

glucose or insulin concentrations, or  $HbA_{1c}$ , but insulin-stimulated glucose disposal increased from 5.7 to 6.3 mg/kg per min. This increase differed significantly from a change from 6.4 to 5.7 mg/kg per min after diuretic therapy.

The notion that ACE inhibitors might improve insulin sensitivity is also based in part on the assumption that angiotensin II has diabetogenic effects on peripheral tissues, in much the same way as other counter-regulatory hormones such as catecholamines.<sup>3</sup> However, data from our group and others have shown (contrary to the starting hypothesis) that angiotensin II increases insulin sensitivity in both diabetic and non-diabetic subjects.<sup>4,5</sup> Although Herings and colleagues' retrospective data are worthy of further investigation, their conclusions are a potential source of anxiety to patients and will be of concern to physicians. We suggest that this report should be interpreted with caution so that the established benefits of ACE inhibitors in diabetic patients with heart failure, hypertension, and microalbuminuria are not compromised. The evidence that ACE inhibitors have clinically relevant metabolic effects is at best inconclusive, and a proper placebo-controlled study (rather than diuretic comparisons) to support the hypothesis that ACE inhibitors enhance insulin-mediated glucose disposal is urgently needed.

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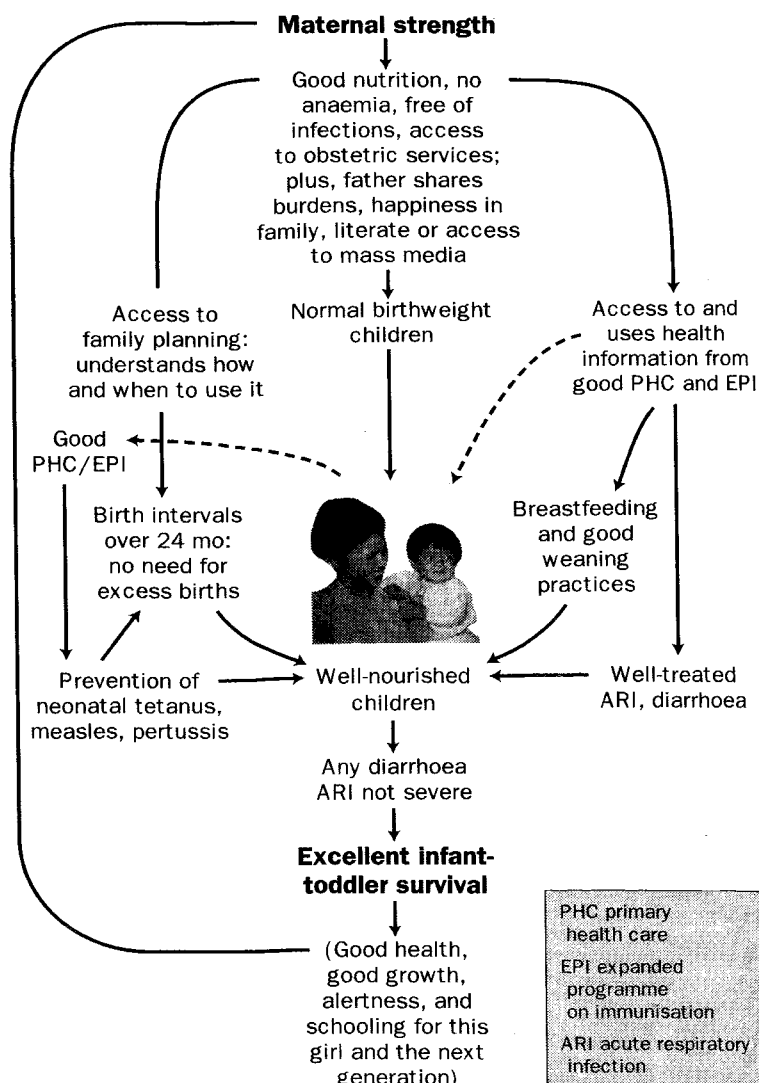
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- 1 Donnelly R. Angiotensin-converting enzyme inhibitors and insulin sensitivity: metabolic effects in hypertension, diabetes, and heart failure. *J Cardiovasc Pharmacol* 1992; **20** (suppl 11): S38-44.
- 2 Pollare T, Lithell H, Berne C. A comparison of the effects of hydrochlorothiazide and captopril on glucose and lipid metabolism in patients with hypertension. *N Engl J Med* 1989; **321**: 868-73.
- 3 Deibert DC, DeFronzo R. Epinephrine-induced insulin resistance in man. *J Clin Invest* 1980; **65**: 717-21.
- 4 Morris AD, Petrie JR, Ueda S, et al. Pressor and subpressor doses of angiotensin II increase insulin sensitivity in NIDDM. *Diabetes* 1994; **43**: 1445-49.
- 5 Buchanan TA, Thawani H, Kade W, et al. ANG II increases glucose utilisation during acute hyperinsulinaemia via a haemodynamic mechanism. *J Clin Invest* 1993; **92**: 720-26.

## Maternal and child health, while standing on one leg

SIR—With some bravado I announced to my students that the essentials of maternal and child health could be summarised in one diagram; they dared me to try. The figure here presented is the result, and it contains input from the students.

Several conclusions emerge from the illustration. First, maternal and child health is generational—the mother is a past child and the child is a future parent. Second, the time is always now for interventions; opportunities lost are hard to recover. Third, maternal and child health is at least as much social and psychological as medical—and nutrition is the probable point of confluence. Finally, because no weights have been assigned to any of the elements of health, the diagram suggests that one can enter at any point to help secure a mother's and child's health and complement other interventions. The diagram is also a subtle rejoinder to Maurice King's doubts about child survival interventions.<sup>1</sup> Even in the worst-off countries at least 70% of children survive to age 5;<sup>2</sup> the survivors, however, are weakened for life. With maternal and child health our choice is not



between more or fewer children but between more sickly survivors and more, but healthier, families.

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- 1 King M. Health is a sustainable state. *Lancet* 1994; **336**: 664.
- 2 The state of the world's children. New York: UNICEF, 1995: 66.

## Professor Corneel Heymans

SIR—Belgium is a complicated little country. Foreigners have problems understanding it and Belgians frequently wonder why some of them even try. Renée Fox has been trying for many years, inside and outside châteaux. Still, either she, or Donald Light, the reviewer of her latest book (July 22, p 235), or both of them, are wrong about Prof Corneel Heymans (1892 to 1968). He indeed was a Nobel laureate for physiology (1938). However, he did not work at Louvain University. He was a graduate from, and later a professor at, the State University of Ghent in Belgium, as one can find in the New Encyclopaedia Britannica. Although he taught pharmacology, he was a physiologist. As to the University of Louvain, it has been for some 550 years in Louvain, if you forget about some years in Mechlin. Now it has a new campus in Ottignies, except for its medical school; that is in Woluwe. Yet, the city of Louvain's official name is Leuven, which is Dutch. It is Löwen in German, Louvain in French, and Lovanium in Latin. So, Leuven University is still in Leuven and, as Fox knows since she visited it, Lovanium University, now l'Université de Kinshasa, is in Zaire. There are no châteaux there.

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