



The successful development and implementation of a 2-year community led diabetes prevention intervention

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BACKGROUND

Ngati and Healthy was initiated by community members on the East Coast who expressed concerns about the devastating effect of diabetes. This led to a collaborative community intervention project led by Ngati Porou Hauora (NPH), a Maori Health Provider and the Edgar National Centre for Diabetes Research, University of Otago. The overall goal of the project was to reduce the prevalence of insulin resistance in the short term, and thus reduce type 2 diabetes and its complications in the long term.

Baseline information was obtained from a 2003 prevalence survey¹. About half the community had insulin resistance, IGT/IFG or diabetes (age-standardised rates = 37.0%, 4.1% and 10.6%, respectively) The survey also found that regular physical activity and a diet characterised by a high intake of dietary fibre were found to reduce the risk of newly diagnosed type 2 diabetes, IGT, IFG or insulin resistance.



AIMS

To describe the development and implementation of a 2-year community intervention aimed at reducing insulin resistance prevalence in a rural predominantly Maori community.

INTERVENTION DEVELOPMENT - KEY ASPECTS -

❖ The 2003 survey facilitated the involvement and education of the community. Feedback and discussion of the results was important.

❖ Involvement and support of the Ngati Porou Hauora's CEO and governing board members, and the local runanga from the outset.

❖ The survey results defined the key health messages:
Increase consumption of fruit & vegetables
Increase consumption of wholegrain foods
Increase exercise levels



IMPLEMENTATION - KEY FACTORS -

❖ How the health messages were to be delivered and implemented was discussed with the community at the time of feeding back the survey results.

❖ The intervention had three main components:
 1. A community education and monitoring programme available to all community members, with specific emphasis on high risk individuals and their family who were encouraged to be 'messengers' to their community.

2. A health promotion strategy conveying healthy lifestyle messages through a range of media and role models.

3. A structural strategy aimed at developing environments to support people to make healthy lifestyle changes.

❖ Specific initiatives included:

- Written resources eg posters and exercise training cards using local photos.
- Oral resources eg radio jingles, pre-recorded radio interviews, community talks.
- Education programmes (marae based) eg cooking classes, smoking cessation.
- Health clinics – 'weigh-ins', blood pressure checks, exercise advice.
- School programmes eg adoption of water only policies.

❖ Synergies with other local health programmes were identified and strengthened

❖ A flexible programme allowed informed feedback from the community and findings from the formative and process evaluations to be incorporated

CONCLUSION

A community development model with the involvement of the community in every step, from the conceptual and planning phases to the development and implementation of a diabetes prevention intervention was successful in engaging the community in a community-wide diabetes prevention programme.

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Visit the Edgar National Centre for Diabetes Research website:

www.otago.ac.nz/diabetes/

Visit the Ngati Porou Hauora website:

www.nph.org.nz

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Te Whare Wānanga o Ōtago

REFERENCES:

1. Tipene-Leach D, Pahau H, Joseph N, Coppell K, McAuley K, Booker C et al. Insulin resistance in a rural Maori community. *New Zealand Medical Journal* 2004;117:U1208.