

## Government intervention needed

Government needs to intervene to change the environmental factors that contribute to the Type 2 diabetes epidemic, the Public Health Association conference in Dunedin was told in September.

Public health analyst **Esther Willing** told the delegates her research looked at how district health boards framed Type 2 diabetes as an issue in their area and how this influenced what they did in practice to address it. She concluded that some responsibility for reducing the incidence of the disease lies with the Government.

All DHBs viewed diabetes through a medical lens, focusing on the number of hospital beds needed, cost of treatment, and numbers of clinicians involved. Some also framed it as a lifestyle issue and concentrated on primary care and community health initiatives, like physical activity programmes, to prevent or minimise it.

Some DHBs acknowledged there were wider environmental factors contributing to the prevalence of diabetes, eg the plethora of fast food outlets in a district heavily affected by Type 2 diabetes. “When DHBs framed diabetes in this way, they were unable to address these issues as they lie outside of the health sector.”

Ms Willing and research partner Dr Tim Tenbenschel from the University of Auckland found that some DHBs, such as Counties Manukau, had successfully influenced environmental factors, such as persuading the local McDonalds to offer sugar-free drinks.

“But in the end, these are very small changes. While DHBs are able to develop local health policy responses, they cannot create the wider social and environmental changes that are necessary. Strong policy leadership by the government is needed to make the real, and necessary, difference.” •



## Coming to terms: Early detection

By **Jim Mann**, Professor in Human Nutrition and Medicine, University of Otago

In the previous issue I discussed the strong evidence that lifestyle changes can substantially reduce the risk of Type 2 diabetes developing in people with prediabetes. Since then there has been another long-term study from the United States providing further confirmation.

In addition, there is excellent evidence that in people who have developed diabetes good control of blood sugar, blood pressure and cholesterol levels can greatly reduce the risk of complications. So “early detection” of people with prediabetes or indeed diabetes before the development of symptoms is of great importance.

The recommendation in New Zealand is that every man should be checked by age 45 years and every woman by the age of 55 years. People of Māori, Pacific or South Asian descent, those with a strong family history of diabetes or heart disease, or who are appreciably overweight, should be checked 10 years earlier and those who have been diagnosed as having heart disease should be tested at the time of diagnosis.

One can make a strong case for “opportunistic screening” of high-risk individuals at an even younger age should they, for any reason, come into contact with appropriate health professionals. It is most important, in addition to screening for prediabetes or diabetes, to also check blood pressure and cholesterol (and other blood fats) and record weight, height and waist circumference.

Until very recently a fasting blood glucose measurement has been regarded as the most appropriate screening test for prediabetes or diabetes, followed by a glucose tolerance test if the result is not clear-cut.

There has been recent evidence to suggest that measurement of haemoglobin A1c may be used as a screening test for diabetes as well as a test for monitoring overall blood glucose control in people with the condition. This would be very convenient as the need for a fasting blood test could be avoided. However, there has not yet been final agreement regarding the level of A1c which should be used as a cut-off beyond which people would be classified as having diabetes or prediabetes.

It is possible to identify people who are likely to be at risk of Type 1 diabetes by the measurement of antibodies in the blood of family members of those who have already been diagnosed with the condition. However, other than in a research setting, “early detection” of Type 1 diabetes is not recommended since there is no recognised treatment which can prevent or reduce the likelihood of developing Type 1 in those who are at risk.

The term “early detection” is also used in people who have already developed diabetes, in the context of diagnosing complications at the earliest possible opportunity or indeed of identifying those at risk of complications even before they develop. Screening people for diabetes related eye problems, identifying an “at risk” foot and regularly measuring blood pressure, cholesterol (and other blood lipid) and kidney function tests are particularly important examples since appropriate treatment can profoundly reduce the risk of developing more serious problems.

So, “early detection” is indeed a key aspect in both the prevention and treatment of diabetes. •