

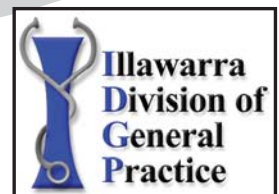
Illawarra Region

Diabetes

*Patient Information
Booklet and Service
Directory 2011*



Impaired Fasting Glucose
Impaired Glucose Tolerance



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Diabetes

Each day 275 Australian adults develop type 2 diabetes. Almost one million Australian adults have diabetes. The news that you have diabetes can be quite a shock. The aim of this booklet is to help you to manage your diabetes by providing you with up to date information and details of services available to you in the Illawarra area.

Diabetes is a condition where there is too much **glucose** (a type of sugar) in the blood. Normal glucose levels range between 3.5 and 7.8mmol/L. The body depends on **insulin**, a hormone made in the pancreas, to keep glucose within this normal range by moving glucose from the blood into the body's cells for use as fuel or energy. In diabetes, this process does not work properly and blood glucose levels remain too high.

Type 2 Diabetes is due to a combination of the body not responding to insulin (insulin resistance) and an inability to make enough insulin. In contrast, in **Type 1 Diabetes** the pancreas stops making insulin.

Diabetes can be diagnosed through an elevated Fasting or Random plasma glucose test (confirmed by a second reading) or through an abnormal Oral Glucose Tolerance Test (OGTT).

It is important to ensure that **you** manage your diabetes effectively to prevent other problems like heart disease, stroke, damage to blood vessels, foot problems, eye disease, kidney disease and nerve damage. Even if on medication, remember that diet and physical activity are an important part of managing your diabetes.

Making lifestyle changes is an important part of managing, preventing or delaying the onset of diabetes. This includes:

- Eating a healthy diet
- Reducing body weight
- Increasing physical activity levels
- Controlling other risk factors associated with diabetes such as high blood pressure, high cholesterol and triglyceride levels and smoking

Impaired Fasting Glucose (IFG) and Impaired Glucose Tolerance (IGT)

Before people have diabetes they almost always have a “**pre-diabetes**” condition, where blood glucose levels are higher than normal but not high enough to be diagnosed as diabetes. As in type 2 diabetes, the body produces insulin but there may be less of it or it may not work properly.

Factors that increase the chances of having pre-diabetes are: carrying extra fat particularly around the waist (ie more than 94cm for men and more than 80cm for women), physical inactivity, high triglycerides and low HDL and/or high cholesterol, high blood pressure and a family history of diabetes and/or heart disease.

Pre-diabetes means that you have a high chance of developing diabetes and your health may already be affected even though you may not notice any symptoms. You have a higher risk of heart attack and stroke, particularly if you already have high blood pressure or are overweight.

“Pre-diabetes” is diagnosed by having a fasting or random plasma glucose test, then if the result is abnormal, having an oral glucose tolerance test (a sweet glucose drink).

Impaired Fasting Glucose (IFG) is a condition in which blood glucose levels are high after a fasting blood test but do not rise abnormally high after an oral glucose tolerance test.

Impaired Glucose Tolerance (IGT) is a condition where blood glucose levels are high after fasting and results of an oral glucose tolerance test are abnormal. Research has shown that people with Impaired Glucose Tolerance have a one in three chance of developing Type 2 Diabetes within 10 years.

The **good news** is that if you take action to control your blood glucose when you have “pre-diabetes” you can delay or prevent type 2 diabetes from developing.

There is evidence that lifestyle changes may slow down or stop the progression to diabetes including healthy eating and doing regular physical activity such as walking 30 minutes a day 5-7 days a week. Losing a modest amount of weight also helps. Don't worry if you can't get to your ideal body weight as losing 5-10% of total body weight can make a huge difference (e.g. if you are 80kg this would be a loss of 5-8 kgs). It is also important to treat other risk factors for heart attack and stroke - high lipids, high blood pressure and smoking.

(Source: Australian Institute of Health and Welfare 2008. Diabetes: Australian Facts 2008. Canberra: AIHW; and Diabetes Australia factsheet www.diabetesaustralia.com.au)

Healthy eating

What you eat will play a very important role in helping you to manage your diabetes, Impaired Glucose Tolerance (IGT) or Impaired Fasting Glucose (IFG). The good news is that the healthy eating guidelines recommended to people with diabetes are the same as those recommended to all Australians. Some of these guidelines include:-

- Enjoy a wide variety of nutritious foods.
- Eat plenty of breads, cereals (preferably wholegrain), fruit, vegetables and legumes.
- Eat a diet low in fat and in particular saturated fat.
- Maintain a healthy body weight by balancing physical activity and food intake.
- Limit alcohol and salt

Carbohydrate foods are broken down to glucose, providing our bodies with an important source of energy. When we eat foods containing carbohydrate, our bodies break them down to glucose. So when our bodies don't have effective insulin flowing through them, whenever we eat carbohydrate food, our blood glucose levels will rise to a higher degree than a person who does not have diabetes because the body cannot regulate the glucose properly.

