

## **Ko e faka'ehi'ehi mei' he pā kālava'**

### **Ko e hā 'a e pā kālava'**

Ko e pā kālava' ko hano 'ohofia ia 'o e 'uto' - ko ha tu'u fakafokifā ia 'a e tafe 'a e toto' ki he ngaahi konga 'o ho 'uto' 'o hoko ai ha maumau ki he fanga ki'i me'a ko ia 'oku' ne fakatupu 'a e mo'ui (cell) 'a e 'uto'.

'Oku 'i ai 'a e ongo kalasi kehekehe 'e ua 'o e pā kālava', ko e mingi pe mapunipuni 'a e kālava' (ischaemic) pea mo e pā mo tāfea 'a e totō' mei' he kālava' (haemorrhagic).

### **1. KO E PĀ KĀLAVA ISCHAEMIC**

'Oku fakatupu 'a e pā kālava ischaemic mei' he mingi pe ko e mapuni 'a e halanga toto ko ia ki he 'uto', pe ko ha tāpuni 'e ha konga toto pe ko ha kongokonga toto 'a ia kuo motu mei' ha kālava 'a e halanga toto ki he 'uto'. Ko e kalasi pā kālava eni 'oku lahi taha 'a 'ene fa'a hoko'.

### **2. PĀ KĀLAVA HAEMORRHAGIC**

'Oku fakatupu 'a e pā kālava haemorrhagic mei' ha pā 'o tāfea 'a ha halanga toto 'i he 'uto'. 'Oku hoko ai heni ha 'oho atu 'a e toto' ki he ngaahi neave 'o e 'uto', 'o maumau ai 'a e ngaahi cell 'o e 'uto' 'o 'ikai toe lava ke ngāue 'a e tafa'aki ia ko ia 'o e 'uto'. 'E lava 'o hoko eni kapau na'e fanau'i mai pē 'a e tokotaha ia ko ia' kuo maumau ha konga 'o hono halanga toto', pe kuo hanga 'e ha mahaki 'o fakatupu ha manifinifi hifo pea maumau ngofua ai 'a e halanga toto'.

### **KO E NGAahi NUNU'A 'O E PĀ KĀLAVA'**

**'E lava pē ke fakahoko 'e he kalasi kehekehe 'o e pā kālava' 'a e ngaahi maumau tatau.**

*'E lava pē ke hoko atu 'a e ngaahi nunu'a ko eni' kā 'e fakatefito eni 'i he 'ēlia 'o e 'uto' kuo maumau':*

- 'Ikai toe 'ilo ha me'a
- Mamatea pe ko e ngāvaivaia fakafa'ahi taha, 'o kau ai 'a e fofonga', uma' pe ko e alanga'.
- Faingata'a 'a e talanoa' mo e mahino'
- Faingata'a 'a hono folo 'o ha me'a pe ko e ma'ume'atokoni'
- 'Ikai toe lava 'o mapule'i 'a e tu'umama'o' mo e tu'uofi'
- Mole pe ko e maumau 'a e ongo' 'i he ngaahi konga 'o e sino'
- Mole 'a e konga 'o 'ete vakai' 'i he fa'ahi 'e taha 'o e sino'
- Mole 'a e manatu'
- 'Ikai toe lava 'o mapule'i 'a e ongo'i

## **Preventing Stroke**

### **What is a stroke?**

A stroke is a brain attack – a sudden interruption of blood flow to parts of your brain causing damage to brain cells. There are two main types of stroke, ischaemic and haemorrhagic.

### **1.ISCHAEMIC STROKE**

Ischaemic strokes are caused by narrowing or clogging of arteries leading to the brain, or by a blood clot or piece of debris breaking away from a blood vessel and causing a blockage in one of the brain arteries.

Ischaemic stroke is the most common type of stroke.

### **2.HAEMORRHAGIC STROKE**

A haemorrhagic stroke is caused by an artery in the brain bursting and bleeding. Blood is forced into brain tissue, damaging cells so that area of the brain can't function. This can happen because the person was born with a faulty artery, or because disease has caused the artery walls to become thin and brittle.

