



Making the most of diabetes & heart medicines



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OBJECTIVES

After this session you will be able to:

- ▶ Identify and promote the benefits of controlling blood pressure and lipids in clients with type 2 diabetes
- ▶ Support clients to interpret new reporting units for HbA_{1c}
- ▶ Apply effective strategies to assist clients to adhere to diabetes management options



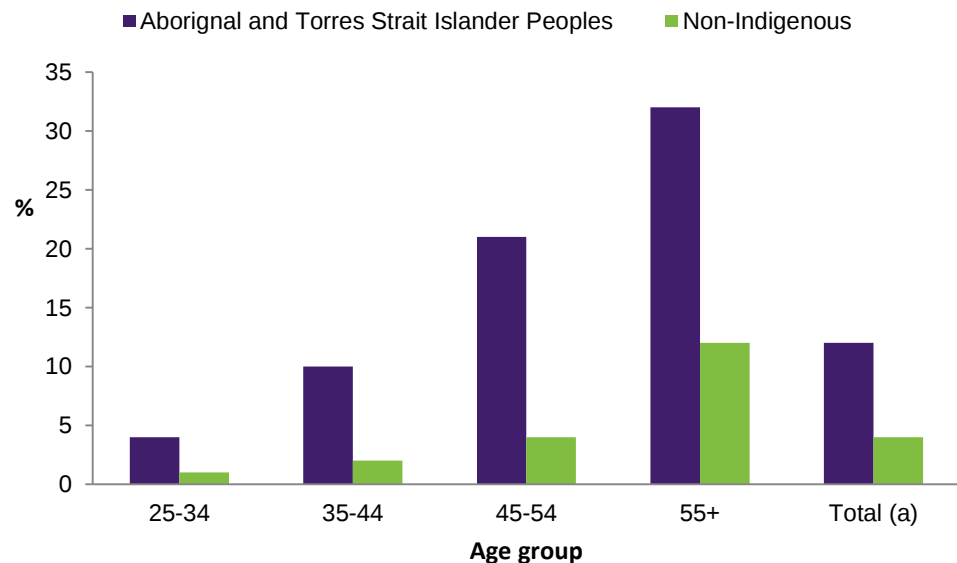
SESSION OUTLINE

- ▶ [Why diabetes?](#)
- ▶ [About diabetes](#)
- ▶ [Diabetes symptoms](#)
- ▶ [Diabetes and the heart](#)
- ▶ [Diabetes and cholesterol](#)
- ▶ [Managing cardiovascular risk](#)
- ▶ [Diabetes complications](#)
- ▶ [Medication management](#)
 - BP
 - Lipids
 - Diabetes
- ▶ [New reporting units](#)
- ▶ [Tests and targets](#)
- ▶ [Lifestyle management](#)

WHY DIABETES?

Aboriginal and Torres Strait Islander peoples **up to five times more likely** to have diabetes

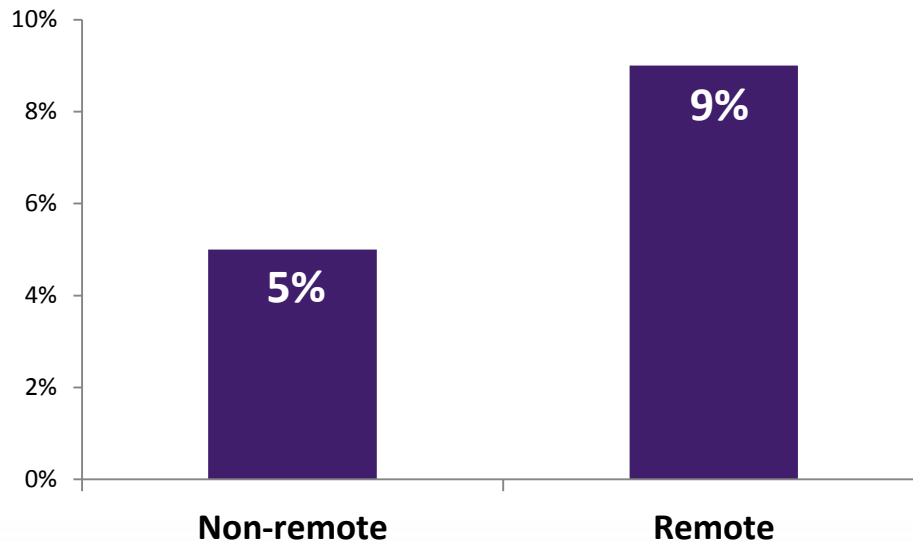
Percentage of self-reported diabetes/high blood sugar levels, adults aged 25 and over (2004–05)



Graph source: Aboriginal and Torres Strait Islander Health Performance Framework Report 2010. Canberra: Australian Health Ministers' Advisory Council, 2011.

WHY DIABETES?

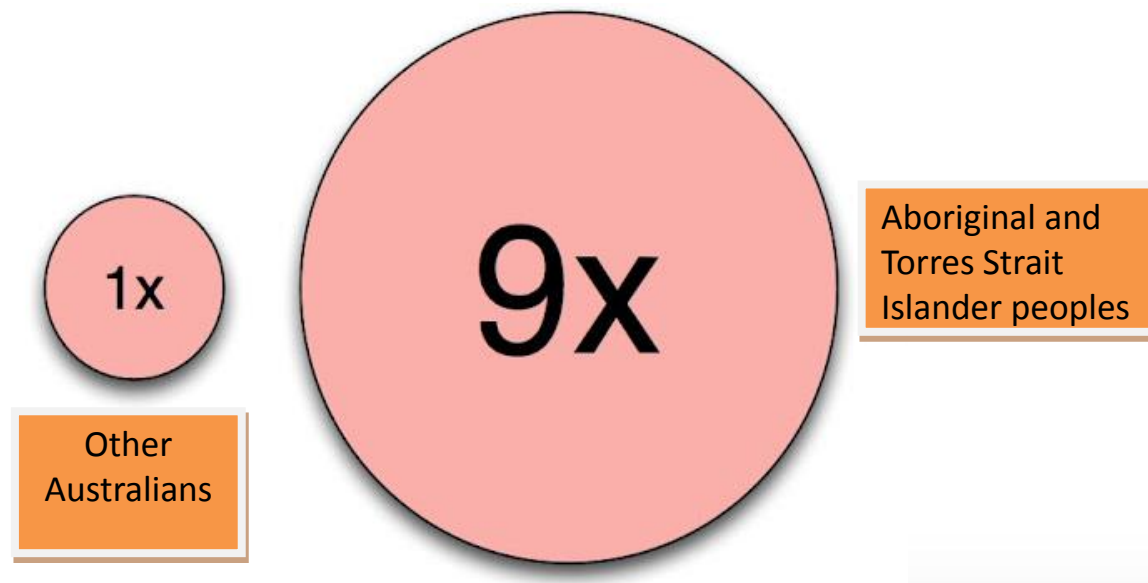
Aboriginal and Torres Strait Islander peoples in remote areas are nearly **twice as likely** to report diabetes



Graph data source: Aboriginal and Torres Strait Islander health performance framework 2010: detailed analyses. Cat. no. IHW 53. Canberra: Australian Institute of Health and Welfare, 2011.

WHY DIABETES?

