



Martin Silink is President of the International Diabetes Federation (IDF) and a Professor of Paediatric Endocrinology at the University of Sydney and The Children's Hospital at Westmead in Sydney. He is also Chair of the IDF Child Sponsorship Program, and led the successful Unite for Diabetes campaign that resulted in the passage of the UN World Diabetes Day Resolution in December 2006. His main research interests are diabetes complications in the young and the changing patterns of diabetes in childhood and adolescence. Professor Silink was Chairman of the IDF Western Pacific Childhood Diabcare 2001 and 2003 projects, which were international collaborative audits of the health of children and adolescents with type 1 and type 2 diabetes.

The benefits of preventing 7 million more people from developing diabetes worldwide annually and preventing complications in the 246 million people with diabetes would be immense.¹ Even though the 2000–2015 UN Millennium Development Goals do not contain any reference to the impact of non-communicable diseases, the UN General Assembly in 2006 adopted UN Resolution 61/225, which recognised that “diabetes is a chronic, debilitating and costly disease associated with severe complications, which poses severe risks for families, Member States and the entire world and serious challenges to the achievement of internationally agreed development goals, including the Millennium Development Goals”. In 2008, the World Health Assembly endorsed the Action Plan to achieve the recommendations of the 2004 World Health Assembly Resolution 57/17 (‘Global Strategy on Diet, Physical Activity and Health’). However, despite this, international funding for global action on non-communicable diseases remains very low.

Diabetes prevention strategies are directed at the individual or more generally at the population. In countries with well-developed healthcare systems, the emphasis has been on identifying individuals at risk by using self-applied health risk score instruments. Those at high risk of developing diabetes and cardiovascular disease would be encouraged to visit their doctor for assessment, given dietary and lifestyle modification advice and, if needed, prescribed medication such as metformin, aspirin and treatment for hypertension and lipid elevation.² Those with resistant morbid obesity could be considered for bariatric surgery. However, low- and middle-income countries are largely unable to fund strategies focusing on individual risk factors and individual treatments.

Population-based methods are more cost-effective, but much research is needed to optimise public health strategies to promote healthy eating and physical activity, breastfeeding, school sport and eating programmes, tobacco reduction, government controls over inappropriate advertising, urban design and transport. In addition, whole-of-government strategies will need to address the social gradients in health within countries marked by “the unequal distribution of power, income, goods, and services”, as outlined in the 2008 report of the World Health Organization Commission on Social Determinants of Health.³

For the secondary prevention of diabetic complications, the World Bank has identified as cost-saving improved glucose control for those with glycated haemoglobin (HbA_{1c}) >9.0%, blood pressure reduction to <160/95mmHg, foot care for those with high-risk diabetic foot and pre-pregnancy care in women known to have diabetes.⁴ These targets would be regarded as minimal care, and current recommendations aim to achieve HbA_{1c} <6.5%, blood pressure <130/80mmHg, normal blood lipids and regular screening for eye, kidney, nerve and vascular disease, with interventions to prevent progression where indicated. Affordable access to healthcare services and low-cost medication for the control of glucose, blood pressure and lipids needs to be made available to all.

Diabetes prevention will not be easy and will involve the acceptance of both societal and individual responsibility. Individual responsibility in maintaining normal bodyweight, a healthy diet and regular physical activity is essential, but cannot be achieved by government decree and will not be successful without addressing social determinants of health. Strategies to engage civil society and provide them with ownership and leadership opportunities in public health campaigns (e.g. the UN World Diabetes Day, 14 November) are more likely to have an effect than passive educational messages. People with diabetes should be encouraged to be part of the solution and not simply regarded as the problem. ■

1. International Diabetes Federation, *Diabetes Atlas, 3rd Edition, 2006*.
2. Knowler WC, Barrett-Connor E, Fowler SE, et al., Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin, *N Engl J Med*, 2002;346(6):393–403.
3. World Health Organization Commission on Social Determinants of Health, *Closing the Gap in a Generation, 2008*.
4. World Bank, *Disease Control Priorities in Developing Countries, 2nd Edition, 2006*.