### **THE EFFECTS OF STROKE**

**Different types of strokes can cause similar damage.**

*These effects may occur depending on which area of the brain has been damaged:*

- Loss of consciousness
- Paralysis or weakness, involving face, arm, or leg on one side.
- Difficulty talking and understanding
- Difficulty with swallowing or feeding
- Incontinence, loss of bladder and bowel control
- Loss or impairment of sensation
- Partial loss of vision to one side
- Loss of memory
- Loss of emotional control, mood changes, depression, fatigue, frustration.

fakaeloto', feliuliuaki 'a e tō'onga', ongo'i mafasia 'a e loto', hela'ia, 'ite'ita vave.

### **Ngaahi me'a 'oku nau fakatupu 'a e pā kālava'**

'Oku fā'a tupu 'a e pā kālava' mei hano fakataha'i 'o ha ngaahi me'a kehekehe pē, 'o hangē nai ko ha ngaahi mahaki tauhi ('a ia ko e toto mā'olunga), ngaahi tukufakaholo fakafāмили pe ko ha ngaahi tō'onga mo'ui 'oku 'ikai fakatupu mo'ui lelei ('o hangē ko e ifi tapaka' mo e 'ikai lelei 'a e kai faka'aho'). 'Oku tātātaha pē ke hoko ha pā kālava ia tupu mei' ha me'a kuo hoko fakatu'upakē pe ko ha vālau.

### **NGAAHI SITEPU FAINGOFUA KI HONO TA'OTA'OFI 'A E HOKO 'A E PĀ KĀLAVA'**

#### **1. Vakai'i 'a e tu'unga 'o ho toto'**

Ko e toto mā'olunga' ko e taha ia 'i he ngaahi me'a lalahi taha 'oku nau ala fakatupu 'a e pā kālava'. 'E ngalingali a'u hake ki he liunga fitu' 'a e ngalingali ke pā kālava ai 'a kinautolu 'oku nau toto mā'olunga' 'o fakatatau atu kia kinautolu 'oku tu'unga lelei pē pe mā'ulalo 'a honau toto'. Ko e tupu'anga lahi taha 'o e pā kālava ko ia na'e mei lava pē hano ta'ofi' ko e 'ikai ke fakatokanga'i kei taimi mo mapule'i lelei 'a e tu'unga 'o e toto mā'olunga'.

'Oku tātātaha pē ke 'asi mai ha faka'ilonga ia ki he toto mā'olunga', ko ia ai, vakai'i ma'u pē 'a e tu'unga 'o ho toto' - ko ha ki'i lao fakafuofua lelei eni ke ke ngāue'aki, 'a ia ko ho'o sivi 'a e tu'unga 'o ho toto' 'o tu'o ua 'i he ta'u, kae tautautefito kia kinautolu 'oku nau ta'u 45 pe toe motu'a ange ai'. Kapau 'oku' ke toto mā'olunga, 'oku mahu'inga ke ke fai pau ki he fale'i pea mo ha fāito'o 'e fokotu'u atu 'e ho'o toketaa'.

'E fokotu'u atu 'e ho'o toketaa' ha tō'onga mo'ui fo'ou 'o hangē nai ko e fakaholo sino, liliu ha ngaahi tō'onga ma'ume'atokoni 'oku 'ikai fakatupu mo'ui lelei, fakalahi ange 'a e fakamālohisino' pe ko e ta'ofi 'a e ifi tapaka'. 'E mahu'inga 'aupito 'a e ngaahi me'a' ni kapau 'oku' ke faka'amu ke ke ma'u 'a e tu'unga mo'ui lelei taha te ke ala ma'u'.

'I he taimi 'e ni'ihī, 'e toe tu'utu'uni atu foki 'e ho'o toketaa' ha fo'i'akau ke mapule'i'aki 'a e tu'unga 'o ho toto'. 'Oua na'a faifaiange pea' ke ta'ofi 'a ho'o folo 'a e fo'i'akau' ni te'eki tomu'a fai ha femahino'aki ki ai mo ho'o toketaa'. Kapau te ke ta'ofi 'a ho'o folo 'a e fo'i'akau' ni, 'e fakautuutu ange ai 'a e ngalingali ke ke pā kālava ai'.