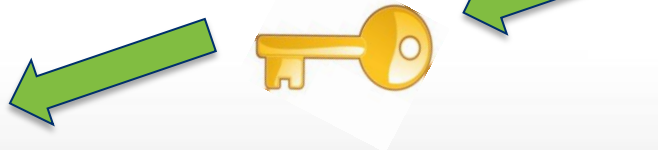
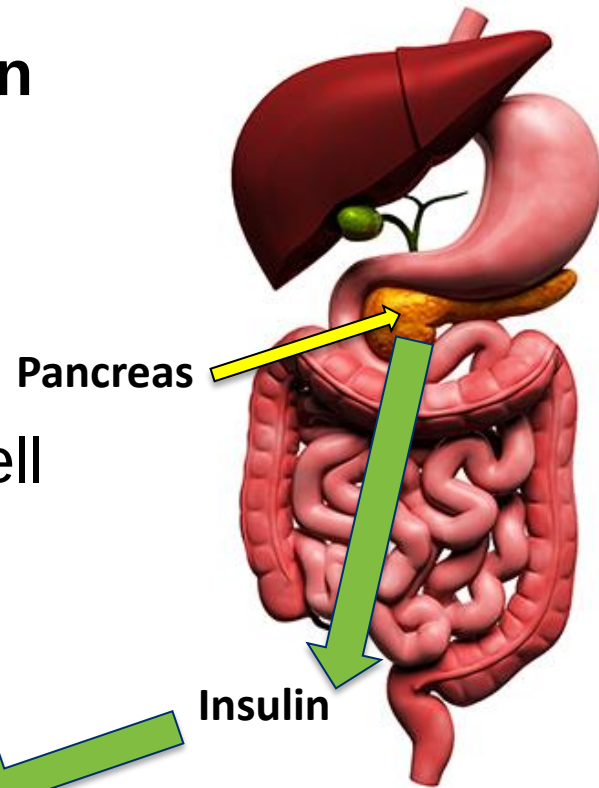
Aboriginal and Torres Strait Islander peoples **9 times more likely** to be hospitalised because of diabetes



Source: AIHW 2010. Australia's health 2010. Australia's health no. 12. Cat. no. AUS 122. Canberra: AIHW

ABOUT DIABETES

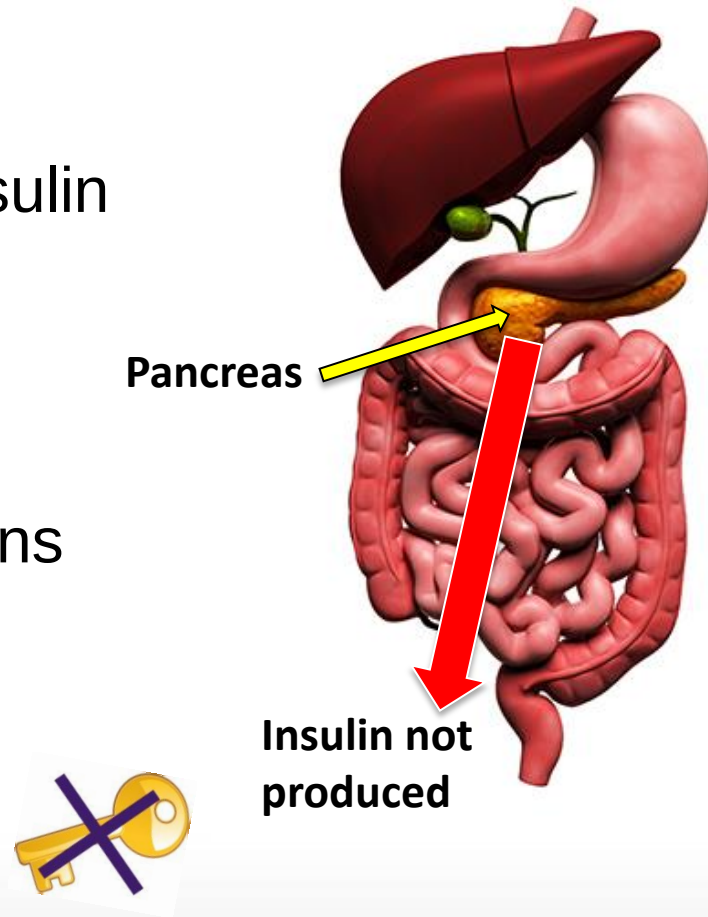
- ▶ The **pancreas** produces **insulin**
- ▶ Insulin keeps the balance of sugar (**glucose**) in the blood steady
- ▶ Insulin lets glucose enter the cell and create **energy**



ABOUT DIABETES

Type 1 diabetes

- ▶ Pancreas **stops** making insulin
- ▶ No known prevention
- ▶ No known cure
- ▶ Managed by insulin injections



A cartoon illustration of a man with dark skin and curly hair, wearing a red t-shirt and grey trousers. He is standing on a blue and white platform scale, leaning forward slightly with his hands on his thighs. The scale has a red display screen showing the number '100'.



TYPE 2 DIABETES: WHO IS AT RISK?

The Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK)

1. Your age group

- | | |
|------------------|-----------------------------------|
| Under 35 years | ☐ 0 points |
| 35 – 44 years | ☐ 2 points |
| 45 – 54 years | ☐ 4 points |
| 55 – 64 years | ☐ 6 points |
| 65 years or over | ☐ 8 points |

2. Your gender

- | | |
|--------|-----------------------------------|
| Female | ☐ 0 points |
| Male | ☐ 3 points |

3. Your ethnicity/country of birth:

3a. Are you of Aboriginal, Torres Strait Islander, Pacific Islander or Maori descent?

- | | |
|-----|-----------------------------------|
| No | ☐ 0 points |
| Yes | ☐ 2 points |

3b. Where were you born?

- | | |
|---|-----------------------------------|
| Australia | ☐ 0 points |
| Asia (including the Indian sub-continent), Middle East, North Africa, Southern Europe | ☐ 2 points |
| Other | ☐ 0 points |

4. Have either of your parents, or any of your brothers or sisters been diagnosed with diabetes (type 1 or type 2)?

- | | |
|-----|-----------------------------------|
| No | ☐ 0 points |
| Yes | ☐ 3 points |

5. Have you ever been found to have high blood glucose (sugar) (for example, in a health examination, during an illness, during pregnancy)?

- | | |
|-----|-----------------------------------|
| No | ☐ 0 points |
| Yes | ☐ 6 points |

6. Are you currently taking medication for high blood pressure?

- | | |
|-----|-----------------------------------|
| No | ☐ 0 points |
| Yes | ☐ 2 points |

7. Do you currently smoke cigarettes or any other tobacco products on a daily basis?

- | | |
|-----|-----------------------------------|
| No | ☐ 0 points |
| Yes | ☐ 2 points |

8. How often do you eat vegetables or fruit?

- | | |
|--------------|-----------------------------------|
| Everyday | ☐ 0 points |
| Not everyday | ☐ 1 point |

9. On average, would you say you do at least 2.5 hours of physical activity per week (for example, 30 minutes a day on 5 or more days a week)?

