



# MA'ISUKA

## O MEA E TATAU ONA E ILOA

Diabetes: what  
you need to know

ENGLISH/SAMOAN



Australian  
Diabetes  
Council

---

# Contents

## Chapter      Index

	Foreword
	Introduction
1	What is diabetes
2	Types of diabetes
	Type 1 diabetes
	Type 2 diabetes
	Gestational diabetes
3	Risk factors
4	The Diabetes Health Care Team
5	Annual Cycle of Care
6	Healthy Eating for Diabetes
7	What's in food?
8	Common Questions about Food and Diabetes
9	Diabetes and Alcohol
10	Physical activity
11	Oral Medications
12	Insulin
13	Blood Glucose (Sugar) Monitoring
14	Short Term Complications – Hypoglycaemia
15	Short term complications – high blood glucose (sugar) level (hyperglycaemia, DKA, HONK/HHS, and sick days)
16	Chronic complications
17	Diabetes and your feet
18	Diabetes and Pregnancy
19	Diabetes and Your Emotions
20	Diabetes and Driving
21	Diabetes and Travel
22	Need an Interpreter?
23	National Diabetes Services Scheme (NDSS)
24	Australian Diabetes Council

# Contents

## Mataupu      Faasinotusi

	Uputomua
	Faatomuaga
1	O le a le ma'isuka?
2	Ituaiga Ma'isuka
	Ma'isuka ituaiga 1
	Ma'isuka ituaiga 2
	Ma'isuka a o To/Ma'itaga (Gestational Diabetes)
3	O Mea e ono Aafia ai
4	O le'Au a le Soifua Maloloina e Vaaia le Ma'isuka
5	Faataamilosaga Faale-Tausaga o le Vaavaaiga
6	'Ai mea'ai e Lelei mo le Ma'isuka
7	O a mea o i totonu o mea'ai?
8	Mataupu 8 Fesili Taatele e uiga i Mea'ai ma le Ma'isuka
9	Mataupu 9 Ma'isuka ma le Ava malosi
10	Faagaioiga Faamalositino
11	Vai/Fualau e Inu
12	Inisalini
13	Puleaina ole Kulukose (Suka) ole Toto
14	O Lavelave Mo Sina Taimi Pu'upu'u – Haipakilisimia (Hypoglycaemia)
15	O lavelave mo sina taimi pu'upu'u – maualuga le kulukose (suka) ole toto (hyperglycaemia, DKA, HONK/HHS, ma aso ma'i)
16	Lavelave ose Ma'iumi (Chronic complications)
17	Ma'isuka ma ou alofivae (Feet)
18	Ma'isuka ma le Ma'ito
19	Ma'isuka ma ou Lagona loloto - Emotions
20	Ma'isuka ma le avetaavale
21	Ma'isuka ma Famalaiga
22	E manaomia se Faamatalaupu?
23	Polokalame o Auaunaga Ma'isuka ile Atunu atoa (NDSS)
24	Fono ale Ma'isuka i Ausetalia (Australian Diabetes Council)

---

# Foreword

Diabetes –What you need to know has been written for people with diabetes and for people who would like to learn more about the condition.

Health professionals with skills and knowledge in a variety of specialised areas have contributed to the content and presentation.

This book has been reviewed by diabetes educators, dietitians and exercise physiologists.

Australian Diabetes Council  
ABN 84 001 363 766 CFN 12458  
26 Arundel Street, Glebe, NSW 2037  
GPO Box 9824, Sydney, NSW 2001

email: [info@australiandiabetescouncil.com](mailto:info@australiandiabetescouncil.com)  
websites: [www.australiandiabetescouncil.com](http://www.australiandiabetescouncil.com)  
[www.diabeteskidsandteens.com.au](http://www.diabeteskidsandteens.com.au)

---

# Uputomua

Ma'isuka - O mea e tatau ona e iloaina, ua tusia lelei mo tagata e ma'isuka ma tagata foi e mananao e a'oao'ina atili e uiga ile faama'i o le ma'isuka.

O foma'i polofesa e i ai tomai ma le malamalama i le tele o ituaiga tulaga faapitoa sa fesoasoani i mea ua tusia i lenei tusi ma lona tuuina atu.

O lenei tusi ua toe iloiloina e i latou o faiaoga o le ma'isuka, o e vaiai mea'ai (dietitians) ma i latou o foma'i o faamalosi tino.

**Australian Diabetes Council**  
ABN 84 001 363 766 CFN 12458  
26 Arundel Street, Glebe, NSW 2037  
GPO Box 9824, Sydney, NSW 2001

Imeli: info@australiandiabetescouncil.com  
Upegatafa'ilagi: www.australiandiabetescouncil.com  
www.diabeteskidsandteens.com.au

© Copyright Australian Diabetes Council February 2011 (Sa ona kopiina Fono Ma'isuka Ausetalia Fepuali 2011)  
O lenei tusitusiga/fesoasoani e i ai le faasaaga e kopi ai (copyright). E ese mai ai i ni feutaiga talafeagai mo faapogai e a'oao'ina ai na o oe lava (private), o suesuega, o ni faitioga poo le toe iloiloina ua faatagaina i lalo o le tulafono Copyright Act 1968, e leai se vaega e faataga ona teuina pe toe faia ni kopi i soo se isi lava auala e aunoa ma se tusi ua tusia lelei e faataga ai ia tulaga mai le Fono Ma'isuka Ausetalia (Diabetes Australian Council).

# Introduction

One in four people in Australia have either diabetes or are at high risk of diabetes. Diabetes prevalence is considerably higher in Aboriginal and Torres Strait Islander and certain culturally and linguistically diverse (CALD) groups.

So far there is no cure for diabetes but with proper management most people can lead a full and active life and delay or prevent long term complications. To ensure best possible health, people with diabetes and their families need to understand a great deal about diabetes.

Being diagnosed with diabetes can be frightening and overwhelming. It's a lot easier when you understand it and develop a lifestyle plan to manage it. For this reason it is very important to have information about food, medicines, exercise, community resources and diabetes self care.



This book has been produced by Australian Diabetes Council. It has been written in English and several other languages to explain what you need to know about diabetes.

# FAATOMUAGA

E tasi mai le fa tagata i Ausetalia e maua i le ma'isuka pe e i ai foi i le tulaga maualuga e ono maua ai i le ma'isuka. O le ma'isuka e matuā maualuga ma taatele i tagatanuu Apoliki ma tagata mai le Motu o Torres Strait ma mai ni kulupu paino mai isi atunuu eseese latou aganuu ma tu culturally and linguistically diverse (CALD).

E'o mai i le taimi nei e leai se togafiti mo le ma'isuka ae a pulea lelei o le toatele e maua ai, e mafai lava ona ola ma soifua umi lava ma mafai foi ona faatuai ai po o le puipuia foi o aafiaga ma faaletonu e umi se taimi o aafia ai. Ina ia mautinoa le maua pea o le soifua lelei sili, o i latou e ma'isuka atoa ai ma o latou aiga, e manaomia lava ina ia malamalama ile tele o mea tau ile ma'isuka.

A iloa loa ua e maua ile ma'isuka, e mafai ona e fefe ma faapopoleina loa oe. E sili atu ona faigofie pe a e malamalama i ai ma atinae loa se fuafuaga o le soifuaga ina ia pulea lelei. O le faapogai lea, o faamatalaga faatuatuaaina e uiga i mea'ai, vai ma fualau mai foma'i, o faamalositino, o fesoasoani mai le komiuniti ma le vaaiga e oe lava ia o le ma'isuka e matuā taua tele.



O lenei tusi ua tuuina atu e le Fono o le Ma'iska a Ausetalia (Australian Diabetes Council). Sa tusia i le gagana Faa-Peretania ma isi foi gagana e faamatala ai mea e ao ona e iloa e uiga i le ma'isuka.

# 1

## What is diabetes?

Diabetes is a condition where the amount of glucose (sugar) in the blood is too high. Glucose is your body's main energy source but when blood glucose is too high over long periods it can damage certain organs.

Glucose comes from carbohydrate foods that are broken down and released into the bloodstream. Carbohydrate foods include bread, rice, potatoes, fruit and milk. The pancreas, a part of the body that is found behind the stomach, releases a hormone called insulin into the blood stream. Insulin allows the glucose to move from the blood stream into certain cells of the body, where it is changed into energy. We use this energy to walk, talk, think, and carry out many other activities.

Diabetes occurs when there is either no insulin, not enough insulin or the insulin that is produced is not working properly to move the glucose out of the blood..

Currently there is no cure for diabetes.

### ***Symptoms of high blood glucose (sugar)***

1. Frequent urination (both night and day)
2. Thirst / dry mouth
3. Tiredness / lack of energy
4. Blurred vision
5. Slow healing of wounds
6. Infections e.g. urine and skin
7. Tingling sensation in feet
8. Itchy skin

# 2

## Types of diabetes

***The most common types of diabetes include:***

- Type 1 diabetes
- Type 2 diabetes
- Gestational Diabetes (GDM)

---

# 1

## O le a le ma'isuka?

O le ma'isuka o le ma'i e tupu mai ina ua maualuga le kulukose (suka) i le toto. O le kulukose o le mea autū lea e i lou tino e mafua ma maua mai ai le malosi, ae a maualuga tele atu loa ma ua ova atu mo se taimi umi lava, e mafai ai loa ona faaleaga ai isi totoga faapitoa o le tino.

O mea'ai ia e ta'uua o carbohydrates (kapohaikeleti) e.g. falaoa, pasta ma pateta, e vaevaeina ma liliuina i suka ma faaalu atu loa i alatoto i mea la ia ua ta'uua o kulukose. O le atepili (pancreas) o le totoga lea e i tua ole puta, nate faasau le homone e ta'uua o le inisalini (insulin) e alu atu i alatoto. E faataga e le inisalini le kulukose e alu ati i alatoto i sela faatulagaina ese mai ole tino, o iina e sui ai loa ile malosiaga (energy). Tatou te faaaogaina loa lenei malosiaga mo le savali, tautala, mafaufau ai, ma fai ai isi faagaioiga uma lava.

E mafua mai le ma'isuka ina ua leai se inisalini e gaosia, poo ua lē lava foi le inisalini nate faaluiua le kulukose i alatoto (ile inisalini lea ua gaosia ua lē galue lelei).

I le taimi nei e leai se togafiti mo le ma'isuka.

**O auga ole maualuga o le toto ile kulukose (suka), e aofia ai mea nei:**

1. Tula'i soo ile feauvai (ile ao ma le po)
2. Fia inu/mago (dry) le gutu
3. Vaivai eeva/leai se malosi
4. Nenefu le vaai
5. Faigata ona pepē manu'a
6. Ma'i/tiga (infections) (e.g. faigata ona fai le feauvai)
7. Matuitui mai lalo o vae (feet)
8. Mageso le pa'u (skin).

# 2

## Ituaiga Ma'isuka

**O le ma'isuka e pito i sili ona taatele e aofia ai:**

- Ma'isuka ituaiga 1
- Ma'isuka ituaiga 2
- Ma'isuka a'o to se'i oo ina fanau (Gestational Diabetes (GDM))

---

## Types of diabetes - continued

### Type 1 diabetes

This type of diabetes usually occurs in children and young people, but it can occur at any age. In type 1 diabetes the body's immune (defence) system has destroyed the cells that make insulin. As a result no insulin is produced by the pancreas. The development of type 1 diabetes is NOT linked to lifestyle e.g. eating too much sugar, not exercising enough or being overweight.

Symptoms of type 1 diabetes usually happen very quickly and include:

- Feeling very thirsty
- Passing a lot of urine frequently
- Sudden weight loss (despite normal or increased appetite)
- Tiredness
- Generally feeling unwell
- Abdominal pain, nausea and vomiting
- Mood changes.



If undetected, blood glucose levels become very high. When the body cannot get enough glucose from the blood to use as energy it will begin to breakdown fat. When the body is breaking down too much fat, ketones are produced. High ketone levels and high blood glucose levels are very serious and need immediate medical treatment.

If untreated, the person will become very ill and may develop:

- Rapid or deep breathing
- Dehydration and vomiting, leading to
- Coma.

The treatment for type 1 diabetes is insulin which must be commenced immediately and must be taken for life. The management of type 1 diabetes also includes:

- Balancing exercise, food and insulin
- Regular blood glucose monitoring
- Healthy lifestyle.

### Ma'isuka ituaiga 1

O le ituaiga ma'isuka lenei e tupu i tamaiti , ae mafai lava ona tupu mai i soo se matua lava o se tagata This type of diabetes usually occurs in children and young people, but it can occur at any age.

I le ma'isuka ituaiga 1 ua faaleaga e le autau e tete'e atu i faama'i (immune system) ia selā e gaosia le inisalini. O le mea la ua tupu, ua le toe faia nei e le atepili (pancreas) ni inisalini . O le mea la ua tupu, ua le toe faia nei e le atepili (pancreas) ni inisalini.

O le tupu mai o le ma'isuka numera 1 E LĒ fesoottai ma le ituaiga olaga e ola ai (e.g. aitele i le suka, o le le faia o ni faamalositino poo ua puta ma lapo'a tele foi ua ova le mamafa).

O auga o le ma'isuka ituaiga 1 e masani lava ona vave ona tutupu mai e aofia ai mea nei:

- Lagona fia inu lava i taimi uma
- Pi so'o ma alu le feauvai
- Vave le pa'u o le mamafa (e ui lava o la e 'ai lelei pe o 'ai tele foi)
- Vaivai
- Faalogo atu lava ua le malosi
- Tiga le manava, fia pua'i ma fia faasuati
- Fesuia'i le amio/uiga.



Afai e le iloa, o le kulukose (suka) i le toto o le a alu maualuga lava. A oo loa ina le lava le kulukose mai le toto e faaaoga o se malosiaga, ona amata loa lea ona mu le ga'o, e mafua mai ai ketone ia e maua ai loa i le ma aso e ma'i ai. O ketone ma le kulukose pe a maualuga i le toto, e matautia tele ma e manaomia le vave togafitia.

Afai ae le togafitia, o le a ma'i tigaina lava lea tagata ma atonu o le a maua foi i le:

- Wavevave le manava pe manavanava loloa foi
- Leai se vai i le tino (Dehydration) ma faasuati, ma o'o ai loa ina
- Coma (Moe ua le toe iloaina se mea)

O le togafitiga mo le ma'isuka ituaiga 1 o le inisalini ma e tatau lava ona amata fai loa faavave ma ia faia loa mo le olaga atoa. O le puleaina o le ma'isuka ituaiga 1 e aofia ai foi ma le:

- Faapaleni o faamalositino, mea'ai ma le inisalini
- Vaai ma siaki i taimi uma le kulukose i le toto
- Ola ma tumau ise olaga soifua maloloina lelei.

---

## Types of diabetes - continued

### Type 2 diabetes

This type of diabetes is usually diagnosed in people over 40 years of age. However it is now being diagnosed in younger people, including children. Poor lifestyle choices are a major reason for this increase in young people .

Inactivity and poor food choices can result in weight gain, especially around the waist. This prevents the body from being able to use insulin properly (insulin resistance) so blood glucose levels rise. Type 2 diabetes has a slow onset.

Type 2 diabetes runs in families so children and grandchildren are at risk. The good news is that type 2 diabetes can be delayed or prevented when healthy lifestyle choices that focus on increasing physical activity, healthy food choices and weight loss are made. For this reason it is important to know your risk for type 2 diabetes.

Symptoms of type 2 diabetes may include frequent urination, thirst, blurred vision, skin infections, slow healing, tingling and numbness in the feet. Often, there are no symptoms present, or symptoms are not recognised.

Once diagnosed, it is very important to maintain good blood glucose (sugar) levels as soon as possible to avoid complications.

Management should begin with healthy food choices and regular physical activity. However, diabetes is a progressive disease and over time, oral medications and/or insulin may be needed.

## Ma'isuka ituaiga 2

E masani ona maua ai tagata i le 40 tausaga agai atu i luga. Ae peitai ua maua ai foi ma talavou laiti, ua oo lava i tamaiti laiti. O le leaga o le olaga e filifili e ola ai o se faapogai autu lea ua faateteleina ai i tagata talavou. O le le gaioi ma le leaga o le filifiliga o mea'ai e mafai ai ona lapo'a ma mamafa tele ai pauna, aemaise lava le manava o le a lapo'a. O le a taofia mai ai loa le tino i le faaaogaina lelei o le inisalini, (insulin resistance) ona oso ai loa le i luga o le kulukose (suka). O le ma'isuka ituaiga 2 e mafai ona faatuai lona tupu mai. O le ma'isuka numera 2 e alu i le toto ma le aiga ma e ono aafia ai fanau a fanau.

O le tala e fafia ai e uiga i le ma'isuka ituaiga 2 e mafai ona fatuaituai pe puipuia foi pe afai ua faia filifiliga sa'o mo soifuaga e ola lelei ai i le faateleina lea o gaioga faamalosito, filifiliga mo mea'ai mo le soifua lelei ma le lusi o pauna. Ona o le faapogai lenei e taua lava lou iloaina o lou ono aafia i le ma'isuka ituaiga 2.

O auga o le ma'isuka ituaiga 2 e aofia ai le pi so'o ma alu le feauvai, fiainu, nenefu le vaai, papala le pa'u, tuai ona pepe manu'a, mainiini ma pepe vae (feet) O le tele o taimi e leai ni auga e aliali mai, pe e leiloa atu foi ni auga.

A sue ma ua iloa ua maua ile ma'i, e taua le taumafai ia tumau le maualuga ole kulukose ile toto ile vave lava e mafai ai ina ia taofia ai nisi mau faaletonu.

O le puleaina e tatau ona amataina nei loa i le filifiliga o mea'ai lelei mo le soifua, ma le fai pea lava o faamalosi tino.

Ae peitai, o le ma'isuka o se faama'i e sosolo. I le umi o le taimi, atonu o le a manaomia vai e inu ma/ poo le tui foi i le inisalini.

---

## Types of diabetes - continued

### Type 2 Management Plan

- Be physically active (e.g. walking) – aim for 30 minutes of moderate physical activity every day of the week. Check with your doctor first
- Adopt a healthy eating plan
- Lose weight or maintain a healthy weight
- Reduce salt intake
- Drink plenty of water
- See your diabetes health care team for regular health checks – blood glucose levels, blood pressure, cholesterol, kidneys and nerve function, eyes and dental health
- Take care of your feet - check daily
- Stop smoking
- Regular dental care to avoid teeth and gum problems.

Encourage your family to adopt a healthy lifestyle



### Smoking and diabetes

Tobacco has many unhealthy effects, especially for people with diabetes. People with diabetes who smoke are three times more likely to die of heart disease or stroke than people with diabetes who do not smoke.

Smoking raises blood glucose levels, reduces the amount of oxygen reaching the body's tissues, increases fat levels in the blood, damages and constricts blood vessels and increases blood pressure. All of these contribute to the risk of heart attack and stroke. Smoking can also worsen blood supply to feet.

For those who quit smoking, more frequent monitoring of blood glucose levels is important. This is because blood glucose levels may get lower when they quit smoking and can require changes to medication doses.

It is advisable that people with diabetes discuss with their doctor, the products and services available to help them quit smoking.

## Ituaiga o ma'isuka – faaauau pea

### Fuafuaga o le Puleaina Ituaiga 2

- la toaga e gaioi (e.g. savali) – . vaai ile 30 minute o faagaioiga faamalositino ile tele o aso ole vasio. Siaki muamua i lau foma'
- Fai se fuafuaga o mea'ai e lelei mo le soifua
- Lusi pauna ma pe tumau i se mamafa lelei mo le soifua maloloina
- Faalaititi le ai masima
- Inu tele le vai auli
- Vaai lau au ale soifua maloloina e vaaia le ma'isuka mo au siaki faifaipea (e.g. maualuga ole kulukose ile toto,toto maualuga, ga'o ile toto (cholesterol) ma fatuga'o) ma gaioiga o neula, mata ma ou nifo ia lelei
- Vaai faalelei ou vae – siaki i aso uma
- Tu'u le ulaula
- Vaai pea lava le foma'i nifo ma ni faafitauli i ou aulamu (gums).

Faamalosi i lou aiga ia ola i se olaga soifua lelei.



### Ulaula ma le ma'isuka

E tele aafiaga le lelei mo le soifua maloloina e i le tapaa, ae maise lava tagata e maua i le ma'isuka. O tagata e maua i le ma'isuka ma ulaula e faatoluina le ono feoti i ma'i o le fatu poo le stroke (pe le tino ua le lava se okesene) nai lo tagata ma'isuka e le ulaula.

O le ulaula e oso ai i luga le maualuga o le kulukose (suka) ma faaititia ai le o'o atu o le okesene i vaega iti (tissues) o le tino, e faateleina ai le maualuga o ga'o i le toto, e faaleagaina ai ma puni ai alatoto ma oso ai i luga le toto maualuga. O nei mea uma e fesoasoani lea i le ma'i o le fatu oso/pe ma le stroke. E fesoasoani foi le ulaula e faaleaga ai le alu atu o le toto i vae (feet).

Mo i latou ua tu'u le ulaula, e taua lava le vaavaaia pea lava pea o le maualuga o le kulukose o o outou tino. O le pogai o lea tulaga o le maualuga o le kulukose i le toto atonu o le a maualalo ina ua outou tu'uina le tapaa ma e manaomia loa le faaititia o vai/fualau na e inu. E fautuaina lava i latou e maua i le ma'isuka ia talanoa ia outou foma'i, o mea ma auaunaga o loo avanoa e fesoasoani ia latou ina ia tuu le ulaula.

---

## Types of diabetes - continued

### Gestational Diabetes

This type of diabetes occurs during pregnancy and usually goes away after the baby is born.

In pregnancy, the placenta produces hormones that help the baby to grow and develop. These hormones also block the action of the mother's insulin. As a result, the need for insulin in pregnancy is two to three times higher than normal. If the body is unable to produce enough insulin to meet this extra demand, gestational diabetes develops.

Screening for gestational diabetes occurs around the 24th to 28th week of pregnancy. Gestational diabetes may re-occur at the next pregnancy.

Blood glucose (sugar) levels that remain above target range may result in bigger babies, which can make birth more difficult. It can also increase the risk to the baby of developing diabetes in later life.



#### **What do you need to do if you have been diagnosed with gestational diabetes?**

It is necessary to see a diabetes educator, dietitian, endocrinologist and obstetrician. The management includes healthy eating for the mother, moderate exercise plus regular monitoring of blood glucose levels.

It is a good idea to have small frequent meals throughout the day that are nutritious for you and your baby, rather than three big meals. This will ease the insulin demand on the pancreas.

Those most at risk for developing gestational diabetes are:

- Women over 30 years of age
- Women with a family history of type 2 diabetes
- Women who are overweight
- Aboriginal or Torres Strait Islander women
- Certain ethnic groups, in particular Pacific Islanders, people from the Indian subcontinent and people of Asian origin
- Women who have had gestational diabetes during previous pregnancies.

Women who have had gestational diabetes are at increased risk of developing type 2 diabetes. It is strongly recommended to have a follow up Oral Glucose Tolerance Test 6-8 weeks after the baby is born, then every 1-2 years.

## Ma'isuka a o To/Ma'itaga (Gestational Diabetes)

O le ituaiga ma'isuka lenei e tupu a o to le tina ma e masani lava ona toe alu ese pe a uma ona fanau mai le pepe.

A o to le tina, e tuuina mai e le faa'autagata (placenta) ia homone e fesoasoani i le tupu a'e ma le atinaeina o le pepe. O nei homone e poloka ai foi ia gaioiga o inisalini mai le tina. O le mea la ua tupu, o le manaoga mo le inisalini a o to le tina o le a faalua pe faatoluina le mauluga atu nai lo tulaga masani. Afai la e le mafai e le tino ona tuuina mai nei inisalini e pei ona manaomia nei e tali atu ai i le manaoga faasili lea, ona tupu ai loa lea o le ituaiga ma'isuka lenei (gestational diabetes).

O le iloiloga poo le fa'ataina mo le ituaiga ma'isuka lenei (gestational diabetes) e faia i le 24 i le 28 vaiaso o le ma'itaga. Atonu e toe tupu foi le ma'isuka lava lenei i leisi foi maitaga e soso'o mai.

O le mauluga o le kulukose (suka) i luga atu o tulaga masani atonu o le a maua mai ai pepe e lapopo'a tele atu, ma e mafai ona faigata ai le faafanauga. E mafai ai foi ona ono maua ai o lea pepe i le ma'isuka i le lona olaga mulimuli mai.



### **O le a le mea e manaomia e te faia pe afai ua iloa e maua oe i le ma'isuka a o e to (gestational diabetes)?**

E tatau loa ona e alu e vaai se faiaoga o le ma'isuka, se foma'i o mea'ai (dietitian), foma'i e vaaia homone o le toto (endocrinologist), ma se foma'i tipitipi o fafine fananau (obstetrician).

O le puleaina e aofia ai le 'ai e le tina o mea'ai e lelei mo le soifua, fai nai faamalositino faaopopo i ai ma le siakiina pea lava pea o le mauluga o le kulukose (suka) o le toto.

O se tasi o auala lelei o le 'ai so'o o mea'ai laiti i le aso mea'ai e lelei mo oe faapea foi pepe, nai lo le tolu o mea'ai lapopo'a i le aso. O lenei tulaga o le a faafaigofie ai le manaoga mo inisalini mai le atepili.

O i latou e sili ona ono maua i le ma'isuka a o to (gestational diabetes) o:

- Fafine ua ova ile 25 tausaga le matua
- Fafine ua ova atu i le 30 tausaga le matua
- Fafine e i ai i o latou aiga talafaasolopito o le ma'isuka ituaiga 2
- Fafine ua ova atu le mamafa
- Fafine Apoliki poo fafine mai le motu o Torres Strait
- Kulupu faapitoa mai atunuu eseese, tagata mai le Pasefika, tagata mai le malo Initia ma tagata o mai i Saina
- Fafine sa maua i le ma'isuka a o ma'ito i isi taimi sa to ai muamua.

O fafine sa maua i le ma'isuka a o ma'ito (gestational diabetes) e i ai latou i le tulaga mauluga e maua ai i le ma'isuka ituaiga 2. E fautuaina malosi i latou ia toe sueina i le Suega o le Lavatia o Kulukose e auala atu i le Gutu (Oral Glucose Tolerance Test) 6-8 vaiaso talu ona uma le fanau mai o pepe, ia ona fai lea tai 1 – 2 tausaga.

# 3

## Risk Factors

Risk factors for developing type 2 diabetes include:

- Family history of diabetes
- Overweight and over 45 years of age
- Heart disease, heart attack or stroke
- High blood pressure and over 45 years of age
- Anyone over 55 years of age
- High blood cholesterol
- High blood glucose levels during pregnancy (gestational diabetes)
- Higher than normal blood glucose levels
- Aboriginal, Torres Strait Islander, Pacific Islanders, Indian sub-continent or Chinese cultural background
- Women with Polycystic Ovarian Syndrome.

The Australian Diabetes Risk Assessment Tool (AUSDRISK) should be used to identify your risk of developing type 2 diabetes. You can get this risk assessment tool from your doctor or from [www.health.gov.au](http://www.health.gov.au). Discuss your results with your doctor.

***Children and adolescents who are overweight, experiencing increased thirst, urinary frequency, tiredness and/or who may have a family history of diabetes should also be tested for diabetes.***

One of the main risk factors for developing diabetes is a family (hereditary) link. This means that if a person has diabetes, there is an increased risk that other members of their family (e.g. brother, sister, children, grandchildren) will develop diabetes.

