an interesting way of clarifying the current debate on whether the notified bodies' role is only to serve manufacturers or also to take into account public health concerns.[3] Organisations such as the new register could improve the work done by the notified bodies. But to be consistent with the European Union directives this improvement should be carried out at the European level because all the member states, being considered as a single market, need the same safety requirement.

Secondly, in addition to evaluating safety it is necessary to assess the effectiveness and cost effectiveness of the new technologies, which, as Sheldon and Faulkner point out, is not the role of the new register. Even though international collaboration can be useful in such evaluations, health policy in each country has to be taken into account, and thus such evaluation should be performed at the state level.

In terms of regulating the new technology, the debate on how to avoid confusion between these two challenges needs to be clarified.

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1 Sheldon TA, Faulkner A. Vetting new technologies. *BMJ* 1996;313:508. (31 August.)
2 Altenstetter C. Regulating healthcare technologies and medical supplies in the European Economic Area. *Health Pol* 1996;35:33-52.
3 Bradbury J. France extends moratorium on breast implants. *Lancet* 1996;347:1543.

Ratio of waist circumference to height is better predictor of death than body mass index

EDITOR,—The ratio of waist circumference to height has been shown to be a stronger predictor of intra-abdominal fat than the body mass index,[1] and this must partly explain why this ratio showed a stronger association with cardiovascular risk than did body mass index in a cross sectional study.[2] Height, weight, and waist and hip circumference were measured in the 1984-5 health and lifestyle survey of a nationwide random stratified sample of British adults.[3] All participants in the survey were flagged on the central health service register, and the survey was notified when death occurred and was sent copies of the death certificates with appropriate coding (*International Classification of Disease*, ninth revision).

Fifths of the distribution of anthropometric variables were calculated for the 3321 men and 4093 women, aged 18-97, whose measurements were valid. Figure 1 shows the 10 year all cause mortality and cardiovascular mortality by fifth for each variable for the 1158 men and 1460 women who were aged 40-64 at the time of the survey. No consistent trend was observed for body mass index, but there was a linear trend with the ratio of waist circumference to height for both all cause mortality and cardiovascular mortality in women and for cardiovascular mortality in men.

Logistic regression analysis was also carried out, with adjustment for age and smoking, in the 2184 men and 2730 women aged 30-79. This showed that body mass index did not significantly predict death from all causes or cardiovascular death whereas the ratio of waist circumference to height was a significant predictor ($P<0.01$) of both death from all causes and cardiovascular death in women and of cardiovascular death in men. Omission of people who died within four years of the survey or with pre-existing disease did not significantly alter the trends. The ratio of waist circumference to hip circumference was a predictor of similar value, but waist circumference alone, although being as good a predictor of death in women, was not as good at predicting cardiovascular death in men. Previous reports that waist circumference alone can predict cardiovascular disease have been made on the basis of cross sectional rather than prospective data.[4 5]