- | | |
|-----|-----------------------------------|
| Yes | ☐ 0 points |
| No | ☐ 2 points |

10. Your waist measurement taken below the ribs (usually at the level of the navel, and while standing)

Waist measurements (cm)

For those of Asian or Aboriginal or Torres Strait Islander descent:

- | Men | Women | |
|------------------|-----------------|-----------------------------------|
| Less than 90 cm | Less than 80 cm | ☐ 0 points |
| 90 – 100 cm | 80 – 90 cm | ☐ 4 points |
| More than 100 cm | More than 90 cm | ☐ 7 points |

For all others:

- | Men | Women | |
|------------------|------------------|-----------------------------------|
| Less than 102 cm | Less than 88 cm | ☐ 0 points |
| 102 – 110 cm | 88 – 100 cm | ☐ 4 points |
| More than 110 cm | More than 100 cm | ☐ 7 points |

Add up your points

Your risk of developing type 2 diabetes within 5 years*:

- ☐ **5 or less: Low risk**
Approximately one person in every 100 will develop diabetes.
- ☐ **6-11: Intermediate risk**
For scores of 6-8, approximately one person in every 50 will develop diabetes. For scores of 9-11, approximately one person in every 30 will develop diabetes.
- ☐ **12 or more: High risk**
For scores of 12-15, approximately one person in every 14 will develop diabetes. For scores of 16-19, approximately one person in every 7 will develop diabetes. For scores of 20 and above, approximately one person in every three will develop diabetes.

*The overall score may overestimate the risk of diabetes in those aged less than 25 years.

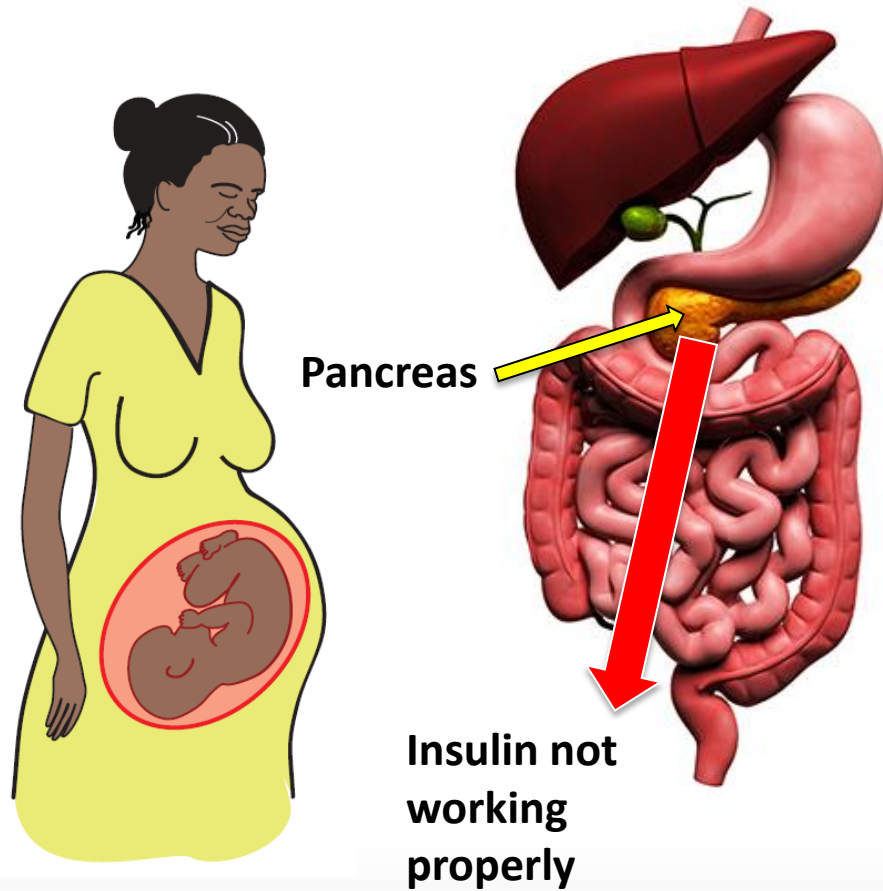
If you scored 6-11 points in the AUSDRISK you may be at increased risk of type 2 diabetes. Discuss your score and your individual risk with your doctor. Improving your lifestyle may help reduce your risk of developing type 2 diabetes.

If you scored 12 points or more in the AUSDRISK you may have undiagnosed type 2 diabetes or be at high risk of developing the disease. See your doctor about having a fasting blood glucose test. Act now to prevent type 2 diabetes.

ABOUT DIABETES

Gestational diabetes

- ▶ Pregnancy can stop insulin working properly
- ▶ Increased risk for type 2 diabetes
- ▶ 4 times more likely for Aboriginal and Torres Strait Islander mothers



DIABETES SYMPTOMS

Too much sugar in the blood – what happens?



DIABETES COMPLICATIONS

Sometimes a complication is the first sign that something is wrong

- ▶ MICROVASCULAR complications
= eyes, kidneys, skin
- ▶ MACROVASCULAR complications
= heart, brain, arms and legs

DIABETES COMPLICATIONS

Microvascular

Eyes: retinopathy

Kidneys:
nephropathy

Nerve damage:
neuropathy



Macrovascular

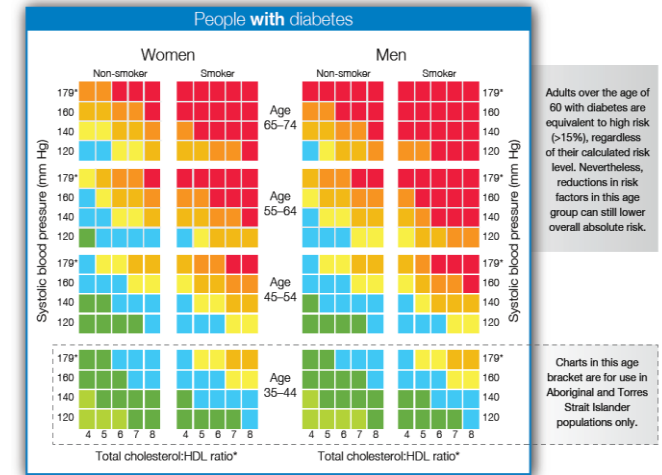
Brain: Stroke

Heart:
Cardiovascular
disease

Peripheral vascular
disease

DIABETES AND THE HEART

- ▶ Type 2 diabetes can double the **risk of dying** from cardiovascular disease.
- ▶ **Around half** of Aboriginal and Torres Strait Islander peoples with diabetes also have cardiovascular disease
- ▶ **80% of people** with diabetes will die of cardiovascular disease
- ▶ Measure a client's cardiovascular risk (e.g. Australian Cardiovascular Risk charts)



*In accordance with Australian guidelines, patients with systolic blood pressure ≥ 180 mm Hg, or a total cholesterol of >7.5 mmol/L, should be considered at clinically determined high absolute risk of CVD.