Your family needs to be aware of the importance of a healthy lifestyle to delay or prevent type 2 diabetes. Regular physical activity and healthy food choices will help reduce the risk of developing type 2 diabetes.

### **PREVENTION - THE TIME TO ACT IS NOW**

People at high risk of type 2 diabetes should be tested by their doctor every year to check for the possible onset of diabetes.

# 3

## O Mea e ono Aafia ai

O Mea e ono Aafia ai e maua ai i le ma'isuka ituaiga 2 e aofia ai mea nei:

- Talafaasolopito o le aiga i le ma'isuka
- Ova le mamafa ma ova atu i le 45 tausaga le matua
- Ma'i fatu, fatu oso poo le stroke
- Toto maualuga pe ova atu i le 45 tausaga le matua
- Soo seisi lava e ova atu i le 55 tausaga le matua
- Maualuga le ga'o (cholesterol) o le toto
- Maualuga le kulukose o le toto a o ma'ito (gestational diabetes)
- Maualuga tele atu le kulukose o le toto nai le mea masani ai
- Apoliki, Tagata mai le Motu o Torres Strait, Tagata mai le Pasefika Tagata mai le konitineta o Initia pe o mai foi Saina
- Fafine e maua i le le paleni o homone (Polycystic Ovarian Syndrome ).

O le meafaigaluega a le Australian Diabetes Risk Assessment Tool (AUSDRISK) e tatau ona faaaoga e faailoa ai lou ono aafia i le maua i le ma'isuka ituaiga 2. E mafai ona e maua mai lenei meafaigaluega e iloilo ai mai lau foma'i pe mai le [www.health.gov.au](http://www.health.gov.au) Talanoa i lau foma'i e uiga i faaiuga o lau iloiloga.

***O tamaiti ma talavou ua ova le lapopo'a, e maua ile fia inu i taimi uma, pi soo, vaivai ma i ai le talafaasolopito o latou aiga le ma'isuka, e tatau lava ona suesueina pe mama'isuka.***

O se tasi o faapogai autu e ono maua ai i le ma'isuka o le fesootaiga e alu alu i le toto o le aiga (hereditary). O lona uiga afai e maua se tagata i le ma'isuka, o le a tele le avanoa e ono maua ai isi tagata o le aiga (e.g. uso, tuafafine, le fanau, fanau a fanau) o le a maua foi i le ma'isuka.

E tatau ona iloa lelei e lou aiga le taua o le ola i se olaga soifua lelei e faatuai ai pe puipuia ai foi le ma'isuka ituaiga 2. O faagaioiga faatino e faifaipea ma filifiliga o mea'ai lelei mo le soifua maloloina o le a fesoasoani e faaititia ai le ono maua o outou i le ma'isuka ituaiga 2.

### **PUIPUIGA – O LE TAIMI E GAOI AI O NEI**

O tagata e maualuga le tulaga e ono maua ai i le ma'isuka ituaiga 2 e tatau lava ona sueina e a latou foma'i i tausaga uma e siaki pe ua maua i le ma'isuka.

# 4

## The Diabetes Health Care Team

Diabetes is a lifelong condition. Your health care team is available to support, advise and answer your questions.

The most important member of this team is you!

You are the one who will be at the centre of your diabetes management. Your family, friends and co-workers might also be part of your team.

The Diabetes Health Care Team includes:

- **Your family doctor** who looks after your diabetes and refers you to other health professionals as needed. Your family doctor is responsible for organising your diabetes tests.
- **An Endocrinologist** is a specialist in diabetes. Many people with type 1 diabetes see an endocrinologist. People with type 2 diabetes may see an endocrinologist if they are having problems with their diabetes management or when insulin therapy is needed.



- **A Diabetes Educator** is usually a registered nurse who has done special training in diabetes. Educators can assist with teaching you about diabetes in many of the important areas such as blood glucose monitoring, medications, insulin, sick days, travel and stress.
- **A Dietitian** can answer questions about healthy eating for you and your family.
- **An Exercise Physiologist** can help to develop a physical activity plan suitable for you - regardless of age, ability or disability.
- **An Optometrist** will do a diabetes eye check and a vision check. Some people with diabetes need to see an Ophthalmologist, a doctor with special training in diseases and problems with the eye.

- **A Podiatrist** is a health professional who deals with the feet. Many podiatrists have advanced training in caring for the 'diabetic foot'.
- **A Dentist** will check your teeth and gums.

Sometimes people with diabetes have trouble coping with the day to day burden of their disease. **Social workers** and **psychologists** can help in this area. Your family doctor or diabetes educator can often refer you to these services.

Other specialists are sometimes needed. Children and adolescents with diabetes should see a **paediatric endocrinologist** or a **paediatrician**.

Women with diabetes who are planning a pregnancy, who are pregnant or women who develop gestational diabetes should see an **obstetrician** and endocrinologist. If complications of diabetes are present, referral to other health professionals may be required.

**Pharmacists** are also very important in your diabetes management. They have special knowledge of how medicines work and which medications may interact with each other.

Ask your doctor or diabetes health care team about any structured **diabetes education** classes/programs in your area. Diabetes education programs, either individual or as part of a group, will help you set some healthy lifestyle goals and assist you with managing your diabetes.

# 4

## O le 'Au a le Soifua Maloloina e Vaaia le Ma'isuka

Ole ma'isuka o se faama'i e tumau ile olaga atoa. E avanoa la le 'au/vaega o le soifua maloloina e vaaia le ma'isuka e lagolago, fautua ma latou taliina au fesili.

O le sui pito i sili ona taua o le 'au lenei o oe! .

O oe o le tagata e i le ogatotonu i le puleaina o lou ma'isuka. O lou aiga, o au uo ma le 'au faigaluega e mafai foi ona avea latou ma vaega o lou 'au

O le 'Au ale Soifua Maloloina e Vaaia le Ma'isuka e aofia ai:

- Lau **foma'i mo tou aiga** na te vaaia lou ma'isuka ma faasino oe i isi foma'i polofesa pe a e manaomia. O le tiute foi o lau foma'i le faatulaga o le suesueina o lou ma'isuka.



- O le **Endocrinologist**, ole foma'i faapitoa mo le ma'isuka. O le toatele o tagata e maua ile ma'isuka numera 1 e o e vaaai le foma'i lenei - endocrinologist. O tagata e maua ile ma'isuka ituaiga 2 e o vaaai le foma'i lava lenei pe afai ua i ai ni faaletonu ile puleaina o o latou ma'isuka
- O le **Faiaoga mo le Ma'isuka** e masani lava o se tasi o tausima'i ua lesitalaina ua uma ona a'oao'ina faapitoa ile ma'isuka. E mafai e nei faiaoga ona fesoasoani e a'oao' oe e uiga ile ma'isuka ma le tele o vaega taua e pei ole vaavaaia ole kulukose, o vai/fualau, inisalini, aso ma'i, femalagaaiga ma lou popole faanoanoa.
- E mafai e le tagata e vaaia me'a'i - **Dietitian** ona tali au fesili e uiga i me'a'i lelei mo le soifua maloloina mo oe ma lou aiga
- E mafai e le foma'i mo faamalositino - **Exercise Physiologist** ona fesoasoani e fuafua se polokalame o faagai oiga faamalositino e talafeagai mo oe – tusa lava poo le a lou matua, lou tomai poo ni faaletonu foi i lou tino (disability).

- E mafai ele foma'i o mata - **Optometrist** ona siaki ou mata ma lau vaai. O nisi tagata atonu e manaomia le vaaai ole foma'i ata faapitoa - Ophthalmologist, ole foma'i lea ua a'oao'ina faapitoa i faama'i ma faafitauli o mata.
- Ole **Podiatrist** ole foma'i polofesa e feagai ma vae i lalo - feet. Ole toatele o foma'i o vae ua uma ona a'oao'ina faapitoa sili atu i vae o tagata ma'isuka - 'diabetic foot'
- Ole a siaki e le **Dentist** – foma'i fa'inifo ou nifo ma ou aulamu – gums.

O nisi taimi e i ai faafitauli i tagata ma'isuka ile feagai ai lea ma le faatulagaina/puleaina ole avega i mea e fai i aso taitasi o o latou ma'isuka. E mafai e **social workers** ma **psychologists** – foma'i o mafaufau ona fesoasoani i tulaga ia. E mafai e lau foma'i ole tou aiga ona faasino oe i auaunaga nei.

E manaomia foi isi foma'i faapitoa i nisi taimi. E tatau lava i tamaiti ma tagata talavou e maua ile ma'isuka ona vaaai ia foma'i mo tamaiti - **paediatric endocrinologist** poo se **paediatrician**.

O fafine e ma'isuka ae fuafua e fai sana pepe pe ua to foi, ia poo ua maua foi ile ma'isuka a o to (gestational diabetes) e tatau lava ona vaaai le foma'i - **obstetrician** ma le **endocrinologist**. Afai ua i ai ni faafitauli/faaletonu ole ma'isuka, atonu e manaomia le faasino ma ave i isi foma'i polofesa.

E taua foi Pule o faletalavai – **Pharmacists** ile puleaina o lou ma'isuka. Ua ia i latou tomai faapitoa ile aogā ma le aafiaga ole tino i vai/fualau, ma poo fea foi le vai/fualau e galulue faatasi ma isi fualau.

Fesili i lau foma'i poo le 'au (team) a le soifua maloloina e vaaia le ma'isuka e uiga i ni vasega/polokalame o a'oao'ga o le ma'isuka i lo outou pitonuu. O polokalame o a'oao'ga o le ma'isuka, pe fai taitoatas i pe fai o se vaega o se kulupu, o le a fesoasoani ia oe e fai ai ni sini o ituaiga olaga soifua lelei e ola ai ma fesoasoani ai ia oe i le puleaina o lou ma'isuka.

# 5

## Annual Cycle of Care

### What regular health checks are recommended?

Regular health checks help to reduce your risk of developing diabetes complications.



**The recommended health checks are:**

What needs to be checked?	How often?	Who do you need to see?
Blood pressure	Every visit to your doctor	Your family doctor
Weight, height and waist circumference Body Mass Index (BMI): if required – this helps determine if you have a problem with your weight	Every six months/ more often if required	Your family doctor
<u>Feet</u>	Daily self check and Six monthly health professional checkups	Podiatrist or family doctor
<u>Kidneys</u> : a blood and urine test, to make sure your kidneys are working well	Once a year/ more often if required	Your family doctor
HbA1c: this blood test shows your average blood glucose level over the past 2 - 3 months	At least six monthly or more often if not on target	Your family doctor
Lipids: blood fats	Once a year/ more often if required	Family doctor
<u>Eyes</u>	At diagnosis and at least every two years/ more often if required	Optometrist / Ophthalmologist
<u>Healthy eating plan</u>	Once a year	Dietitian
<u>Physical activity</u>	Once a year	Your family doctor / exercise physiologist
Medication	Once a year/ more often if required	Your family doctor
Review self care education	Once a year	Diabetes educator
Review smoking status	Once a year	Your family doctor

**Your family doctor, with the help of your health care team, should develop a care plan to manage your diabetes. This will allow you to access additional Medicare services for people with chronic conditions.**

# Faataamilosaga Faale-Tausaga o le Vaavaaiga

## O a siaki faifaipea mo le soifua maloloina ua fautuaina?

O siaki faifaipea o le soifua maloloina e fesoasoani ia faaititia lou ono maua i le tele o faaletonu o le ma'isuka.



### O siaki o le soifua maloloina ua fautuaina o:

O a mea e manamia ia siaki?	E faafia?	O ai e te manaomia e vaai?
Toto mauluga	Taimi uma vaai lau foma'i	Foma'i ale tou aiga
Fua lou mamafa, lou mauluga/umi ma galue pe fia lou BMI (Body Mass Index – o lenei fuataga e iloa ai pe o ia se faafitauli i lou mamafa). Fua lou manava/sulugatiti	I le ta'iono masina/ faasili atu pe a manaomia	Foma'i ale tou aiga
<u>Vae i lalo (Feet)</u>	Aso uma e oe ma Ta'iono masina ma siaki ele foma'i polofesa	Foma'i o vae poo le foma'i ale tou aiga
<u>Fatuga'o:</u> sue le toto ma le feauvai, ia mautinoia o galulue lelei pea ou fatuga'o	Faatusi ile tausaga/ faasili atu pe a manaomia	Foma'i ale tou aiga
HbA1c: ole suega lea ole toto e iloa ai le tusagalemu ole mauluga ole kulukose ile toto i masina e 2 - 3 ua tuana'i atu.	Ia le ititi ifo ile ta'iono masina pe faasili atu foi pe a tusa ai ma le tulaga manaomia.	Foma'i ale tou aiga
Suavai (Lipids): ga'o ole toto	Faatusi ile tausaga/ faasili atu pe a manaomia	Foma'i ale tou aiga
<u>Mata</u>	At diagnosis and at least every two years/ more often if required	Foma'i mata / Ophthalmologist
<u>Fuafuaga o mea'ai lelei mo le soifua maloloin lelei</u>	Once a year	Foma'i o mea'ai -Dietitian
<u>Faagaioiga faamalositino</u>	Once a year	Foma'i ale tou aiga / foma'i o faamalositino
Vai/fualauu	Once a year/ more often if required	Foma'i ale tou aiga
Toe lloilo a'oalogia ole vaavaiga o oe lava e oe	Once a year	Faiaoga ma'isuka
Toe lloilo tulaga ole ulaula	Once a year	Foma'i ale tou aiga

**O le foma'i ale tou aiga, ma le 'au ale soifua maloloina e vaai le ma'isuka o le a fesoasoani ia oe ia faia se fuafuaga o le vaavaaiga e pulea ai lou ma'isuka. E mafai ai foi ona e maua isi auaunaga faafoma'i mo le tausiga (Medicare services) mo tagata e matuia tele le tulaga o o latou ma'i.**

# 6

## Healthy eating for diabetes

Eating does more than just provide food and building materials for the body. Eating is a pleasurable and social experience.

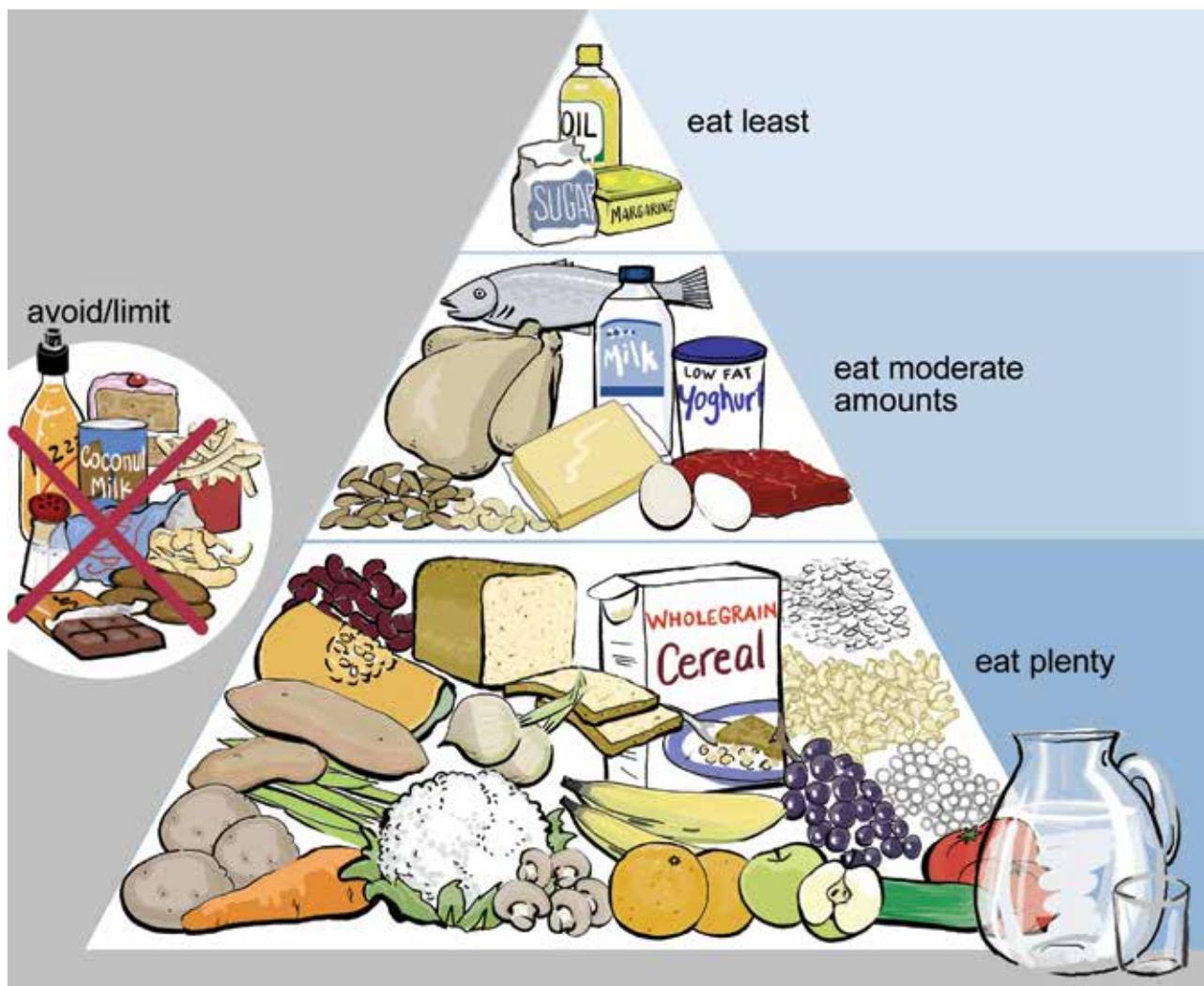
Diabetes should not stop you from enjoying food and eating with friends and family. You can still enjoy special occasions such as family, social, school and religious festivals. Tell your dietitian, diabetes educator and doctor what you eat and when. Your food and diabetes medications can be adapted to suit your lifestyle and normal family routine. However you may need to make changes to your eating habits to keep your diabetes under control and stay healthy.

### Why is healthy eating important?

A healthy diet is one of the most important parts of diabetes management.

Eating well can help to manage your blood glucose (sugar) levels, cholesterol and blood pressure. Eating well can also help you to maintain a healthy body weight. Being overweight makes it harder to manage your diabetes. It is therefore important to have a healthy diet to help you lose excess weight and improve your diabetes management.

It is important that any dietary advice is tailored to your needs. That is where your dietitian is helpful.



# 6

## 'Ai mea'ai e Lelei mo le Ma'isuka

Ole 'ai e le faapea na ole maua mai ai o mea e 'ai ma le fausiaina o mea mo le tino. Ole 'ai ose fiafiaga lea ma ose mafutaga ma isi e fiafia ai (social experience).

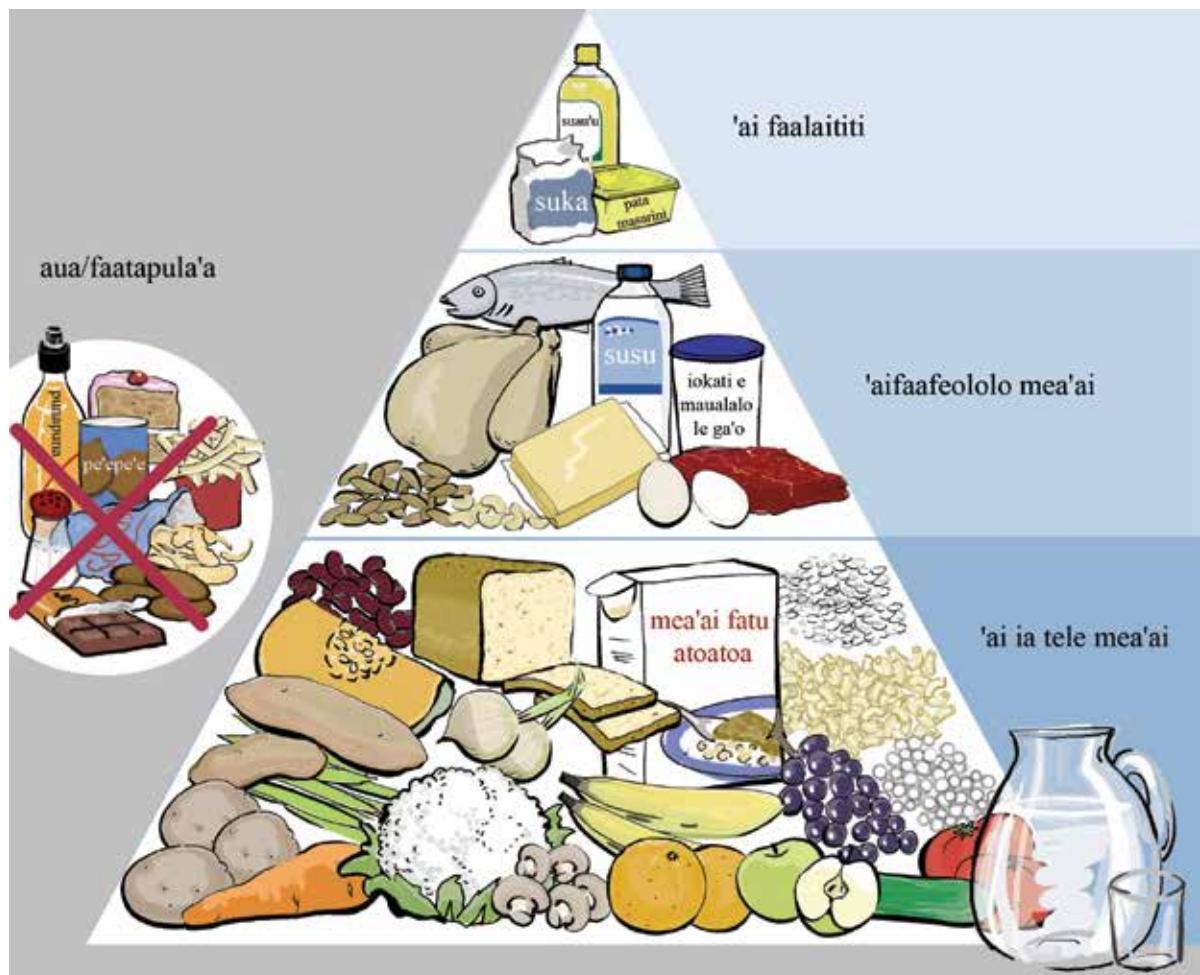
E le tatau ona toafia mai oe ile fiafiaga e 'ai faatasi ma au uo ma ou aiga ona ole ma'isuka. E mafai lava ona e maua le fiafiaga i faatasiga faapitoa pei o'aiga, faatasiga, ole aoga ma sauniga e faamanatu ai le lotu. Ta'u i lau foma'i o mea'ai (dietitian) le faiaoga ole ma'isuka ma lau foma'i ia mea'ai na ete 'ai ai ma taimi e 'ai ai. E tatau i au mea'ai ma au vai/fualau ona fesootai lelei ia fetaui ma le olaga na ua e ola ai faatasi ai ma lou aiga. Peitai, atonu ete manaomia ni fesuaiga i au amioga masani ai i lau mea'ai ina ia pulea lelei ai lou ma'isuka ma tumau ai pea le soifua lelei.

### Aiseā e taua ai le 'ai mea'ai lelei mo le soifua maloloina?

O mea'ai lelei mo le soifua lelei o se tasi ia o vaega pito sili ona taua ile puleaina ole ma'isuka.

Ole 'ai lelei e fesoasoani ile puleaina ole maualuag ole kulukose (suka) ole toto, le ga'o ile toto ma le toto maualuag. O le 'ai lelei e mafai ai foi ona fesoasoani e faapa'ū i lalo lou mamafa pe afai ua ova lou mamafa. A ova lou mamafa tele, e faigata ona pulea lou ma'isuka. O le mea la lea e taua ai le i ai o sau fua o mea'ai (diet) e fesoasoani ai ia oe ina ia lusi ou pauna na ua ova o lou mamafa ma faaleleia ai le puleaina o lou ma'isuka.

E taua lava poo a ni fautuaga mo le fuaina o mea'ai (dietary advice) ia fesootai lelei atu i ou manaoga. O iinei la e fesoasoani mai ail au foma'i o mea'ai (dietitian).



### **What is healthy eating for diabetes?**

Healthy eating for diabetes is the same as healthy eating for everyone. A healthy eating pattern encourages:

- High fiber cereals including wholegrain breakfast cereals, wholemeal or grainy breads, wholemeal pasta and brown rice.
- Two serves of fruit and five or more serves of vegetables every day (e.g. bananas, paw paw, mangoes, breadfruit, pineapple, kumara, taro, cassava, cabbage, lu'au leaves). Include legumes such as baked beans, kidney beans, lentils, chick peas and split peas
- One to two serves of lean meat, fish, skinless poultry or alternatives each day. Some great examples include fresh fish and seafood such as sashimi and shellfish. Alternative proteins include legumes, tofu, eggs, nuts and seeds.
- Dairy foods (e.g. milk, cheese and yoghurt) that are low fat or skim for everyone over the age of two. Soy products fortified with calcium are a good alternative for those who cannot have dairy.
- Limit saturated fat (e.g. coconut desserts, pe'epe'e (a sauce made from coconut cream and onion) and supoesi (a breakfast soup made up with coconut cream and pawpaw), cakes, pastries, corned beef, pork crackling, mutton flap, fast food).
- Have a low–moderate fat intake.
- Avoid adding salt to food. Choose low salt or reduced salt foods. Limit salty foods such as salted corned beef, povi masima (salted beef brisket) and soy sauce
- Eat only moderate amounts of sugars and limit or avoid foods high in added sugars (e.g. sweet pies, puddings, ice cream, sweets, fausi (a dessert made up with taro or pumpkin), soft drinks and fruit juice).
- Drink plenty of water.
- If you drink alcohol, limit your intake to 2 standard drinks a day. It will also be a good idea to include alcohol free days each week.

### **How can I keep my blood glucose (sugar) levels in the healthy range?**

It is very important that people with diabetes aim to keep their blood glucose levels in target range with regular physical activity, healthy eating and appropriate treatment (medications and/or insulin if required).

You can help to do this by spreading your food intake out over the day, not overdoing your serve sizes and choosing mostly high fibre, low fat and lower glycemic index carbohydrates.

Regular reviews with your dietitian are important to help you get the balance right between your blood glucose levels, the food you eat, exercise and your diabetes medication, if you take them. A dietitian may suggest you make changes to the types of food you eat and how much you eat to help keep you healthy. Your dietitian will try to work within the foods and cooking methods that you traditionally use.

