The CSIRO and Baker IDI Diabetes Diet and Lifestyle Plan

If you have diabetes, you are not alone. More than 1.5 million Australians have diabetes. And more than twice this number are at significant risk of developing diabetes in the next five to ten years. But a diagnosis of diabetes need not seriously affect your health and wellbeing. With good medical care, healthy nutrition and regular physical activity, most people with diabetes lead full and healthy lives. It requires effort, willpower and persistence, but the rewards are considerable.

This book is your guide to diabetes, and the many opportunities you have to maintain and improve your quality of life. In these pages, experts from our respective organisations examine what diabetes is, how it comes about and what you can do to reduce its severity. We look at optimal diets for people with diabetes, and some of the different ways they can be achieved. Our researchers provide ideas for increasing physical activity and how exercise can maintain and improve health. We also shed light on the medical aspects of diabetes care, including the best ways to achieve control of blood glucose, blood pressure and cholesterol levels, and how to reduce the risk of developing major complications.

The CSIRO and Baker IDI Diabetes Diet and Lifestyle Plan provides options for living well with diabetes, but there are no generic solutions. The advice here is based on current Australian science and clinical practice. However, this book is not a substitute for medical advice. The book aims to help Australians make the best diabetes management choices for themselves in order to live full and satisfying lives. We hope you and your family will benefit from our collaboration on this lifestyle resource.

Dr Megan Clark
Chief Executive, CSIRO

Professor Garry Jennings
Director, Baker IDI Heart and Diabetes Institute

Published: 02/05/2011
Format: Paperback, 288 pages
RRP: $35.00
Imprint: Penguin
Publisher: Penguin Aus.

Link to BMI and BMR calculators: http://www.bakeridi.edu.au/bmi-bmr-calculators
Eggplants (aubergines) get a bad wrap from many people, but this versatile vegetable (well, technically a fruit because it is seeded) is a really handy ingredient to have at the ready. It can be served many ways - roasted, chargrilled, stewed, baked or sauteed - and can bulk out many a meal without negatively affecting your daily nutritional intake. Eggplants are the star of this recipe.

3 small eggplants (aubergines), sliced
olive oil spray
1 onion, finely chopped
2 cloves garlic, crushed
1/4-1/2 teaspoon dried chilli flakes
700 g salt-reduced tomato passata
1/4 teaspoon Splenda or other powdered sweetener
160 g low-fat ricotta
1/2 cup (15 g) basil leaves, torn
1/2 cup (40 g) grated parmesan

Fennel salad
4 cups (300 g) salad leaves
1 small bulb fennel, thinly sliced
balsamic vinegar, to serve

1. Preheat the oven to 180°C. Heat a grill plate or heavy-based frying pan over medium heat.
2. Spray the eggplant slices with olive oil and grill in batches for 2 minutes on each side or until well coloured.
3. Heat the oil in a frying pan and fry the onion and garlic for 5 minutes or until soft. Add the chilli, passata and sweetener and simmer for 5 minutes.
4. Arrange half the eggplant slices in the base of a 20 x 30 cm baking dish and sprinkle with half the ricotta and basil. Pour over half of the tomato sauce and repeat with the remaining eggplant, ricotta, basil and tomato sauce. Sprinkle with the parmesan and bake for 30 minutes. Leave to sit for 10 minutes before slicing to allow the juices to be absorbed.
5. Meanwhile, make the fennel salad. Combine the salad leaves and fennel in a bowl and drizzle with balsamic vinegar. Serve with the eggplant parmigiana.

Serves 4
Prep time: 20 minutes
Cooking time: 45 minutes
1 serve = 2 1/2 units dairy, 4 units vegetables, 2 units fats
About the Authors

Dr Grant Brinkworth - A senior exercise and nutritional research scientist at CSIRO Food and Nutritional Sciences, he is responsible for developing and leading several large-scale clinical studies into the role of diet and exercise on weight loss and the prevention and treatment of lifestyle diseases, including obesity, diabetes and cardiovascular disease. He has published more than 40 scientific papers and is an adjunct research fellow at the University of South Australia. He received a CSIRO Medal for Research Excellence in 2005 and the CSIRO Julius Career Development Award for outstanding scientific achievement in 2008.

Jing Hui (Jillian) Chin - An Accredited Practising Dietitian working as a research dietitian in the Clinical Research Unit of CSIRO Food and Nutritional Sciences. Jillian’s work involves the development, delivery and analysis of diets for clinical trials. She has a strong interest in the use of sustainable diets in diabetes management.

