries is especially interesting. In India CHD is reported to be common in large centres of population. The great majority of patients are under 60 years³; moreover, their serum cholesterol levels are low.⁴ It would therefore seem that in Indians the factors of age and cholesterol level have noxious significance greater than those obtaining in Western populations.

Among South African Blacks in big urban centres, for example, Johannesburg, all orthodox CHD risk factors are present in large proportions of adults.⁵ Actually, prevalence of hypertension is much higher than that prevailing in local Whites. Yet CHD is extremely uncommon in urban Blacks. In 1976 there were only 14 deaths from CHD at Baragwanath Hospital, which draws patients from a surrounding population of over a million. Obviously these people suffer far less from CHD than would be predicted from known prevalences and intensities of risk factors.

It is interesting that regarding another variable, serum α_2 globulin, it has been reported that CHD patients in Western countries have significantly higher values than controls.⁶ Yet we found mean values for elderly rural South African Blacks, among whom CHD is virtually absent, to be significantly higher (for a variety of reasons) than values on White CHD patients.⁷

Thus the risk factors mentioned either have different connotations in different populations, or influential factors, whose identity is not known, are in operation which either favour or inhibit CHD development.

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¹ Keys, A, *et al*, *Circulation*, 1972, **45**, 815.

² Coronary Heart Disease in Seven Countries, *Circulation*, 1970, **Suppl 41**, No 1, 186.

³ Lal, H B, and Caroli, R K, *Indian Heart Journal*, 1967, **19**, 12.

⁴ Banerjee, J C, and Mukherjee, S K, *Indian Heart Journal*, 1970, **22**, 288.

⁵ Walker, A R P, *American Heart Journal*, 1975, **89**, 133.

⁶ Ducimetiere, P, Warnet, J M, and Richard, J L, *Journal of Chronic Diseases*, 1976, **29**, 423.

⁷ Walker, A R P, and Walker, B F, submitted for publication.

Hazards of the sauna

SIR,—Dr Sandra Dean and others give a report (4 June, p 1449) relating to the hazards of the sauna in which it was stated that the temperature of 43°C was that of the average sauna bath. This is somewhat on the low side as the usual range of temperature of the sauna room is 80° to 100°C. A novice bather should be able to tolerate a sauna temperature of around 80°, though an experienced bather can tolerate 100°C. The usual period of time exposed to those temperatures is some 10 to 15 minutes, however, and not the five hours quoted in the paper, admittedly at an apparently lower temperature.

I speak with some experience as a sauna was installed in our new surgery during construction, and I consider it one of the finest investments we ever made.

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Suppression of intractable cough

SIR,—The suppression of intractable cough without impairment of other body functions and faculties is a desirable objective rarely achieved by the commonly used cough suppressants. Three patients under our care have been so relieved with lignocaine aerosol (28 May, p 1374).¹

One patient with a rapidly progressing oat cell carcinoma of the lung with considerable mediastinal involvement suffered uncontrollable distressing cough by day and night. This cough, which was distressing not only to himself but to the whole family, was almost completely relieved after two lignocaine aerosol treatments. He subsequently died peacefully without further medication. The second patient had an alveolar cell carcinoma of four years' standing. Her increasing breathlessness was greatly aggravated by constant cough causing retching and vomiting. After two treatments five days apart her condition was greatly improved and the cough was suppressed. It has, however, been found necessary to repeat these inhalations at varying intervals during two months. By this means her life has been made tolerable. A third patient with bronchial carcinoma developed a distressing