---

## Mea'ai e lelei mo le ma'isuka – faaaauau pea

### O le a le 'ai i mea'ai lelei mo le ma'isuka?

Ole'ai mea'ai lelei mo le ma'isuka e tutusa lava ma le 'ai o mea'ai lelei mo tagata uma lava. O se ata faataitai o mea'ai lelei e faamalosia ai:

- Mea'ai e maualuga/tele faalavalava (high fiber cereals) e aofia ai fatu atoatoa o siliale mo mea'ai ole taeao (wholegrain breakfast cereals), falaoa wholemeal or falaoa grainy, wholemeal pasta ma le alaisa enaena..
- Lua asuga o fualaau aina ma lima pe sili atu asuga o fualaau (vegetables) i aso uma (e.g. fa'i, esi, mago, 'ulu, fala, kumara, taro, manioka, kipisi, lu'au leaves). E aofia ai lekumi (legumes) pei o baked beans, kidney beans, lentils, chick peas and split peas
- Tasi pe lua nai fasipovi mama, i'a, moa ua sae ese le pa'u, pe fevavaa'i aso. O nisi o faataitaiga lelei lava e aofia ai i'a fou ma figota e pei o sashimi ma figota faiuna (shellfish). Pe fevavaa'i o polotini e aofia ai lekumi, tofu, fuamo, nati ma fatu.
- Mea'ai mai manu/povi (e.g. susu, sisi ma yoghurt) e maualalo le ga'o poo le skim mo tagata uma e sili atu ile 2 tausaga le matua. O mea'ai soy ua faamalosia ile calcium e lelei i sui a'i mo i latou e le mafai ona 'ai i mea'ai mai manu/povi.
- Faatapulaa ga'o lololo (e.g. desserts mai popo, pe'epe'e (sosi fai mai pe'epe'e ma aniani) ma supoesi (mea'ai ole taeao supoesi e fai ile pe'epe'e ma le esi), keke, pastries, pisupo tuuapa, masi fasipua'a, apaapa mamoe, mea'ai sauna vave (fast food)).
- La maualalo – pe feololo lau 'ai ga'o.
- Aua le faaopopoina le masima i mea'ai. Filifili mea'ai le maualalo pe ua faaititia le masima. Faatapula mea'ai masimā pei o fasipovi masima ma le (salted beef brisket) ma le soi sosi.
- 'Ai na mea'ai e tau leai se suka ma faatapulaa pe aua loa le toe 'aina mea'ai e tele le suka lena ua faaopopo i ai (e.g. pai suamalie, puligi, 'aisi kulimi, lol, fa'ausi(dessert fa'ausi talo pe maukeni) vaiinu suamalie ma sua o fualaau 'aina.)
- Toaga e inu le suavai auli.
- Afai ete inu le ava malosi, faatapulaa na o le 2 fagu masani (standard) i le aso. O se mea lelei foi le aofia ai o se aso le leai se ava malosi e inu ai i vaiaso taitasi.

### E faapefea ona ou mafai ona tausia le maualuga o lo'u kulukose (suka) ia lelei mo le soifua maloloina?

E taua tele lava ia i latou e ma'isuka ona taumafai e pulea ma ia maualalo le maualuga ole kulukose (suka) i o latou toto faatatau ile maualuga faatulagaina, ile faia pea lea o faamalositino, 'ai mea'ai lelei mo le soifua lelei, ma togafitiga talafeagai lelei, (o vai/fualaau ma/ poo inisalini pe a manaomia).

E mafai ona e fesoasoani ile faiga lenei i lou faasoa lelei lea o au mea e 'ai ile aso atoa, ile aua lea ona so'ona faalapopo'a o asuga, ma filifili na o mea'ai faatupu malosi e maualuga le faipa, maualalo le ga'o ma maualalo ifo le glycemic index carbohydrates.

E taua le toe iloiolina pea lava pea o mea ma lau foma'i o mea'ai – dietitian e mafai ona latou fesoasoani ia oe ina ia sa'o le paleni ile va o le maualuga ole kulukose o lou toto, o mea'ai ete 'ai ai o au faamalositino ma au vai/fualaau ole ma'isuka pe afai o e inuina. Atonu ole a fautuaina foi ele foma'i o mea'ai e fai se suiga ile ituaiga mea'ai na ete 'ai ai, ma poo le a le tele ete 'aiina ia fesoasoani ai ia e ola soifua lelei. O le a taumafai foi lau foma'i o mea'ai e galue i mea'ai ma metotia e kuka ai mea'ai o na ete faaaogaina faale- atunu na ete faaaogaina.

# 7

## What's in food?

### You may have heard about:

- Carbohydrates
- Fibre
- Protein
- Fat
- Vitamins and Minerals.

These are called nutrients and they help your body to work properly and stay healthy. A nutrient is a substance found in food. You can find more information on each of these nutrients below.

### Carbohydrates

Carbohydrates are the best energy source for your body. When they are eaten they breakdown to form glucose in the bloodstream. Eating regular meals and spreading your carbohydrate foods evenly over the day can help to maintain your energy levels without causing blood glucose levels to go too high or too low. It becomes more difficult to manage your blood glucose levels if you only have one or two large meals a day. Try to have small frequent meals to spread out the intake.

### Carbohydrate foods include:

- Breads and cereals (e.g rice, noodles, pasta, bread, porridge).
- Milk and yoghurt (including soy products).
- Fruit (e.g. banana, pineapple, paw paw, mango and ripened breadfruit)
- Starchy vegetables and legumes (e.g taro, cassava, potato, kumara, corn and yam).
- Sugar and sugary foods (e.g puddings, sweet pies, tapioca puddings, coconut buns, fausi (a dessert made up with taro or pumpkin), soft drinks, fruit juices).

Most of these foods, except sugar and sugary foods, also provide other important nutrients to help keep you healthy. It is important to include these foods every day.

Eating a large serve of carbohydrate (e.g. a large plate of rice or pasta) may cause your blood glucose levels to rise too high. Also, eating too much food all the time, even if it is healthy food, will cause you to put on weight. Being overweight makes it harder to manage your blood glucose levels.

As everyone is different, talk to your dietitian about the amount of carbohydrate food you need to eat.

Sometimes testing your blood glucose level 2 hours after a meal can help you to work out if you ate too much carbohydrate at a meal. If this happens a lot speak to your dietitian or diabetes educator who can give you advice on what to do. Cutting down carbohydrates is not always the answer.

### Glycemic Index

All carbohydrate foods will breakdown to form glucose. Some carbohydrates break down to glucose fast and some break down slowly. The Glycemic Index (GI) is a way of measuring how fast or slow a carbohydrate food affects blood glucose levels.

Low glycemic index foods raise your blood glucose levels more slowly than high glycemic index foods. Eating mostly low glycemic index foods may help people with diabetes to reduce average blood glucose levels, lower blood fats and raise healthy cholesterol. They may also help you feel fuller for longer which may help with weight control. It is still important to not overdo your serve sizes.

# 7

## O a mea o i totonu o mea'ai?

### **Atonu ua e faalogo e uiga i mea nei:**

- Mea'ai e tupu ai le malosi - Carbohydrates
- Mea'ai e faalavalava - Fibre
- Polotini - Protein
- Ga'o - Fat
- Vaitamini ma minerale - Vitamins and Minerals.

O igoa o mea nei o niutirieni (nutrients) ma e fesoasoani i lou tino ina ia galue lelei ma ia tumau ile soifua lelei. Ole niutirieni e maua i mea'ai. E mafai ona e maua nisi faamatalaga i nei niutirieni taitasi mai faamatalaga ia e i lalo.

### **Mea'ai faatupu malosi - Carbohydrates**

O carbohydrates o mea'ai silisili ia e tupu mai le malosiaga mo lou tino. A uma loa ona e 'aiina ona vaevaeina loa lea i kulukose i totonu o alatoto. Ole 'ai mea'ai i taimi masani ma le faasoaina lelei o au mea'ai carbohydrates ile aso e mafai ai ona fesoasoani e faatumauina le maualuga o lou malosi e aunoa ma le oso maualuga tele ai i luga ole kulukose (suka) i lou toto poo le pa'u maualalo ai foi. O le a faigata ona pulea le maualuga o le kulukose o lou toto pe afai na o le tasi pe lua au mea'ai lapopo'a e 'ai ile aso. Taumafai e 'ai'ai soo ae faalaiti au 'aiga ia faasalalaunia ai mea'ai na ete 'aina.

### **O mea'ai carbohydrate e aofia ai mea nei:**

- Falaoa ma cereals (e.g. alaisa, falaoa, pasta ma le polesi)
- Susu ma yoghurt (aofia ai ma mea'ai fai mai soi).
- Fualaau 'ain(e.g. fa'i, fala, esi, mago ma fualaau pula)
- Fualaau masoā ma llegumes (e.g taro, tapioka, pateta, kumara, saga ma ufi).
- Suka ma mea'ai e i ai suka (e.g puligi, pai suamalie, puligi tapioka, pani popo, fa'ausi (fa'ausi e fai i taro poo maukeni), vaiinu suamalie ma sua o fualaau 'aina).

O le tele o mea'ai nei, seivagana ai le suka ma mea'ai e i ai suka, e maua mai ai foi isi niutirieni taua e fesoasoani ia e soifua lelei ai lava. E taua le aofia ai o nei mea'ai i au mea'ai i aso taitasi uma lava.

O le 'ai ose asuga lapo'a lava o mea'ai carbohydrates (e.g. ipu alaisa lapo'a poo le pasta), atonu ole a oso ai maualuga tele atu le kulukose o lou toto. E faapena foi, pe a e 'ai tele i taimi uma lava, tusa lava pe o mea'ai lelei mo le soifua maloloina, e tupu ai lava lou ova mamafa. A e mamafa tele atu la, ole a faigata ona pulea le maualuga ole kulukose o lou toto.

Ona e esese a tagata uma, talanoa i lau foma'i (dietitian) o mea'ai e uiga ile aofa'i o mea'ai carbohydrate e tatau ona e 'aiiina.

O nisi taimi, ole sueina ole maualuga ole kulukose o lou toto ina ua 2 itula talu ona uma ona e 'ai, e fesoasoani lea ia oe ete iloa ai po ua tele leu ai i mea'ai carbohydrate. A tupu soo le tulaga lea, talanoa i lau foma'i o mea'ai lelei poo le faiaoga ole ma'suka e mafai ona maua mai ai fautuaga ile mea e te faia. Ole tipi i lalo o mea'ai carbohydrate e le ole tali lea ile tele o taimi.

### **Faasinotusi ole Glycemic (Glycemic Index (GI)**

O mea'ai uma carbohydrates ole a vaevaeina e maua ai kulukose. O isi carbohydrates e vave ona vaevaeina nai lo isi a o isi e tuai ona vaevaeina. Ole glycemic index (GI) la ole auala lea e fua ai le vave poo le telegese ole aafiaga ole maualuga ole kulukose mai mea'ai carbohydrates.

---

## What's in food? - *continued*

Not all low glycemic index foods are healthy. You still need to consider if the food fits into the healthy eating recommendations listed earlier. Try to eat mostly high fibre low fat and lower glycemic index foods. Including a lower glycemic index food at every meal is a good start.

Some healthy lower glycemic index foods include pasta, legumes (dried beans and lentils), sweet corn, kumara, taro, cassava, low fat milk and yoghurt, most fruit and many high fibre grainy breads.

Rice is usually a high glycemic index food. However, there are some varieties of rice that have a lower glycemic index. These include Basmati rice and Doongara rice.

### **What about sugar?**

Sugar is also a carbohydrate. Eating small amounts of sugar will not affect your diabetes, e.g. 1 teaspoon of sugar in your cup of tea or a thin spread of jam on your toast.

Some foods that contain sugar are also healthy foods. For example fruit and milk naturally contain sugar. Other healthy foods have had small amounts of sugar added to them (e.g. some high fibre breakfast cereals and yoghurts). We know these foods are good for us so we can include them in our diet.

However eating or drinking large amounts of foods that are very high in sugar (e.g. soft drinks, cordials, fruit juices, flavoured milk and drinks made up with sweetened condensed milk) can cause your blood glucose levels to rise too high. They can also cause you to put on weight. These foods are best eaten in small amounts. Choose diet soft drinks and cordials instead of standard varieties. Sweetened condensed milk is high in sugar and fat. The healthier alternative is to use skim milk with 1-2 teaspoons of sugar or a sweetener (such as Equal™, Splenda™ and Sugarine™).

If you are using sugar in recipes, think about how much sugar you will end up eating. If the recipe is very high in sugar and you will be having a large serve, try reducing the amount of sugar, have a smaller serve or replace some of the sugar with an alternative sweetener (such as Equal™, Splenda™ and Sugarine™). Try to choose recipes that are low in fat (particularly saturated fat) and contain some fiber.

### **Fibre**

Fibre is important for everyone, including people with diabetes. Fibre can help keep your digestive system healthy and prevent constipation.

Fibre is also very useful for people with diabetes. It can help to lower "bad" cholesterol which helps to keep your heart healthy. Also many foods that are high in fibre have a low glycemic index. This is because some types of fibre can slow down digestion of the food. Eating foods high in fibre can also keep you feeling fuller for longer so may help with weight control.

High fibre foods include whole fruits (not juice) (e.g. paw paw), vegetables (e.g. cassava and taro), legumes, nuts and seeds, grainy and wholemeal breads and high fibre cereals.

---

## O a mea e i ai i mea'ai? – faaauau pea

Ole maualalo ole glycemic index i mea'ai e oso ai i luga le maualuga ole kulukose ile toto e faagesegese nai lo mea'ai e maualuga le glycemic index. Ole 'ai la i mea'ai e maualalo le glycemic index e mafai ona fesoasoani ai i tagata e ma'isuka e faaititia ai le tusagalemu ole maualuga ole kulukose ile toto, faaititia ai foi le ga'o ile toto ma faaalu ai i luga cholesterol lelei mo le soifua lelei. E mafai foi ona fesoasoani e faalogoina ai lagona faatumuina e fesoasoani foi e pulea ai lou ova mamafa. Ae taua lava le aua ona faatele atu le asuga ma lapopo'a o au mea'ai.

E le o mea'ai uma e maualalo le glycemic index e lelei mo le soifua maloloina. E tatau lava ona e filifili pe fetaui mea'ai ma taiala ma fautuaga sa avatu muamua. Taumafai e 'ai na o mea'ai e maualuga fibre ae maualalo ga'o ma mea'ai e maualalo le glycemic index. O le aofia ai o mea'ai e maualalo le glycemic index i au'aiga uma lava o se amataga lelei lena.

O nisi o mea'ai lelei mo le soifua e maualalo le glycemic index e aofia ai pasta, legumes (pi mamago, ma lentils), saga suamalie, kumara, taro, manioka, susu e maualalo le ga'o ma yoghurt, ma ia tele lava o fualaau aina, tele lava o mea'ai faalavalava – fibre, ma falaoa fatua. O le alaisa e masani lava o se mea'ai e maualuga le glycemic index. Peitai e i ai isi ituaiga alaisa e maualalo ai le glycemic index. E aofia ai alaisa Basmati ma le alaisa Doongara.

### Ae faapefea le suka?

Ole suka ole carbohydrate foi. Ole 'ai o sina suka laititi e le afaina ai lou ma'isuka. (i.e. tasi ile lua sipuniti suka i lau iputi poo le faamanifinifi ole siamu i luga o lau falaoa faapa'u).

O nisi o mea'ai e i ai suka e lelei foi mo le soifua. Mo se faataitaiga, o fualaau aina ma susu mai le natura e i ai lava le suka. O isi mea'ai lelei e i ai lava sina suka laititi ua faoopopo i ai (e.g. o breakfast cereals and yoghurts). Ua taou iloa o nisi o nei mea'ai e lelei mo tatou e mafai la ona aofia i a taou mea'ai ua fuaina – diet.

Peitai, ole 'ai tele poo le inu tele i mea'ai e maualuga ai le suka (e.g. vai inu suamalie, vai lanu, lolcandies, sukalaki poo alaisa suamalie), e mafai ona oso maualuga ai i luga le kulukose (suka) o lou toto. E mafai foi ona e lapo'a tele ai. O mea'ai nei e sili lava pe a 'aiina faalaititi lava. Filifili vai inu diet ma vai lanu nai lo ituaiga taatele. O susu toto'o e suamalie e maualuga lava le suka ma le ga'o. O leisi fesuaiga lelei mo le soifua lelei o le faaaoga ole skim milk ae faoopopo i ai le 1–2 sipuniti suka poo se mea faasuamalie (pei o le Equal™, Splenda™ and Sugarine™).

Afai o e faaaogaina le suka i lesipi, mafaufau pe fia le tele o suka ole a e 'aiina pe a uma ona 'ai. Afai e telele suka ile lesipi ma ole a tele lau asuga e 'ai, taumafai e faalaititi le fua ole suka, asu faalaititi lau mea'ai poo le sui le suka i se mea faasuamalie ese mai (pei ole Equal™, Splenda™ and Sugarine™). Taumafai e filifili lesipi e maualalo le ga'o (aemaise lava ga'o lololo) ma e i ai ni faalavalava/momoia'a - fibre.

### Faalavalava/momoia'a – Fibre

E taua lava foi le faalavalava/momoia'a mo tagata uma, e aofia ai ma tagata ma'isuka. E mafai ona fesoasoani ia momoia'a (fibre) i lou puta mo le faamalūina o mea'ai ia soifua lelei ma taofia mai ai foi ma le mamau ole manava (constipation).

E aoga tele foi ia momoia'a i tagata e ma'isuka. E mafai ona fesoasoani e tuu ai i lalo le kolesatalole (cholesterol) "leaga" lea e fesoasoani ina ia soifua lelei lou fatu. O leisi foi mea, ole tele o mea'ai e maualuga ai ia momoia'a, e maualalo ai lava le glycemic index. Ole pogai la ona o nisi o momoia'a-fibre e fesoasoani e faagesegese ai le faamalūina o mea'ai. Ole 'aiina o mea'ai e maualuga ai ia momoia'a, e te maua ai foi lagona na ete maona lava mo se taimi umi e fesoasoani foi ia pulea lelei ai lou mamafa.

O mea'ai e maualuga le momoia'a –fibre e aofia ai le fualaau aina atoa (e le o sua –juice) (e.g. esi) fualaau mata (e.g. manioka ma taro) legumes, nati ma fatu, falaoa fatua ma falaoa wholemeal ma siliale – cereals e maualuga ai momoia'a – fibres.

---

## What's in food? - *continued*

### Fat

Fat is an essential nutrient. However many of us eat too much fat or eat the wrong types of fat.

Fat is high in kilojoules. Eating too much fat can cause you to put on weight or make it harder for you to lose weight.

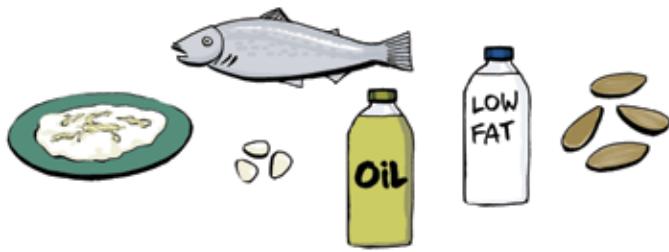
Some fats (saturated fats and trans fats) can increase your risk of heart disease and make it harder to manage your diabetes. Avoid these types of fats (e.g. lard, full fat dairy foods, coconut products, palm oil, fried foods and fatty meats).

Polyunsaturated fats (e.g. oily fish, seafood, safflower and sunflower oils) and monounsaturated fats (e.g. avocado, canola and olive oils) can help reduce your risk of heart disease. They are better choices than saturated fat. Both of these fats have benefits for your health so vary between them. These fats are still high in kilojoules, so if you are overweight, eat them in moderation.

To help you get the right type of fat and avoid eating too much fat:

#### **Choose:**

- Meat trimmed of fat or leaner cuts
- Chicken trimmed of fat and skin
- Low fat cooking methods such as umu, barbequing, grilling, dry frying, baking, steaming or poaching
- Low fat dairy foods or soy alternatives
- To eat more fish including oily fish (e.g. tuna, salmon, mackerel, herring and sardines)
- Olive, canola, sesame, peanut, safflower or sunflower oils for cooking, marinades and dressing
  - Use low fat sauces for dishes, avoiding creamy sauces based on coconut cream/milk
- Margarines made from olive, canola, safflower or sunflower oils
- Alternatively, use a plant sterol enriched margarine (i.e. Proactive™ and Logicol™), but speak to your dietitian and/or doctor about it before you decide to use it.
- To include small amounts of avocado, unsalted nuts and seeds in your diet.
- Use healthier alternatives such as light evaporated milk with coconut essence to replace coconut cream or milk



#### **Limit/avoid:**

- Fatty or processed meats (e.g. mutton flap, sausages, salami, corned beef, canned sausages and pork cracklings).
- High fat cooking methods such as frying or roasting in fat
- Full fat dairy foods.
- Butter, ghee, lard, vegetable shortening, cream, coconut milk and coconut cream.
- Fast food, fried foods such as deep fried chicken from KFC, cakes, sweet pies, puddings, pastries, biscuits, crisps and high fat crackers.

## O a mea e i ai i mea'ai? – faaauau pea

### **Ga'o -Fat**

O se niutirini taua ma aogā lava lenei. Peitai, ole tele lava o tatou ua 'aai tele lava i ai ile ga'o poo ua 'ai tele foi ile iyuaiga ga'o sesē.

E mauluga lava le kilokiuli (kilojoules) i ga'o. Ole 'ai tele la ile ga'o e mafai ona e lapo'a ma mamafa tele ai ia poo le faigata ai foi ona lusi ou pauna ma lou mamafa.

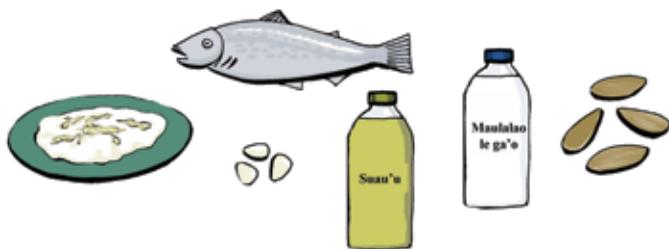
O nis o ituaiga ga'o (saturated fats and trans fats) e mafai ona faateleina ai le ono aafia o oe i ma'i ole fatu ma faigata atili ai le puleaina o lou ma'isuka. Aua le faaaogaina nei ituaiga ga'o (e.g. lard, mea'ai e tumu i ga'o mai manu, coconut products, suau'u pama, mea'ai falai ma fasipovi ga'oa).

O ga'o polusaturated (polyunsaturated fats (e.g. i'a lololo, ga'oa/suau'u, suau'u safflower ma sunflower) ma ga'o monounsaturated (e.g. avoka, canola and olive oils) e mafai ona fesoasoani e faaititia ai le maua o oe i faama'i ole fatu. O filifiliga lelei sili atu nei nai lo ga'o lololo (saturated fat). O ituaiga ga'o nei e lua e lelei tele mo lou soifua maloloina, ia fesuisua'i la'ia faivava. Ae mauluga lava ia kilokiuli o ga'o nei, afai la e ova tele lou mamafa, 'ai faatatau ga'o nei.

Ina ia fesoasoani la ia oe ile mauaina ole ituaiga ga'o sa'o lelei, ma taofia ai lou so'ona 'ai ga'o tele:

#### **Ia Filifili:**

- Tipi ave ese le ga'o poo fasi povi mama
- Tipi ese ga'o ma pa'u o moa
- Faaaoga metotia e kuka ai i ga'o e maulalo ga'o pei ole BBQ, faavevela ile ogaumu –grilling, falai faamago, tao, sitimi pe saka i vai (poaching)
- Mea'ai mai manu e maulalo ga'o poo soi e fesuia'i ai
- La'ai tele i i'a e aofia ai i'a q'a'oa (e.g. tuna, samani, mackerel, eleni ma satini)
  - Suau'u olive, kanola, sesame, pinati safalaoa poo sunflower e kuka ai, marinades ma dressing
  - Faaaoga ia sosi e maulalo le ga'o, aua le faaaogaina sosi e tele ai le kulimi e fai mai pe'epe'e poo susu kulimi
  - Margarines - pata e fai mai i suau'u olive, canola, safflower poo sunflower
  - A le o lea - alternatively, faaaoga margarine laau sterol enriched (i.e. Proactive™ and Logicol™), ae talanoa i lau foma'i o mea'ai - dietitian ma/pool au foma'i e uiga i ia mea ae ete lei filifili e faaaoga.



#### **Aloese mai/Faatapulaa:**

- Aano o manu ga'oa (e.g. fasi mamoe, sosisi, salami, pisupo, apa sosisi ma fasipua'a lololo)
- Metotia e kuka ai ile mauluga ole ga'o e falaiina poo le taoina ile ga'o
- Mea'ai tumu ga'o mai manu - dairy foods.
- Metotia e kuka ai ile falaiina poo le taoina ile ga'o
- Pata, ghee, lard ga'o pua'a, kulimi, ma pe'epe'e vegetable shortening, cream, coconut milk and coconut cream.
- Mea'ai gaosi vave, mea'ai falai pei o moa falai i ga'o loloto mai le KFC, keke, pai suamalie, puligi, pastries, masikeke, konati, ma masi nutinuti.

---

## What's in food? - *continued*

### **Protein**

Protein is essential to your body everyday to repair old or damaged parts. Most people living in Australia already eat enough protein and do not need to eat more.

Choose protein foods that are also low in fat. Foods that are a good source of low fat protein are lean meat, poultry without the skin, fish and seafood, eggs, low fat dairy products, unsalted nuts, legumes (dried beans, dried peas and lentils) and soy products such as tofu.

Speak to your dietitian if you are not sure if you are eating enough protein.

### **Vitamins and minerals**

Vitamins and minerals are important for a healthy body. Eating a wide variety of foods from all five food groups will help you get all the vitamins and minerals your body needs.

The food groups are:

- Breads and cereals
- Vegetables
- Fruit
- Dairy foods
- Meat or meat alternatives (e.g. poultry, seafood, eggs, legumes, nuts and seeds).

---

## O a mea e i ai i mea'ai? – faaauau pea

### **Polotini-Protein**

E manaomia le polotini mo aso uma e lipea ai vaega ole tino ua matua poo ua faaleagaina foi. O le tele lava o tagata e nonofo i Ausetalia ua matuaā lava lelei polotini ua latou 'aiina ma e le toe manaomia le toe aiina o nisi e sili atu.

Filifili mea'ai polotini e maulalo ia ga'o o i ai. O mea'ai e lelei e maulalo le ga'o polotini na e i ai, o fasipovi mama, moa ua aveese pa'u, i'a ma mea'ai figota, fuamoa, mea'ai mai manu e maulalo le ga'o, pinati le faamasimaina, lekiumi (pi mamago, ma lentils) ma mea'ai e fai mai i soi pei o tofu.

Talanoa i lau foma'i o mea'ai (dietitian) pe afai ete le o mautinoa poo lava au polotini na e 'ai.

### **Vaitamini ma minerale**

E taua vaitamini ma minerale mo le soifua maloloina ole tino. Ole 'ai ile tele o ituaiga o mea'ai mai le kulupu e lima faatulagaina ole a fesoasoani ia oe e te maua mai ai vaitamini ma minerale na e manaomia e lou tino.

### **O kulupu nei o mea'ai:**

- Falaoa ma cereals
- Fualauu mata -Vegetables
- Fualauu aina -Fruit
- Mea'ai mai manu -Dairy foods
- Aano o manu poo nisi mea e sui a'i aano o manu (e.g. moa, mea'ai mai le sami, fuamoa, lekiumi, nati ma fatu).

---

# 8

# Common Questions about Food and Diabetes

## **How often should people with diabetes eat?**

It is important for all people with diabetes to eat regular meals over the day. This helps to spread food intake out and prevent blood glucose levels going too high or low.

Some people with diabetes take tablets or insulin to help manage their diabetes. These medications may mean that you need to eat at certain times, eat a small snack between meals or have a snack before bed. Discuss with your dietitian, diabetes educator or doctor whether you need to eat at certain times or need to eat snacks.

If you eat irregular hours (or you do shift work) it is important to discuss this with your dietitian, diabetes educator or doctor as your medications may need to be adjusted to fit in with when you are able to eat. It is important that you do your best to have a regular eating pattern from day to day.

## **Why is it important to manage my weight?**

Being overweight can make it harder to control your blood glucose levels. Carrying too much fat around your middle is especially bad for diabetes and heart disease. If you are overweight, ask your dietitian for advice on how to adjust your food intake to lose weight. Also speak to your doctor or an exercise physiologist about exercise.

