EDOR celebrates 10 years

The team at Edgar Diabetes and Obesity Research in Dunedin has been working for more than 10 years to reduce diabetes and obesity and find new ways to treat these conditions. Caroline Wood reports on its work over the past decade.

New Zealand holds the unenviable record for having the third fattest population in the OECD after the USA and Mexico. Obesity is a major risk factor for diabetes with its consequent health impacts and massive cost burden.

The Edgar Diabetes and Obesity Research (EDOR) centre was set up in the wake of the sharply increasing health burden of diabetes and obesity in New Zealand. Its aim is to reduce the prevalence – and improve the management - of diabetes and obesity by finding new ways to prevent and treat these conditions.

Based at the University of Otago in Dunedin, the team is led by some of New Zealand's top diabetes and obesity researchers including Professor Jim Mann, Dr Kirsten Coppell and Associate Professor Rachael Taylor. Diabetes New Zealand's Patron Sir Eion Edgar was the founding benefactor of EDOR.

The centre includes four core staff and 14 members from eight different departments on the Dunedin and Wellington campuses.

Auckland University's Professor Boyd Swinburn, Professor of Population Nutrition and Global Health, was asked to deliver a keynote speech this year as part of the centre's celebration of its first decade of research.

He paid tribute to EDOR's work telling Diabetes: "It's a fantastic achievement, the work they do



Top team (from left): Assoc Prof Rachael Taylor, Prof Jim Mann, Sir Eion Edgar and Dr Kirsten Coppell

is critically important. We need specialist groups to tackle diabetes and obesity research and the work they have done in this area has been a tremendous boost to New Zealand."

The centre's achievements include:

- · National and international recognition of its diabetes and obesity studies.
- More than 120 papers published in leading, high impact scientific journals.
- · A lead role in guideline policy development at local, national, and international levels.

Current research includes studies looking at ways of tackling childhood obesity (a key determinant of diabetes), approaches to prediabetes management, blood sugar control in type 1 diabetes (part of an international study), and the role of different kinds of carbohydrate in the management of diabetes.

Professor Jim Mann paid tribute to the work of the team over the past decade.

He said: "With 10 major studies behind us and another 10 currently under way, we are in a stronger position to further inform the public, policymakers, and the government about what works in tackling diabetes and obesity in New Zealand."

Landmark EDOR studies

Ngati and Healthy: Prevent diabetes project

This 2006 Whānau Ora supreme award winner and Health Innovation Award finalist was a collaborative community intervention between Ngati Porou Hauora and EDOR. The study showed that participants appeared to reduce the prevalence of insulin resistance, especially those who made the most marked lifestyle changes.

LOADD: Lifestyle over and above drugs in diabetes

This research examined if an intensive dietary intervention can further improve glucose, blood pressure, and lipids levels, over and above the effects of recommended drugs. Intensive nutrition treatment achieved an improvement in glycaemic control and body measures in patients with type 2 diabetes who were at high risk of cardiovascular disease.

APPLE and PLAY: School intervention programmes for lifestyle and exercise

The APPLE study was the first in New Zealand, and one of the first internationally, to show that communitybased initiatives could successfully reduce the rate of excessive weight gain in primary school-aged children. Sixteen schools and more than 900 primaryschool aged children are involved in the randomised controlled PLAY study.