People with diabetes must ensure that spread these over the day by eating regular small meals and snacks containing carbohydrate to ensure that their bodies have enough energy without elevating blood glucose levels too much.

Examples of carbohydrate foods:

- Bread, including muffins, crumpets, fruit bread, flat breads.
- Breakfast cereals.
- Fruit including fresh, dried, frozen, canned in natural juice, or 100% fruit juice with no added sugar.
- Legumes like baked beans, lentils, kidney beans, chickpeas, etc.
- Reduced or low fat milk, buttermilk, low fat yoghurt, ice-cream, custard, or dairy alternatives like soy, rice and oat "milk" products.
- Rice, pasta, other grains like couscous or pearl barley etc.
- Starchy vegetables including potato, sweet potato and corn.

Carbohydrates and the Glycemic Index

Different carbohydrate foods are digested by the body at different rates. This concept is called the GLYCEMIC INDEX or GI. Some carbohydrates are digested quickly and cause a rapid rise in blood glucose. These foods are said to have a high glycemic index. Other carbohydrates are digested slowly and cause a more gradual rise in blood glucose. These foods are said to have a low glycemic index.

Low glycemic index foods are beneficial to include in the eating plan of a person with diabetes (or IGT and IFG) as they may help to improve blood glucose levels. Examples of low glycemic index foods include:-

Wholegrain breads; breakfast cereals such as rolled oats, All Bran, untoasted muesli, pasta, Doongara rice; legumes such as baked beans, kidney beans, chick peas; sweet corn; low fat dairy foods and soy milk; fruits such as apples, oranges, peaches, pears, plums, cherries and green grapes.

Refer to www.gisymbol.com.au

Include a variety of free foods

Free foods do not have a significant amount of carbohydrate therefore have little impact on your blood glucose level. Free foods include all vegetables (except for potatoes, sweet potatoes, legumes and corn) and salad vegetables.

Aim to eat five vegetables every day, where a serve equals ½ cup cooked vegetables or 1 cup salad.. Other free foods include strawberries, passionfruit, herbs and spices plus low kilojoule/diet soft drinks, cordials, and jelly in moderation.

Limit foods with large amounts of added sugar

Small amounts of sugar can be included as part of a healthy meal. For example 1 teaspoon sugar added to porridge.

However, foods that are very high in sugar such as regular soft drinks, cordials, jelly, topping, syrup and lollies will be important for you to limit. Look for the sugar free or low kilojoule/diet alternatives, however be aware that some may be high in fat.

Limit foods high in fat especially saturated fat and trans fats

Foods high in fats should only be eaten in small amounts. There are different types of fats in food – saturated, trans, polyunsaturated and monounsaturated. Saturated and trans fats increase your risk of heart disease by altering your cholesterol levels (increasing “bad cholesterol” and reducing “good cholesterol”). Small amounts of polyunsaturated and monounsaturated are beneficial.

Saturated fat is found in many animal foods including the visible fat on meat, chicken skin, full cream dairy products, butter, lard and processed meats. It is also found in palm oil which is often used in takeaway foods, commercial cakes, biscuits and snacks as well as in coconut oil including coconut cream and milk.

Trans fats are found naturally in trace amounts in dairy products, beef, veal, lamb and mutton, but it is the manufactured trans fats that are of most concern. These are found in foods which use hydrogenated or partially hydrogenated vegetable fats such as baked products like pies, pastries, cakes, biscuits and buns. Years ago, most margarines had high levels of trans fats, however, this is no longer the case in Australia.

To reduce your saturated and trans fat intake choose lean meats, trim fat off meat, remove chicken skin, eat less fried foods, pies, processed meats, chips, chocolates, biscuits and pastries. Use low fat dairy products and limit butter, lard, cream and sour cream.

Monounsaturated and polyunsaturated fats are found in margarine, oil, nuts (especially walnuts), oily fish (salmon, tuna) and avocado. REMEMBER that although monounsaturated and polyunsaturated fats are healthier choices, they are still high in kilojoules so if you are trying to lose weight you need to use only small amounts.

What about Alcohol?

Alcohol can affect your diabetes or IGT/IFG control. It is recommended that you limit alcohol intake to no more than 2 standard drinks per day (a standard drink = 1 middy of regular beer or 1 schooner of light beer or 100ml of table wine or 1 nip of spirits). Also, have at least two alcohol free days per week.

Physical activity

Physical activity is an essential part of managing IFG, IGT and diabetes. It works by:

- Improving insulin action so blood glucose levels fall
- Reducing the progression to diabetes in people with IGT or IFG
- Reducing body fat
- Helping blood pressure and cholesterol levels stay within the normal ranges
- Reducing the risk of heart disease
- Improving circulation
- Increasing metabolism
- Reducing stress, depression and anxiety

Moderate physical activity, including aerobic activity such as a brisk walk or bike ride and resistance training such as light weights should be undertaken for 30 minutes on most or all days of the week.