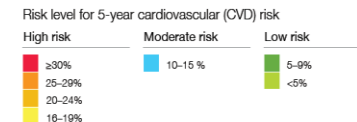
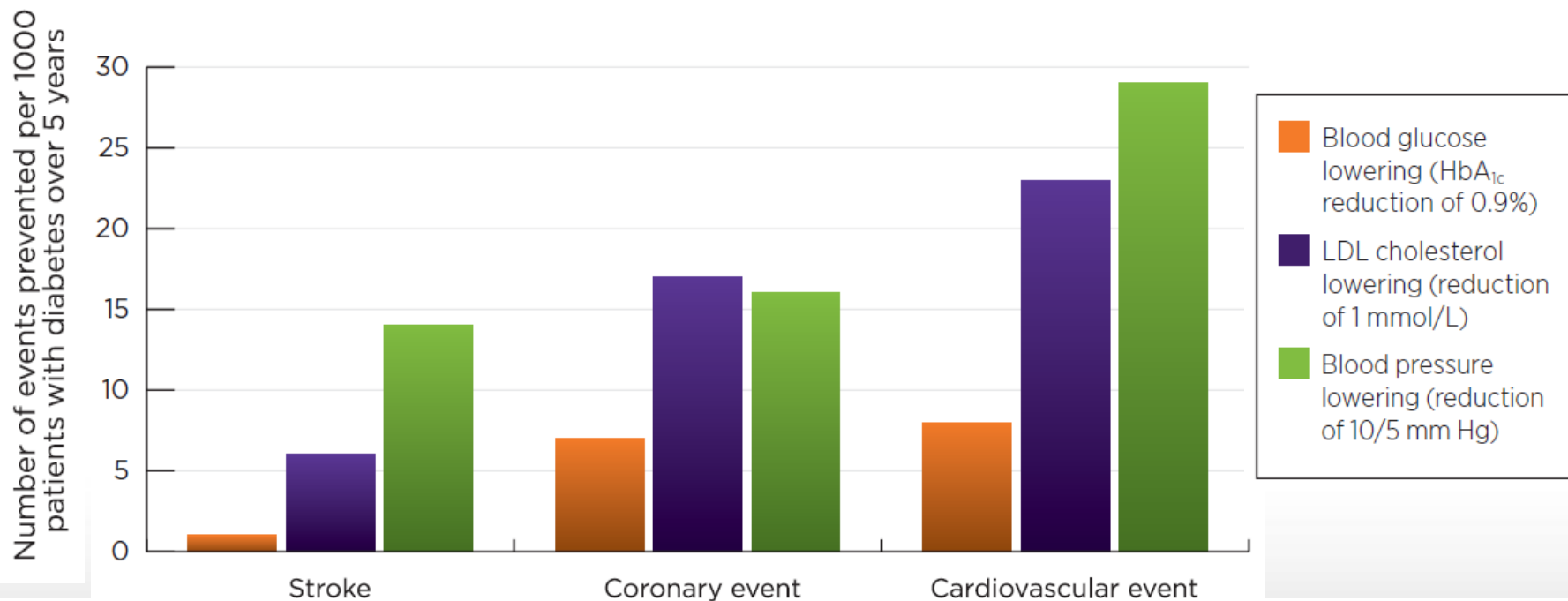


Image from: www.heartfoundation.com.au

MANAGING CARDIOVASCULAR RISK

- ▶ Controlling blood pressure and cholesterol is more effective in reducing cardiovascular disease risk than tightening blood glucose levels



ADDRESS BLOOD PRESSURE & LIPIDS AS A PRIORITY

	Those at high risk (>15%)* ¹⁰	Those at moderate risk (10–15%)* ¹⁰ Review 6–12 monthly	Those at low risk (<10%)* ¹⁰ Review every 2 years
FIRST LINE	Treat with antihypertensive and lipid-modifying therapy [†] regardless of BP or lipid levels	Trial lifestyle advice first (for 3–6 months) Consider adding antihypertensive therapy if BP persistently ≥ 160/100 mm Hg [†]	
BP	Target ≤ 130/80 mm Hg for all people with type 2 diabetes		
LIPIDS	Targets ▶ Total cholesterol < 4.0 mmol/L ▶ HDL-cholesterol ≥ 1.0 mmol/L	▶ LDL-cholesterol < 2.0 mmol/L ▶ Triglycerides < 2.0 mmol/L	
ASPIRIN	Routinely recommended in people with a history of CVD Not routinely recommended in people without a history of CVD	Not routinely recommended in people without a history of CVD	

Modified from National Vascular disease Prevention Alliance Guidelines for the management of absolute cardiovascular risk, 2012

BP targets for adults

Patient group	Target BP(mm Hg)
•coronary heart disease •diabetes •micro- or macroalbuminuria <i>[spot urine albumin/creatinine ratio >2.5 mg/mmol (men), 3.5 mg/mmol (women)]</i>	<130/80
•stroke or TIA •others	<140/90

Modified from:

Guide to management of hypertension 2008, National Heart Foundation of Australia Guidelines for the management of absolute cardiovascular disease risk, National Vascular Disease Prevention Alliance, 2012.

DIABETES AND HYPERTENSION

Reducing BP

- ▶ prevents early cardiovascular disease & death
- ▶ decreases microvascular disease affecting the brain, kidney and retina.

DRUGS FOR HYPERTENSION

- 1. ACE inhibitors**
- 2. ARBs or sartans**
- 3. calcium channel blockers CCBs**
- 4. Beta-blockers**
- 5. thiazide diuretics**

.

From AMH

Uncomplicated hypertension

an ACE inhibitor (or sartan) or

- a dihydropyridine calcium channel blocker or
- if 65 or older, a thiazide diuretic (low dosage).

Choose an agent given **once daily**.

Generally allow 4–6 weeks to assess response to treatment.

Inadequate effect

Add a **second antihypertensive**

Preferred combinations		
ACE inhibitor/ sartan	calcium channel blocker	<u>or</u> a thiazide
calcium channel blocker	thiazide	

ACE-INHIBITORS

Active ingredient	Brand names
captopril	Acenorm, Capoten, Captophexal, Topace
enalapril	Alphapril, Amprace, Auspril, Enahexal, Enalabell, Renitec/M
fosinopril	Fosipril, Monace, Monopril
lisinopril	Fibsol, Liprace, Lisinobell, Lisodur, Prinivil, Zestril
perindopril	Coversyl, Perindo
quinapril	Accupril, Acquin, Asig, Filpril
ramipril	Prilace, Ramace, Tritace
trandolapril	Gopten, Odrik



ACE inhibitors

First-line treatment especially in patients with

- chronic kidney disease
- diabetes with micro- or macroalbuminuria
- heart failure or with left ventricular dysfunction
- following MI (myocardial infarction or heart attack)

captopril, enalapril, fosinopril, lisinopril, perindopril, quinapril, ramipril, trandolapril

ARBs Angiotensin Receptor Blockers “sartans”

Active ingredient	Brand names
candesartan#	Atacand
eprosartan#	Teveten
irbesartan#	Avapro, Karvea
losartan	Cozaar
olmesartan#	Olmetec
telmisartan#	Micardis
valsartan	Diovan

AMH:

May be used as an alternative first-line treatment especially in patients who are intolerant of ACE inhibitors.

DRUG INTERACTIONS

There are medicines that you should be careful with when someone is on an ACE-inhibitor. The most important are:

- NSAIDs (Non steroidal anti-inflammatory drugs)

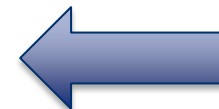
Always check with the doctor/pharmacist if you are not sure.

Always discuss with the doctor all medicines being taken.