### **Stroke risk factors**

Usually strokes happen because of a combination of factors, such as certain medical conditions (*ie high blood pressure*), inherited characteristics or unhealthy lifestyle (*eg smoking or poor diet*). Sudden shocks or an argument almost never cause strokes.

### **SIMPLE STEPS TO REDUCING THE RISK OF STROKE**

#### **1. Check your blood pressure**

High blood pressure is one of the greatest risk factors for stroke. The chance of having a stroke is up to seven times higher for people with high blood pressure than for those with normal or low blood pressure. Failure to detect and control high blood pressure is the number one cause of avoidable strokes.

High blood pressure rarely gives any warning signs so have your blood pressure checked regularly – twice a year is a good rule of thumb, especially for those over about 45 years of age.

If you have high blood pressure, it is important that you take the advice and treatment suggested by your doctor.

Your doctor will recommend changes to your lifestyle such as losing weight, changing unhealthy eating habits, exercising more or stopping smoking. These measures are essential if you are going to stay as well as possible.

In many cases your doctor will also prescribe medication to control your blood pressure. Never give up taking your tablets without talking to your doctor first. If you stop taking them your risk of stroke will rise.

## 2. Ta'ofi 'a e ifi tapaka'

'E liunga fā 'a e ngalingali ke ke pā kālava' 'o kapau 'oku' ke ifi tapaka. Kapau 'e ta'ofi ho'o ifi tapaka' 'i he 'aho' ni pē, 'e kamata leva ke holoholo hifo 'a e tu'unga fakatu'utāmaki 'o ha'o pā kālava. 'Oku tokolahi 'a e ni'ihi 'oku faingata'a 'aupito ia ke ta'ofi 'a 'enau ifi tapaka' kā 'oku lahi pē 'a e ngaahi me'a 'e ala tokoni atu kiate koe'. Talanoa mo ho'o toketā fakafāfāmi' ke 'oatu ha'ane fale'i mo ha'ane tokoni pe ko ha'o telefoni atu ki he **Laine Tokoni ki he Tuku Ifi Tapaka' (pe Smoking Quit Line) 'i he fika 0800 778 778.**

## 3. Fakamālohiso

'Oku lahi ange 'a e ngalingali ke pā kālava 'a kinautolu 'oku 'ikai ke nau mo'ui longomo'ui', 'i hono fakahoa atu kiate kinautolu 'oku nau mo'ui longomo'ui'.

Ko ha ki'i miniti pe 'e 30 'oku fiema'u 'i he 'aho ke ke ki'i fakamālohiso ai' pea 'e lava ke ke mo'ui lelei ai pea 'e si'isi'i ange heni 'a e ngalingali ke ke pā kālava ai'. 'Oku lelei ha fa'ahinga ngāue pē 'oku fakatupu ngaungaue 'o kapau 'e hoko eni ke ke ki'i pupuha'ia pea mo ke ki'i hōhō ai. 'Ahi'ahi'i eni 'aki ha'o kaka 'i he sitepu' 'o 'ikai ke ke heka lifi, ko ha'o ngāue 'i tu'a 'i ho'o ngoue matala'akau', pe ko ha'o luelue ki he falekoloa' ke kumi ha'o nusipepa...

## 4. Fakafuofua 'a ho'o ma'u kavamālohi'

'E lava ke mā'olunga ho toto' mei ha'o inu lahi'i 'a e kavamālohi' 'i ha fo'i taimi pē 'e taha. 'Oku malava ke hoko ai heni ha pā 'a e halanga toto' 'o tāfea ai 'a e 'uto'. 'Oku toe fakautuutu ange 'a e ngalingali ke ke pā kālava' mei ha hulutu'a 'a ho'o toutou ma'u 'a e kavamālohi'.