Exercise does not have to be vigorous. Activity can be done in 30 minutes sessions or in shorter sessions of 10 to 15 minutes adding up to a daily total of 30 minutes. It is recommended to aim to do 210 minutes of physical activity each week. Incidental activity helps, be active every day in as many small ways as you can. For example, park your car further from work, take the stairs instead of the lift or do some gardening. It all helps.

Whether you have IGT, IFG or diabetes, before you start any type of physical activity, discuss it with your doctor. There are a few important things to remember for people with diabetes. Some people may need to eat extra carbohydrate and have access to fast acting carbohydrate in case they develop hypoglycaemia (low blood sugar). This is particularly important if they are on insulin.

Foot care

Diabetes increases the risk of infections, gangrene and amputation of the feet. These problems are largely preventable and you can develop healthy foot care habits so your feet aren't put in any danger.

1. Inspect your feet for sores, wounds, blisters every day. These should be treated immediately by a doctor or podiatrist.
2. Protect your feet by wearing comfortable shoes at all times, even inside the house.
3. Wash and dry your feet every day.
4. Cut your toenails carefully. Cut toenails straight across, being careful not to dig down the side of your nail. Round the edges with a nail file.
5. Check your shoes every day for rough areas or sharp objects.
6. Do regular physical activity. This improves your blood circulation.
7. If you smoke – QUIT. Smokers often have poor circulation.
8. Make sure your feet are checked regularly by your doctor or podiatrist. A list of podiatrists can be found in the service directory in this booklet.
9. Report any pain or aching in the calves, thighs or buttocks which stops when you rest.
10. Report any numbness or tingling in lower legs or feet.

Diabetes Service Directory

ILLAWARRA DIABETES SERVICE

Diabetes Centre Level 2 304 Crown St, Wollongong.....1300 308 969
Diabetes Centre Clinical Trial and Research Centre
Level 2 304 Crown St Wollongong.....4225 1951
Provides a wide variety services including the continuing education and management of patients with Type1 Type 2 Diabetes, Gestational Diabetes, pediatric services and a high risk foot clinic. The clinical team is comprised of endocrinologists, diabetes educators, dietitians, and podiatrists. Limited outreach services are provided at Shellharbour, Kiama, and Port Kembla and Bulli hospitals.

WALKING & GENTLE EXERCISE PROGRAMS

Gentle Exercise. A range of exercise classes including aquarobics, dancing, gentle exercise, pilates, strength training, tai chi, walking and yoga are available throughout the Illawarra region. For information on classes in your area phone the Public Health Unit.....4221 6700
Beaton Park Leisure Centre.....4229 6004
Heartline (Heart Foundation).....1800 362 787

EXERCISE PHYSIOLOGISTS

Body Dynamics - Jennifer Wilkie, Heidi Turner, Amy MacLaine & Ryan Graham
249 Princes Hwy (PO Box 108) Bulli4283 6659

Rehabilitation in Motion Exercise Physiology
Katerina Ziropiannis, Suite 6, 25 Victoria Street
Wollongong.....4229 9555

Conekt - Nathan Clark.....0409 995 194

Joannah Braham, University of Wollongong..... 4221 3057

Anthony Tyson, Port Kembla Hospital.....4223 8148
Elisabeth White, Port Kembla Hospital Brain Injury Service.....4223 8148

Gerald Duck 72 Phillip Street Thirroul.....0425 840 869

Gerringong Physiotherapy - Belinda Henry, Mark Burns & Alison Crofts, Shop 6/11 Blackwood St Gerringong..... 4234 4666

HeartWise Health - Tegan Cummins
12 Bong Bong Road Dapto.....4260 8701

Instill Health, Wollongong - Lauren Hickson

Home Visits from Thirroul - Shellharbour.....0411 284 640
Illawarra Sports Medicine Clinic, Beaton Park, Gwynneville 4229 4964