## **Can I eat fruit? What type of fruit can I eat and how much?**

Yes, people with diabetes can eat fruit. Fruit is an excellent source of fibre, vitamins and minerals. All fruit can be included as part of a healthy diet for people with diabetes. Fruit contains natural sugar therefore it is important to spread fruit over the day. Fruit also contains kilojoules, and it can cause weight gain if you eat too much. It is important not to over eat fruit but aim for 2-3 serves a day.

The recommendation for fruit is the same as the general population. That is, two servings of fruit each day. 1 serve of fruit equals:

- 1 medium piece of fruit (e.g. 1 apple or 1 orange or 1 pear)
- 2 smaller pieces of fruit (e.g. 2 plums or 2 kiwifruit)
- 1 cup chopped or canned fruit in natural juice (not in syrup)
- 1½ tablespoons of sultanas or 4 dried apricots\*
- 1 small mango
- 1 cup pineapple, watermelon or rockmelon
- 1 ½ cups diced papaya or pawpaw
- 1 small banana.

Fruit juice is high in kilojoules and does not contain fibre. It is much better to eat the whole fruit rather than drink the juice. Drinking too much juice raises blood glucose levels and may contribute to weight gain. If you must drink juice, limit to a maximum of 1 small glass a day.

\*Dried fruit contains a lot of natural sugar. If you eat dried fruit limit to a small quantity e.g. 1½ tablespoons of sultanas or 2 dates or ½ medium spear of dried paw paw or ½ a pineapple ring.

# 8

## Mataupu 8 Fesili Taatele e uiga i Mea'ai ma le Ma'isuka

### E faafia ona tatau ona 'ai ia tagata e maua ile ma'isuka?

E taua lava i tagata uma e mama'isuka ona 'a'ai tatau fuafuaina lelei ile aso. E fesoasoani lea ile faasoasoaina ole mea'ai lea e 'ai ma puipuia ai foi le oso maualuga poo le pa'ū maualalo foi ole kulukose (suka).

O nisi tagata e maua ile ma'isuka e inu vai ma / poo inisalini e fesoasoanie pulea ai o latou ma'isuka. O nei vai/fualaau e uiga mai atonu o le a manaomia ai lou 'ai i taimi faatulagaina, 'ai i vaiaiga poo le 'ai foi sina mea ae ete lei moe ile po. Talanoa i lau dietitian, le faiaoga ole ma'isuka poo lau foma'i pe manaomia lou 'ai i taimi faatulagaina pe manaomia foi lou 'ai sina mea i vaiaiga.

Afai e eseese a taimi e te tausia, (poo lou faigaluega sifi foi) e taua lou talanoa ma lau foma'i o mea'ai, faiaoga ole ma'isuka poo le foma'i ona o au vai/fualaau e manaomia le toe sui ina ia fetau ma oe pe a oo ile taimi ete 'ai ai. E taua lou taumafai e 'ai i taimi faatulaga lelei i aso taitasi uma lava.

### Aiseā e taua ai le puleaina lelei o lo'u mamafa?

Afai e ova lou mamafa, e mafai ona faigata ai lava le puleaina ole maualuga ole kulukose i lou toto. O le tauaveina ole ga'o tele i lou tino ma lou sulugatiti, e matuā leaga lava mo le ma'isuka ma ma'ifatu. Afai e ova tele lou mamafa, fesili i lau foma'i o mea'ai mo se fautuaga pe faapefea ona toe sui lau mea'ai ina ia lusi ai lou mamafa. Talanoa foi ile foma'i poo le foma'i o faamalositino e uiga i faamalositino.

### E mafai ona ou 'aiina fualaau aina? O a ituaiga fualaau 'aina e mafai ona ou 'aiina ma o le a le tele?

loe, o tagata e maua ile ma'isuka e mafai ona 'a'ai i fualaau 'aina. O fualaau 'aina o mea silisili ia e maua mai ai momoia'a – fibre, vaitamini ma minerale. E mafai ona aofia ai uma lava ia fualaau 'aina o se vaega o mea'ai fuaina lelei - diet mo le soifua maloloina o tagata e ma'isuka. O loo i ai i fualaau 'aina ia suka faanatura o lona uiga la, e taua lava le 'ai faasoasoa o fualaau 'aina i le aso. E maua foi i fualaau 'aina ia kilokose - kilojoules, ma e mafai ona mamafa ai ou pauna pe a e tele lau 'ai i ai. E taua aua le ova telelau 'ai i fualaau 'aina, ae fuafua mo le 2 – 3 i le aso.

O le fautuaga mo fualaau 'aina e 'ai e tutusa lava foi mo tagata lautele ole atunu.

E faapenei, 2 asuga o fualaau 'aina mo aso taitasi. 1 le asuga o fualaau 'aina e tutusa ma le:

- 1 le fualaau 'aina (e.g. 1 apu 1 moli poo 1 pea)
- 2 tama'i fualaau 'aina (e.g. 2 palamu pe 2 kiwifruit)
- 1 ipu fualaau 'aina tipitipi poo fualaau 'aina tuuapa i o latou lava sua (ae le ole syrup)
- 1½ sipuni 'ai o vine/sultanas peor 4 dried apricots\*
- 1 tama'i mago
- 1 ipu fala, watermelon poo le rockmelon
- 1 ½ ipu esi palu
- 1 tasi le tama'i fa'i pula.

O fualaau 'aina e maualuga ai lava kilokiusi - kilojoules ma e le maua ai momoia'a fibre. E sili atu ona lelei le'ai atoa ole fualaau 'aina i lo le inuina o le sua. O le inu tele i sua o fualaau 'aina e oso ai i luga le maualuga kulukose - glucose ole toto ma atonu e mafua ai le faateleina o lou mamafa. Afai e tatau lava ona e inu i sua o fualaau 'aina, faatapulaa ile maualuga e gata ai ole i le ipu ilea so.

---

## Common questions about food and diabetes - *continued*

### **Can I eat unlimited vegetables?**

Vegetables provide an excellent source of fibre, vitamins and minerals. Recommendations for vegetables are five or more servings a day. One serve of vegetables is equal to  $\frac{1}{2}$  cup cooked vegetables or 1 cup salad or 1 medium potato\* or  $\frac{1}{2}$  cup cooked legumes\*. Most vegetables have very little impact on blood glucose levels and weight. These vegetables are referred to as free foods and can be included in unlimited quantities (e.g. lu'au leaves, cabbage, pumpkin, capsicum, lettuce, cucumber, tomato).

\*Starchy vegetables (that is, potato, sweet potato, corn, taro, cassava, sweet potato, kumara and legumes) do contain carbohydrate. This means they are broken down into glucose to provide the body with energy. Starchy vegetables can be included as part of a healthy eating plan in moderate amounts to help manage blood glucose levels.

### **Are "diet" foods suitable?**

Not all diet foods or foods marked "suitable for people with diabetes" are useful for people with diabetes. Often they can be quite high in kilojoules or may have a lot of fat in them. Also they can often be quite expensive.

Diet foods that you should avoid are:

- Diabetic chocolate. These are usually high in fat.
- Diet or low carbohydrate beer. These beers are still high in alcohol. It is the alcohol that is more of a problem than the carbohydrate content.

Some diet foods are fine for people with diabetes. These are foods that normally may be high in added sugar. Replacing the sugar with a sweetener such as Equal™, Splenda™ and Sugarine™ means you do not have to worry that they will raise your blood glucose level too high. These include:

- Diet soft drinks
- Diet cordials
- Diet jellies.

### **What foods can I eat if I am always hungry?**

If you are often hungry, make sure you are not overly restricting how much you eat just to keep your blood glucose levels down. This is especially important for children, adolescents and the elderly. Speak to your dietitian about what is the right amount of food for you.

If you are eating the right amount of food and are still hungry, try to include high fibre, low fat and low glycemic index foods in your meals and snacks. They can help to keep you feeling fuller for longer.

Some foods can be eaten without affecting your blood glucose level or body weight. These are the kind of foods you should aim to eat if you are still hungry. These foods are often called "free" foods. They include:

- Most vegetables except the starchy vegetables (taro, cassava, kumara, potato, sweet potato, corn, legumes), avocado and olives.

---

## Fesili e taatele e uiga i mea'ai ma le ma'isuka – faaauau pea

\*O fualaau 'aina ua faamago – dried, e maua ai le tele o suka faanatura. Afaí ete 'aia fualaau 'aina ua faamagoina, faatapulaa i le faalaititi e.g. 1½ sipuni 'ai sultanas pe 2 dates pe ½ se fasi esi ua faamago pe ½ se fasi fala tipi faalapotopo.

### **E mafai ona ou 'aia fualaau mata – vegetables e le faatapulaaina?**

O fualaau mata o le auala pito sili lea e maua mai ai fibre, vaitamini ma minerale. Fautuaga mo fualaau mata e lima asuga poo le sili atu ile ilea so e tasi. Tasi le asuga o fualaau mata e tutusa ma le ½ ipu o fualaau mata ua kukaina pe 1 ipu salati pe 1 ipu pateta faaleogalua \* pe ½ ipu legumes ua kukaina\*. O le tele lava o fualaau mata e laititi lava le aafia ai o le maualuga ole kulukose ole toto ma le mamafa foi. O nei fualaau mata e faasino lea i mea'ai e sa'oloto mai hyperlink ma e mafai ona aofia ai i fualaau mata e le faatapulaaina le tele (e.g. lau lu'au kapisi, maukeni, fiu -capsicum, lettuce, kukama, tomato).

\*Fualaau mata - vegetables e tele ai le masoā (o pateta, pateta suamalie, saga, taro, cassava, kumara ma legumes) e maua ai carbohydrate. O lona uiga ua uma ona vaevaeina i kulukose e maua ai ele tino le malosi - energy. O fualaau mata e tele ai le masoā e mafai ona aofia ai ose vaega o fuafuaga mo le 'ai ia soifua lelei i 'aiga faleogalua le lapopo'a tele e fesoasoani ile puleaina ole maualuga ole kulukose ole toto.

### **E fetaui ia mea'ai ua "fuaina -diet?**

E le faapea o mea'ai uma ua fuaina poo mea'ai e maka " e fetaui mo le ma'isuka" e aogā uma mo tagata ma'isuka. Ole tele o taimi e mafai ona maualuga lava le kilokiuli – kilojoules poo le tele foi ole ga'o o loo i ai. Ma o leisi itu, e mafai foi ona matuā taugata lava le tau.

### **Mea'ai fuaina e tatau ona e aloese ai o:**

- Sukalaki ma'isuka. E masani ona maualuga lava le ga'o i mea nei
- Pia e maualalo le carbohydrate. O pia nei e maualuga lava le alakaholi - alcohol. Ole alcohol le faafitauli sili atu nai lo le carbohydrate.

O nisi o mea'ai fuaina e lelei lava mo tagata ma'isuka. O nisi nei o mea'ai e maualuga lava le suka ua faaopopo i ai. O suiina la ole suka i mea e faasumalie ai – sweetener e pei ole , Equal™, Splenda™ ma le Sugarine ™ o lona uiga ete le toe popole, e le toe oso ai i luga le maualuga ole kulukose o lou toto.

O mea nei e aofia ai:

- Diet vaiinu suamalie
- Diet vai lanu
- Diet sieli.

### **O a mea'ai e mafai ona ou 'aiina pe afai ou te fia'ai so'o lava?**

Afaí ete fia'ai so'o lava, ia mautinoa e le o matuā ova le faasaina tele ole tele o lau 'ai ina ia faamaualalo ai lou kulukose. E taua faapitoa tele lenei mo tamaiti, talavou ma tagata matutua. Talanoa i lau foma'i o mea'ai – dietitian e uiga ile aofai o mea'ai sa'o mo oe.

Afaí o sa'o le aofai o mea'ai na ete aiina ae na ete fia'ai ma e le maona lava, taumafai e aofia ai ma mea'ai e i ai momoia'a –fibre ma e maualalo ia glycemic index i au mea'ai ma au 'aiga faavai'aiga. E mafai ona fesoasoani ia oe ina ia atoatoa ai lau faalogo ma e maona umi ai lava.

E i ai isi mea'ai e mafai ona 'ai ae le aafia le maualuga o lou kulukose poo le mamafa o lou tino. O ituaiga mea'ai la nei e tatau ona e naunau e 'ai pe afai o e fia 'ai pea lava. O nei mea'ai e masani ona faaigoaina o mea'ai ("sa'oloto"). E aofia ai:

- Le tele o fualaau mata vagana fealaau mata e tele masoā (taro, manioka, kumara, pateta, pateta suamalie saga, legumes), avoka ma olive.

- 
- Some fruits e.g. lemon, lime, cumquats, loquats, passionfruit, berries and rhubarb.
  - Black or green tea\* (without milk or sugar)
  - Herbal teas
  - Coffee\* (without milk, sweetened condensed milk or sugar)
  - Water including soda water and plain mineral water
  - Diet soft drinks and cordials
  - Clear broth
  - Tomato Juice
  - Fresh lemon juice
  - Diet jelly
  - Herbs and spices.

It is best to limit tea and/or coffee to 4 cups a day.

### **Should I use coconut cream or coconut milk in my cooking?**

Coconut cream or milk contains a large amount of saturated fat, which will raise your bad cholesterol (LDL), increase insulin resistance and increase the risk of having heart diseases. Also, it is very high in energy (kilojoules) which can cause an undesired weight gain. So, it is the best to avoid or limit food or drink containing coconut cream or coconut milk. There are a few healthier alternatives you can try in your cooking to replace the regular coconut cream or milk:

- low fat natural yoghurt with a little coconut essence or desiccated coconut
- light evaporated milk with coconut essence
- Carnation™ light and creamy coconut flavoured evaporated milk
- 1 cup of low fat milk or evaporated skim milk with 2 teaspoons cornstarch, 1 teaspoon coconut essence and a sprinkle of sugar can replace 1 cup of coconut milk

### **What can I add to food to give it more flavour?**

It is important to limit salt and foods containing salt. This is because a high salt intake can cause high blood pressure.

Herbs, spices, chilli, garlic, lemon, lime, onion or vinegar can all be used to add flavour to food without affecting blood glucose levels or blood pressure. Use your traditional herbs and spices to maintain the traditional flavour of meals.

### **Why should I see a dietitian?**

An Accredited Practising Dietitian is a health professional who can help you manage food and diabetes. Make an appointment to see a dietitian when you are first diagnosed with diabetes. You will need a referral from your doctor. When you are first diagnosed, your dietitian will need to see you a few times. Continue to see a dietitian once or twice a year from then on.

Your doctor might also suggest you see a dietitian if you are prescribed with medications or change your medications. This is because medications can affect the balance between food and your blood glucose levels.

Call Australian Diabetes Council on 1300 342 238 for more information.

If you cannot speak English well, call the free Telephone Interpreter Service (TIS) on 131 450 and ask them to help you to speak to a dietitian from Australian Diabetes Council.

- 
- O nisi fualaau 'aina e.g. tipolo, lime, cumquats, loquats, pasio, berries ma rhubarb.
  - Ti uliuli pe lanu meamata \* (leai se susu poose suka).
  - Ti hepale - herbal.
  - Kofe\* (leai se susu, mea faasuamalie pe suka).
  - Vai aofia ai vai soda ma vai manino minerale
  - Diet vai suamalie ma cordials
  - Polofu – broth mama
  - Sua ole Tamato
  - Sua ole Tipolo mama
  - Diet sieli
  - Herbs ma mea faafeu.

### **E tatau ona ou faaaoga le sua ole niu poo le pe'epē'e i a'u kuka?**

O loo i ai se vaega tele ole ga'o lololo (saturated fat) ile sua ma le pe'epē'e ole popo, e faaoso ai i luga ou cholesterol leaga (LDL), faatele ai le te'ena ole inisalini ma faateleina ai le ono maua i ma'i ole fatu. Ae maise foi, e maualuga tele foi i (kilojoules) malosi e mafai ona faatetele ai lou mamafa e le o manaomia. O le mea la, e sili lava le aloese pe faatapulaa mea'ai ma vai inu e i ai le sua ole niu ma le pe'epē'e mai popo. E i ai nisi mea e suitulaga e lelei tele mo le soifua lelei e mafai ona e faataita'a i au kuka e sui a'i le sua ole nui masani ma le pe'epē'e mai le popo:

- Yoghurt faanatura e maualalo le ga'o, laititi foi le manogi niu poo le popo ua aveese le susua
- Susu mama e faamanogi ile popo
- Carnation™ susu mama ua faamanogi ile popo
- 1 le ipu poo le susu sikimi liuausa ae 2 sipuni ti ole masoā saga, 1 sipuni ti mea faamanogi ole popo ma se sausauga mai le suka e sui a'i le ipu pe'epē'e e 1.

### **O a mea e mafai ona ou faaopopo i mea'ai ina ia manaia ai le manogi – flavour?**

E taua le faatapulaa/limiti ole masima ma mea'ai e i ai le masima. Ona ole maualuga ole 'ai masima e mafai ona oso ai ma le toto maualuga.

Faaopopo mea nei, herbs, spices, chilli, aniani Saina -garlic, tipolo, lime ma le vinika e mafai ona manogi lelei ai mea'ai ae le aafia ai ma le oso maualuga ai le kulukose (suka) o le toto. Faaaoga mea faamanogi mai anamua- tradition e tumau ai pea le manogi faaanamua o au mea'ai.

### **Aiseā e tatau ai ona ou alu e vaai le foma'i o mea'ai-dietitian?**

O le foma'i o mea'ai ole foma'i polofesa pasi lelei e mafai ona fesoasoani ia oe ile puleaina o au mea'ai ma lou ma'isuka. Afai ete mafaia, faatulaga sa lua feiloaiga e vaai ai le foma'i o mea'ai ina ua faatoa iloa ua maua oe ile ma'isuka. Ona faaaauau pea lea ona e vaaia le foma'i o mea'ai faatasi pe faalua foi i tausga uma lava.

O le a fautuaina foi oe e lau foma'i e vaai le foma'i o mea'ai pe afai o tala atu ni au vai/fualaau poo ua sui foi au vai/fualaau. Ole faapogai ona o vai/fualaau e aafia ai le paleni ile va o mea'ai ma le maualuga ole kulukose o le toto.

Valaau ile Diabetes Australia-NSW ile 1300 342 238 mo nisi faamatalaga.

Afai e le mafai ona e tautala Faa-Peretania ma le lelei, valaau ile Auaunaga fai fua e le totogiina a Faamatalaupu i Telefoni ile 131 450 ma fesili i ai e fesoasoani ia oe i lau talanoaga ma foma'i o mea'ai – dietitian mai le Australian Diabetes Council.

# 9

## Diabetes and Alcohol

Too much alcohol is harmful for everyone, including people with diabetes. However, people with diabetes may still drink some alcohol. If you drink alcohol, drink in moderation and be aware of the following:

- Alcohol can increase body weight, blood pressure and some blood fats. This can make it harder to manage your diabetes and increases your risk of heart disease.
- People who use insulin or take some diabetes tablets can have a very low blood glucose level (hypoglycaemia) after drinking alcohol. Always eat carbohydrate food when drinking alcohol. Ideally drink alcohol with a meal but if this is not possible snack on carbohydrate foods like low fat crackers, pretzels or bread.
- The symptoms of drunkenness and hypoglycaemia are similar. People may not offer you help if they think that you are just drunk. Let the people with you know that you have diabetes and what to do if you have hypoglycaemia.

### Drink alcohol in moderation

Moderate drinking means no more than 2 standard drinks for both women and men per day.



A standard drink is a 285 ml of full strength beer, 375 ml mid-strength beer, 425 ml light beer (less than 3% alcohol), 100ml wine or 30ml spirits. It's a good idea to include alcohol free days each week.



To help reduce how much alcohol you drink try diluting it by adding water, soda water or diet soft drink. You could also try alternating between alcoholic and non-alcoholic drinks.

# 9

## Mataupu 9 Ma'isuka ma le Ava malosi

Ole tele na'ua ole ava malosi e leaga lea mo tagata uma lava, e aofia ai me e ma'isuka. Peitai o tagata e maua ile ma'isuka e mafai lava ona inu ile ava malosi. Afai ete inu le ava malosi, inu faatatau ma ia e iloaina mea nei e pei ona i ai i lalo:

- E mafai ele ava malosi ona faaopopo lou mamafa, toto maualuga ma nisi o suka ile toto. O le a mafai la ona faigata le puleaina o lou ma'isuka ma faateleina le avanoa e maua ai oe i ma'i ole fatu
- O tagata e faaaoga le inisalini poo fualau ma'isuka e mafai ona maualalo lava le kulukose (suka) o o latou toto pe a uma ona inu na o sina tama'i ava malosi. la 'ai lava ia mea'ai carbohydrate pe afai ole a inu le ava malosi. O le mea pito i lelei lava, inu le ava faatasi ma le mea'ai, ae afai e le mafai, ai sina mea faavai'aiga mea'ai e maualalo le ga'o, masi poo falaoa.
- E tutusa lava auga ole onā ma le hypoglycaemia -haipokalasimia. E le ofoina mai e tagata se fesoasoani ia oe pe afai e manatu na ete onā. Ta'u i tagata na tou te faatasi e maua oe ile ma'isuka ma mea e fai ia oe pe a oso lou hypoglycaemia - haipokalasimia.

### Inu faatatau le ava malosi

O le inu faatatau o lona uiga ia le sili atu ile tasi le pia taatele mo tamaitai ae lua pia taatele



mo alii ile aso. Ole pia taatele e 285 ml ole pia atoa le malosi –full strength, 375 ml malosi feololo – mid strength, 425 ml pia māmā – light beer (lalo ifo ole 3% alcohol) 100 ml uaina poo sipili. O le mea lelei le aofia ai o aso e leai ai se ava malosi i vaiaso taitasi.

Ina ia fesoasoani pe fia le ava malosi e te inuina, taumafai e sui ile suavai, soda poo le diet

soft drink. E mafai foi ona e tago inu faavāvā, ava malosi ma isi vai inu e le i ai se ava malosi o i ai.



# 10 Physical activity

Daily physical activity is an important part of maintaining a healthy lifestyle. Everybody receives great benefits from exercise, but for people with diabetes; there are some extra, more significant benefits as well.

## Why it is good for you

### Regular physical activity can:



- Lower your blood glucose (sugar) levels and improve your blood glucose control
- Help make your tablets and/or insulin work better
- Help you to manage your weight or reduce your weight
- Lower blood pressure and blood fats such as cholesterol
- Improve the health and strength of your heart
- Reduce stress and anxiety
- Reduce your risk of developing diabetes complications
- Help you sleep better
- Improve your balance and coordination
- Make you feel great!

### What should I be aiming for?

Regular physical activity plays a large part in helping you to manage and control your diabetes. The amount of activity you should be doing is the same as everybody else!

Following these four simple guidelines can help put you on the path to good health:

- Think of physical activity as an opportunity, rather than an inconvenience

- Be active in as many ways as you can.

Create opportunities for activity within your day. For example, walk to the shops instead of driving, take the stairs over the lift, or get off the bus one stop early and walk the extra distance.

It is also important to make these changes within the workplace. Try walking the longer way to the photocopier, visiting a colleague rather than emailing, stand up when talking on the phone or going for a walk during the lunch break.



- Put together at least 30 minutes of moderate intensity physical activity every day. Guidelines suggest we aim to do a minimum of 30 minutes every day of physical activity; but remember these don't have to be all at once. 30 minutes can be divided into 15 or 10 minute blocks, and they have the same effect. Try exercises that use your whole body in the movement, such as brisk walking, swimming, dancing or cycling. These activities should be performed at a level that makes you breathe harder but that you can still talk.

- If possible, do some regular vigorous exercise for extra health and fitness.

Vigorous means that you are now exercising at a level that makes you huff and puff. Only do this type of activity if you have your doctor's okay and are managing your current exercises well.

# 10 Faagaioiga Faamalositino

O faagaioiga faamalositino i aso taitasi o se vaega e taua tele mo le faatumauina ole olaga soifua maloloina lelei. E maua ai e tagata uma le mea lelei mai faamalositino, ae mo tagata e ma'isuka; e i ai nisi mea e faasili atu, e i ai ma aogā failogaina ma taua lava.

## Aiseā e lelei ai mo a'u?

### O faagaioiga faamalositino faifaipea e mafai ai ona:



- E faapa'ū ai i lalo le kulukose (suka) o lou toto ma faaleleia ai puleaina ole kulukose o lou toto
- E fesoasoani ile faaleleia o galuega a au vai/fualau poo le inisalini
- E fesoasoani ile pulaina o lou mamafa ma/poo le fesoasoani ia lusi ai lou mamafa
- E faapa'ū ai le toto maualuga ma ga'o ole toto pei ole cholesterol
- Faalelei atili ai le soifua lelei o lou fatu
- E faaititia ai le popole ma le le to'a
- E faaititia ai le ono maua o oe i faafitauli faigata o lou ma'isuka
- E fesoasoani e lelei ail au moe
- Faaleleia ai au galuega ma lou paleni
- E te maua ai foi lagona lelei!

### O le a se sini e tatau ona ou vaai taula'i i ai?

O faagaioiga faamalositino faifaipea e i ai lana vaega fai e fesoasoani ia oe e pulea ma faatonutonu lou ma'isuka. O le tele o faagaioiga e tatau ona e faia e tutusa lava ma isi foi tagata!

O le mulimilitai i taiala nei faigofie e fa e mafai ona fesoasoani e tuu oe i luga o le auala e tau atu ile soifua maloloina lelei:

- Mafaufau i faagaioiga faamalositino o se avanoa, ae le o se mea e faalavelave mai.
- Ia toaga i le tele o ni auala e te mafaia ma lavatia. Fai ni avanoa mo faagaioiga i totonus o lou aso. Mo se faataitaiga, savali ile faleoloa nai lo le alu ile taavale, alu ile faasitepu ae le ole lifi, pe alu ese mai le pasi toe tasi le nofoaga e tu ai pasi mai le mea ete oso ese ai ma savali mo sina mamaao teisi atu. E taua foi lou faia o nei suiga i totonus ole fale faigaluega. Taumafai e savali ia mamaao mai le masini fai atakopi, asiasi i sau uo nai lo le imeli i ai, tu i lug ape a talanoa ile telefoni pe alu e savali ile taimi ole lunch.
- Tuu faatasi ia le ititi ifo ile 30 minute ni faagaioiga faamalositino feololo le mamafa mo aso uma. O se manatu mai taiala ia tatou vaai taula'i ia faia se 30 minute ia le ititi ifo, o faagaioiga faamalositino i aso uma; ae ia manatua ia aua nei faia uma ile taimi e tasi. O le 30 minute e mafai ona vaevae i poloka e tai 15 pe 10 minute, ma e tutusa lava le aogā. Taumafai ia faamalositino e faaaoga ai le tino atoa i gaioiga, pei ole savali faanatinati, 'a'au, siva pe ti'eti'e ile uila. O nei faagaioiga e tatau ona faia ile maualuga ia faigata ai ona e manava ae o loo mafai lava ona e tautala.
- Pe afai e mafai ai, fain i faamalositino mamafa atu faifaipea mo le soifua lelei ma le malosi ia sili atu. Mamafa atu e uiga o lea ua e faamalositino ile maualuga ete sela ma e pafupafu mapuea ai. Faato'a e faia lava ituaiga faamalositino nei pe afai ua fai mai lau foma'i e ok ma o na e lelei le puleaina o au faamalositino na e fai ile taimi nei.