Triple whammy is

- **ACEI/sartan**
- **diuretic**
- **NSAID**

CALCIUM CHANNEL BLOCKERS for hypertension



suitable as
1st-line
treatment of
uncomplicated
hypertension

Active ingredient	Brand names
amlodipine	Norvasc
felodipine	Felodur, Plendil
nifedipine	Adalat
lercanidipine	Zanidip

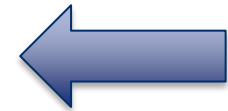
Other calcium channel blockers

diltiazem	Cardizem
verapamil	Isoptin, Cordilox, Veracaps



BETA BLOCKERS for hypertension

Active ingredient	Brand names
atenolol	Noten, Tenormin
labetalol	Presolol
metoprolol	Betaloc, Lopressor, Minax
propranolol	Deralin



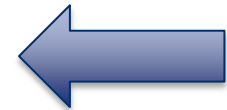
No longer
recommended
1st line for
uncomplicated
hypertension

Other β blockers

bisoprolol	
carvedilol	
sotalol	

THIAZIDE & THIAZIDE LIKE DIURETICS

Active ingredient	Brand names
hydrochlorothiazide#	Dithiazide
hydrochlorothiazide with triamterene	Hydrene
indapamide#	Natrilix/SR, Dapa-tabs
chlorthalidone	Hygroton



1st-line
treatment for
hypertension
>65 years

COMBINATION PRODUCTS

watch out for combination products containing a diuretic

- with an **ACEI** eg enalapril, fosinopril, or perindopril;
- with a **ARB** eg as candesartan, eprosartan, irbesartan, olmasartan, telmisartan or valsartan
- with a **ARB** plus a **CCB** plus a diuretic (NB **triple** combination)

Several different **strength** combinations are available.

READ THE LABEL

Comorbidities affecting antihypertensive choice 1

Comorbidity

Drugs with favourable effect

chronic kidney disease, diabetes
with micro- or macroalbuminuria

ACE inhibitors (or sartans)

heart failure

ACE inhibitors (or sartans), beta-blockers
(carvedilol, controlled release metoprolol,
bisoprolol), thiazide diuretics

post MI

beta-blockers (except oxprenolol, pindolol), ACE
inhibitors (or sartans)

angina

beta-blockers (except oxprenolol, pindolol),
calcium channel blockers, ACE inhibitors

AF

ACE inhibitors (or sartans), (verapamil, diltiazem,
beta-blockers may help rate control)

Comorbidities affecting antihypertensive choice 2

Comorbidity

asthma, COPD

bradycardia, second- or third-degree
atrioventricular block

heart failure

gout

Drugs with unfavourable effect

beta-blockers¹

beta-blockers, diltiazem, verapamil

calcium channel blockers (especially
verapamil, diltiazem)

thiazide diuretics

¹cardioselective beta-blockers (eg atenolol, metoprolol) may be used cautiously in mild-to-moderate reactive airways diseases

IMPACT OF BP LOWERING

Lowering systolic BP by **10 mmHg**
or diastolic by **5 mmHg**

reduces relative risk of cardiovascular events by $\approx$ **25%**
and stroke by $\approx$ **33%**,
irrespective of choice of antihypertensive.

NPS Prescribing Practice Review: 52; 9/2010

DOSING POINTERS

Initial BP mmHg	Drug 1 (half dose)	Drug 1 (full dose)	Drug 1 + Drug 2 (both half dose)
180 systolic	171	168	162
110 diastolic	104	103	99

ADHERENCE & CV MEDICINES

- 19% failed to collect second script
- 20 months average time medicine continued

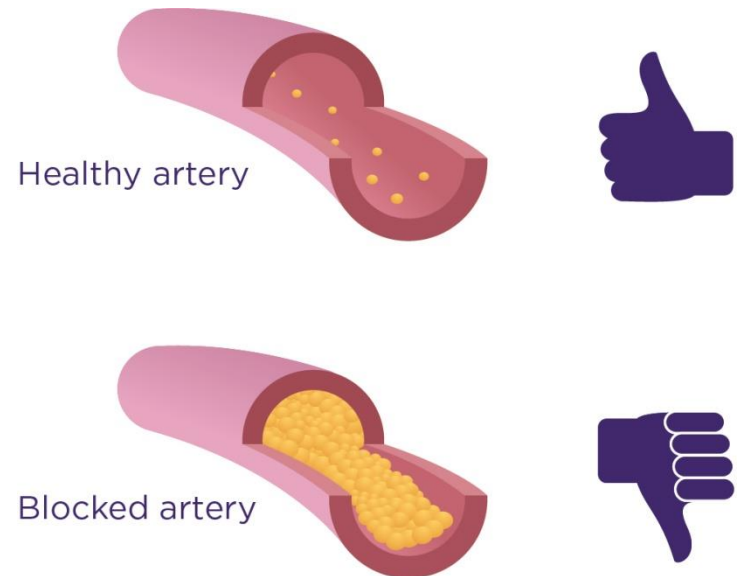
Aboriginal people & Acute Coronary Syndrome

There is strong evidence that Aboriginal and Torres Strait Islander people who present to hospital with ACS do not receive equivalent hospital care to other Australians with the same condition. A 2006 report from the Australian Institute of Health and Welfare (AIHW) found that compared with other Australians, Aboriginal and Torres Strait Islander people had:

- **three times** the rate of major coronary events, such as heart attack
- **1.4 times** the out-of-hospital death rate from coronary heart disease (CHD)
- more than **twice** the in-hospital death rate from CHD
- a **40%** lower rate of being investigated by angiography
- a **40%** lower rate of coronary angioplasty or stent procedures
- a **20%** lower rate of coronary bypass surgery.

DIABETES AND CHOLESTEROL

- ▶ Cholesterol is a **fat** in the blood
- ▶ There is good (**HDL**) and bad (**LDL**) cholesterol
- ▶ People with diabetes may also need a medicine for cholesterol
- ▶ **Monitoring cholesterol is an important part of diabetes management**



DRUGS FOR CHOLESTEROL

- statins
- fibrates
- ezetimibe

MANAGEMENT –TARGETS

RACGP goals for optimum management of lipids and BP for people with diabetes

LDL-C	<2.0 mmol/L
Total cholesterol	<4.0 mmol/L
HDL-C	>1.0 mmol/L
Triglycerides	<2.0 mmol/L
Blood pressure	≤130/80 mm Hg

STATINS

Active ingredient	Brand names
atorvastatin	Lipitor
fluvastatin	Lescol, Vastin
pravastatin	Lipostat, Pravachol
rosuvastatin	Crestor
simvastatin	Lipex, Zocor

fluvastatin,
pravastatin &
simvastatin more
effective taken in
the evening,
(NB compliance)

Fewer
interactions
with fluvastatin,
pravastatin &
rosuvastatin

POSSIBLE SIDE EFFECTS

- myalgia
- mild transient GI symptoms
- headache
- sleep disturbance (eg insomnia, nightmares)
dizziness
- elevated aminotransferase concentrations

Seek medical advice promptly if your urine is dark (brown) or if you have any muscle pain, tenderness or weakness