Movement Medicine - Katie Marsh, Jacklyn Richardson,

Pippy Barnett & Wayne John, 1/132 Keira Street, Wollongong...4227 5622

Physical Therapy - Cassandra Tate

60 Rosemont St, Wollongong.....4225 9916

Rehability - Richelle Mayne, Angela Douglas & Pippy Barnett

200 Cordeaux Road, Mount Kembla4272 8121

RehWork Rehabilitation & Consultancy - John Booth &

Katie Commins, Wollongong.....4229 2012

Robert Battocchio, Wollongong..... 4226 4754

Sean Murray-Smith, URAC, University of Wollongong.....4221 4214

Step Bite Step - Kim Allsop, Flinders/Shellharbour.....4297 0606

The Body Care Specialists - Paul Netherclift

58 Vermont Road Warrawong..... 4275 1955
Or0404 400 828

Wollongong Pilates Studio - Shelly Harper & Donna Oliver

9/83 Railway Street, Corrimal4285 2518
Or0401 084 022

A list of accredited Exercise Physiologists can be found at
www.aaess.com.au

DIETITIANS - PUBLIC

Illawarra Diabetes Service, Wollongong.....1300 308 969

Kiama Hospital - Clinic once a month (4th Thurs)..... 1300 308 969

Shellharbour Hospital4295 2500

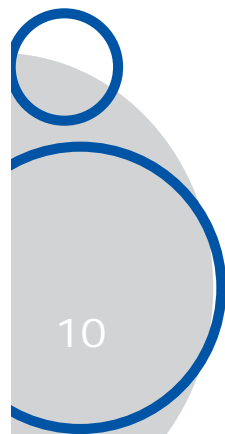
Australian Diabetes Council1300 136 588

Wollongong Office, 3 Station Street Wollongong.....4226 4379

DIETITIANS - PRIVATE

Campus Fitness Health Care - Kate Deagnoli

University of Wollongong.....4221 3057



Chloe Madigan The Northern Polyclinic.....4283 4225
 The Southern Polyclinic..... 4257 2455
 Keiraville Surgery.....4229 8320

Complete Care Consultancy - Rhonda Grassby
 326 Crown St Wollongong 4228 7769

Edge - Malcolm Gibbs Dapto0402 213 488
 Woonona4283 3433
 Bulli.....4284 4622

Nicolette Cates, Berkeley.....4271 1899

Illawarra Sports Medicine Clinic - Anita Neeham
 Beaton Park, Gwynneville.....4229 4964

Judy Wellins, Mobile Service.....4271 1899
 Or.....0412 124 955

Laverty Pathology - Rebecca McPhee
 138 Terralong Street, Kiama.....4424 5903
 Or.....0432 969 903

Shellharbour Medical Centre - Renee Lintescue.....0413 582 530

Step Bite Step - Sharon Allsopp, Flinders/Shellharbour.....4297 0606

Find and Accredited Practising Dietitian at www.daa.asn.au

WEIGHT LOSS SERVICES

Movement Medicine, Katie Marsh, 1/132 Keira Street,
 Wollongong, Individual and group programs.....4227 5622

Rehability, Richelle Mayne, Mt Kembla.....4272 8121

Weight Management Group, ERSC, UoW.....4221 3057

Weight No Longer group. Every Thursday at 11am at the Illawarra
 Diabetes Service Level 2, 304 Crown St Wollongong, phone
 1300 308 969. A GP referral is not required. But appointment is needed.

DIABETES EDUCATORS

Cheryl Nankivell Clinic at Nowra.....0419 810 643
 Kiama.....4232 1244



Illawarra Diabetes Service.....1300 308 969

A list of accredited educators can be found at www.adea.com.au

PRE DIABETES GROUP PROGRAMS

Lifestyle Modification Program

Type 2 Diabetes is largely preventable by controlling associated lifestyle risk factors such as overweight and obesity, physical inactivity and poor diet. Landmark intervention studies in China (The China Da Qing Diabetes Prevention Study) the US (The Diabetes Prevention Program) and Finland (The Finnish Diabetes Prevention Program) have shown that sustainable lifestyle interventions in people at high risk of developing type 2 diabetes, led to significant reductions in the incidence of diabetes, by up to 58%.

The Lifestyle Modification Program is a national initiative providing dietary, exercise and lifestyle behaviour change advice for patients aged 40-49 who are at 'high risk' of Type 2 Diabetes. The program provides support and education through 7 workshops delivered over a 6 month period.

Type 2 Diabetes risk is assessed using The Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK). Scores of 15 or above place patients in the 'high risk' category enabling them to receive a government subsidy to attend the program if they are aged 40-49. Low-moderate risk patients or those outside the age range, can pay a fee to attend the program.

The Division's 'reset your life' lifestyle modification program operates in Kiama and Wollongong. Phone 4220 7600, Fax 4226 6489, Email idgp@idgp.org.au

A list of providers delivering this program can be found at www.idgp.org.au/allied-health-services

DIABETES GROUP PROGRAMS

Diabetes self-management programs are being run by some exercise physiologists, dietitians and diabetes educators. A Medicare rebate can be claimed and a GP referral is required. For further information contact your GP, or EPs and dietitians in this directory.