---

## Physical activity - *continued*

### What about Resistance Training?

You should also aim to include some kind of weight or resistance training during the week. Resistance training means any exercise or activity where you use your body to lift something or to work against a weight, force or gravity. Resistance training is great for helping you to keep active and independent for longer and has additional benefits for people with diabetes.

Resistance training can:

- Improve the way your body uses and stores insulin
- Increases your muscle mass. This increases how much energy you burn which helps with weight loss/ management and improving blood glucose control.
- Decrease your risk of falling and the risk of fractures
- Improve strength, power, balance and coordination

### How much resistance training do I need to be doing for good health?

- Try to lift weights (e.g. cans of food, hand weights) two - three times a week
- Include exercises that target all of your large muscle groups including your arms and legs
- Aim to do each exercise eight - twelve times (repetitions), and perform two - three lots (sets) of each exercise
- Start at a light weight till you learn the correct technique. After you have mastered this weight, try lifting a heavier weight
- Ideally, aim to lift a weight that only allows you to do eight - twelve repetitions each time.



### Precautions to take before initiating an exercise program:

If you plan to start an exercise program for the first time, or you are doing something new, visit your doctor for medical clearance before you begin.

It is also important to understand how your medications work together with physical activity. Exercise works like insulin and lowers your blood glucose levels (sugar). In people who are taking insulin or some oral medications the combined effect with exercise can cause hypoglycemia. To avoid this, it is important to regularly test your blood glucose levels (sugars) before, sometimes during, immediately after and again a couple of hours after exercise, so you understand how your body responds to different activities. If you find that your blood glucose is falling too low, you may need to alter your diabetes medication or eat extra carbohydrates to account for this effect. However, consult with your doctor, diabetes educator or dietitian before making these changes.

There are also some times when you should avoid exercise; if your blood glucose levels (sugars) are above 15 mmol/L, if you are feeling unwell or lightheaded (dizzy) or if you are unsure how to perform an exercise correctly.

### Most important!

Enjoy the activities you chose. Be active in as many ways as you can, every day and remember you don't have to take it seriously, just regularly.

Always speak with your doctor before beginning a new physical activity program. If you require more guidance or advice about exercising with diabetes, speak with an accredited exercise physiologist.

## Faagaioiga faamalositino – faaauau pea

### E faapefea Koleniga e Faasagatau mai?

E tatau foi ona e taumafai ia aofia ni ituaiga o koleniga si'isi'i mea mamafa poo le faasagatau mai a'o faagaso lo le vasio. O le uiga o koleniga faasagatau mai so'o se koleniga lava e faaaoga ai lou tino atoa e s'i ai se mea pe galue faasagatau ise mea mamafa, se malosiaga poo le kulavati - gravity. E tele le aogā o koleniga faasagatau mai e fesoasoani ia oe ina ia e toaga ma galue lava oe na o oe ia umi lava ma e i ai mea lelei faoopopo atu mo tagata e maua ile ma'isuka.

E mafai e koleniga faasagatau mai ona:

- E faaleleia atili ai le auala e faaaoga ai e lou tino le inisalini
- E faateleina ai ou maso. E faoopopo ai foi le tele ole malosi ete faaaluina lea e fesoasoani ile puleaina o lou mamafa ma faaleleia ai pea le puleaina ole kulukose o lou toto
- E faaititia ai lou ono pa'u so'o ma le gaugau gofie o ou ponaiivi
- E faaleleia ai lou malosi, paoa, paleni ma au faagaioiga co-ordination.

### O le a le tele ole koleni faasagatau mai ou te manaomia ou te faia mo le lelei ole soifua maloloina?

- Taumafai e si'i mea mamafa -wights (e.g. pusa mea'ai, poo mea si'isi'i mo lima) faalua pe faatolu ile vasio.
- Aofia ai faamalositino e faasino tonu i ou maso lapopo'a, e aofia ai ou vae ma lima.
- Taulai le vaai ia faia faasefululua le faamalositino e tasi (fai matoe fai) ma fai ni seti se lua pe tolu o na faamalositino i taimi uma e fai ai au faamalositino.
- Amata ise mea māmā se'ia e a'oina le auala sa'o e fai ai. A ua e mafaia loa le mamafa lea, ona taumafai foi le a e faamamafa atu leisi fua.
- Ole mea lelei lava, taumafai e si'i e faataga ai oe ete si'ia ai faavalu pe faasefululua foi ile taimi e tasi.



### O faaeteetega e vaai i ai a'o lei amataina se polokalame o faamalositino:

Afai ua e fuafua e amata se polokalame faamalositino mo le taimi muamua lava, poo lou e faia foi se mea fou, asiisi i lau foma'i mo se faamaoniga faafoma'i o loo mea uma o oe ae lei amataina.

E taua foi lou malamalama pe faapefea ona galulue faatai au vai/fualau ma au faagaioiga faamalositino. O faamalositino e galue pei ole inisalini e faamaulalo ai le kulukose (suka) ole toto. I tagata la o loo latou faaaogaina le inisalini poo vai/fualau e inuina, ole tuufatasiga o nei vai ma faamalositino e aafia ai ma e mafai ona oso ai le haipokalasimia – hypoglycemia. Ina ia taofia lea tulaga, e taua le su'eina pea lava pea ole maualuga ole kulukose (suka) o lou toto a'o lei, nisi taimi a'o faia, ia pe a uma lava au faamalositino ma ile lua itula talu ona uma au faamalositino, ina ia e malamalama ai ile tali mai a lou tino i ituaiga faagaioiga eseese. Afai ua e iloa ua pa'u maualalo le kulukose o lou toto, atonu e tatau ona toe sui au vai/fualau mo le ma'isuka, poo le 'ai o nisi mea'ai carbohydrates e tali atu ai i nei aafiaga. Ae ui i lea, talanoa i lau foma'i, le faiaoga ole ma'isuka poo le foma'i o mea'ai a'o lei faia nisi suiga.

E i ai foi nisi taimi e tatau ai ona le faia faamalositino; pe afai ua sili atu i luga ole 15 mmol/L le maualuga ole kulukose o lou toto, pe a faalogo atu ete le o malosi pe faanivaniva (dizzy) pe ete le o mautinoa lelei foi pe faapefea ona fai lea faamalositino.

### Pito i sili ona taua!

Ia e fiafia ile faagaioiga na ua e filifilia. Ia e toaga ile tele o auala e mafai ai ona e faatinoina, i aso uma, ma ia e manatua ete le matuā sulusulu ma le ulu i ai, faifai malie ae fai fai pea.

Talanoa pea lava i lau foma'i a o le'i amataina seisi polokalame fou o faagaioiga faaletino. Afai ete manaomia nisi taiala poo fautuaga e uiga i faamalositino ma le ma'isuka, talanoa ile foma'i o faamalositino.

# 11

## Oral Medications

Type 2 diabetes is a progressive disease. Even though you can be doing all the right things to manage your diabetes, it may be necessary to start medication to keep healthy blood glucose (sugar) levels.

***When starting new medication you need to ask your doctor and pharmacist:***



- How many tablets you should take
- How often you should take your tablets
- What time of the day you should take your tablets - whether before food, with food or after food
- How your tablets work
- The side effects
- How your tablets affect or are affected by other medications you are taking.

Over time your medications may not work as well. For this reason it is recommended to have your medications reviewed by your doctor every year.

Your local pharmacist can also help you understand your medications.

Do not stop, decrease or increase your medication without first discussing it with your doctor or diabetes educator.

Do not share your medications with anyone else.

Certain diabetes medication can increase the risk of a low blood glucose level (hypoglycaemia). It is essential to know how to recognise and treat low blood glucose or hypoglycaemia. Ask your doctor, pharmacist or diabetes educator if this applies to you. If you are having frequent episodes of hypoglycaemia it is very important to speak with your family doctor or diabetes health care team.

***Further assistance with your medications:***

***Home Medication Review:***

If you are taking five or more different medicines, talk to your doctor about arranging a home medication review by your local pharmacist.

***National Prescribing Service:***

For information over the phone regarding the expert use of any of your medications you can contact the National Prescribing Service consumer enquiry line "Medicines Line" on 1300 633 424.

# 11

## Vai/Fualaau e Inu

Ole ma'isuka ituaiga 2 ose faama'i e alu ma tuputupu pea. Tusa lava pe sa'o mea na ete faia ia pulea ai lou ma'isuka, atonu foi e tatau ona amata loa ona inu vai/fualaau ina ia faatumau ai pea le soifua lelei ole mauluga ole kulukose (suka) o lou toto.

**A amata loa ia vai/fualaau fou, e tatau ia oe ona fesili i lau foma'i ma le pule ole faletalavai:**



- Pe fia au fualaau e tatau ona inu
- Pe faafia ona inu au vai/fualaau
- Ole a le taimi ole aso e inu ai au vai; pe inu ae le'i 'ai, inu faatasi ma me'a'i, poo le uma ona 'ai.
- E faapefea ona galulue nei fualaau.
- O ni aafiaga.
- E faapefea ona aafia ai, ia poo le aafiaga i isi vai, ma isi vai ia ete inuina.

A umi se taimi o au vai/fualaau o le a le toe aogā lelei. Ona o pogai ia e fautuaina ai ia toe iloilo au vai/fualaau e lau foma'i i tausaga uma lava.

E mafai foi ona fesoasoani lau pule ole faletalavai ina ia e malamalama i au vai/fualaau.

Aua ne'i taofiina, faaititia pe faaopopoina au vai e aunoa ma lou fesili ma talanoa i lau foma'i, pule ole faletalavai poo le faiaoga ole ma'isuka.

Aua le faasoaina atu au vai/fualaau i seisi lava tagata.

E i ai nisi vai/fualaau ese mai mo le ma'isuka e mafai ona faateleina ai le maulalo ole kulukose ole toto (hypoglycaemia). E taua lava lou iloa pe faapefea ona e iloaina ma pe faapefea ona togafiti le maulalo ole kulukose ole toto poo le hypoglycaemia. Fesili i lau foma'i, pule ole fale talavai poo le'au ale soifua maloloina e vaaia le ma'isuka.

### **Mo nisi fesoasoani i au vai/fualaau:**

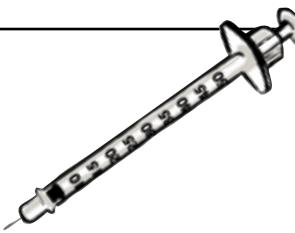
#### **Home Medication Review:**

Afai o e inuina le lima pe sili atu foi ni ituaiga vai/fualaau eseese, talanoa i lau foma'i e uiga ile faatulagaina o se toe iloiloina o vai/fualaau i lou aiga e lau pule ole faletalavai pito lata ane.

#### **National Prescribing Service:**

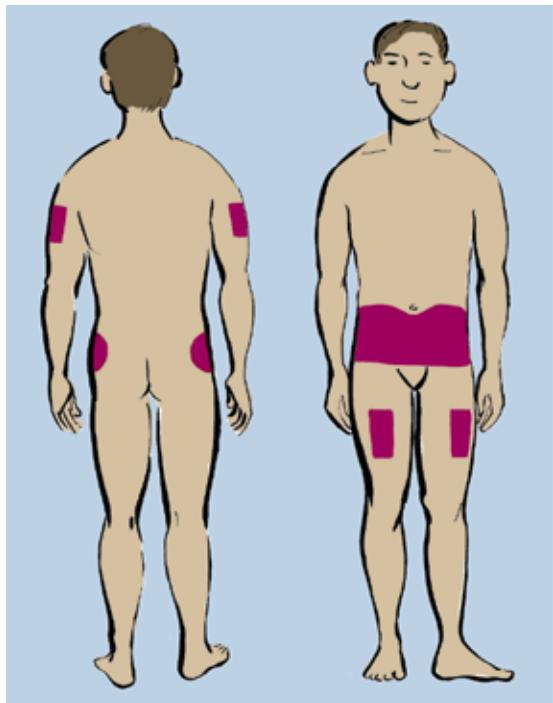
Mo nisi faamatalaga i luga ole telefoni e uiga ile faaaogaina poto o so'o sau vai/fualaau lava, e mafai ona e faafesootai le National Prescribing Service consumer ile laina mo fesili "Medicines Line" ile 1300 633 424.

# 12 Insulin



The pancreas is a part of the body situated behind the stomach that produces a hormone called insulin.

Without insulin, the cells in our bodies would not be able to use the glucose (sugar) to provide energy.



In type 1 diabetes the pancreas does not make any insulin and glucose levels build up in the blood. Insulin by injection or by insulin pump is required for life. A person with type 2 diabetes or gestational diabetes may also require insulin to keep their blood glucose levels within the recommended range.

Your doctor may decide that insulin is needed as well as oral medications, or that insulin may be better than oral medications. This does not mean that you have failed in your diabetes management. It has been decided that insulin is necessary to maintain good diabetes management.

All insulins lower blood glucose levels. Low blood glucose or hypoglycaemia can be a side effect of insulin treatment. It is essential to know how to recognise and treat low blood glucose or a hypoglycaemic episode.

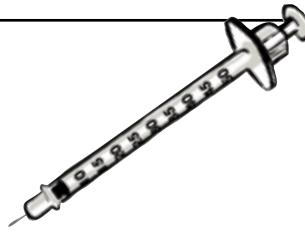
There are many types of insulins available, you and your doctor will discuss which is right for you. If you have any questions or concerns about starting on insulin you can also contact your diabetes educator.

## **Key points to know are:**

- Type and amount of insulin to be used
- Time to take your insulin and when to eat
- The time your insulin has its greatest effect and how long it stays in your body
- When to test your blood glucose (sugar) level
- When to contact your doctor or diabetes health care team.

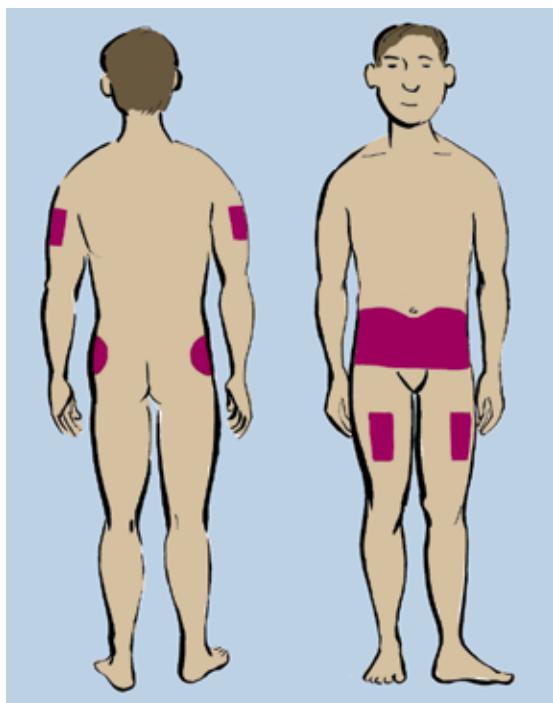
**Tell your doctor or diabetes educator of any changes in your lifestyle, working hours, physical activity or meal times. They will advise you if you need to change your insulin treatment .**

# 12 Inisalini



Ole atepili (pancreas) ose vaega ole tino e i tua atu ole puta na te gaosia ia homone e ta'ua o inisalini – (insulin).

A leai ni inisalini, ole a le mafai e sela o o taou tino ona faatula ma faaaoga le kulukose (suka) – lea e tupu mai ai le malosiaga - energy.



Ile ituaiga ma'isuka1, ua le gaosia ele atepili (pancreas) ni inisalini ma kulukose e fausia ai ia maualuga mo le toto. O le inisalini e tui pe ala atu ile pamu e manaomia ma le olaga atoa. O le tagata e maua ile ma'isuka ituaiga 2 poo le ma'isuka ao to -gestational diabetes, atonu e manaomia foi le inisalini ina ia tumau ai pea le maualuga ole kulukose ole toto ile maualuga ua fautuaina. Atonu ole a filifili lau foma'i e manaomia le inisalini atoa ai ma vai/fualaaau e inu, ia poo le sili atu foi le inisalini i vai/fualaaau e inu. E le faapea la ona ua e le pasi ma toilalo ile puleaina o lou ma'isuka. O le filifilia ole inisalini e tatau ma talafeagai ile faatumauina ole pulea lelei o lou ma'isuka.

O inisalini uma lava e faapa'ü ai i lalo le maualuga ole kulukose ole toto. O le maualalo ole kulukose ole toto poo le haipokilimia - hypoglycaemia e mafai ona avea ma aafiaga oso mai i togafitiga i inisalini. E taua ona iloa pe faapefea ona iloa ma togafiti le kulukose ua maualalo ile toto poo le tulaga ole hypoglycaemic. E tele le ituaiga o inisalini o loo avanoa ma o oe ma lau foma'i ole a talanoa poo le fea e sa'o mo oe. Afai e i ain i au fesili poo ni ou popolega e uiga i le amataina ole inisalini e mafai foi ona e fesootai ile faiaoga ole ma'isuka.

## Mataupu autü e tatau ona iloa o:

- Ituaiga ma le tele ole inisalini e faaaoga
- Taimi e tui ai lau inisalini ma poo le a le taimi ete 'ai ai.
- Ole taimi e pito i aogä ai le inisalini ma poo le a le umi ole taimi e nofo ai i totonu o lou tino.
- O le a le taimi e su'e ai le maualuga kulukose (suka) o lou toto.
- O le a le taimi e faafesootai ail au foma'i poo le 'au ale soifua maloloina mo ma'isuka.

**Ta'u i lau foma'i poo le faiaoga ole ma'isuka o ni suiga i lou olaga, itula faigaluega, faagaioiga faamalositino poo taimi ete 'ai ai. Ole a latou fautuaina oe pe a i ai se manaoga e sui ou togafitiga o inisalini.**

---

## **Sharps disposal**

### **What are “community sharps”?**

Community sharps are medical devices that penetrate the skin and are used in the home.

They include:

- Needles – used to give injections, draw blood or insert insulin pump tubing
- Syringes (even if needle removed)
- Pen needles for insulin pens
- Blood glucose or finger pricker lancets.

Your used sharps must be secured in a strong puncture resistant container, Australian Standard Sharps containers (available from the Australian Diabetes Council and some pharmacies) or a puncture resistant plastic container with a screw top lid are suitable.



Sharps must NOT be placed in any rubbish or recycling bins.

### **How do I dispose of my community sharps?**

Place sharps in an appropriate container. Dispose of containers only into community sharps disposal facilities found at:

- Public hospitals
- Participating pharmacies
- Community sharps disposal bins
- Needle and syringe program outlets.

For a list of sharps disposal facilities in your area contact your local council or phone the Australian Diabetes Council on 1300 342 238.

---

## Tia'iina o mea ma'ai

### O a ia mea o "komiuniti o mea ma'ai"?

Ole komiuniti o mea ma'ai o mea faigaluega faafoma'i e ma'ai e tuai le pa'u ole tino ma e faaaogaina foi i aiga.

E aofia ai mea nei:

- O nila – e faaaoga e fai ai tui, tui mai ai toto pe tuu i faaga'au pamu mo inisalini
- Faaga'au fai tui (Syringes) (tusa lava pe ua leai se nila)
- Peni nila mo peni inisalini
- Mea ma'ai/tamai naifi foma'i e tui ai le tamaimailima mo le kulukose



O au mea ma'ai uma ua uma ona faaaoga e tatau lava o teu malu ise konotaina malosi e le pa, pei o Australian Standard Sharps containers (e maua mai le Australian Diabetes Council ma nisi o fale talavai) poo se konotaina foi e le pa e i ai se tapuni e sikulu e talafeagai lena.

O mea ma'ai E LĒ tuuina ise pini lapisi poo se pini lapisi e vili toe faaliliu mai.

### E faapefeaona tia'i a'u meama'ai komiuniti?

Tuu mea ma'ai ise konotaina talafeagai lelei. Tia'i ea o konotaina e i ai mea ma'ai i nofoaga na o mea ma'ai komiuniti lava e tia'i ai i nofoaga nei:

- Falema'i faitele
- Fale talavai e auai ai
- Pini lapisi e tia'i i ai meama'ai komiuniti
- Nofoaga o polokalame e tia'i ai faaga'au ma nila.

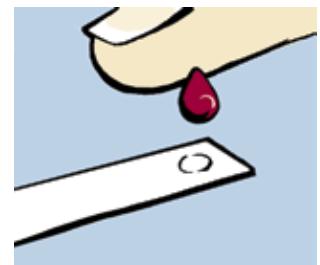
Mo le lisi o nofoaga e tia'i ai mea ma'ai i lo outou nuu faafesootai lau local council poo le telefoni ile Australian Diabetes Council ile 1300 342 238.

# 13

## Blood Glucose (Sugar) Monitoring

Monitoring blood glucose levels is important to help you manage your diabetes. Self blood glucose testing is a way of measuring how much glucose is in your blood.

A drop of blood is obtained by pricking the finger with a needle called a lancet. The blood is applied to a test strip, and inserted into a blood glucose machine (meter). The blood glucose(sugar) level is then displayed.

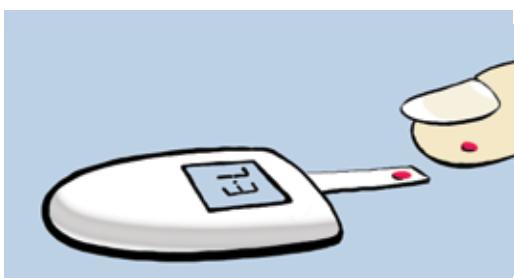


There are many types of meters available. Ask your doctor or diabetes educator which meter suits you. You will also need to be shown how to use your meter.

### **Why you should monitor your blood glucose (sugar) level**

Blood glucose levels respond to food, particularly carbohydrates. Other factors like physical activity, diabetes medication, changes in your daily routine, stress and illness will also cause blood glucose levels to go up or down.

Visits to a doctor or health professional may be weeks or months apart. It is important to know and understand the readings/blood glucose levels and make some self-management decisions in between doctors visits.



The benefits of using a meter include:

- Seeing if your blood glucose level is too high or too low
- Gives you a picture of your day to day diabetes management
- Shows you whether your blood glucose levels are within your recommended target range
- Shows you the effects of food, physical activity and medication on your blood glucose (sugar) level
- Gives you confidence to self-manage your diabetes.

This gives you and your diabetes health care team the information needed to help you manage your diabetes.

### **When you should monitor your blood glucose (sugar) level**

Blood glucose monitoring is usually done before meals or two hours after the start of a main meal. Ask your doctor or diabetes educator for advice on when and how often you need to check your blood glucose level.

It is safe practice to check your blood glucose level before driving and on long journeys, especially for those people who are at risk of hypoglycaemia.

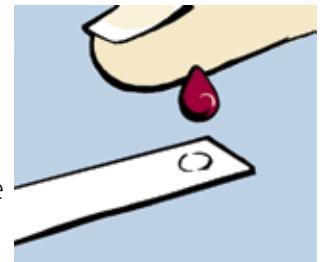
Monitor your blood glucose level more often:

- If you are sick
- When adjusting tablets or insulin doses
- When blood glucose levels are high -for example over 15 mmol/L
- After exercise
- After alcohol intake.

# 13

## Puleaina ole Kulukose (Suka) ole Toto

E taua le puleaina ole maualuga ole kulukose o lou toto e fesoasoani ile puleaina olou ma'isuka. O lou sueina lava e oe ia ole kulukose o lou toto ose auala lea e fua ai pe fia le kulukose i lou toto.



E faasisina sina toto mai lou tamaimailima ua tui ise nila e ta'u ole lancet. Ona tuu lea ole toto lenei ile fasi pepa e su'e ai – tesy strip, ave loa faitau ele masini (mita) e faitau ai le kulukose ole toto. Ona ta'u mai ai lea ole maualuga ole kulukose (suka) ole toto.

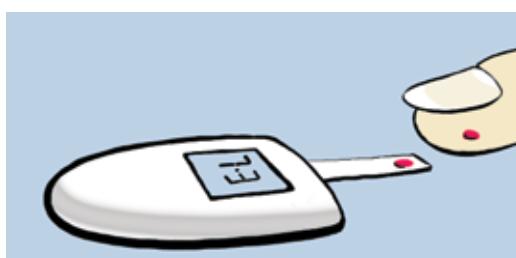
E tele lava ituaiga mita o loo maua. Fesili i lau foma'i poo le faiaoga ole ma'isuka poo fea le mita e fetaui mo oe. E manaomia foi le faasino atu ia oe pe faapefea ona faaaoga lau mita.

### Aiseā e tatau ai ona e su'eina le maualuga ole kulukose (suka) o lou toto

E tali mai le maualua ole kulukose ole toto i mea'ai, aemaise lava mea'ai carbohydrates. O isi faapogai e pei o faagaioiga faaletino, vai/fualau tau ma'isuka, fesuaiga i au mea e fai i aso taitasi, faanoanoa popole ma faama'i ia e mafua ai le oso i luga poo le pa'ū foi i lalo ole maualuga ole kulukose ole toto.

O le alu e vaai le foma'i poo foma'i polofesa atonu e fia vaiaso, masina le va. E taua lou iloa ma malamalama le faitauga/toto ma le maualuga ole kulukose na ua i ai ma fai sau lava filifiliga ile puleaina ile va o au asiasiga ile foma'i.

O le aogā ole faaaogaina ole mita e aofia ai le:



- Illo ai pe ua maualuga pe maualalo le kulukose o lou toto.
- Ete maua ai le ata o lou puleaina o lou ma'isuka i lea aso ma lea aso.
- E faailoa mai ai ia oe o le maualuga ole kulukose o lou toto o loo fetaui lava ma le maualuga fautuaina.
- E faailoa mai ai le aafiaga i mea'ai ma faagaioiga faamalositino ma vai/fualau ile maualuga ole kulukose (suka) o lou toto.
- Ete maua ai le talitonuga ia oe lava i lou puleaina lea o lou ma'isuka.

E maua ai e oe ma lau 'au ale soifua maloloina e vaia lou ma'isuka ia faamatalaga e manaomia e fesoasoani ai ia oe ile puleaina o lou ma'isuka.

### O afea e tatau ai ona su'eina le maualuga ole kulukose (suka) o lou toto

Ole su'eina ole kulukose ole toto e masani ona faia ae ete le'i 'ai, poo le lua itula talu ona uma lau mea'ai. Fesili i lau foma'i poo le faiaoga ole ma'isuka mo fautuaga poo afea ma e faafia foi ete manaomia e siaki ai le maualuga ole kulukose o lou toto.

O se faataitaiga saogalemu le su'eina ole maualuga ole kulukose olou toto ae ete le'i aveina le taavale ise malaga mamao, aemaise lava tagata e ono maua ile hypoglycaemia.

Ia su'eina pea lava pea le maualuga ole kulukose o lou toto:

- Pe afai ua e ma'i
- Pe a fesua'i le maualuga o fualau poo le inisalini
- Pe a maualuga le kulukose o lou toto – mo se faataitaiga 15 mmol/L
- Pe a uma au faamalositino
- Pe a uma lau inuga ava malosi.

---

### **What my blood glucose levels should be?**

For most people with type 2 diabetes the recommended range for blood glucose levels is 6 to 8 mmol/L fasting/before meals and 6 to 10 mmol/L two hours after the start of a main meal.

**Your doctor will advise you on what blood glucose level will be best for you.**

### **The Glycated Haemoglobin (HbA1c) Blood Test**

Blood glucose monitoring with a meter gives you a picture of your day to day diabetes management. There is another important blood test called glycosylated haemoglobin – more commonly known as HbA1c. This blood test gives you a picture of your blood glucose control over the last two to three months and is arranged by your doctor.

The generally recommended HbA1c target level in people with type 2 diabetes is 7% or less. Your HbA1c should be checked at least every 6 months.