## 5. Ma'u 'a e me'atokoni 'oku fakatupu mo'ui lelei & fakafuofua'i 'a e mamafa 'o ho sino'

'E hoko 'a hono fakasi'isi'i 'a ho'o ma'u 'a e me'atokoni ngako' mo konokona' ke ne holoki hifo ai 'a e tu'unga 'o ho toto' pea mo e lahi 'o e ngako (cholesterol) 'i ho toto'. 'E hoko 'a e fu'u lahi 'a e ngako 'i ho'o ma'u me'atokoni' ke ne fakatupu 'a e atherosclerosis (*pe ko e fāsi'i 'a e kālava'*) pe ko e mapuni 'a e kālava tufaki toto mei' he mafu' 'a ia 'e lava ke hoko ai heni ha'o pā kālava. Feinga ke ke ma'u 'i he 'aho kotoa pē 'a e ngaahi me'atokoni mei' he ngaahi kulupu lalahi 'o e me'atokoni' 'a ia 'oku fakatupu mo'ui lelei ki he sino', 'o kau ai 'a e ngaahi fua'i'akau' mo e vesitapolo kei fo'ou', tenga'i'akau k'ai' pea mo ha kakano'i manu fe'unga pē 'a ia 'oku 'ikai ke ngako pe ko ha ma'u'anga polotini 'oku si'isi'i ai 'a e ngako'.

## 2. Stop smoking

Smoking quadruples the risk of stroke. If you stop smoking today your risk of having a stroke will begin to drop. Many people find it difficult to stop smoking but there are a lot of things that can help you. Talk to your GP for advice and support or call the **Smoking Quit Line on 0800 778 778.**

## 3. Exercise

Physically inactive people have more risk of stroke than people who keep active.

As little as 30 minutes of moderate exercise a day can increase your fitness and reduce your risk of stroke. Any physical activity is good as long as it is enough to make you slightly warm and a little out of breath. Try taking the stairs instead of the lift, gardening, walking to the dairy to get the paper...

## 4. Limit the amount of alcohol you drink

Drinking lots of alcohol at once can raise your blood pressure. This increases the risk of a blood vessel bursting and bleeding into the brain. Regular heavy drinking also increases your risk of stroke.

## 5. Eat a healthy diet & control your weight

Cutting down on the amount of fat and salt in your diet should lower your blood pressure and your cholesterol level. Too much fat in your diet can also cause atherosclerosis (*narrowing of the arteries*) or clots which can cause strokes. Try to eat a balanced diet with lots of fresh fruit and vegetables, grains and a moderate amount of lean meat or low fat protein each day.

Being overweight strains the entire circulatory system and predisposes you to higher cholesterol levels, high blood pressure and diabetes, all of which increase your risk of stroke.

'Oku hoko 'a 'ete fu'u sino' ke mafasia ai 'a e fa'unga fakatafenga toto 'o e sino' pea 'oku tupu ai heni 'a e mā'olunga 'a e tu'unga 'o e ngako' 'i ho toto', toto mā'olunga' pea mo e suka', pea ko e ngaahi me'a kotoa ko eni' 'oku ngalingali te nau fakatupu ha'o pā kālava.

#### **6. Fakasi'isi'i 'a e tu'unga 'o e ngako' 'i ho toto'**

'Oku mahu'inga 'aupito 'a e ngako' ki he ngaahi ngāue 'a e me'a ko ia 'oku ne fakatupu 'a e mo'ui (cell) 'a e sino'. Ko e angamaheni' 'oku fa'u pē 'e he sino' ia 'a e ngako 'oku' ne fiema'u'.

'E lava ke fakautuutu ange 'a e fāsi'i 'a ho halanga toto' 'i he taimi 'oku' ke ma'u ai 'a e me'atokoni 'oku mālounga ai 'a e ngako' pea mo e me'atokoni 'oku lahi ai 'a e ngako'. 'E lava 'e ho'o toketaa' 'o fokotu'utu'u ke fai hao sivi toto ke vakai'i 'a e tu'unga 'o e ngako' 'i ho sino'. 'E fokotu'utu' atu 'e ho'o toketaa' 'a e founga lelei taha ke fakasi'isi'i ai 'a e tu'unga 'o e ngako' 'i ho toto'.