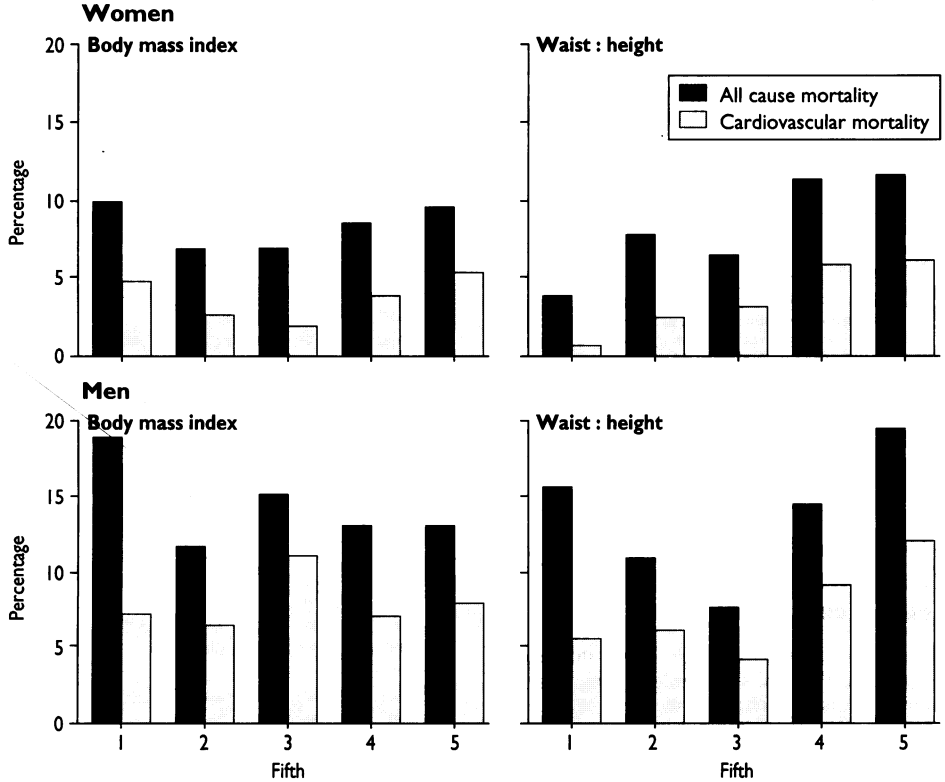

Fig 1—*Ten year all cause mortality and cardiovascular mortality in 40-64 year old British adults by fifths of body mass index and ratio of waist circumference to height*

This prospective study therefore supports the proposal[2] that the ratio of waist circumference to height should be used in a public health context because, unlike the ratio of waist circumference to hip circumference, it is an appropriate measure of the reduction in risk as well as of the risk itself.

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1 Ashwell MA, Cole TJ, Dixon AK. Ratio of waist circumference to height is strong predictor of intra-abdominal fat. *BMJ* 1996;313:559-60. (31 August.)
2 Ashwell MA, LeJeune SRE, McPherson K. Ratio of waist circumference to height may be a better indicator of need for weight management. *BMJ* 1996;312:377.
3 Cox BD, Blaxter M, Buckle ALJ, Fenner NP, Golding JF, Gore M, *et al. The health and lifestyle survey.* London: Health Promotion Research Trust, 1987.
4 Hans TS, Lean MEJ, Seidell JC. Waist circumference remains useful predictor of coronary heart disease. *BMJ* 1996;312:1227-8.
5 Hans TS, van Leer EM, Seidell JC, Lean MEJ. Waist circumference action levels in the identification of cardiovascular risk factor: prevalence study in a random sample. *BMJ* 1995;311:1401-5.

Consensus statement on management of hypothyroidism and hyperthyroidism

Long term treatment is not safe in elderly patients with toxic nodular hyperthyroidism

EDITOR,—According to the consensus statement for good practice and audit measures in the management of hypothyroidism and hyperthyroidism, "long term treatment with 5-10 mg carbimazole seems to be safe and is an option for patients with relapsed Graves' disease or toxic nodular hyperthyroidism."[1] We have analysed the data for 28 patients aged over 60 with toxic nodular hyperthyroidism receiving long term treatment with methimazole (starting dose 3-30 mg (median 10 mg); maintenance dose 2.5-15 mg (5 mg)). The patients were treated for 6-240 months (23.5 months). During treatment 18 relapses occurred in 14 patients (five relapses of clinical hyperthyroidism and 13 of subclinical hyperthyroidism). Neither the starting dose nor the time until the patients became euthyroid predicted relapse. In most cases (nine patients) the relapse was explained by poor compliance: the patients stopped taking the drug or did not take it regularly. In three cases iatrogenic hypothyroidism occurred.

On the basis of these data we think that long term thyrostatic treatment of toxic nodular hyperthyroidism with methimazole (and probably also with carbimazole, which is not used in Hungary) is not safe in elderly patients. Radioiodine treatment, which is recommended by the consensus statement particularly for elderly people, should be the first choice.

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1 Vanderpump MJP, Ahlquist JAO, Franklyn JA, Clayton RN. Consensus statement for good practice and audit measures in the management of hypothyroidism and hyperthyroidism. *BMJ* 1996;313:539-44. (31 August.)