If your HbA1c is greater than 7% it should be checked every three months. You will need to speak to your diabetes health care team about your diabetes management goals and possible changes to your diabetes management and treatment.

---

### **O le a tonu le maualuga ole kulukose o lo'u toto e tatau ona i ai**

Ole toatele lava o tagata e maua ile ma'isuka ituaiga 2 ole maualuga ole kulukose fautuaina 6 ile 8 mmol/L anapogi/ae lei'ai ma le 6 ile 10 mmol/L lua itula ina ua uma ona amata lau me'a'i autu.

### **O le a fautuaina oe e lau foma'i ile maualuga ole kulukose o lou toto pito i sili ona lelei mo oe.**

#### **O le Suega ole Toto mo le Glycated Haemoglobin (HbA1c)**

Ole suega ole kulukose ole toto ile mita ete maua ai le ata o lea aso ma lea aso ile puleaina o lou ma'isuka. E i ai foi leisi suega ole toto e taua foi e faaigoaina ole glycosylated haemoglobin – e lauiloa tele ole HbA1c. Ole suega lenei ole toto ete maua ai le ata ole puleaina ole kulukose o lou toto ile lua ile tolu masina ia ua tuanai atu ma e faatulagaina e lau foma'i.

O le fautuaga masani lava mo le HbA1c tapulaa maualuga e faasino i ai o tagata e maua ile ma'isuka ituaiga 2 ile 7% poo lalo ifo.

O lou HbA1c e tatau ona sueina ia le ititi ifo ile tai 6 masina.

Afai ae sili atu ile 7% lou HbA1c ua tatau loa ona siaki ile tai tolu masina. E manaomia lou talanoa i lau'au ale soifua maloloina e vaiai le ma'isuka e uiga ile sini mo le puleaina o lou ma'isuka ma atonu e tatau ona i ai ni suiga ile puleaina ma le togaftiga o lou ma'isuka.

# 14 Short Term Complications – Hypoglycaemia

## Hypoglycaemia (low blood glucose levels)

Hypoglycaemia is when the blood glucose (sugar) level drops below 4 mmol/L. It can happen very quickly.

Hypoglycaemia can occur in people who take certain oral diabetes medication or use insulin.

**Ask your doctor or health care team if this applies to you.**

It is essential to know how to recognise the signs and symptoms of having low blood glucose (sugar) and how to treat it.



### Blood glucose levels can be low because of:

- Delayed or missed meals
- Not enough carbohydrate in the meal
- Extra activity or more strenuous activity
- Too much diabetes medication
- Alcohol.

### Signs and Symptoms

These can vary from person to person and may include:

- Dizziness/light headedness
- Sweating
- Headache
- Weakness, shaking
- Tingling around the lips and fingers
- Hunger
- Mood changes, irritable/tearful
- Confusion/lack of concentration.

If you feel any of these signs and symptoms, test your blood glucose level if possible.

**Treatment for low blood glucose levels (hypos) in a person who is conscious, cooperative and able to swallow.**

**If you are unable to test, treat anyway.**

**Treatment for low blood glucose levels (Hypos).**

#### Step 1

**Take quickly absorbed carbohydrate such as:**

- Half a glass of juice OR
- 6 to 7 jellybeans OR
- Half a can of regular (not diet) soft drink OR
- 3 teaspoons of sugar OR honey

Retest the blood glucose level after 10 - 15 minutes.

If still below 4 mmol/L repeat Step 1.

# 14

# O Lavelave Mo Sina Taimi Pu'upu'u – Haipakilisimia (Hypoglycaemia)

## Hypoglycaemia (maualalo le tulaga ole kulukose ole toto)

Ole Hypoglycaemia e tupu pe a pa'ü i lalo ifo ole 4 mmol/L le kulukose (suka) ole toto. E vave lava ona tupu le tulaga lea.

E mafai ona tupu le Hypoglycaemia i tagata o loo inu ia ituaiga o vai/fualaau faapitoa poo le inisalini mo le ma'isuka.



### Fesili i lau foma'i poo le 'au ale soifua maloloina e vaaia le ma'isuka pe lavea ai oe ile tulaga lea.

E taua lava lou iloaina pe faapefea ona e iloa ia faailoilo ma auga ua maualalo le kulukose (suka) o lou toto ma e faapefea ona togafiti.

#### E mafai ona maualalo le kulukose ole toto ona ole:

- Tuai poo ua misi sau 'aiga - mea'ai
- Le lava carbohydrate i au mea'ai
- Tele atu au faagaioiga pe ua mamafa tele foi faagaioiga
- Tele atu le inisalini poo vai/fualaau mo le ma'isuka
- Ava malosi.

#### Faailoga ma Auga

E mafai ona eseese mea nei mai lea tagata ma leisi tagata ma e aofia ai mea nei:

- Niniva/ mama le ulu
- Oso mai le afu
- Tiga le ulu
- Vaivai, tetete
- Manitiniti vae, lima ma tamaimailima
- Fia 'ai
- Fesuia'i lagona, maitaita/matagitagi
- Fenumia'i/leai se fiafia mai.

A e faalogoina nisi o nei faailoga ma auga, su'e le maualuga o le kulukose o lou toto pe afai e mafai.

#### Afai e le mafai ona e su'eina, togafiti pea.

#### Togafitiga mo le maualalo ole kulukose ole toto (Hypos)

##### Sitepu 1

##### 'Ai pe inu faavave ia mea'ai e i ai carbohydrate pei o:

- Afa ipu ole juice POO LE
- 6 ile 7 jellybeans POO LE
- Afa apa (not diet) ole soft drink POO LE
- 3 sipuni ti ole suka POO LE honey.

Toe su'e le maualuga ole kulukose ole toto pe a uma le 10 - 15 minute.

Afai o loo i lalo lava ole 4 mmol/L toe fai le Sitepu 1.

## Short Term Complications – Hypoglycaemia - *continued*

### Step 2

If your next meal is more than 20 minutes away, follow up with more slowly absorbed carbohydrate such as:

- 2 plain biscuits e.g. 2 Arrowroot or 2 milk coffee biscuits OR
- 1 slice of bread OR
- 1 glass of milk or soy milk OR
- 1 piece of fruit
- 1 tub of low fat yoghurt.

If not treated the blood glucose levels can continue to drop, resulting in:

- Loss of coordination
- Confusion
- Slurred speech
- Loss of consciousness/fitting.

## ***THIS IS AN EMERGENCY !!***

***Instructions for the person present during this emergency:***

**If the person having a hypo is unconscious they must not be given anything by mouth.**

- Place the person in the 'recovery position' or on their side
- Make sure the airway is clear
- Ring 000 or if using a mobile ring 112 for an ambulance stating "diabetic emergency"
- An unconscious person must NOT be left alone
- If you are able and trained, give a Glucagon injection.



**Important points for the person at risk of hypoglycaemia**

- Always carry 'hypo' food with you if you are on insulin or at risk of hypoglycaemia. Ask your doctor if this applies to you.
- Carry identification to say you have diabetes
- Test before driving, before and after exercising and after alcohol intake



## O Lavelave mo sina Taimi Pu'upu'u - Hypoglycaemia- Faaauau pea

### Sitepu 2

Afai o leisi au 'aiga e 20 minute fai, toe 'ai nisi mea'ai e i ai carbohydrate faagesegese pei o:

- 2 masi keke e.g. 2 Arrowroot pe 2 milk coffee biscuits POO LE
- 1 fasi falaoa POO LE
- 1 ipu susu poo le susu soy POO LE
- 1 se fasi fualau 'aina
- 1 le ipu yoghurt e maualalo le ga'o.

Afai ae le togaftiae mafai ona alualu pea i lalo le maualuga ole kulukose ole toto ona tupu ai loa lea ole:

- Le fetaui au faagaioiga
- Fesea'i le malamalama
- Faatosotoso lau tautala
- Leiloa se mea/faama'i oso.

## O LE FAALAVELAVE FAAFUASE'I LENEI!!

*Faatonuga mo le tagata o loo i ai ile taimi lenei ole faalavelave faafuase'i:*

### Ole tagata ua maua ile hypo ma ua leiloa se mea aua lava ne'i tuuina se mea i lona gutu.

- Faataoto ile 'recovery position' ia poo lona itu
- La mautinoa o kilia le ala'ea
- Vili le 000 pe a o faaaaoga le mobile vili le 112 mo le taavale ale falema'i ma fai i ai "faalavelave faafuase'i ma'isuka"
- O le tagata ua leiloa se mea E LE tatau ona tu'ua na o ia
- Afai ete mafai ape ua a'oa'oina foi oe, tui loa le Glucagon.



### Mea taua mo tagata e ono maua ile hypoglycaemia

- Ave pea lava mea'ai 'hypo' i alu atop e afai o tui oe ile inisalini pe e ono maua oe ile hypoglycaemia. Fesili i lau foma'i pe tutupu mea nei ia oe.
- Ave mea e iloa ai oe - identification e iloa ai ete ma'isuka
  - Su'e ae ete lei avea le taavale, a'o lei faia ma pe a uma au faamalositino ma pe a uma sau inuga ava malosi.



# 15

## Short term complications – high blood glucose (sugar) level (hyperglycaemia, DKA, HONK/HHS, and sick days)

**Hyperglycaemia** or high blood glucose levels is when the blood glucose (sugar) levels are much higher than recommended – above 15mmol/L.

Blood glucose levels go high because of:

- Eating too much carbohydrate
- Not taking enough insulin or oral diabetes medications
- Sickness or infection
- Emotional, physical or mental stress
- Certain tablets or medicines, (including cortisone or steroids)
- A problem with your blood glucose meter, strips or testing technique
- Lumps present at the injection site (if on insulin)
- Fingers not clean when testing your blood
- Testing too soon after eating. (Check your blood glucose two hours after the start of a main meal).

### **Signs and Symptoms**

You may feel:

- Tired
- Thirsty
- Pass urine more frequently
- Blurred vision
- Generally unwell.

If feeling unwell

- Test your blood glucose levels more often: at least every 2 – 4 hours
- Drink fluids and continue to eat normally if possible
- Treat the cause of the illness
- Tell someone and have them check on you.

Test for ketones if advised to do so by your doctor.

### **When do I need to call my doctor?**

Contact your doctor for advice during illness if:

- You can't eat normally
- You are not well enough to monitor your blood glucose levels
- Your blood glucose level is higher than 15 mmol/L for more than 12 hours
- Vomiting or diarrhoea continues for more than 12 hours
- You continue to feel unwell or become drowsy.

**It is important to have a written sick day management plan prepared before you get sick or unwell. Talk to your diabetes health care team to arrange this.**

### **Ketone Testing and Diabetic Ketoacidosis (DKA)**

Ketones are chemicals in the blood which are produced from the breakdown of fat. If the body has no insulin present, glucose (sugar) can't be used for energy. Therefore the body makes ketones to provide a different source of energy. This may occur due to poor control of diabetes, not enough insulin or missed insulin doses, illness or infection.

# 15

## O lavelave mo sina taimi pu'upu'u – maualuga le kulukose (suka) ole toto (hyperglycaemia, DKA, HONK/HHS, ma aso ma'i)

O le Hyperglycaemia poo le maualuga ole tulaga ole kulukose ole toto e tupu pe afai ua maualuga tele le kulukose ole toto ua **maualuga tele atu lava nai lo lea na fautuaina** – luga atu ole 15mmol/L.

E oso i luga le tulaga ole kulukose ole toto ona ole:

- Ua tele atu lau'ai i mea'ai carbohydrates
- Ua le lava ia fualaau ma'isuka na e inuina ma/poo inisalini
- Faama'i pe ua pisia - infection
- O ou lagona o'otia, faaletino pe faalemafaufa-faanoanoaga
- E i ai ituaiga fualaau poo vai, (e aofia ai cortisone poo steroids)
- O faafitauli i lau mita mo le kulukose ole toto, o strips poo auala e fai ai le su'ega
- Fula le mea na e tui (pe a ole inisalini)
- E le mamā ou lima pe a su'e le toto
- Ua vave ona e su'eina ae faatoa uma ona e'ai. ( siaki le kulukose o lou toto pe a lua itula talu ona uma lau mea'ai tele ole aso).

### Faailoilo ma Auga

Atonu ete faalogoina le:

- Vaivai
- Fia inu
- Alu so'o lau fe'auvai
- Nenefu le vaai
- Ua e le malosi lava.

Afai o e faalogoina ete le o malosi:

- Su'e pea lava pea le maualuga ole kulukose o lou toto : ia le ititi ile tai 2 – 4 itula
- Inu mea suavaia ma toaga e'ai pei ona e masani ai pe afai e mafai
- Togafiti le mafuaaga ole ma'i
- Ta'u i seisi tagata ma fai i ai e siaki mai oe,

Su'e mo ketones pe afai sa fautuaina e lau foma'i.

### O le a le taimi out e manaomia ai le valaau i la'u foma'i?

Faafesootai lau foma'i mo se fautuaga a'o e ma'i pe afai:

- Ua le mafai ona e'ai pei ona sa masani ai
- Ua e le malosi tele e su'e le maualuga ole kulukose o lou toto pe 'ai pe inu
- Ua maualuga atu le kulukose o lou toto nai le 15 mmol/L mo le sili atu nei ile 12 itula
- Pua'i pe ua diarrhoea faaauau pea ua sili atu ile 12 itula
- O faaauau pea ou lagona le malosi pe ua faanivaniva foi.

**E taua le i ai ose fuafuaga tusi ole puleaina o aso ma'i ua saunia a'o ete lei ma'i pe ua e le malosi foi. Talanoa i lau'au ole soifua maloloina ia e vaaia le ma'isuka e faatulaga ai le vaega lea.**

### Su'eina ole Ketone ma le Diabetic Ketoacidosis (DKA)

O Ketones o kemikolo - chemicals i totonu ole toto e faia mai ile vaevaeina o ga'o.

Afai ua leai se inisalini o i ai, ole kulukose(suka) ole a le mafai ona faaaoga mo le malosi (energy). Ona faia loa lea ele tino ia ketones e maua mai ai leisi malosi e ese mai. E mafua mai lea tulaga ona ole le

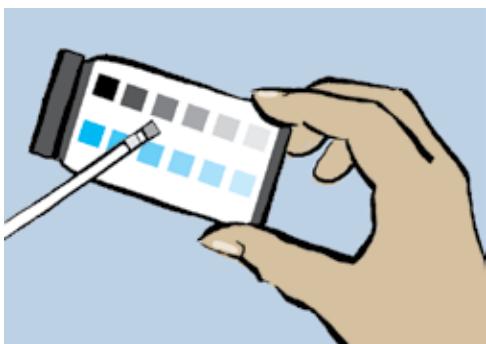
---

A build up of ketones can lead to a condition called ketoacidosis, requiring urgent medical attention. Diabetic ketoacidosis (DKA) is a life threatening condition that usually only occurs in people with type 1 diabetes. It causes dehydration and a buildup of acids in the blood. This results in vomiting and increased drowsiness.

### **DKA IS AN EMERGENCY AND REQUIRES URGENT MEDICAL ATTENTION**

**In very rare cases ketoacidosis can occur in people with type 2 diabetes and is usually caused by a serious infection.**

With type 2 diabetes it is not usually necessary to test for ketones. Discuss with your diabetes health care team if you need to check for ketones.



There are two methods of testing for ketones – testing urine and testing blood :

#### **Urine Ketone Test**

Urine test strips are available to check for ketones. Ask your pharmacist about the types of urine ketone strips available and carefully follow the directions for testing. Urine ketone tests must be timed exactly using a watch or clock with a secondhand.

#### **Blood Ketone Test meter**

There are meters available to test blood for ketones. The same drop of blood to be tested for glucose can be used to test for ketones. Different test strips are used for testing glucose and ketones. Ketone test strips are not subsidised by the National Diabetes Services Scheme at present.

#### **Seek URGENT medical attention if:**

- The urine ketone test shows medium or high levels of urine ketones.
- The blood ketone test result is higher than 0.6 mmol/L.

### **Hyperosmolar Hyperglycaemic Syndrome (HHS) - previously known as Hyper Osmolar Non Ketotic coma (HONK)**

**HHS** is a complication of type 2 diabetes that involves extremely high blood glucose (sugar) levels without the presence of ketones. This medical emergency occurs in anyone with type 2 diabetes, regardless of treatment.

When blood glucose levels are very high, the body tries to get rid of the excess glucose (sugar) in the urine. This significantly increases the amount of urine and often leads to dehydration so severe that it can cause seizures, coma and even death.

#### **The main causes of HHS/ HONK are:**

- Undiagnosed type 2 diabetes
- A current illness or infection e.g. pneumonia and urinary tract infection
- Other major illnesses e.g. stroke, heart attack
- Persistent physical or emotional stress
- Certain medication. This is another reason you need to talk to your diabetes health care team about the medications you are taking.

#### **Signs and Symptoms include:**

- Severe dehydration
- Shock
- Changes in consciousness
- Coma.

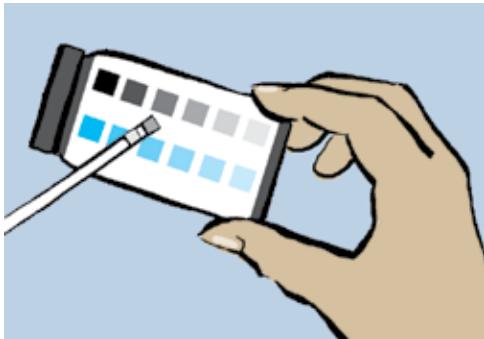
### **HHS/HONK requires URGENT medical attention.**

lelei ona pulea le ma'isuka, le lava le inisalini pe ua misi le tuiga ole inisalini, ma'i poo nisi aafiaga. O le faufaula'i la o ketones e mafai ona maua ai ile ma'i e ta'u ole ketoacidosis, e manaomia ai loa le vaai ole foma'i faavave lava.. O le ma'isuka ketoacidosis (DKA) ose faama'i e faamata'u mai ile ola ma e masani ona maua ai tagata e maua ile ma'isuka ituaiga 1. E maua ai ile leai ose vai ile tino – dehydration ma faatupu ai asiti - acids ile toto. Ona aupua'i ai lea ma faateleina ai le faanivaniva.

## O LE DKA OSE FAALAVELAVE FAAFUASE'I MA E MANAOOMIA IA I AI FOMA'I FAAVAVE LAVA

**Ini tulaga e seāseā lava tupu, ole ketoacidosis e mafai ona tupu i tagata e maua ile ma'isuka ituaiga 2 ma e masani lava ona mafua mai ise faama'i pipisi (infection) matuia.**

Ole ma'isuka ituaiga 2 e le masani ona faia le su'ega mo ketones. Talanoa i lau 'au mai le soifua maloloina e vaia le ma'isuka pe ete manaomia le siakiina o ou ketones.



E lua metotia e su'e ai ketones – su'eina ole fe'auvai ma le su'eina ole toto:

### Su'ega Fe'auvai Ketone

E i ai fasi 'ie – strips e avanoa e siaki ai ketones. Fesili ile pule ole fale talavai e uiga i ituaiga o strips mo fe'auvai ketone o maua ma mulimulitai ma le faaeteete i faatonuga mo le su'eina. E tatau ona taimi ia su'ega ole fe'auvai ketone e faaaoga ai le uati ia sa'o lelei lava poo se uati e i ai le vae sekone.

### Mita e Su'e ai le Toto Ketone

E i ai mita e maua e su'e ai le toto mo ketones. Ole toto sisina a e tasi lea sa su'e ai le kulukose e mafai foi ona toe faaaoga e su'e ai ketones. Ae eseese la ia strips e faaaoga mo le kulukose ese mo le ketones. O strips mo su'ega o Ketone e le faatupeina ele [National Diabetes Services Scheme](#) ile taimi nei.

### Saili loa FAAVAVE fesoasoani faafoma'i pe afai ua:

- Faaali mai ile su'ega ole fe'auvai mo ketone ua ta'u mai ai e feololo pe ua maualuga ia ketones ile fe'auvai.
- O le faaiuga ole su'ega mo ketonu ole toto e maualuga atu nai le 0.6 mmol/L.

### Hyperosmolar Hyperglycaemic Syndrome (HHS) - e iloaina foi ole Hyper Osmolar Non Ketotic coma (HONK)

**HHS** ose lavelave - complication ole ma'isuka ituaiga 2 e aafia ai le maualuga tele ole kulukose (suka) ole toto ae le o i ai ni ketones. O lenei faalavelave faafuase'i faafoma'i e mafai ona tupu i soo se tagata lava o maua ile ma'isuka ituaiga 2, tusa lava poo a togafitiga.

A o'o ina maualuga tele ia kulukose ole toto, ona taumafai lea ole tino e aveese le kulukose (suka) lea ua sili atu i totonus ole fe'auvai. O le a faateleina ai loa le fe'auvai ma e masani ai lava ona maua ai loe ile leiaiose vai ile tino – dehydration, e matuā leaga lava e maua ai loa ile ma'ilili - seizures, coma ma otiai loa.

### O mafuaaga autu ole HHS/ HONK o:

- Le'i iloa e ma'isuka ituaiga 2
- Ma'i o e ma'i ai nei e.g. nimonia fula le ala fe'auvai
- Isi ma'i matuia e.g. stroke, ma'i fatu
- Faanoanoaga oso pea poo lagona faanoanoa
- O nisi o vai/fualau. O le tasi lea faapogai e manaomia ai lou talanoa i lau 'au ole soifua maloloina e vaia le ma'isuka e uiga i vai/fualau na ete inuina.

### Faailoilo ma Auga e aofia ai:

- Matuā leai se vai ile tino
- Shock
- Fesuiaiga i lou iloa - consciousness
- Coma.

### HHS/HONK e manaomia le FAAVAVE OLE vaaiga faafoma'i.

# 16 Chronic complications

Blood glucose (sugar) levels that remain high for long periods of time can cause diabetes related complications such as eye disease, kidney disease, nerve damage as well as heart disease and circulation problems. High blood glucose levels also increase the risk of infection and slow down recovery from infection. For these reasons it is very important that you try and keep your blood glucose levels within the ranges recommended by your doctor or diabetes health care team.

## **Diabetes and eye disease:**

Damage can occur to the back of the eye (retina) where there are very fine blood vessels important for vision. This is called diabetic retinopathy. The development of retinopathy is strongly related to how long you have had diabetes and how well the blood glucose levels have been controlled.

High blood pressure, high cholesterol levels and kidney failure can also affect the severity of diabetic retinopathy.

Vision loss or blindness is preventable through early detection and treatment. The treatment for diabetic retinopathy can be laser therapy or surgery.

Glaucoma and cataracts can occur at an earlier age and more often in people with diabetes. Cataracts affect the eye's lens causing it to become cloudy with a loss of vision. The treatment for cataracts is surgery.

Glaucoma occurs when the pressure inside the eye becomes very high, causing damage to the optic nerve. The treatment for glaucoma can be eye drops, laser therapy or surgery.

## **Diabetes and kidney disease:**

Your kidneys help to clean your blood. They remove waste from the blood and pass it out of the body as urine.

Over time diabetes can cause damage to the kidneys. If the kidneys fail to work properly, waste products stay in the body, fluids build up and the chemical balance is upset. This is called diabetic nephropathy.

You will not notice damage to your kidneys until it's quite advanced, however early signs of kidney problems can be detected through a urine test.

Finding out about early kidney damage is simple and painless and should be checked every year from the time of diagnosis of diabetes. Treatment at this time can prevent further damage.

In severe kidney disease dialysis treatment or a kidney transplant may be needed.

People with diabetes are also at increased risk of infection of the bladder, kidneys and urinary tract.

The good news is that the risk of developing kidney problems can be reduced by: stopping smoking if you smoke, managing your blood glucose levels, having regular kidney and blood pressure checks and leading a healthy lifestyle.

# 16

## Lavelave ose Ma'iumi (Chronic complications)

O kulukose (suka) ole toto e tumau pea i luga le maualuga mo se taimi umi lava e mafai ona mafua ai lavelave tau ma'isuka e pei o faama'i mata, faama'i o fatuga'o, faaleagaina ai neula e aofia ai foi ma le faama'i ole fatu ma faafitauli ile faataamilosaga o ala toto. Ole maualuga foi ole kulukose ole toto e faateleina ai foi le avanoa e maua ai i ma'i infections ma faagese ai le toe malosi lelei mai ia ma'i. Ona o nei faapogai e taua tele la lou taumafai e taofi pea le maualuga o le kulukose ole toto ia tutusa ma le maualuga e pei ona fautuaina e lau foma'i poo le 'au ale soifua maloloina e vaaia le ma'isuka.

### **Ma'isuka ma faama'i o mata:**

E mafai ona faaleagaina le pito i tua o totonu ole mata (retina) ile mea e i ai alatoto nini'i ma neula taua mo le vaai. Ua faaigoa ole ma'isuka retinopathy. Ole tupu mai la ole retinopathy e faiā tele lava ile ma'isuka ile leva ole taimi na i ai lou ma'isuka ma pe faapefea le lelei na pulea ai le maualuga ole kulukose ile toto.

Ole toto maualuga, leaga o fatuga'o ma le maualuga ole ga'o ile toto – cholesterol, e mafai ai foi ona matuā aafia ai lava le faama'i lea o mata ole retinopathy.

Ole leiloa ole vaai poo tauaso, e mafai ona puipua e auala ile vave maua ua mama'i ou mata ma fai togafiti talafeagai.

Ole togafiti ole retinopathy ole ma'isuka ole sulu – laser therapy poo le tipi – taotoga (surgery).

Ole ku – Cataracts, e aafia ai meavaai – lens ole mata, e mafua ai ona nenefu le vaai ma leiloa ai lava le vaai - vision. Ole togafiti mo le ku i mata ole tipi

Ole kalokoma –glaucoma, e tupu pe a malosi le omia – pressure i totonu ole mata, e tupu ai loa le faaleagaina ole neula vaai – optic nerve. Ole togafiti mo le glaucoma ole vai tului mata, laser poo le tipi.

### **Ma'isuka ma faama'i o fatuga'o:**

E fesoasoani ou fatuga'o e faamamā lou toto. Latou te aveese mai otaota mai le toto ma pasi atu i fafo ole tino ile feauvai.

Ole umi ole taimi, e faaleagaina ai ele ma'isuka ia fatuga'o (ma'isuka ole retinopathy). Afai ua le galulue lelei fatuga'o, o otaota ole a i ai pea ile tino, tele le vai e i ai ma leaga ai loa le paleni kemikolo suavai.

Ole igoa o le ma'i lea ole ma'isuka nephropathy.

Ole a e le maitauina ua leaga ou fatuga'o seiloga ua matuā mama'i ma leaga lava, peitai ane e taua ai lava la, o faailoga vave vaaia o faafitauli i fatuga'o e mafai lava ona iloa e auala atu i le su'eina.

Ole fia iloaina vave e uiga ile faaleagaina o fatuga'o, e faigofie lava ma e le tiga, ma e tatau ona siaki i tausaga uma talu ona iloa ua maua ile ma'isuka. Ole togafitiina loa ile taimi nei e puipua ai nisi faaleagaina e toe tutupu mai.

I faama'i faigata ma ogaoga o fatuga'o ole faamamaina ole toto - dialysis treatment, poo le toe totö o fatuga'o (kidney transplant) atonu e manaomia.

O tagata e ma'i suka, e ono maua foi ma aafia tele i faaletonu ole tagamimi - bladder, fatuga'o ma le ala fe'auvai.