PODIATRISTS - PUBLIC

Kiama Hospital and Community Health Service
Bonaira St, Kiama.....4233 1033
Port Kembla Hospital, 89-91 Cowper St Warrawong.....4223 8033
Wollongong Diabetes Service
Level 2, 304 Crown St Wollongong1300 308 969

PODIATRISTS - PRIVATE

Corrimal Podiatry Centre - Anna Szainocha, Paul Thompson, Peter Birchill , Guest Building Russell St Corrimal.....	4285 9006
Freeman Podiatry, Melanie Freeman and Naomi Williams, Meagan Veenstra , 2/56 Church Street Wollongong.....	4229 3622
Illawarra Family Medical Centre Donald Scott	0427 213 469
Illawarra Podiatry - Michael Cambareri, David Allan & Jeremiah Stavro-George 206 Shellharbour Rd Warilla.....	4296 8646
Leisure Coast Podiatry - Paul Thompson & Haana Van Rossum , 62A Terralong St Kiama	4232 3513
Michael Coffee , 2 Raymond Rd, Thirroul.....	4267 1177
Podiatry Clinic, Dapto - Rebecca Wiener, Leone Perry & Paul Thomson Unit 3/53 Baan Baan St, Dapto.....	4261 6909
Rutty Podiatry - Gill Rutty 122 Princes Hwy Unanderra.....	4272 7110
Wollongong Podiatry - Carissa McMahon, Timothy Bransdon & Peter MacFarlane , Shop 35/341 Crown St Wollongong.....	4228 3802
Fairy Meadow Podiatry - Jason Giobbi, Dean McGreggor & Brandon McGreggor , Shop 1/78-80 Princes Hwy Fairy Meadow	4284 8999

ABORIGINAL MEDICAL SERVICE

Illawarra Aboriginal Medical Service 150 Church St, Wollongong.....	4229 9495
2/130 Princes Highway, Dapto.....	4262 8777

Clinics run at the Wollongong Aboriginal Medical Service:

- Diabetes clinic run weekly on a Wednesday morning with a Diabetes Nurse Educator and Dietitian.
- Podiatry clinic run on a Thursday every 3 weeks.
- Eye clinic run fortnightly on a Tuesday.
- Professor Calvert's clinic - Endocrinologist run once a month on a Monday morning.

ENDOCRINOLOGISTS

Dr Raymond Slobodniuk, 75 Market St, Wollongong.....4227 3322

Dr Robert Moses, Dr Dennis Calvert & Alexia Pape
4/393 Crown St, Wollongong.....4229 6130

Dr Mary Freeman, 338-340 Crown Street, Wollongong.....4252 5200

OPHTHALMOLOGISTS

Wollongong Eye Specialists - Dr Ashish Agar, Dr Smita Agarwal, Alan Flack, Evan Soicher & Robert Chong
441 Crown St, Wollongong.....4229 7795

Dr Allan Vernon & Dr Rajiv Shah
75 Market Street, Wollongong.....4229 7433

Dr John Lee Dr Yves Kerdraon & Dr Michelle Gajus
1 Princes Hwy Figtree4226 1553

Dr Mark McDonald
Nowra and 132 Terralong Street Kiama.....4421 0155

OPTOMETRISTS Principal Optometrist

Dirk Den Dulk, 155 Tongarra Rd, Albion Park.....4257 9118

Dirk Den Dulk & Robyn Fuller, 125 Balgownie Rd, Balgownie...4283 4411

Dom Proust & Arti Saini, 12B Stocklands, Corrimal.....4283 5722

Rod Swindle & Anna Wang, 104 Railway St, Corrimal.....4284 0604

Malinda Halley & Sib Verma, Suite 7, 47-51 Baan Baan St,
Dapto.....4261 8855

Darren Liver, 13 Bong Bong Rd, Dapto.....4260 8244

James Gan 70 Princes Highway, Fairy Meadow.....4285 5563

Steve Anastovski, Andrew Kyriacov & Alison Swan
80 Westfield Centre, Figtree.....4225 2505

Ray Proust & Arti Saini, 49 Westfield Centre, Figtree.....4229 6966

Joan Comber, 2 Centrepoint Arcade, Kiama.....4232 1919

Paul Black & Peter Rose, 13A Kiama Fair Centre, Kiama.....4232 2610

Budget Eyewear , 53b Stocklands, Shellharbour.....	4297 3200
Hayssam Khalas , OPSM, 231 Stocklands, Shellharbour.....	4296 5700
Neil Craddock , 10 McCauley Street, Thirroul.....	4268 1044
Ray Bayani , 90 Westfield Centre, Warrawong.....	4275 1119
Bruce and Robyn Porter , 3/74 Kembla St, Wollongong.....	4228 5228
Melissa Lee & Sujata Roy OPSM, Shop 40 Crown Central, Wollongong.....	4229 1116
Phung Trung , Shop 2/232 Crown St, Wollongong	4227 2557
Anthony Shenouda , 59 Princes Highway, Dapto	4261 8778

HEALTH SERVICES

South East Sydney Illawarra Health - Community Health Centres

Your local community health centre can be found under 'South Eastern Sydney Illawarra' in the white pages.

Multicultural Health Service	4221 6700
Amputee Service , Port Kembla Hospital	4223 8131
Health Care Interpreter Service Port Kembla Hospital Cowper St Warrawong.....	4223 8540
Illawarra Diabetes Service	See first entry in directory

COMMUNITY SUPPORT GROUPS

Australian Diabetes Council

Wollongong Type 2 Diabetes Support Group

The Wollongong Branch provides support for people with type 2 diabetes and their families. They hold regular meetings that allow members to hear from guest speakers on a range of issues relating to diabetes including the latest management techniques, research studies, equipment and products for people with diabetes, information on complications and the newest lifestyle ideas and dietary information. They meet every 2nd Wednesday of the month at 10.00am at the Uniting Church Hall, Fisher Street, West Wollongong. Phone Elaine Crowson on 4296 8035.