Professor Peter Clifton - A high-profile clinical and nutrition researcher for more than 20 years, he joined Baker IDI in July 2009. While he was at CSIRO, he co-authored The CSIRO Total Wellbeing Diet books. His primary research interest is the use of diet in the prevention and treatment of cardiovascular disease and its risk factors: obesity and diabetes. Peter has a clinical practice specialising in lipid management at the Flinders Medical Centre and in diabetes and cardiovascular disease at the Royal Adelaide Hospital. He has written articles for newspapers and medical magazines, discussion papers for food companies and books for the public. He is on the editorial board of four journals, a reviewer for 20 others and a reviewer for grant bodies in Australia, New Zealand, South Africa, Israel and Austria.

Associate Professor David Dunstan - A VicHealth Public Health Research Fellow and Co-Director of the newly established Healthy Lifestyle Research Centre at the Baker IDI Heart and Diabetes Institute. His research focuses on the role of physical activity and sedentary behaviour in the prevention and management of chronic diseases. He leads the collaborative group that is analysing the lifestyle risk factor data collected from the Australian Diabetes Obesity and Lifestyle (AusDiab) study. He is also the creator of the physical activity program Lift for Life.

Associate Professor Jennifer Keogh - A dietitian with more than 35 years’ experience, she was a research dietitian and research scientist at CSIRO’s Food and Nutritional Sciences before moving to Baker IDI. Her current research interests are in weight-loss surgery in the treatment of obesity and the effects of salt on blood vessel function. She has published more than 50 scientific papers and is an associate editor of the Dietitians Association of Australia’s journal, Nutrition & Dietetics. At the time of writing she is Associate Professor Dietetics and Nutrition at the University of South Australia.

Dr Lance Macaulay - The Theme Leader of Obesity and Health in CSIRO’s Preventative Health Flagship, he has more than 32 years’ research experience. His interests lie in understanding the mechanisms of insulin action, diabetes and obesity. He served on the editorial boards of the journals Endocrinology and Frontiers in Biosciences. His father had diabetes for 80 years and was one of Australia’s longest-surviving people with diabetes. This continues to ignite Lance’s passion to help other diabetics live long and healthy lives.

Sonia Middleton - An Accredited Practising Dietitian who specialises in diabetes management in the Education Services arm of Baker IDI. Her role includes clinical diabetes education, health-professional training, research and commercial projects. In 2009 she was the national trainer for the Reset Your Life Type 2 Diabetes Prevention Program. Dr Phil Mohr - The senior behavioural scientist at CSIRO Food and Nutritional Sciences, where he leads the Diet, Exercise and Behaviour Research
Team. He currently leads research projects for CSIRO’s Preventative Health Flagship and CSIRO’s Food Futures Flagship. His research into how people reason and make decisions about health, products and lifestyle choices applies his knowledge of psychology and methodology to produce practical outcomes. He is affiliated with the University of Adelaide and the University of South Australia, contributes to the South Australian Health Literacy Alliance and serves on the Social Science Expert Advisory Group for Food Standards Australia and New Zealand (FSANZ).

**Associate Professor Manny Noakes** - Manny is currently responsible for Capability Management in the CSIRO Food Nutrition and Health Science Program and is Stream Leader for Diet and Lifestyle Programs within the CSIRO Preventative Health Flagship. Manny has more than 30 years’ experience in nutrition and has published more than 100 scientific papers. She has a strong interest in diets for weight management, including the role of protein and other dietary factors in appetite regulation. She co-authored the bestselling CSIRO Total Wellbeing Diet and has received several awards for research excellence, including two CSIRO medals and an Outstanding Achievement Alumni Award from Flinders University.

**Pennie Taylor** - An Accredited Practising Dietitian, she is the Senior Research Dietitian for the Clinical Research Unit at CSIRO Food and Nutritional Sciences. She also works part-time in diet clinics and private practice, specialising in weight management, weight-loss surgery and diabetes care. Her role at CSIRO is to liaise with senior scientists to develop and deliver designer diets for clinical trials, analyse dietary data and prepare scientific and commercial publications. Pennie has a strong interest in dietary patterns associated with weight-loss surgery and the impact of surgery on dietary tolerance and long-term weight loss.

**Professor Merlin Thomas** - A nephrologist (kidney specialist) at the Baker IDI Heart and Diabetes Institute. He has published close to 150 scientific papers and has received a number of awards, including the 2005 Victorian Premier’s Award for Medical Research. His ongoing research focuses on the mechanisms of vascular and kidney damage in diabetes.

**Professor Paul Zimmet AO** - Director Emeritus and Director of International Research at the Baker IDI Heart and Diabetes Institute, he has an outstanding international record in diabetes and obesity research. In 2008 he was appointed to the Federal Government’s Preventative Health Taskforce. His research in Australian, Pacific and Indian Ocean populations provided new insights into the causes of type 2 diabetes. In 2000 he led the first-ever national diabetes and obesity study in Australia (AusDiab). Paul has published more than 650 scientific papers, chapters and reviews. He is co-editor of the widely used International Textbook of Diabetes Mellitus and The Epidemiology of Diabetes Mellitus: An International Perspective.