#### **7. Vakai'i pe 'oku' ke ma'u 'a e atrial fibrillation**

Ko e atrial fibrillation ko e fa'ahinga ia 'e taha 'o e tā fakatohala 'a e mafu'. 'Oku toe lahi ange 'a e ngalingali ke pā kālava 'a kinautolu 'oku nau ma'u eni'.

Kapau 'oku' ke 'ilo pe 'oku' ke mahamahalo 'oku' ke ma'u 'a e mahaki ko eni', 'oku mahu'inga ke ke sio leva ki ho'o toketaa' ke ne tokoni atu pe ko e hā 'a e founga lelei taha ke mapule'i'aki 'a e palopalema' ni.

#### ***Ko e Ngaahi Tupu'anga Kehe':***

#### **8. Ko hono folo 'o e fo'i'akau fakavaha fanau'**

'Oku toe lahi ange 'a e ngalingali ke ke pā kālava ai' 'i he taimi 'oku' ke folo ai 'a e fo'i'akau fakavaha fanau'. 'Oku hanga 'e he fo'i'akau' ni 'o 'ai 'a e toto' ke pikipiki ange pea 'e lava ke hoko ai heni ha fakamapuni 'a e toto' 'o ala tupu ai ha mā'olunga 'a e toto'.

Kapau 'oku' ke toto mā'olunga pe 'oku' ke ifi tapaka mo ke folo 'a e fo'i'akau fakavaha fanau', 'oku toe fakautuutu ange leva heni 'a e ngali ke ke pā kālava'.

'Oku mahu'inga ke ke fepōtalanoa'aki mo ho'o toketaa' felāve'i mo e ngaahi me'a' ni pea te ne fale'i atu leva 'a e ngaahi lelei mo e kovi 'o e folo fo'i'akau fakavaha fanau'.

#### **PĀ KĀLAVA IKIHIKI (pe MINI STROKES pe ko e TIA'S)**

'Oku 'i ai 'a e ngaahi pā kālava 'e ni'ihī 'oku fa'a fakafokifā pē 'a 'enau hoko' kā 'e lava pē ke hā mai ha ngaahi faka'ilonga kimu'a 'i heni. Ko e taimi lahi 'oku hoko mai 'a e ngaahi faka'ilonga'

#### **6. Lower your serum cholesterol**

Cholesterol is essential to the body's cells. Normally your body produces all the cholesterol you need.

Foods high in cholesterol and saturated fats can accelerate atherosclerosis. Your doctor can arrange a blood test to check your cholesterol levels.

Your doctor will recommend the best way to reduce your cholesterol levels.

#### **7. Find out if you have atrial fibrillation**

Atrial fibrillation is a type of rapid irregular heartbeat. People with this condition have a greater risk of stroke.

If you know or suspect you may have atrial fibrillation it is important you see your doctor, who will help you decide the best way to manage this problem.

#### ***Other Risk Factors:***

#### **8. Taking the contraceptive pill**

Taking oral contraceptives can increase your risk of stroke. The Pill makes the blood stickier and more susceptible to forming clots and increases the chance of high blood pressure.

If you have high blood pressure or smoke and take the Pill your risk increases. It is important to discuss these things with your doctor who will be able to advise you on the risks and benefits.

#### **MINI STROKES (TIA'S)**

Some strokes are very sudden but there can be warning signs. Usually the warning is in the form of a mini stroke or Transient Ischaemic Attack (TIA)

ni 'i ha fanga ki'i pā kālava ikiiki pe ko ia 'oku ui ko e Transient Ischaemic Attack (TIA).

Ko e ngaahi faka'ilonga 'o e TIA 'oku tatau tofu pē ia mo e ngaahi faka'ilonga 'o e pā kālava' kā 'oku hoko pē eni ia 'i he taimi 'oku si'isi'i hifo 'i he houa 'e 24 (ko e ngaahi faka'ilonga ko ia 'oku laka hake 'i he houa 'e 24 'oku ui ia ko e pā kālava').