Amputee Support Group	4223 8131
Port Kembla Hospital Illawarra Dialysis and Transplant Association Contact: Val Bruncker, Secretary, 6 Rangoon Rd Minnamurra	

Diabetes internet sites

www.diabetescounselling.com.au

Australian Diabetes Council

www.australiandiabetescouncil.com. Includes multilingual resources

Follow links to a range of useful sites

Canadian Diabetes Association: www.diabetes.ca

American Diabetes Association: www.diabetes.org

International Diabetes Institute: www.diabetes.com.au

NSW Dept of Health www.health.nsw.gov.au

Better Health Channel www.betterhealth.vic.gov.au

Australian Dept of Health and Ageing www.health.gov.au

Australian Institute of Health and Welfare www.aihw.gov.au/Diabetes **Centre** www.diabetes.org.au Follow links to other sites.

National Heart Foundation www.heartfoundation.com.au

Physical activity, nutrition, stress management etc

Australian Association of Exercise and Sports Science: www.aaess.com.au.

Find an Exercise Physiologist www.diabetesnet.com

Australian Nutrition Foundation: www.nutritionaustralia.org

Dietitians Association of Australia: www.daa.asn.au

Get Healthy: www.gethealthy.com.au

Glycemic Index: www.glycemicindex.com

NSW Dept. of Sport and Recreation: www.dsr.nsw.gov.au

Multicultural Health

NSW Multicultural Health Communication Service: www.mhcs.health.nsw.gov.au

See also Diabetes Australia site

Indigenous Health

Office of Aboriginal and Torres Strait Islander Health: www.health.gov.au/oatsih

Australian Indigenous Health InfoNet

www.healthinfonet.ecu.edu.au

Kidneys - Kidney Foundation: www.kidney.org.au

Polycystic Ovarian Syndrome - www.posaa.asn.au

Eyes - www.eyesondiabetes.org.au

Feet - Australian Podiatry Assn S.A. Inc: www.podiatrysa.net.au

For young adults - www.realitycheck.org.au

Juvenile Diabetes Foundation Australia - www.jdrf.org.au

www.childrenwithdiabetes.com

Health Insite - Australian Govt. Health Information website: www.healthinsite.gov.au

Monitoring your diabetes: checks and tests¹.

Every person with diabetes should know what to expect from their health care providers in terms of managing their diabetes effectively. Listed below are checks which should be done by your doctor and an explanation of what the tests mean. It is important that you take an active role in managing your diabetes.

1. HbA1c

This is the “gold standard” for assessing overall diabetes control. The test can be taken at any time of the day and is not influenced by hour-to-hour or day-to-day fluctuations in health. It gives a reliable measure of overall diabetes control for the previous two to three months. It should be measured every six to twelve months. Note that while the result of the plasma glucose (see point 2) and the HbA1c may have similar numbers, they are measuring entirely different things and shouldn't be compared.

AIM: The aim is to maintain HbA1c less than 7.0%.

HOW OFTEN: This blood test should be done:

- **At least every 6 months**

2. Plasma glucose (blood sugar)

This test is now ordered less and less because most people with diabetes are using a home glucose meter. The glucose level in the blood is simply a measure of the glucose at that particular time which is useful for day-to-day management. The glucose level can vary a great deal and can be influenced by many factors, eg. diet, physical activity, overnight production by the liver, stress etc. Blood sugar should be tested at different times.

AIM: A blood glucose level of 6.1 – 8 mmol/L (fasting).

3. Weight and Waist

Measuring your weight and waist is important as being in the healthy weight range will make your diabetes easier to control. **Weight, aim for a BMI of 25 where practicable (to calculate, divide your weight in kgs by your height in metres squared). However a modest weight reduction of 5-10% of current body weight is beneficial (e.g. if you are “overweight” at 80kg, this would be 5-8kg recommended weight loss). Waist circumference aim for less than 94cm for men, less than 80cm for women.**

¹ Information in this section has been obtained from Diabetes Australia & The Royal Australian College of General Practitioners 2010, Diabetes Management in General Practice sixteenth edition 2010/11, Diabetes Australia Publication, Australia.

HOW OFTEN:

- On your initial visit, your doctor should measure your weight and then every 3 months following this.
- Weight should be measured more frequently if you are on a weight reduction program.

4. Blood pressure

It is very important to keep your blood pressure under control when you have diabetes to reduce the risk of damage to blood vessels, eg in the eyes, kidneys and the heart.

AIM: The target for people with diabetes is less than 130/80.

