

Innovative Ngati Porou Programme Reduces Diabetes Risk Factors

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Trials prove effectiveness of community-based intervention in battle against disease

A two-year community-based programme has helped reduce diabetes risk factors in the Tairāwhiti East Coast region.

The Ngati and Healthy Prevent Diabetes Project is a collaborative initiative headed by Ngati Porou Hauora (NPH) and the [Edgar National Centre for Diabetes Research](#) (ENCDR) at the University of Otago.

World-leading diabetes and nutrition expert Professor Jim Mann from the ENCDR says while clinical trials with individuals have shown that changes in lifestyle can reduce the risk of diabetes, the NPH intervention programme shows clearly what can be achieved at the community level.

"What we particularly wanted to establish was the extent to which a community level intervention could reduce the risk of diabetes in this Maori community".

Ngati Porou Hauora developed and ran, in conjunction with the community, a programme featuring three main components - health promotion, community education and a structural component.

The health promotion component included radio messages, a poster campaign and local celebrity involvement, while the community education component featured physical activity classes, food and cooking demonstrations, and opportunities for the follow-up of high-risk individuals.

The structural component sought tribal "buy-in" to the healthy lifestyles strategy, a change in procedures around nutrition at school, and began to look at how to make the right sorts of foods available locally at affordable prices.

A baseline survey was completed prior to the start of the programme, with a follow-up survey in 2006.

Results from that survey, presented at the International Diabetes Federation Conference today, showed that the number of people with diabetes in the Tairāwhiti East Coast region had stabilised - contrary to national predictions of an increase - and insulin resistance had decreased markedly amongst 25-49 year-old women and men.

Marked improvements in levels of exercise and eating habits, and reductions in weight, body mass index and triglycerides were also observed amongst women under 50 years. The better results for women have been attributed to their higher level of participation in community intervention activities than men, something identified in an ongoing evaluation of the programme.

Ngati & Healthy Team Leader Helen Pahau says the most important reason for the programme's success was that the community took ownership of it, while Dr David Tipene-Leach, who was part of the ENCDR research team, says it will take time for the programme to impact on diabetes prevalence.

"But the fact that there has been no increase in diabetes and a reduction in insulin resistance

suggests such community-based programmes are effective and worthwhile tools."

Ngati Porou Hauora Board Chair George Jahnke says they are very encouraged that the research is showing early signs of success.

"As a provider of integrated, sustainable healthcare for all people within the Ngati Porou rohe, we are committed to continuing to make a difference by securing funding for research-based, healthy lifestyles intervention like this that are going to contribute to breaching serious gaps in the health status of our people," he says.

"The communities have told us how important it is for services to be promoting health through Ngati Porou tikanga, focused on our people's needs and with us taking control of our own health. We are committed to continuing to develop true partnerships with the Crown to achieve this."

Meanwhile, ENCDR senior research fellow and public health physician Dr Kirsten Coppell says working with NPH, in the true sense of collaboration, has been rewarding.

"The ENCDR members of the project team have pretty much been observers as the intervention has developed and implemented. We have provided support for the intervention team and expertise for the evaluation components of the project."

Funding support for the intervention programme was received from Te Kete Hauora of Ministry of Health, SPARC, the HB Williams Turanga Trust, JN Williams Memorial Trust, and Eastern & Central Community Trust. The evaluation was made possible by Grant in Aid from the Lottery Grants Board and the Hawkes Bay Medical Research Foundation. The first prevalence survey was funded by Professor Mann's Bristol-Myers Squibb/Mead Johnston Unrestricted Research Grant, with some additional resources from Tairāwhiti District Health (laboratory services) and NPH. The second survey was funded by the Health Research Council of New Zealand.

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