STATINS & DIABETES SCARE

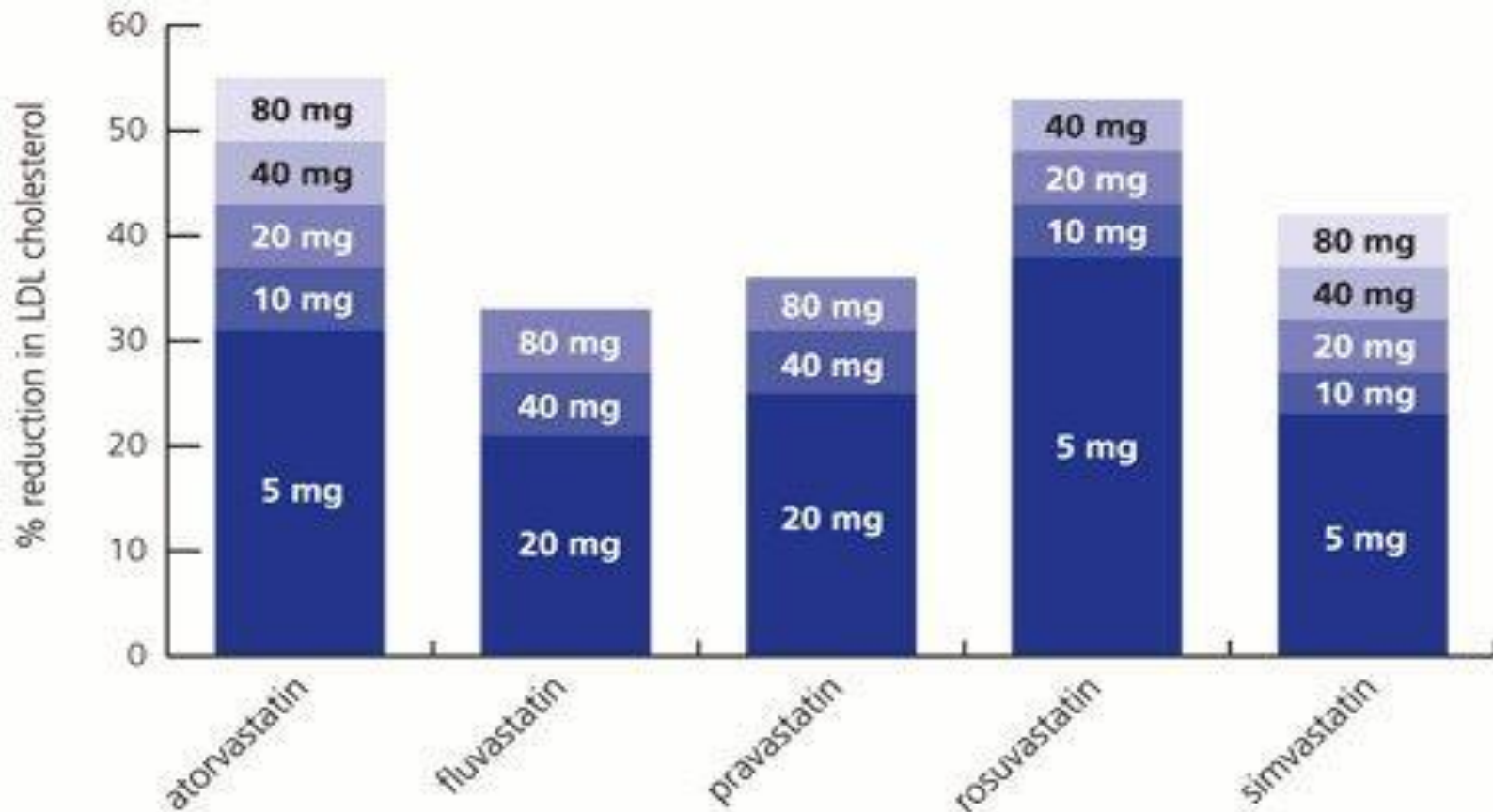
slightly increased risk for new-onset diabetes

Treat **255** patients with statins for 4 years

⇒ **1** additional case of diabetes

⇒ prevent **>5** major coronary events

STATIN EFFECT on LDL CHOLESTEROL



Derived from a meta-analysis of short-term trials. Height of bar indicates the point estimate for the dose. Reproduced with permission, National Prescribing Service, NPS NEWS 71 February 2011.

HDL RESPONSE to THERAPY

■ Weight reduction	5–20% increase in HDL
■ Physical activity	5–30% increase in HDL
■ Smoking cessation	5% increase in HDL
■ Statin therapy	5–10% increase in HDL
■ Fibrate therapy	5–15% increase in HDL
■ Nicotinic acid therapy	15–30% increase in HDL