Ole tala e fiafia ai, ole ono aafia ile maua i faafitauli o fatuga'o e mafai ona fo'ia ma faaititia ile: tu'u le ulaula, pulea lelei le maualuga ole kulukose o lou toto, ia su'e pea lava ou fatuga'o ma siaki lou toto maualuga ma ia soifua ise soifuaga maloloina lelei.

---

## Chronic complications - *continued*

### **Diabetes and nerve disease:**

Diabetes over time can cause damage to nerves throughout the body. This damage is referred to as diabetic neuropathy.

Neuropathy leads to numbness, changes in sensation and sometimes pain and weakness in the , feet, legs, hands and arms. Problems may also occur in the digestive tract, heart and sex organs.

Diabetic neuropathy also appears to be more common in people who have:

- Problems controlling their blood glucose levels
- High levels of blood fat
- High blood pressure
- Excess weight
- An age greater than 40
- Had diabetes for a long time.

Signs and symptoms of nerve damage may include:

- Numbness, tingling, or pain in the toes, feet, legs, hands, arms, and fingers
- Muscle wasting of the feet or hands
- Indigestion, nausea, or vomiting
- Diarrhoea or constipation
- Feeling dizzy or faint due to a drop in blood pressure when standing
- Visual problems
- Problems with urination
- Erectile dysfunction (impotence) or vaginal dryness
- Sweating and palpitations
- Weakness
- Dry skin
- Dry mouth, eyes, nose.

Neuropathy can also cause muscle weakness and loss of reflexes, especially at the ankle, leading to changes in the way the person walks. Foot deformities may occur. Blisters and sores may appear on numb areas of the foot because pressure or injury goes unnoticed, leading to the development of an ulcer. If foot injuries or ulcers are not treated quickly, the infection may spread to the bone, and in extreme circumstances, may result in amputation. Due to neuropathy and its effect on daily living the person may lose weight and is more likely to suffer with depression.

The best way to minimise your risk for developing neuropathy is to keep your blood glucose levels as close to the recommended range as possible. Daily foot care is of great importance to reduce complications.

Treatment of neuropathy includes pain relief and other medications as needed, depending on the type of nerve damage. Discuss the options with your health care team.

### **Diabetes and heart disease/stroke:**

People with diabetes are at increased risk of heart disease and stroke. Higher than recommended blood glucose and cholesterol levels and high blood pressure over long periods of time damage the large blood vessels. This can lead to heart disease (coronary artery disease), damage to the brain (cerebral artery disease) and other blood vessel disease (peripheral artery disease).

Blood vessel disease is progressive and causes hardening and narrowing of the arteries due to a gradual build up of plaque (fatty deposits).

Coronary artery disease is the most common form of heart disease. Blood carries oxygen and

---

## O lavelave ose ma'iumi – faaauau pea

### **Ma'isuka ma faama'i o neula:**

E mafai ele ma'isuka, ise taimi umi lava, ona faaleaga ia neula uma ole tino. O lenei faaleagaina e ta'u ole ma'isuka neulapafi – diabetic neuropathy,

Ole Neuropathy e o'o atu ai ile pepē ole tino, fesuaiga i faalogona ma o isi taimi tiga ma vaivai ia vae i lalo, oga vae, ma oga lima. Faafitauli e tupu foi ala 'ai e faamalu ai mea'ai, fatu ma itusa.

E aliali mai ole ma'isuka neuropathy e sili atu ona taatele i tagata e i ai mea nei:

- Faafitauli ile puleaina ole maualuga ole kulukose ile toto
- Maualuga ga'o ile toto
- Toto maualuga
- Ove le mamafa
- Sili atu tausaga ile 40
- Umi le taimi o maua ile ma'isuka.

Faailoga ma auga o neula ua faaleagaina e aofia ai le:

- Ole pepē, manitiniti, poo le tiga o tamaimaivae, alofivae, vae, lima, ogalima, ma tamaimailima
- Tiga le manava, faafaufau pe faasuati
- Manava tatā pe mamau foi
- Faalogona niniva poo le matapogia ona ua pa'ü i lalo le maualuga ole toto ona o la e tu
- Faafitauli ile vaai o mata
- Faafitauli ile alu ole fe'auvai
- Ua le tu le poti(imotence) poo le mago matutu ole pipi - vaginal dryness
- Afu tele ma le tutusa le tata ole fatu - palpitations
- Vaivai
- Mago le pa'u
- Mago le gutu, mata ma le isu.

Ole neulapafi - Neuropathy, e mafai ona mafua mai ai le vaivai o maso mai le neulapafi, ma leai ai se vave o gaioiga – reflexes, aemaise lava i pogavae – ankle, ma agai atu ai lava ina le lelei le savali. E faaleagaina ai foi foliga o alofivae. Ole a pāpā – blisters ma po'ua vae i vaega ua gagase ma pēpē, ona ole una'i malosi mai poo ni manu'aga e le o amana'iaina, e o'o atu ai ina maua ile ulcer. A le vave togaftia manu'a o vae ma ulcers, ole a sosolo atu le leaga i ponaivi, ma i tulaga leaga tele lava, ona oo lea ina tipi ese le vae.

Talu ai ona ole Neuropathy ma ona aafiaiga i olaga o tagata taitoatasati atonu ole a lusi ona pauna ma ole a safa foi ile faanoanoa – depression.

Ole auala pito sili e puipua mai ai ile neulapafi – neuropathy, ole taofi lea ole maualuga ole kulukose ile toto ile latalata lava ile maualuga masani e mafai ai. Ole yaaiga o vae e taua tele e faaititia ai le mau lavelave e taua tele lava e faaititia ai nisi faafitauli e ono tutupu mai. Ole togaftia ole neuropathy e aofia ai fualau faate'a tiga ma isi vai e pei ona manaomia, e faalagolago ile ituiga o neula ua faaleagaina. Talanoa i filifiliga ma lau 'au mai le soifua maloloin e vaaia tagata ma'isuka.

### **Ma'isuka ma faama'i ole fatu /stroke:**

O tagata e ma'isuka e faateleina le ono aafia i faama'i ole fatu ma le stroke. Ole oso maualuga sili atu nai lo le maualuga fautuaina ole kulukose ile toto ma le toto maualuga e mafua mai ai le faaleagaina o alatoto lapopo'a. E mafai ona maua ai le ma'i fatu (coronary artery disease), faaleaga ai le fai'ai (cerebral artery disease) ma isi faama'i o alatoto (peripheral artery disease).

O faama'i la o nei alatoto e tuputupu pea ma e tupu ai le vaiti ma malō ai alatoto ona ua faulai ai ia palake – plaque, o faulaiga ga'o – fatty deposits.

---

## Chronic complications - *continued*

other important nutrients to your heart. Blood vessels to your heart can become partially or totally blocked by fatty deposits. Chest pain (angina) or a heart attack occurs when the blood flow supplying oxygen to your heart is reduced or cut off.

Over time, coronary artery disease can weaken the heart muscle and lead to heart failure preventing the heart from pumping blood properly to the rest of the body. This can also lead to abnormal beating rhythms of the heart.

A stroke occurs when blood supply to part of your brain is interrupted and brain tissue is damaged. The most common cause is a blocked blood vessel. Stroke can cause physical problems such as paralysis, problems with thinking or speaking, and emotional problems.

**Peripheral artery disease** occurs when blood vessels in your legs are narrowed or blocked by fatty deposits causing reduced blood flow to your legs and feet.

Many people with diabetes and peripheral artery disease do not have any symptoms.

Other people may have the following symptoms:

- leg pain, particularly when walking or exercising, which disappears after a few minutes of rest
- numbness, tingling, or coldness in the lower legs or feet
- sores or infections on feet or legs that heal slowly.

Certain exercises, such as walking, can be used both to treat peripheral arterial disease and to prevent it. Medications may help relieve symptoms. In advanced cases treatment may involve surgical procedures.

You can lower your risk of blood vessel damage by keeping your blood glucose, blood pressure and cholesterol in the recommended range with healthy eating, physical activity, and medication. Quitting smoking is essential to lower your risk.

### **Diabetes and infection:**

High blood glucose levels can lower your resistance to infection and can slow the healing process.

### **Oral health problems and diabetes**

When diabetes is not controlled properly, high glucose levels in saliva may increase the amount of bacteria in the mouth and may also cause dryness of the mouth. Blood glucose (sugar) levels that stay high for long periods of time reduces the body's resistance to infection, and the gums are likely to be affected.

Periodontal diseases are infections of the gums and bones that hold your teeth in place. Even if you wear dentures, you should see your dentist at least once a year.

Signs and symptoms of oral health problems include:

- Gums that are red and swollen, or that bleed easily
- Persistent bad breath or bad taste in the mouth
- Any change in the fit of dentures.

### **Fungal infections /Thrush**

Thrush is the term used for a common infection caused by a yeast-like fungus.

Yeast infections are often associated with diabetes, especially when the blood glucose level is very high. Persistent cases of thrush may sometimes be an early sign of diabetes.

Thrush can occur in the mouth, throat, digestive tract, vagina or on the skin. It thrives in the moist areas of the body.

Oral thrush, a fungal infection in the mouth, appears to occur more frequently among people

---

## O lavelave ose ma'iumi – faaauau pea

**Faama'i o alatoto ole Fatu** -Coronary artery ose faama'i fatu lenei e pito i sili ona taatele. E ave ele toto le okesene ma isi mea aogā ile fatu. E mafai ona poloka ia alatoto i lou fatu ona ole tele ole ga'o ua fau ai. E oso ma pe le fatu ina ua faaititia le alu ole okesene ile fatu poo ua tipi foi ma e mafai ona maua ai loa ile fatafata tiga (angina).

I se taimi umi la, o faama'i o alatoto ile fatu ole a mafai ai ona vaivai maso ole fatu ma ono tupu ai loa le pe ole fatu, e tupu ina ua le mafai ele fatu ona pamu faalelei le toto i isi vaega uma ole tino. Atonu ole a i ai nisi suiga ile tātā ma le pa'ō masani ole fatu.

O le stroke e tupu pe a faasalaveia le alu ole toto ise vaega ole fai'ai ma ua leaga uaualaiti (tissue) ole fai'ai. Ole mafuaga pito i taatele ole poloka o alatoto. E mafai ona maua faafitauli ole tino ile stroke pei ole pe ole tino (paralysis), faafitauli o mafaufauga, ma faafitauli o lagona.

**Peripheral artery disease** ole faama'i ole perifelale, e tupu ina ua vaiti ia alatoto o vae pe poloka foi ile faula'i ai o ga'o, e mafua ai le faaititia ole alu ole toto i ou vae ma alofivae.

Ole tele o tagata e ma'isuka ma ma'i peripheral artery e leai ni auga e aliali mai.

O isi tagat atonu e i ai auga nei:

- Tiga o vae, aemaise lava pe a savali pe faamalositino foi, ae toe mou ese pe a uma ona malolo mo nai minute.
- Gagase ma pēpē, matuitui mainiini, malulu ia vae poo alofivae
- Po'u ma papala o alofivae ma vae e tuai ma gese ona toe pēpē ma toe lelei.

O faamalositino e ese mai, pei ole savali, e mafai ona faaaoga i mea e lua, e togafiti toe puipui mai ai ile faama'i ole perifelela - peripheral vascular disease. E mafai ona fesoasoani ia vai/fualaau e faate'a ai auga tiga. I ma'i faigata tele atu o togafitiga e aofia ai le tipi – surgery.

E mafai ona e faaititia le ono maua o oe ile stroke, ile taumafai lea ia tumau pea le lelei o le kulukose ile toto, toto maualuga ma le ga'o ile toto, le fuafuaina o au mea'ai, faagaioiga faamalositino, ma vai/fualaau. O le tu'u ole ulaula tapa'a o se mea lelei ma Ua tatau ona tu'u.

### **Ma'isuka ma le ma'i pipisi (infection):**

Ole maualuga ole kulukose (suka) ile toto e mafai ona faaititia ai le malosi e tete'e atu ai i faama'i e mafai ai foi ona gese ai le toe vave malosi o le ma'i.

### **Ma'isuka ma le soifua lelei ole gutu (Oral)**

Afai ae le puleaina le ma'isuka, ole maualuga ole kulukose o le fāua ole a mafai ai ona faateleina le aofaiga o siama ile gutu ma e ono mamago ai le gutu. Ona ole ma'isuka e faaititia le malosi ile tino e tete'e ai le ma'i, o aulamu e aofia ai i mea e ono aafia. Ole tumau pea le maualuga ole kulukose (suka) ole toto mo se taimi umi ole a faaititia ai le malosi ole tino e tete'e i faama'i, ona aafia loa lea o aulamu – gums. Ole faama'i ole ole piliotonetali – periodontal, e mama'i ia aulamu ma ponai na e taofia ma tutū ai ou nifo. Tusa lava pe fai ou nifo faapipi'i, e tatau lava ona vaai lau foma'i fa'inifo ia le ititi ifo ile faatasi ile tausaga.

O nisi o faailoga ma auga o faafitauli o aulamu e aofia aile:

- O aulamu ua mumu ma fulafula, pe ua toto gofie
- Elo pea lava ole gutu pe ole 'o'ona ole tofo ile gutu
- So'o se suiga lava ile faamauga o nifo faapipi'i.

### **Ma'i fagi fulafula (fungal) /Falasi (thrush)**

Ole falasi ole upu e faaaoga mo ma'i taatele e mafua mai i fagi pei ni faafefete fulafula. O ma'i faafefete – yeast infections, e masani ona fesootai male ma'isuka, aemaise lava pe maualuga tele le kulukose ile toto. Ole tupu soo ole ma'i falasi, atonu o nisi taimi o faailoga ia ole ma'isuka.

---

## Chronic complications - *continued*

with diabetes including those who wear dentures. Thrush produces white (or sometimes red) patches in the mouth. It may cause a painful, burning sensation on your tongue. It can affect your ability to taste foods and may make it difficult for you to swallow.

In women, vaginal thrush is a very common infection. A common symptom is itching and soreness around the vagina.

**Urinary tract infections** are more common in people with diabetes. They are caused by micro-organisms or germs, usually bacteria.

Signs and symptoms include:

- Wanting to urinate more often, if only a few drops
- Strong smelling and cloudy urine
- Burning pain or a 'scalding' sensation on urination
- A feeling that the bladder is still full after urination
- Blood in the urine.

It is important to see your doctor immediately if any infection is suspected.

---

## O lavelave ose ma'iumi – faaauau pea

E mafai ona tupu le falasi ile gutu, fa'aī, ala e faamalū ai mea'ai, itusa o teine – pipi poo le pa'u ole tino. E ola lava i vaega ole tino e susū.

Ole ma'i falasi ole gutu, ole ma'i fulafula ile gutu, e aliali mai e tele ia i latou e ma'isuka, e aofia ai i latou e fai nifo faapipi'i. E sau le sua pa'epa'e mai le ma'i falasi ( poo nisi taimi e momu) vaega papala ile gutu. E mafai ona pogai mai ai le tiga, pei a mu le laulaufaiva. E mafai ona aafia ai lau tofo i mea'ai ma atonu ole a faigata ai foi ona folo au mea'ai.

I tamaitai, ole ma'i lenei ole falasi i itusa, o se ma'i taatele lava. Ole auga pito i taatele ole mageso ma le tiga i tafatafa ole itusa – vagina.

Ole ma'i ole auala ole fe'auvai e taatele i tagata e maua ile ma'isuka. E mafua mai i siama i tama'i totoga ma isi ituaiga siama – bacteria.

O faailoga ma auga e aofia ai le:

- Manao e fiapi i taimi uma, pe na o sina faasinasina lava e sau
- Malosi le sosogo/elo ma nenefu le feauvai
- Pei a mu le alapi pe a pi
- E faalogo atu e pei o la e tumu lava le tagamimi pe a uma ona pi
- Toto mai le feauvai pe a uma ona pi.

E taua lava lou alu loa faavave e vaai lau foma'i pe a faapea ua e masalomia ua e ma'i.

# 17

## Diabetes and your Feet

Diabetes may affect the feet in two ways.

Firstly, nerves which allow you to feel pain, temperature and give an early warning of possible injury, can be damaged.

Secondly, the blood supply to the feet can be reduced due to blockage of the blood vessels. Damage to the nerves and blood vessels is more likely if you have had diabetes for a long time, or if your blood glucose (sugar) levels have been too high for too long.

It is recommended that people with diabetes should be assessed by a podiatrist or doctor at least every six months. They will advise a common sense, daily care routine to reduce the risk of injuries and complications.

### **It is also essential to check your feet every day for any problems.**

Diabetes may affect the feet in two ways. Firstly, nerves which allow you to feel pain, temperature extremes and give early warning of possible trauma can be damaged. Secondly, the blood supply to the feet is reduced due to damage to the blood vessels. This damage is more likely if you have had diabetes for a long time, or if your blood glucose (sugar) levels have been too high for too long.

It is recommended that people with diabetes should be assessed by a podiatrist (or an appropriate health professional), at least every six months, who will advise a common sense, daily care routine to reduce the risk of injuries and complications. It is up to you to check your feet every day.

### **Caring for your feet**

- Maintain blood glucose levels within the range advised by your doctor
- Help the circulation to your feet with some physical activity like walking
- Know your feet well
  - Look at your feet daily. Use a mirror if you need to. Check between your toes
  - Wash your feet daily in warm (not hot) water, using a mild soap. Dry gently and thoroughly
  - Never soak your feet
  - Use a moisturiser to avoid dry skin
  - Only cut your toenails if you can do so safely. Cut straight across – not into the corners – and gently file away any sharp edges.
- Choose footwear which is appropriate for your activity. Smooth out wrinkles in socks
- Check your shoes regularly for excess wear on the outside and for any rough spots on the inner lining
- Avoid foot injuries by wearing shoes or slippers around the house and footwear at the beach or pool
- Avoid contact with very hot or cold items, such as hot water bottles, heaters, electric blankets, hot sand/pathways and hot bath water
- Wear insulated boots to keep feet warm on cold days
- Corn cures and medicated pads can burn the skin. Do NOT treat corns yourself - see your podiatrist
- Get medical advice early if you notice any change or problems with your feet.



# 17

## Ma'isuka ma ou alofivae (Feet)

E mafai ona aafia vae ile ma'isuka i auala e lua.

Muamua lava, o neula ia e faatagaina oe ete lagona ai le tiga, ole fesuiaiga tele ole vevela ma ta'u vave mai ai le lapataiga ole mea e ono tupu mai e faaleaga ai.

Lona lua, ole sapalai ole toto i alofivae ua faaititia ona ua poloka alatoto.

O lenei faaleagaina o neula ma alatoto atonu e mafua mai ona sa e aafia muamua ise taimi umi ile ma'suka, ia poo ua maualuga tele le kulukose (suka) i lou toto mo se taimi umi lava. Ua fautuaina o tagata ma'isuka e tatau ona iloiloina e se foma'i o vae (podiatrist) poo seisi foma'i ia le ititi ifo ile tai ono masina.

Ole a fautuaina ai latou i mea ole faatatau lelei, ole vaavaaiga i aso taitasi ia faaititia ai le ono faamanu'alia ma isi faaletonu.

### **E tatau foi ona siaki ou alofivae i aso taitasi mo ni faafitauli.**

#### **Vaavaaiga o ou alofivae - feet**

- Ia tumai le maualuga ole kulukose ole toto e pei ona fautuaina e lau foma'i
- Fesoasoani ile alu ole toto i ou alofivae i lou faia o ni faamalositino pei ole savali
- Ia e iloa lelei ou lava alofivae
  - Vaai i ou vae i aso uma. Faaaoga se fa'ata pe a e manaomia. Siaki va o ou tamaimai vae.
  - Fufulu ou vae i aso uma i vai mafanafana (ae le ole vai vevela) faaaoga se fasimoli, solo lemu ma ia mago lelei.
  - Aua lava nei sokaina ou vae.
  - Faaaoga se mea e faasüsü ai - moisturiser ia auale mago le pa'u.
  - Faato'a 'oti lava ou tigivae pe a e mafai ona faia ma le saogalemu. 'oti faasa'o – ae le o tulimanu – ma faila lelei ni pito ma'ama'ai.
- Filifili se'evae e fetau i ma e talafeagai ma au faagaioiga. Faamafolafola ni nonoa i ou tokini
- Siaki pea lava ou se'evae mo ni mea ua leaga i totonu mo ni mea ua leaga ma tulimanu i totonu
- Aloese mai le faamanu'alia o ou vae ile faaaogaina lea o se'evae i totonu ole fale ma silipa taele ile matafaga poo le vaitaele
- Aloese mai mea vevela tele pe malulu foi, pei o fagupa'u, heaters, palanikeke uila, oneone vevela/aula vevela ma vaitaele vevela
- Fai se'evae ua faamafanafana ia mafanafana ai pea ou vae i aso malulu
- O mea e togafiti ia patu pei ni saga i tamaimaivae, ma fusi faafoma'i e mafai ona mu ai vae. Aua ne'i e togafitiina ia patu – corns, vaai le foma'i o vae (podiatrist).
- Saili vave se fautuaga faafoma'i pe a maitauina ua i ai se suiga pe ua i ai ni faafitauli i ou alofivae.



# 18 Diabetes and Pregnancy



The key to a healthy pregnancy for a woman with diabetes is planning. Before you become pregnant discuss your target blood glucose levels or other pregnancy issues with your doctor or diabetes educator.

Note: the target blood glucose levels are tighter during pregnancy. You will need a diabetes management plan that balances meals, physical activity and diabetes medication (usually insulin). This plan will change as your body changes during your pregnancy.

If your pregnancy is unplanned it is important to work with your medical team as soon as you know you are pregnant.

Why you need to keep your blood glucose levels within the recommended range for pregnancy

Having good blood glucose management reduces the risk of the baby having any abnormalities when all of its organs are being formed in the first 12 weeks of pregnancy. As your pregnancy progresses, it is very important that you maintain good blood glucose levels otherwise extra sugar in your blood will pass to the baby who can then become big. Delivery of big babies can cause problems.

## **Who will help you before, during and after your pregnancy?**

Apart from your diabetes health care team, other health professionals that will support you are:

- an obstetrician (a specialist doctor that looks after pregnant women)
- a neonatal paediatrician (a specialist doctor that looks after babies)
- a midwife (a nurse, who assists women in childbirth).

Exercise, especially for people with type 2 diabetes, is a key part of diabetes management before, during and after pregnancy.

Discuss your exercise plans with your diabetes health care team.

In general, it's not a good idea to start a new strenuous exercise program during pregnancy. Good exercise choices for pregnant women include walking, low-impact aerobics or swimming.



# 18 Ma'isuka ma le Ma'ito



O le ki ole ma'ito e soifua maloloina lelei mo se fafine e maua ile ma'isuka ole fuafua lelei, Ae ete lei to, talanoa i le maualuga faatuina (target) mo le kulukose o lou toto poo isi mataupu ole ma'ito i lau foma'i poo le faiaoga ole ma'isuka. mataupu ole ma'ito i lau foma'i poo le faiaoga ole ma'isuka.  
Maitau mai: ole maualuga faatuina ole kulukose ole toto e fai a sina fufusi atu a'o e ma'ito.

O le a e manaomia se fuafuaga (plan) e pulea ai le ma'isuka ia faapalenai ai au mea'ai, faagaioiga faamalositino ma vai/fualau ma'isuka (e masani lava i inisalini).  
O lenei fuafuaga ole a suia a'o sui foi lou tino a'o e ma'ito.

Afai e lei fuafuaina lau to, e taua lou galue faatasi ma le 'au faafoma'i ile vave lava ete iloa ai ua e to.

Aisea e manaomia lou tausia ole maualuga ole kulukose i lou toto ile tulaga e masani ai mo le ma'isuka?

A lelei le puleaina ole maualuga ole kulukose o lou toto, e faaititia ai le tulaga le lelei e oo i lau pepe ma ona totoga uma a o tau afuafua ile amataga lava o lau to mo le 12 vaiaso muamua. A o faagasolo lou ma'ito, e taua lava le tumau pea ole maualuga lelei ole kulukose i lou toto, nei te'i ua pasi atu ni kulukose ova atu ia pepe, ona lapo'a ai le o ia. E i ai faafitalui ile tau faafanaua mai se pepe lao'a tele.

## O ai e fesoasoani ia oe, ae ete lei to, a o e to, ma ina ua uma ona e fanau?

E ese mai i lau 'au ole e vaaia le soifua lelei ole ma'isuka, o isi polofesa faamoma'i e vaaia oe o:

- le obstetrician (a foma'i faapitoa e vaaia ia fafine e ma'ito)
- le neonatal paediatrician (ole foma'i faapitoa e vaaia pepe)
- le fafine faatosaga- midwife (ole tausima'i, e fesoasoani i fafine pe a fananau).

O faamalositino, aemaise lava mo tagata e maua ile ma'isuka ituaiga 2, ose vaega autu poo le ki lea ole puleaina ole ma'isuka ae ete lei to, ao e to ma pe a uma ona e to.



Talanoa i lau fuafuaga mo faamalositino ma lau 'au ole soifua maloloina e vaaia le ma'isuka.

I tulaga masani, e le ose mea lelei le amata ise polokalame fou mamafa tele a'o e to. O filifiliga lelei mo faamalositino e fai e fafi ma'ito e aofia ai le savali, faamalositino aerobics faigofie poo le 'aau - swimming.

# 19 Diabetes and your emotions



Chronic diseases such as diabetes can have a major impact on your emotions because they affect every aspect of your life. The physical, mental or emotional reactions to the diagnosis of diabetes and the ability to cope may impact on your diabetes, your family, your friends and your work colleagues.

When a person is diagnosed and living with diabetes there can be many emotions that may be experienced. These include:

- Guilt
- Frustration
- Anger
- Fear
- Anxiety
- Depression

Many people do not like the idea that they may have mental or emotional problems. Unfortunately, they find it embarrassing or

view it as a weakness. Having diabetes increases your risk of developing depression. Tell your doctor how you feel.

If you feel you are more comfortable talking with other members of your diabetes health care team such as a diabetes educator or podiatrist, talk to them.

You need to tell someone. Then you will be referred to the right person who can help you move in the right direction.

## **Recommended websites:**

- [www.australiandiabetescouncil.com](http://www.australiandiabetescouncil.com)
- [www.beyondblue.org.au](http://www.beyondblue.org.au)
- [www.diabetescounselling.com.au](http://www.diabetescounselling.com.au)
- [www.blackdoginstitute.org.au](http://www.blackdoginstitute.org.au)
- [www.diabeteskidsandteens.com.au](http://www.diabeteskidsandteens.com.au)



# 19 Ma'isuka ma ou Lagona loloto - Emotions



O faama'i matuia pei ole ma'isuka, e mafai ona tele le aafia ai o lagona loloto, ona e aafia ai itu uma lava ole olaga ole tagata. Ole itu ile tino, le mafaufau poo lagona i mea e fai ina ua iloa ua maua ile ma'isuka ma le tomai e feragai ai, le aafiaga ole tagata ile ma'isuka, lona aiga, o ana uo ma ana uo ile galuega.

A maua loa ua ma'i le tagata ma ola ai pea ile ma'isuka, e tele ituaiga lagona ootia e tupu mai. E aofia ai mea nei:

- Agasala
- Popole le mautonu
- Ita
- Fefe
- Fa'atu
- Faanoanoa lava

Ole tele o tagata e le fiafia e manatu ua leaga pe ua valea le mafaufau poo faafitalui i lagona. Ole faanoanoaga, e mamā ai pe vaai foi i ai o se vaivaiga.