**Kapau 'oku 'i ai ha taha 'oku' ne ma'u 'a e ngaahi faka'ilonga ko eni' pea fakavave leva 'o sio ki he toketaa'.**

**Ko e ngaahi faka'ilonga anga maheni' 'oku kau ki ai 'a e:**

- Mamate, mofisifisi 'a e sino', mamatea 'a e fofonga', uma' pe ko e alanga' kae tautautefito kapau ko e tafa'aki pē 'e taha 'o e sino'
- Nenefu pe nounou fakafokifā 'a 'ete vakai' 'i ha fo'i mata 'e taha pe ko e ongo fo'i mata' lōua
- Fakafokifā pē 'a e faingata'a 'a 'ete lea' pe ko 'ete mahino'i 'a e talanoa mai 'a e kakai kehe'
- Ninimo fakafokifā, sēlue 'a hoto sino' 'o 'ikai toe ma'u 'ete tu'u', faingata'a 'a e ngaungaue holo'
- Langa uhuu fakafokifā 'a e fo'i 'ulu', pea 'i he taimi lahi 'oku langa fakafa'ahitaha pē pe ko e 'alu hifo 'a e langa' 'i he tafa'aki 'o e kia'
- Pongia taimi nounou
- Mo'utāfu'ua taimi nounou.

**'E lava pē ke fakautuutu ange 'a e ngaahi me'a te nau ala fakatupu 'a e pā kālava', 'o hangē nai ko eni':**

Kapau 'oku ua pe lahi ange ai 'a e ngaahi 'ulungaanga fakatu'utāmaki 'oku' ke ma'u', 'oku toe lahi ange ai 'a e ngalingali ke ke pā kālava ai'.

- **Ifi tapaka + toto mā'olunga** = liunga 18 'a e ngalingali ke ke pā kālava ai' 'o fakahoa atu ki he fika anga maheni'
- **Ifi tapaka + toto mā'olunga + 'ulungaanga fakatu'utāmaki 'e taha:** 'e toe hiki'i hake ai 'a e ngalingali ke ke pā kālava ai'.
- **Kapau 'oku fā pe toe lahi ange ai 'a e ngaahi 'ulungaanga fakatu'utāmaki 'oku' ke ma'u'**, 'oku tatau ia mo ha'o tangutu 'i ha fo'i pomu!  
'E hoko ha'o feinga ke tukuange atu pe fakaholoholo hifo 'a e ngaahi 'ulungaanga fakatu'utāmaki 'oku' ke ma'u' ke holo lahi hifo ai 'a e ngalingali ke ke pā kālava ai 'i he ngaahi ta'u ka hoko mai'.

**Ki ha toe fakamatala kehe ange, fetu'utaki ki he 0800 STROKE (0800 78 76 53)**

Transient Ischaemic Attack symptoms are very similar to those of a stroke but last for less than 24 hours (*symptoms lasting longer than 24 hours are called a stroke*).

**Anyone with these symptoms should see a doctor immediately.**

**Common symptoms include:**

- Numbness, tingling, paralysis of face, arm or leg especially on one side of the body
- Sudden blurred or limited vision in one or both eyes
- Sudden difficulty speaking or understanding what others are saying
- Sudden dizziness, loss of balance, difficulty with movements
- Sudden intense headache, often on one side or down the neck
- Brief spell of fainting
- A brief episode of confusion

**Risk factors multiply, for example:**

If you have two or more risk factors for stroke then your risk of stroke multiplies.

• **Smoking + high blood pressure** = risk of at least 18 times higher than normal

• **Smoking + high blood pressure + one other factor** will increase the risk significantly more.

• **If you have four or more risk factors** you are sitting on a bomb!  
Getting rid of even one risk factor will significantly reduce your chance of having a stroke over the next few years.

**For further information contact 0800 STROKE (0800 78 76 53)**