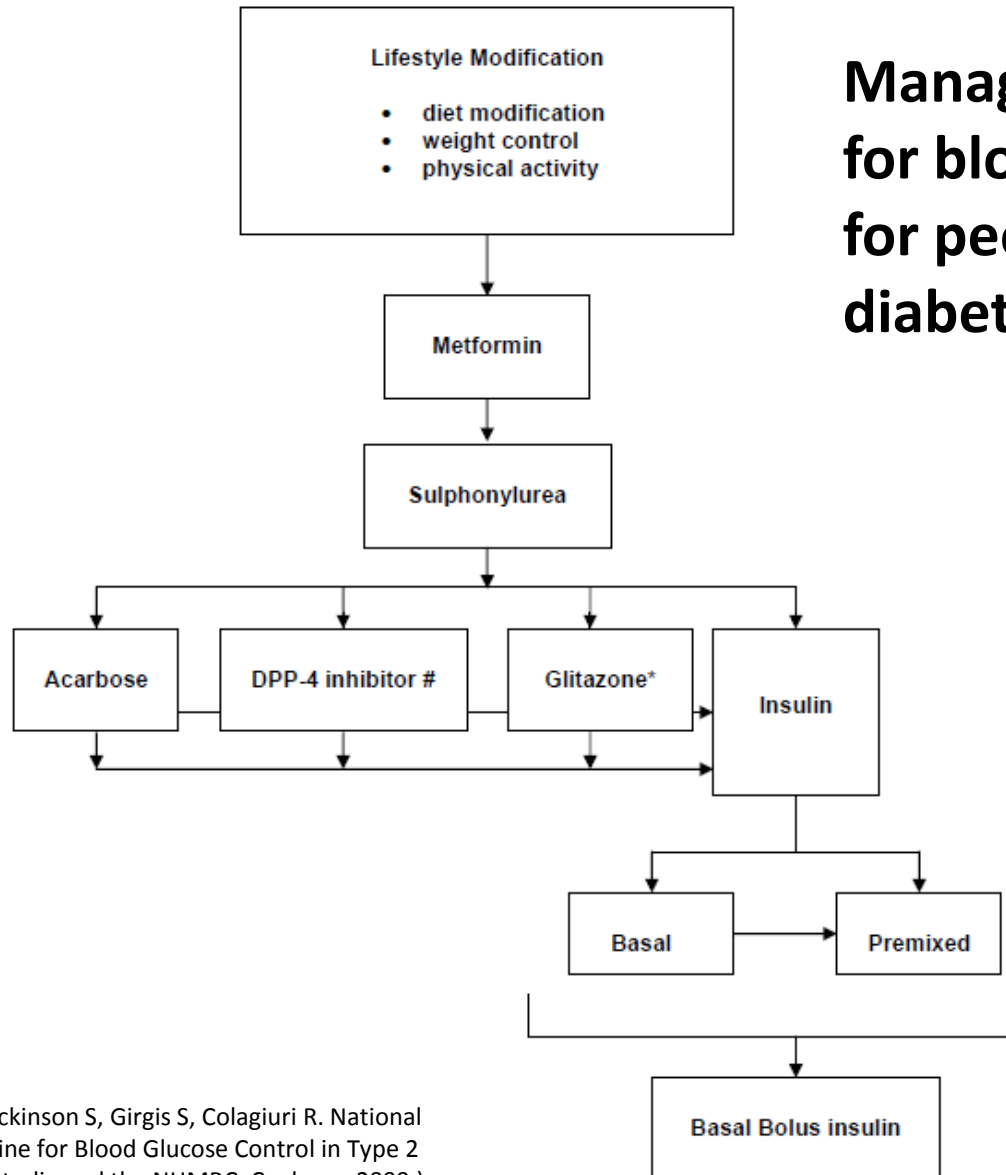
from US Guidelines

MEDICATION MANAGEMENT

Common diabetes medicines

- ▶ Biguanides (metformin)
- ▶ Sulfonylureas (glibenclamide, gliclazide, glimepiride, glipizide)
- ▶ Insulin
- ▶ Alpha-glucosidase inhibitor (acarbose)
- ▶ Thiazolidinediones: 'glitazones' (pioglitazone, rosiglitazone)
- ▶ DPP-4 inhibitors: 'gliptins' (linagliptin, saxagliptin, sitagliptin, vildagliptin)
- ▶ GLP-1 receptor agonist (exenatide)
- ▶ SGLT-2 inhibitors (canagliflozin, dapagliflozin)

MEDICATION MANAGEMENT



**Management algorithm
for blood glucose control
for people with type 2
diabetes**

(Source: Colagiuri S, Dickinson S, Girgis S, Colagiuri R. National Evidence Based Guideline for Blood Glucose Control in Type 2 Diabetes. Diabetes Australia and the NHMRC, Canberra 2009.)

HYPOGLYCAEMIA

Symptoms of hypoglycaemia:

- dizziness Or lightheaded
- shaky
- sweaty

Then if not treated:

- seizure
- sudden onset of odd behaviour - confusion
- unconsciousness

HOW TO FIX A HYPO NB 2 steps

If you can, check your blood glucose level. If it is below 4.0 mmol/L or you are having signs you are having a hypo, treat it quickly.

Step 1 “Treatment”

- 6–7 jelly beans or
- Half a glass of fruit juice or
- Half a can regular (not diet) soft drink or
- 3 teaspoons of sugar or honey.

Wait 10-15 minutes. Check your blood glucose level again to see if it is rising. If it isn't above 4.0 mmol/L and you don't feel better, repeat

Step 1

see ADC leaflets

Step 2

Once your blood glucose level is above 4.0 mmol/L have some longer-acting carbohydrate.

Eat something like:

- A slice of bread or
- A piece of fruit or
- A glass of milk or
- Six small dry biscuits.

Treat quickly It is important to treat a hypo quickly.

Or call 000 or 112 from mobiles.

DOSING POINTERS

- ▶ metformin incl XR
- ▶ sulphonylureas esp MR

RARE ADVERSE EFFECTS INCRETIN MIMECTICS

Pancreatitis

- risk factors: obesity, high TG, alcohol, gallstones
- report persistent severe abdo pain +/- N&V

Pancreatic duct metaplasia

Angioedema & DPP-4 inhibitors

- most in first 3 months, some at first dose
- nb. vildagliptin + ACEI 9X risk

INITIATING INSULIN

Step 1

- Diet, activity & oral medication OK
- Complicating medical conditions treated

Step 2

Deciding on time & type of insulin

am BGL	pm BGL	Schedule
<i>High</i>	<i>OK</i>	<i>Night-time basal</i>
<i>OK</i>	<i>High</i>	<i>Morning basal</i>
<i>High</i>	<i>High</i>	<i>BD isophane or OD glargine</i>

Step 3

Dosage

- **Decide BGL target**
- **Decide on dose:** 'start low & go slow' (eg 10 units basal)
- **Single dose:** morning or evening
Less in elderly, active, low BMI
More in over weight & underactive.

Step 4

Adjust doses

- Change doses in increments of 10-20% (eg 2-4 u) at intervals of 2-4 days.
- Mixed insulins may be needed.

NEW REPORTING UNITS

- ▶ New way to report **HbA_{1c}**
- ▶ Previously reported as a **percentage** (e.g. 7%)
- ▶ The new reporting units - **mmol/mol**
- ▶ Both units to be used until 2013

Old units (%)	New units (mmol/mol)
5.0	31
6.0	42
6.5	48
7.0	53
8.0	64
9.0	75

MANAGEMENT –TARGETS

Some recommended HbA_{1c} targets for people with type 2 diabetes

Clinical condition	HbA _{1c} - mmol/mol (%)
Pregnancy or planning pregnancy	≤ 42 (≤ 6.0)
Diabetes of recent onset and no clinical cardiovascular disease: • requiring lifestyle modification with or without metformin • requiring glucose-lowering drugs other than metformin or insulin • requiring insulin	≤ 42 (≤ 6.0)* ≤ 48 (≤ 6.5)* ≤ 53 (≤ 7.0)*
General target	≤ 53 (≤ 7.0)
Diabetes that is long-standing or clinical cardiovascular disease (any therapy) [†]	≤ 53 (≤ 7.0)
Recurrent severe hypoglycaemia or hypoglycaemia unawareness (any therapy)	≤ 64 (≤ 8.0)

*HbA_{1c} targets must be balanced against the risk of severe hypoglycaemia, especially among older people.

LIFESTYLE MANAGEMENT: FEET

Nerve damage
and reduced blood
supply to the feet
are common



Check for:

- ▶ circulation
- ▶ foot shape
- ▶ toenails
- ▶ skin damage

LIFESTYLE MANAGEMENT: SMOKING

People with diabetes are already at high risk of heart disease, and smoking makes this even worse



Provide help and referral to quit
e.g. Smokecheck



Know the medicines that can help people quit e.g. nicotine patches

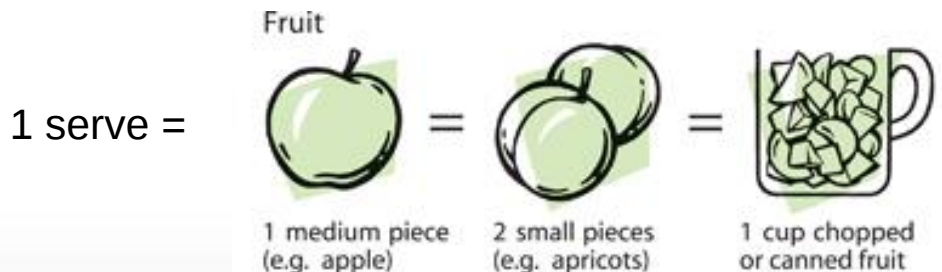
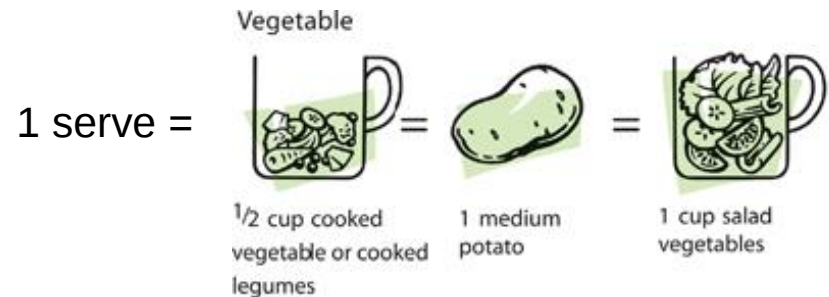
Images from: www.smokecheck.com.au