Ole maua o oe ile ma'isuka e faateleina ai le avanoa ole maua o oe ile faanoanoa lava - depression. Talanoa i lau foma'i. Ta'u i lau ou lagona. Pe afai ete manatu e faigofie ia oe ona talanoa i isi tagata ole'au faafoma'i ole ma'isuka pei ole faiaoga ole ma'isuka, poo le foma'i faapitoa -podiatrist, talanoa ia latou na.

E te manaomia lou talanoa i seisi tagata. Ona faasino loa o oe ile tagata tonu e mafai ona fesoasoani ia oe ma e alu ai ile nofoaga sa'o.

## **Upega tafailagi – websites ua fautuaina e lelei:**

- [www.australiandiabetescouncil.com](http://www.australiandiabetescouncil.com)
- [www.beyondblue.org.au](http://www.beyondblue.org.au)
- [www.diabetescounselling.com.au](http://www.diabetescounselling.com.au)
- [www.blackdoginstitute.org.au](http://www.blackdoginstitute.org.au)
- [www.diabeteskidsandteens.com.au](http://www.diabeteskidsandteens.com.au)



# 20 Diabetes and driving

High or low blood glucose (sugar) levels in people with diabetes can affect their ability to drive safely. People with diabetes may have developed complications such as vision problems, heart disease or nerve damage, which also can affect driving ability. It is vital that people with diabetes know what to do in order to keep themselves and others safe while on the road.



Austroads, the road transport and traffic safety authority for Australia and New Zealand, has developed guidelines for doctors to help assess their patient's fitness to drive. Diabetes and cardiovascular disease are just two of the many conditions for which there are specific medical standards and guidelines which must be met for licensing and insurance.

The main concern when driving is a low blood glucose (sugar) level. It can affect a driver's ability to react and concentrate. Low blood glucose can also cause changes in consciousness which could lead to losing control of the vehicle. People who are taking certain diabetes medication and/or insulin are at risk of hypoglycaemia.

Ask your doctor or diabetes educator if you are at risk.

Hyperglycaemia or high blood glucose levels can also affect driving ability as it can cause blurred vision, fatigue and decreased concentration.

## Medical Standards for Licensing

**Private and Commercial** – People with diabetes who are managed without medication do not need to notify the Drivers Licensing Authority and may drive without license restriction. However, they should be reviewed regularly by their doctor for progression of the disease.

**Private Licence** – People with diabetes who are managed with medication, but **not insulin**, and do not have any diabetes complications do not need to notify the Drivers Licensing Authority. They need to be reviewed every five years (meeting all other Austroads criteria). If you do have any acute or chronic complications a conditional licence may be granted after review by your treating doctor.

**Commercial Licence** – People with diabetes who are managed with medication, but **not insulin**, need to notify the Drivers Licensing Authority in person. A conditional driver's licence may be granted subject to the opinion of the specialist, the nature of the driving task and at least an annual review (meeting all other Austroads criteria).

**Private Licence** – People with diabetes who are managed **with insulin** need to notify the Drivers Licensing Authority in person. A conditional licence may be granted subject to the opinion of the specialist/treating doctor, the nature of the driving task and at least a two yearly review (meeting all other Austroads criteria)

# 20 Ma'isuka ma le avetaavale

Ole maualuga poo le maualalo ole kulukose ile toto o tagata ma'isuka e aafia ai le tomai ile saogalemu ole avega ole taavale. E mafai ona tupu faafitauali i tagata ua maua ile ma'isuka e pei ole leaga ole vaai, ma'i fatu, poo le faaleagaina o neula, e ono aafia ai le tomai ile aveina ole taavale. E taua lava ona iloa e tagata ua ma'isuka ole mea e tatau ona fai ina ia saogalemu latou faapea ma isi tagata e faaaogaina le auala.



Ole "Austroads", ole pulega o auala ma femalagaaiga saogalemu mo Ausetalia ma Niu Sila, ua faavaeina taiala mo foma'i e fesoasoani ina ia maua ai le avanoa i a latou ma'i pe malolosi ma mafai ona ave le taavale. Ole maisuka ma le ma'i ole fatu ma alatoto – cardiovascular, ole na ole lua a'i lea ole tele o faama'i e i ai vai/fualau faapitoa taatele ma taiala e tatau lava ona faamalieina mo le laiseneina ma le inisiuaina

Ole mea taua ma autū i ai pe a ave le taavale, ole maualalo ole kulukose ole toto. O le a mafai ona aafia le tomai ole avetaavale e tali vave atu i mea e tutupu ma lona mataala foi. Ole maualalo ole kulukose ile toto e mafai ai foi ona suia ai pe lusi ai foi le mataala ma le iloaina o mea – consciousness, e ono lusi ai le puleaina ole taavale. O tagata e inuina vai/fualau uiga ese mai mo le ma'isuka ma/poo inisalini, e mafai ona oso ai le ma'i lea haipokalasimia.

Fesili i lau foma'i poo faiaoga ole ma'isuka pe o aafia oe.

Ole ma'i lenei ole haipokalasimia poo le maualuga ole kulukose ile toto e mafai ona aafia ai le tomai ile aveina ole taavale, ona e mafai ona faaleaga ma nenefu ai le vaai, vaivai ma fia moe ai, ma faititia ai le mataala.

## Tulaga Masani Faafoma'i mo le Laiseneina

**Totino ma le Faapisinisi** – O tagata e ma'isuka ia e pulea lava le ma'i e aunoa ma ni vai/fualau, e manaomia lo latou faafesoota'ia ole Drivers Licensing Authority ma e mafai ona avetaavale e aunoa ma ni puipuiga i o latou laisene. Peitai ane, e tatau ona iloilo faapiliota i latou e o latou foma'i poo a le gasologa ole ma'i.

**Private Licence Laisene totino** – O tagata e ma'isuka ma e pulea e vai/fualau, ae leai ni inisalini, e manaomia lo latou o e ta'u ile Drivers Licensing Authority. E manaomia foi le toe iloiloina o latou ile ta'i lima tausaga (ia faamalieina uma ai isi tulafono tusia ale Austroads) Afai e maua oe ise ma'i leaga lava pe ma'i umi foi atonu e maua atu le laisene aiaia pe a uma ona suesueina oe e lau foma'i.

**Commercial Licence Laisene faapisinisi** – O tagata e ma'isuka ma e pulea e vai/fualau, ae leai ni inisalini, e manaomia lo latou o e ta'u ile Drivers Licensing Authority. Ole laisene avetaavale aiaia (conditional) atonu ole a maua mai e fuafua ile manatu ole foma'i faapitoa, le natura ole galuega ile aveina ole taavale ma ia le ititi ifo ile ile tausaga ma iloilo (ia faamalieina uma ai isi tulafono tusia ale Austroads).

---

## Diabetes and driving - *continued*

**Commercial Licence –** – People with diabetes who are managed **with insulin** need to notify the Drivers Licensing Authority in person. A conditional licence may be granted subject to the opinion of the diabetes specialist, the nature of the driving task and annual review (meeting all other Austroads criteria).

Other factors can affect your driver's licence. Ask your doctor. Otherwise contact the Drivers Licensing Authority in your State:

- Australian Capital Territory - Department of Urban Services  
Phone: (02) 6207 7000
- New South Wales - Roads and Traffic Authority NSW  
Phone: (02) 9218 6888
- Northern Territory - Department of Planning and Infrastructure  
Phone: (08) 8924 7905
- Queensland - Queensland Transport  
Phone: 13 23 80
- South Australia - Department of Transport, Energy and Infrastructure  
Phone: (08) 8343 2222
- Tasmania - Department of Infrastructure Energy and Resources  
Phone: 13 11 05
- Victoria - VicRoads  
Phone: (03) 9854 2666
- Western Australia - Department for Planning and Infrastructure  
Phone: 13 11 56  
(08) 9427 8191

If you require further information access the Austroads website  
<http://www.austroads.com.au/aftd/index.html>

---

## Ma'isuka ma le avetaavale – faaauau pea

**Private Licence Laisene Totino** – O tagata e ma'isuka ma e pulea i le inisalini, e manaomia lo latou o e ta'u ile Drivers Licensing Authority. E mafai ona maua mai le laisene aiaia – conditional, ae faatatau ile finagalo ole foma'i faapitoa/foma'i e togafitia, ole natura ole galuega avetaavale ma ia le ititi ifo ile lua tausaga ma toe iloilo ( ia faamalieina uma ai isi tulafono tusia ale Austroads).

**Commercial Licence Laisene Faapisinisi** – O tagata e ma'isuka ma e pulea i le inisalini, , e manaomia lo latou o e ta'u ile Drivers Licensing Authority. Atonu e maua mai le laisene aiaia – conditional, ae faatatau ile finagalo ole foma'i faapitoa, ole natura ole galuega avetaavale ma ia le ititi ifo ile tai tausaga ma toe iloilo ( ia faamalieina uma ai isi tulafono tusia ale Austroads).

O isi mea moni e mafai aafia ai lou laisene avetaavale. Fesili i lau foma'i. la poo le faafesootai foi le Driver's Licensing Authority i lo outou Setete:

- Australian Capital Territory - Department of Urban Services  
Telefoni: (02) 6207 7000
- New South Wales - Roads and Traffic Authority NSW  
Telefoni: (02) 9218 6888
- Northern Territory - Department of Planning and Infrastructure  
Telefoni: (08) 8924 7905
- Queensland - Queensland Transport  
Telefoni: 13 23 80
- South Australia - Department of Transport, Energy and Infrastructure  
Telefoni: (08) 8343 2222
- Tasmania - Department of Infrastructure Energy and Resources  
Telefoni: 13 11 05
- Victoria - VicRoads  
Telefoni: (03) 9854 2666
- Western Australia - Department for Planning and Infrastructure  
Telefoni: 13 11 56  
(08) 9427 8191

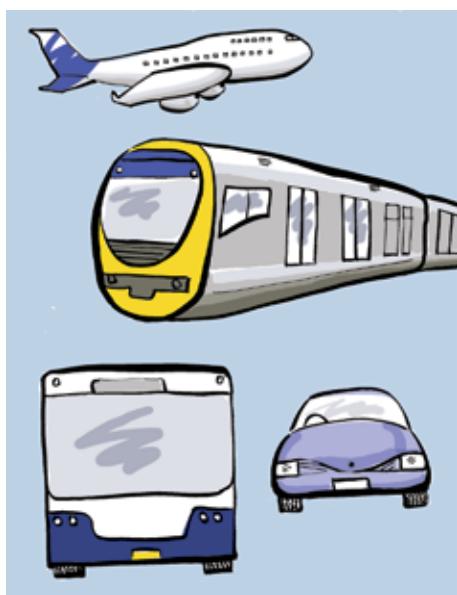
Afai ete manaomia nisi faamatalaga faafesootai le Austroads website  
<http://www.austroads.com.au/aftd/index.html>

# 21

## Diabetes and travel

Having diabetes does not mean your travelling days are over. To ensure you have a safe and enjoyable trip, be sure to plan ahead. Good preparation may seem time consuming but it will help to ensure you get the most out of your holiday.

- Discuss your travel plans with your doctor or diabetes educator. Also discuss medication adjustments for situations you may encounter such as crossing time zones, or when experiencing diarrhoea and/or nausea
- Carry several copies of a typed, signed letter from your doctor outlining your diabetes management plan, medications, devices you use to give medication (if applicable) and equipment needed to test your blood glucose level. You will also need to carry scripts for all medications (clearly detailing your name), doctors contact details, and both the name and type of medication, emergency contacts and your National Diabetes Services Scheme card
- Always wear some form of identification that says you have diabetes
- Pack more test strips, insulin, syringes, pens and other diabetes equipment than you will need for the trip. If possible, pack a spare meter in case of loss or damage
- Depending on your journey and destination, you may need to consider taking an insulated travel pack for your insulin
- Take a small approved sharps container for used lancets and syringes. Some airlines, hotels and airports offer a sharps disposal service
- Keep insulin, syringes/pens and testing equipment in your hand luggage. Do not place insulin in your regular luggage that will be placed in the cargo hold because it is not temperature controlled. The insulin may be damaged or lost



- When flying, check with the airline in advance for specific security guidelines as these are subject to change
- Customs regulations vary from country to country so it is advisable to contact the embassy of the country you're visiting before travelling
- When visiting some countries certain vaccinations are recommended. Information in regard to vaccinations can be obtained from your doctor
- The anticipation/stress of a trip or changes in routine may affect your blood glucose (sugar) levels, so you may need to check your blood glucose level more often
- Contact your airline about meal times and food available during your flight. It is also recommended that you carry your own supply of portable carbohydrates in case of unexpected meal delays or if

# 21

## Ma'isuka ma Famalaiga

Ole maua o oe ile ma'isuka ona e faapea lea ua uma ou aso ete femalagaa'i ai. Ina ia mautinoa e saogalemu ma faafafiaina lau malaga, ia mautinoia ia e fuafua mamao lava. Ole fuafua lelei atonu e pei e alu ai le taimi, ae ole a fesoasoani ia oe e te mautinoa ai ete maua le mea sili mai lau malaga faamalolo.

- Talanoa i lau foma'i ole ma'isuka poo le faiaoga ole ma'isuka. Talanoa foi i ai i ni fesuiaiga o au vai i tulaga ole a feagai ma oe, pei ole kolosiina ole taimi eseese sone, ia poo le maua foi ile manava tatā ma/poo le fiafaasuati.

- Ave ma ni kopi o ni tusi ua lolomi ma saini e lau foma'ina e ta'u mai ai fuafuaga ile puleaina o lou ma'isuka, o vai/fualau, ma nisi mea e faaaoga ile inuina o au vai (afai e talafeagai) ma ni mea e manaomia e su'e ai le maualuga ole kulukose (suka) i lou toto. E tatau foi ona ave au pepa talavai (na e i ai lelei lou igoa), le faafesootaiga o lau foma'i, ma igoa ma ituaiga vai/fualau, o ai e ta'u i ai mo se faalavelave faafuase'i ma lau National Diabetes Services Scheme card.



- Ia ofu pea lava se mea e iloa e te ma'isuka.
- Teu ma ni pepa e su'e ai – test strips, tui, peni ma isi lava mea mo le ma'isuka ete manaomia i lau malaga. A talafeagai, teu ma se mita sipea nei leiloa pe leaga lau mita.
- Faatatau lava i lau malaga ma le mea ete alu i ai, e tatau ona e mafaufau foi se faamalulu mo au inisalini.

- Ave se tama'i pusa ua faataga ma mau lelei e tuu i ai meama'ai ma tui ua uma ona faaaoga. O nisi ofisa vaalele, hotels ma malae vaalele e ofoina auaunaga e tia'i ai meama'ai.
- Teu inisalini, tui/peni ma mea e su'e ai lou toto i lau ato taitai i lou lima. Aua le tuuina le inisalini i lau ato malaga masani na ole a tuu ile ana ole vaa ona e popole ile vevela. Atonu e leiloa e leaga ai le inisalini pe leiloa foi.



- A e lele ile vaalele, siaki muamua ile ofisa o vaalele e uiga i tulafono mo le saogalemu ona e fai ma sui tulafono.
- E eseese lava tulafono o tiute mai lea atunu ma leisi, e fautuaina ia e faafesootai le konesula ole atunu e te alu i ai ae ete lei malaga.
- A e asiasi i nisi o atunu, e i ai vai faapitoa ua fautuaina. E maua mai nei faamatatalaga mai lau foma'i.
- Ole alu malaga ma popolega poo suiga atonu e aafia ai le maualuga ole kulukose (suka) o lou toto, o lona uiga la ia su'e pea lava pea.

---

## Diabetes and travel - *continued*

you dislike the meal offered. If you take insulin with meals, do not give your insulin until your meal arrives.

- To help prevent blood clots move about the cabin at regular intervals and do chair based exercises. Drink plenty of water. Your doctor may advise you to wear support stockings
- If you are driving long distances make sure you stop regularly and take your blood glucose levels before and during your trip
- Carry a small first aid kit with you in case of minor illness or injury.

Useful websites are **www.dfat.gov.au** and **www.health.gov.au**

**Travel insurance** is highly recommended. Make sure it covers situations which may arise in relation to diabetes. The Australian Government has arrangements with some countries providing benefits similar to Medicare, if needed. Remember to take your Medicare card with you.

**For more information, call Medicare Australia on 132 011 or visit: [www.medicareaustralia.gov.au](http://www.medicareaustralia.gov.au)**

### **At your destination**

- Differences in activity, routines, food and stress may affect your blood glucose levels, check your blood glucose levels more often
- Food options may differ from home. It is important to maintain carbohydrate intake. If you are going to a different country do some research before you leave to help you make appropriate food choices
- Take care with food and drink choices, particularly in developing countries where food hygiene may not be adequate. Bottled water is preferable even for brushing teeth
- Protect your skin from sun burn
- Do not go barefoot. Be careful of hot sand and pavements. Check feet daily.

---

## Ma'isuka ma femalagaaiga – faaauau pea

- Faafesootai lua ofisa o vaalele e uiga i taimi o mea'ai ma mea'ai e maua a o alu le vaa. E fautuaina foi ia ave lava ni au mea'ai - carbohydrates ina tei ua tuai mea'ai pe ete le manao foi i mea'ai e ofo mai. Afai e tui lau inisalini faatasi ma le mea'ai, aua le tuiina lau inisalini sei taunuu mai mea'ai.
- Ina ia fesoasoani ile puipuia ole poloka leagaole toto o uaua, fealua'i solo i potu ma fai faamalositino i nofoa. Inu ia tele le suavai. Ole a fautua atu lau foma'ina ia e fai tokini lagolago. Inu ia tele vai. Atonu foi e faatonu oe e lau foma'i e fai tokini e saposapo ai i luga tokini teine uumi.
- Pe afai ete avea le taavale ise malaga mamao, tautuana ia e tu so'o ma fua le malosi o lou kulukose ile toto a o lei alu le malaga ma a o alu foi le malaga.
- Ave ma se tamai seti o mea faafoma'i nei tei ua e ma'i pe lavea foi –first aid kit.

Upegatafailagi e aogā **www.dfat.gov.au** ma le **www.health.gov.au**

**Ole Inisiua malaga** e matuā fautuaina lava. la mautinoa e kava ai tulaga e ono tupu mai e faatatau ile ma'isuka. Ua i ai feutagaiga ale Malo o Ausetalia ma isi malo e maua mai ai benefiti taitutusa lava ma le Medicare, afai e manaomia. Manatua ave lau Medicard - pepa ale falema'i

**Mo nisi faamatalaga vaalaau le Medicare Australia ile 132 011 poo lou aisasi ile:**  
**www.medicareaustralia.gov.au**

### I le mea ete taunuu i ai

- Ole eseese o faagaioiga, polokalame o mea'ai ma le (stress) popole e aafia ai le maualuga ai pea lava le kulukose ole toto.
- E ese mea'ai nai lo lou fale. E taua ia tumau le tumau pea e 'ai mea'ai carbohydrate. Afai ete alu i seisi atunuu, saili ma su'e muamua ae ete lei alu ina ia fai au filifiliga talafeagai mo au mea'ai.
- Faaeteete ile filifiliga o au mea'ai, aemaise lava i atunuu ua lelei atina'e, atonu ole saogalemu ma le lelei. Vai tu'ufagu e sili atu e lava ile fufuluina o ou nifo.
- Puipui lou tino/pa'u mai le mu ile la.
- Aua ete alu e leai ni seevae. Faaetete ile oneone vevela ma auala sima. Siaki ou vae i aso uma.

# 22 Need an Interpreter?

A free telephone interpreter service is available for people who may have difficulty in understanding or speaking English. This service is available through the Translating and Interpreting Service (TIS) of the Department of Immigration and Multicultural and Indigenous Affairs (DIMIA).



TIS have access to professional interpreters in almost 2000 languages and dialects and can respond immediately to most requests.

## **Accessing an interpreter:**

Simply ring the Translating and Interpreting Service on 131 450  
Explain the purpose for the call e.g. wanting to talk to an educator/dietitian at Australian Diabetes Council.

The operator will connect you to an interpreter in the required language and to an Australian Diabetes Council health professional for a three-way conversation.

This free service has been set up by the Australian Diabetes Council and will be promoted with assistance from the Australian Government Department of Health and Ageing.

# 22

## E manaomia se Faamatalaupu?

E i ai le auaunaga fai fua le totogiina ile telefoni e avanoa mo tagata e faigata ona malamalama pe tautala ile Igilisi. E avanoa lenei auaunaga e auala atu ile Translating and Interpreting Service (TIS) ole Department of Immigration ma le Multicultural and Indigenous Affairs (DIMIA). E i ai le avanoa ole TIS i faamatalaupu i gagana pe tusa ma le 2000 ma e mafai ona tali vave atu ile tele o manaoga mo faamatalaupu.



### **Avanoa e maua ai faamatalaupu:**

Na ona e telefoni lava ile Translating and Interpreting Service ile 131 450  
Faamatala i ai le uiga o lau valaau atu e.g. ete fia talanoa ise faiaoga/foma'i o mea'ai (dietitian) ile Australian Diabetes Council.

Ole a faafesootai oe ele talitelefoni ise faamatalaupu ile gagana ete manao ai ma le foma'i polofesa ole Diabetes Australia-NSW ma tou talanoa toatolu ile laina.

O lenei auaunaga fai fua sa faatulagaina lea ele the Australian Diabetes Council ma ole a faalauiloaina ile fesoasoani mai le Australian Government Department of Health and Ageing.

# 23

## National Diabetes Services Scheme (NDSS)

The NDSS is a federal government funded program, administered on behalf of the government by Australian Diabetes Council.

The NDSS provides free syringes and needles for those requiring insulin, as well as blood and urine testing strips at subsidised prices to those who are registered.

Registration is free and you are only required to register once unless your treatment changes to require insulin.

You do not need a doctor's prescription to purchase NDSS products for diabetes management.

### Registering for the NDSS

Once you have been diagnosed with diabetes, your doctor or credentialled diabetes educator can register you with the NDSS. If you are not sure whether you are registered with the NDSS, or want more information, call Australian Diabetes Council on 1300 342 238.

### Where to buy NDSS products

You can buy products at Australian Diabetes Council offices or through pharmacy sub agents. You can also order your products from Australian Diabetes Council by phoning 1300 342 238 or visiting [www.australiadiabetescouncil.com](http://www.australiadiabetescouncil.com).

Your products will be mailed to you free of charge.

### Who should register for the NDSS?

Australian residents that have been diagnosed with diabetes by a doctor and who hold a current Australian Medicare card or Department of Veteran Affairs file number should register.

If you are a visitor to Australia and from a country with a Reciprocal Health Care Agreement, you may be entitled to temporary registration to the NDSS.

Please call Australian Diabetes Council on 1300 342 238 for further information.



---

# 23

## Polokalame o Auaunaga Ma'isuka ile Atunu atoa (NDSS)

Ole NDSS ole polokalame e faatupe ele Malo Tele, e pulea ele Australia Diabetes Council e fai ma sui ole malo.

E maua mai ile NDSS faaga'au fai tui ma nila mo i latou e mananao ile insalini e maua fua le totogia atoa ai ma strips e su'e ai , mo le toto ma feauvai, i tau e faatupe taitoalua ma tagata ua uma ona lesitala.

E fai fua le lesitalaina ma e faatasi lava ona e lesitala vagana ua sui au togaftiga e manaomia ai le inisalini.

E te le manaomia se pepa mai le foma'i e fai ai lau faatau o mea mai le NDSS mo le togaftiga ole ma'isuka.

### Lesitalaina mo le NDSS

E iloa loa ua maua oe ile ma'isuka, e mafai ona lesitala oe e lau foma'i poo faiaoga ua pasi ole ma'isuka ile NDSS. Afai ete le o manino pe ua e lesitala ile NDSS, pe ete manao i nisi faamatalaga, valaau ile Diabetes Australia-NSW on 1300 342 238.

### O fea e faatau mai ai mea (products) mai le NDSS

E mafai ona e faatauina mai mea (products) mai ofisa ole Australian Diabetes Council pe auala atu foi i sui tutotonu o faletalavi (pharmacy sub agents). E mafai ona e okaina mea (products) mai le Australian Diabetes Council i lou telefoni lea ile 1300 342 238 poo lou asiiasi ile [www.australiandiabetescouncil.com](http://www.australiandiabetescouncil.com).

O nei mea (products) ole a lafo atu ile meli e leai se totogi e lafo fua atu.

### O ai e tatau ona lesitala mo le NDSS?

O tagata e nofomau i Ausetalia, ua maua ma iloa ua ma'isuka ele foma'i ma e i ai lana Australian Medicare card poo le Department of Veteran Affairs file number e mafai ona lesitala.

Afai o oe ose tagata tafao asiiasi mai i Ausetalia ma ete sau mai se atunu e i ai le Reciprocal Health Care Agreement, e mafai ona lesitala oe le tumau ile NDSS.

Faamolemole valaau ile Australian Diabetes Council ile 1300 342 238 mo nisi faamatalaga.



# 24 Australian Diabetes Council

Australian Diabetes Council is a non-profit, non-government charity dedicated to helping all people with diabetes. It provides:

- education programs
- conducts public awareness campaigns
- funds research into diabetes management and the search for a cure
- advocacy, (protecting the rights of people with diabetes).

Australian Diabetes Council has a network of branches and support groups to provide support and encouragement for people affected by diabetes.

Our Customer Care Line has diabetes educators, dietitians and exercise physiologists available to provide personalised and practical assistance to benefit people with diabetes and their carers.

To find out about all the benefits of becoming a member of the Australian Diabetes Council contact 1300 342 238.



# 24 Fono ale Ma'isuka i Ausetalia (Australian Diabetes Council)

O le Australian Diabetes Council ose faalapotopotoga e le faia mo se polofiti (non-profit), le ose mea ale malo ae ose faalapotopotoga agaalofa (charity) ua faapaiaina ia fesoasoani i tagata uma e maua ile ma'isuka. Etuuina mai ai mea nei:

- polokalame o a'o'aoga
- e faia kemupeni e faalauiloa atu ai i tagata lautele ns
- suesuega tautupe ile puleaina ole ma'isuka ma suesuega mo togafitiga e faalelei ai
- o fautuaga, (e puipui ai aiatatau a tagata e maua ile ma'isuka).

E i ai le upega o galuega lālā (network) ale Australian Diabetes ma kulupu e fesoasoani e tuuina mai ai le lagolagona ma faamalosiaga mo tagata e aafia ile ma'isuka.

O la matou laina o auaunaga e vaia e fia maua fesoasoani (Customer Care Line) e i ai faiaoga ole ma'isuka, foma'i o mea'ai dietitians, foma'i o faamalositino (exercise physiologists) e avanoa e tuuina atu fesoasoani mo tagata taitoatasi ma faatinoga e lelei ai tagata e maua ile ma'isuka ma i latou e tausia ma vaavaaia latou (carers).

A e fia iloaina mea lelei uma lava e uiga ile avea o oe ma sui ole Australian Diabetes Council faafesootai ile 1300 342 238.



*a shared  
Voice*  
FOR DIABETES

For more information call us on  
**1300 DIABETES**  
1300 342 238  
[australiadiabetescouncil.com](http://australiadiabetescouncil.com)

Australian  
Diabetes  
Council



ABN 84 001 363 766 CFN 12458

STREET ADDRESS  
26 Arundel Street  
Glebe NSW 2037

POSTAL ADDRESS  
GPO Box 9824  
Sydney NSW 2001

CUSTOMER CARE LINE  
1300 DIABETES  
1300 342 238

PHONE +61 2 9552 9900  
FAX +61 2 9660 3633

© 2012 Australian Diabetes Council. May not be reproduced in whole or in part without prior permission.