HOW OFTEN:

- Your doctor should measure your blood pressure Quarterly

5. Cholesterol and triglycerides

These tests should be done on everybody but are particularly important for people with diabetes. This is because people with diabetes are more likely to have raised levels and the effect of raised levels is more serious in people with diabetes.

Keeping your cholesterol and triglyceride levels within the normal range will help to prevent problems with cardiovascular disease later on. These tests must be done while fasting.

AIM: Cholesterol less than 4.0 mmol/L, Triglycerides less than 1.5 mmol/L, HDL 1 mmol/L or more, LDL less than 2.5mmol/L

HOW OFTEN: Your cholesterol and triglyceride levels should be measured:

- Annually (if normal)
- More frequently if being actively treated

6. Microalbumin

This is a special test for measuring a very small amount of protein (albumin) in the urine. This is a urine test to detect early signs of kidney problems caused by diabetes.

AIM: Less than 20 mg/min timed overnight collection, Less than 20 mg/L spot collection, Less than 3.5 mg/mmol women and less than 2.5 mg/mmol men albumin/creatinine ratio.

HOW OFTEN:

- Annually if below target
- More frequently if being actively treated

7. Feet

It is common to have foot problems when you have diabetes.

HOW OFTEN: Your feet should be examined:

- Every 6 months or at every visit if you have a high risk foot or a present foot problem.
- You should see your doctor if you have an infection or ulceration or any other foot problem.
- If required your doctor should ensure that you get appropriate care from specialists and podiatrists expert in the treatment of foot problems for people with diabetes.

8. Eye examinations

Remember that you can greatly reduce your risk of visual loss by early treatment of eye problems. Accredited optometrists are encouraged to see people with diabetes to do annual reviews.

HOW OFTEN: You should see an ophthalmologist or optometrist:

- At least second yearly and more frequently if problems exist.
- If you have changes in your eye condition you will be asked to see an ophthalmologist every 6-12 months for mild cases and every 3-6 months for moderate or severe cases.

What you should do to help manage your diabetes effectively:

- See your GP for regular check-ups.
- See a diabetes educator and dietitian to learn how to look after your diabetes.
- Eat sensibly. Eat mostly carbohydrate foods like fruit, vegetables, bread and less fatty food.
- Do regular physical activity.
- If you smoke - STOP
- At every visit, remind your health professionals that you have diabetes.

Source: NSW Department of Health (1996). *Improving Diabetes Care and Outcomes: Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus*.

National Diabetes Services Scheme

The National Diabetes Services Scheme (**NDSS**) is a service provided to people with diabetes to make supplies of test strips, syringes and needles more affordable. To receive discounts from **NDSS** Pharmacies or Australian Diabetes Council you need to fill out a registration form to receive an NDSS card.

Registration forms are available by calling Australian Diabetes Council on 1300 136 588 or by downloading from www.australiandiabetescouncil.com.

NDSS pharmacies

Many Illawarra pharmacies are registered NDSS sub-agencies. Check with your local pharmacy.

Medication

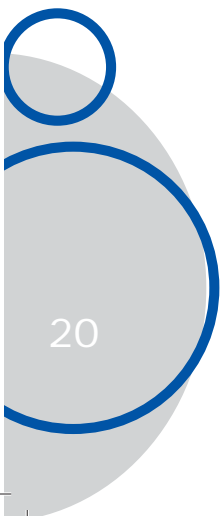
Newly diagnosed type 2 diabetes is **usually managed by following a healthy eating plan and doing regular exercise**. However some people with type 2 diabetes do need tablets or even **insulin** injections to maintain normal blood glucose levels.

There are several different types of medicines for diabetes and your doctor will prescribe one or a combination that will work best for you. Medicines taken by mouth are not insulin. The only way we can give insulin is by injection.

Even when using medicines for diabetes, it is important to maintain a healthy eating plan and regular exercise as this often prolongs the effectiveness of medicines over many years.

Over time, other medicines may not work as well and insulin is needed. Some medicines may be continued even when insulin is started, to help the role of insulin in your body.

These days there are several insulin devices that help to make giving insulin injections easier. Your specialist and diabetes educator can provide support and education through this process.



Some diabetic patients require medications to prevent or reduce the effects of high blood sugar on vascular disease (coronary disease, stroke, kidney disease and eye complications). These treatments are especially useful for diabetic patients who have already suffered kidney, eye or heart complications or a stroke. They are also recommended particularly in high risk groups such as those with protein in the urine, elevated cholesterol levels, smokers and people with high blood pressure.

Home Medicines Review (HMR)

You can have a complete review of your medications in your home, by a pharmacist. The pharmacist must be accredited and have relevant experience.

People who have many medicines or illnesses, who see more than one GP or specialist, are elderly, or who have been recently discharged from hospital are all potentially at risk of suffering an unwanted effect from medicines. The medicines review is particularly beneficial for those with at least one chronic disease, for instance diabetes, because of the many doctors that will be providing care.