LIFESTYLE MANAGEMENT: NUTRITION

Healthy eating can reduce the risk of diabetes complications

Remember 2 + 5 per day:

- ▶ 2 fruit serves
- ▶ 5 vegetable serves



Images from: www.gofor2and5.com.au

LIFESTYLE MANAGEMENT: ALCOHOL

No more than 2 standard drinks a day

One standard drink is:

- ▶ 375 mL low alcohol beer (3.5% alcohol)
- ▶ 260 mL regular beer
- ▶ 100 mL wine
- ▶ 75 mL fortified wine (port, sherry)
- ▶ 30 mL spirits (bourbon, scotch)



LIFESTYLE MANAGEMENT: ALCOHOL

BEER



1.1
285ml
Full Strength
4.8% Alc. Vol



1.6
425ml
Full Strength
4.8% Alc. Vol



1.4
375ml
Full Strength
4.8% Alc. Vol



1.4
375ml
Full Strength
4.8% Alc. Vol

WINE



1.4
150ml
Average Restaurant
Serve of Sparkling Wine
12% Alc. Vol



1.6
150ml
Average Restaurant
Serving of Red Wine
13.5% Alc. Vol



1.4
150ml
Average Restaurant
Serving of White Wine
11.5% Alc. Vol

SPIRITS



1.2
330ml
Full Strength
Ready-to-Drink
5% Alc. Vol



1
30ml
High Strength
Spirit Nip
40% Alc. Vol



1.5
375ml
Full Strength
Pre-mix Spirits
5% Alc. Vol

Images from: www.alcohol.gov.au

LIFESTYLE MANAGEMENT: EXERCISE



Regular physical activity helps to:

- ▶ Make insulin work better
- ▶ Lower blood glucose
- ▶ Control blood fats, blood pressure and weight
- ▶ Increase bone strength
- ▶ Improve general wellbeing



Aim for 30 minutes at a moderate intensity on 5 or more days a week

MedicineList+ smartphone app



Using the free *MedicineList+* smartphone app means you will **always have your medicines and health information with you.**

It can also:

remind you **how and when** to take your medicines so you can get the most out of them

help everyone involved in your health care to know which medicines you use so medicines **mistakes are prevented**

help your doctor and pharmacist to check and review your medicines so they can make the right decisions about your health

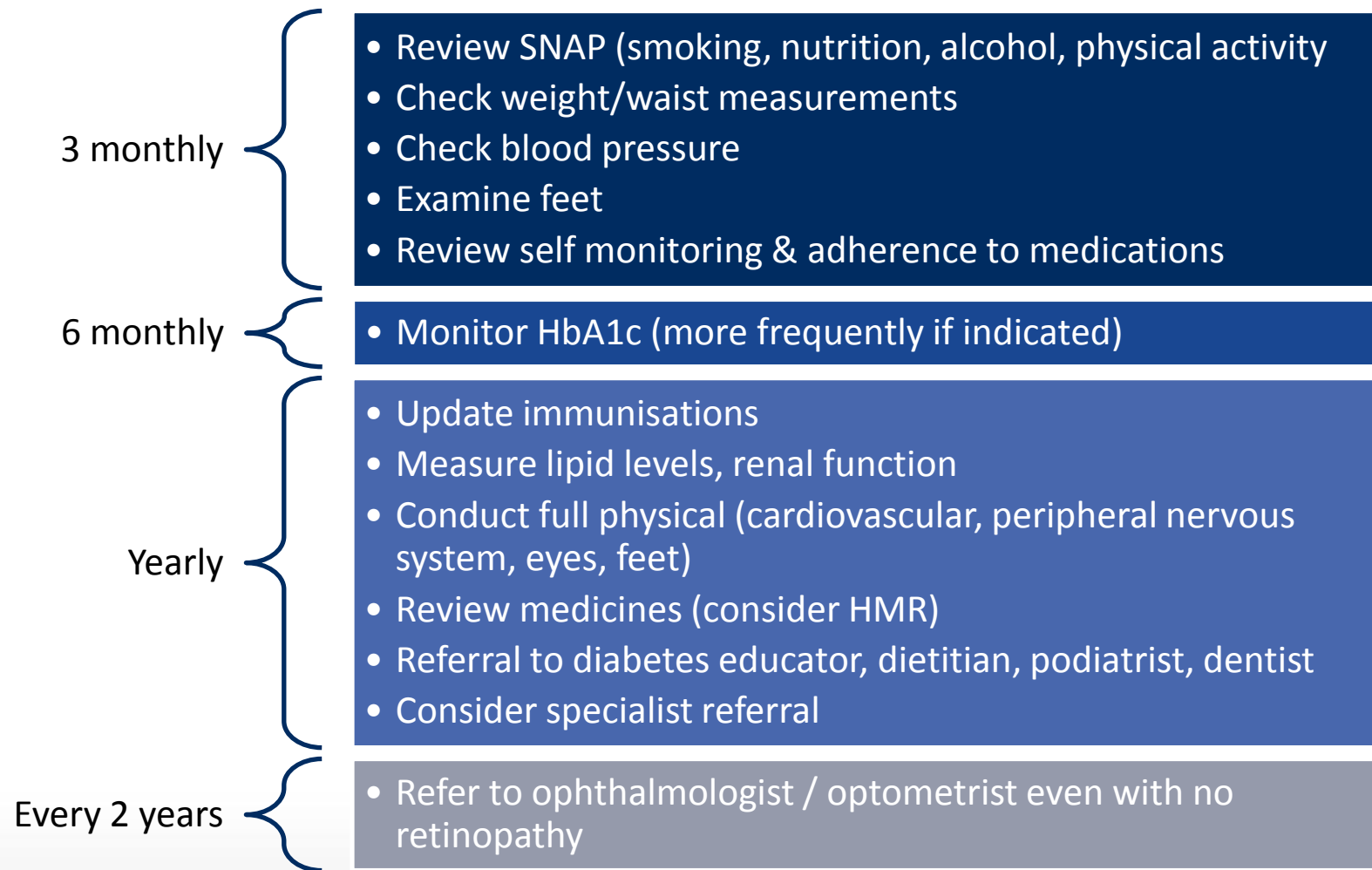
provide vital information about your medicines in an emergency, helping to ensure your safety.

***Get the best out of your
medicines.***

***Ask your doctor or pharmacist
about a Home Medicines Review.***

A Home Medicines Review is a free health service funded by the Commonwealth Government.

ANNUAL CYCLE OF CARE





TAKE HOME MESSAGES

- ▶ Managing blood pressure and lipids along with blood glucose produces the best outcomes
- ▶ Don't forget the importance of managing lifestyle factors
- ▶ Talk with your clients about problems with adherence and work together to address these problems



FOR MORE INFORMATION

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