Coronary heart disease in Indians, Pakistanis, and Bangladeshis: aetiology and possibilities for prevention

Sir—I enjoyed McKeigue's editorial1 and agree that a reduction in the risk of coronary heart disease in South Asians is likely to require different strategies from those recommended for the general population in the United Kingdom. I do not, however, agree that the basis for advising South Asian communities to reduce saturated fat intake on a mass scale so as to lower average plasma cholesterol is open to question. It is possible that nutritional adaptation to dietary intake resistant to weight loss and weight loss by race as from community to community for the same race. It may also vary depending upon the diet and lifestyle factors. It seems that obesity, which is due to intake of energy and decreased physical activity,2 is the most significant consequence of nutritional adaptation. It is beneficial to enhance physical training to decrease obesity and help to prevent coronary disease but exercise may not work unless saturated fat and cholesterol intake are decreased. Similarly, it may be difficult to achieve weight loss unless energy intake as fat is also reduced. Reducing energy intake by decreasing carbohydrate and protein intake may not provide the desired benefit.

Secondly, it seems to be a mistake to compare dietary intakes of South Asian migrants with national average intakes in the United Kingdom because diet and lifestyle changes in Indians are of a more recent origin than in Britons.4 Whereas native Britons may have adapted to these changes, South Asians may have maladapted because of poor living conditions in childhood followed by affluence.5 It seems justifiable to compare the dietary intakes of migrants with those of Indian natives. Apart from slightly higher intake of energy (2140 ± 2415 kcal), Indian migrants to the United Kingdom also consume significantly more total fat per day (256 ± 38-8% kcal) and less carbohydrate (61 ± 48-6% kcal) than native Indians.6 Perhaps Indians in the United Kingdom also take more refined carbohydrates and processed snacks in between meals than native Indians (table). This would enhance fasting postprandial hyperinsulinaemia and hyperglycaemia which are both atherogenic.7 An increased intake of fruits, vegetables, and legumes decreases fasting and postprandial hyperinsulinaemia and hyperglycaemia as well as reducing the intake of foods rich in energy, saturated fat, and cholesterol and provides the soluble dietary fibre and antioxidant vitamins and minerals that are protective against the development of coronary heart disease.8 Because coronary heart disease is a multifactorial problem,9 the efficacy of weight loss and physical training alone is likely to be as disappointing as stopping patients from overconsumption of carbohydrates. I suggest an increased consumption of fruits, vegetables, and legumes in their package of weight loss and physical activity for prevention of coronary disease in South Asians which we have found useful in our patients.10

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