A Home Medicines Review gives you a chance to ask questions or raise concerns that you might not have mentioned to your doctors. The pharmacist also acts as a “go-between” to relay problems being experienced with the medicines to the doctor.

Many people find it reassuring to learn that they are receiving the most appropriate treatment, even though this may involve many medicines.

If you are confused about your medicines or would like to find out more information, or care for a relative or friend who you believe would benefit from this service, your GP can arrange for a pharmacist to see you in your home for the medicines review.

Health assessments, care plans, case conferences and allied health rebates

Your diabetes management can be helped by a number of Medicare services. These involve your doctor and other health care providers. The purpose of these is to provide better co-ordinated care for people with chronic illness and multiple care needs. Patient consent must first be obtained.

A health Assessment is available for people aged 45-49 at risk of developing a chronic disease and for people aged 75 years and older living in their home/community. Health assessment for Aboriginal and Torres Strait Islander people covers the full age spectrum, and should be used for the following age groups, children less than 15, adults aged 15-54 and adults aged 55 and over. These provide an in-depth assessment of a person's health, conducted in their home or in the doctor's surgery, to identifying health issues and conditions that are potentially preventable in order to improve health and/or quality of life and to prevent or delay the onset of chronic disease.

GP Management Plan (GPMP). Is a written comprehensive plan for the individual care of a patient of any age with one or more chronic or terminal conditions. The aim is to provide better co-ordinated care. The plan identifies goals, actions, treatment and services. A review of the GPMP may also be scheduled. The patient should be offered a copy of the plan.

Team Care Arrangements (TCAs). This is a written comprehensive plan of care for individuals who require care from a multidisciplinary team. The plan identifies goals, actions, treatment and services and is done in collaboration with at least two other health care providers eg dietitian, podiatrist, exercise physiologist. A copy of the TCA should be given to the collaborating providers and offered to the patient.

A Case Conference is a meeting or discussion at which the patient's GP and other health care providers (involved in the patient's care) discuss the patient's care needs and look for ways to better co-ordinate the services he/she receives.

Allied Health & Dental Rebates

People with **Team Care Arrangements** can receive a Medicare rebate for 5 visits per year to registered allied health professionals eg. Dietitian, Exercise Physiologist, Podiatrist, Diabetes Educator. **A GP referral is required.** People who are under the care of a GPMP and a TCA may also be eligible for dental services under Medicare. Their oral health must be impacting on their general health. **A GP referral is required.**

Allied Health Group Services

People with type 2 diabetes who have a GP Management Plan, can receive a Medicare rebate for group services provided by registered exercise physiologists, dietitians or diabetes educators. Eligible people can attend up to 8 group services each calendar year. Group programs aim to improve diabetes self management. **A GP referral is required.**

Diabetes Risk Evaluation

Patients between the ages of 40-49 with high risk of developing type 2 Diabetes (as determined by the Australian Type 2 diabetes Risk Assessment Tool AUSDRISK) are eligible for this evaluation. If appropriate they may be referred to a subsidised Lifestyle Modification Program (LMP). **A GP referral is required to participate in an LMP Program.**

Reading list

- “Living with Diabetes Type II” by Lois Jovanovic-Peterson, Charles Peterson, Morton Stone.
- “The new Glucose Revolution” and “The new Glucose Revolution: People with Diabetes”. Jenny Brand-Miller et al.
- “Diabetes and You - an owner’s manual” by Diabetes Australia.
- “The Australian Diabetic Cookbook” by Pauline Holden.
- “Low GI Eating Made Easy” by Jenny Brand-Miller et al.
- “Type 2 Diabetes Risk Reduction Book”, Diabetes Australia

Information sources

Free information is available from the following organisations:

Australian Diabetes Council

Phone: 1300 136 588
Address: Wollongong Office, 3 Station Street Wollongong
Phone: 4226 4379
Email: www.australiandiabetescouncil.com

Aboriginal Infoline.....

Free telephone advisory service. Speak to a Diabetes Educator, Aboriginal Health Worker, Dietitian or Exercise Physiologist. Information sheets on a wide range of topics can be downloaded from www.diabetesaustralia.com.au

Aboriginal factsheets available. Also see www.australiandiabetescouncil/Resources/PDFs/Aboriginal-factsheets.aspx

Illawarra Diabetes Service

Phone: 1300 308 969
Address: Level 2, 304 Crown St Wollongong 2500

National Heart Foundation

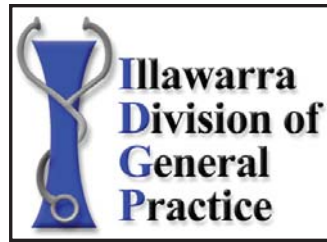
Heartline Phone: 1300 362 787

Smoking Cessation

Quitline

Phone: 13 78 48 (13 QUIT)
7am - 11pm Monday to Friday
9am - 5pm Weekends and Public Holidays

Produced by the Illawarra Division of
General Practice



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