



Ia e Silafia

Suau'u
**e Gaosi ai
Taumafa**



**Queensland
Government**



**Ethnic Communities
Council of Queensland**

Samoan

Faatomuaga

O lenei pepa sa galulue ma tusia e latou o loo a'ō'oga (Dietitian/Nutrition Students) ile luniveste o Tekonolosi a Kuiniselani (QUT) ma le afaigaluega a le Ethnic Communities Council of Queensland (ECCQ) Chronic Disease Program, faatasi ma le lagolago mai a le Malo o Kuiniselani, e ala lea ile Matagaluega ole Soifua Maloloina.

E fia faailoa fo'i e le Chronic Disease Program team a le ECCQ, le fesoasoani ma le lagolago mai o e sa faitauina ma faaliliu lenei pepa.



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Folasaga

O lenei tusi o loo faamatala mai ai ga'o eseese, ma fautuaga mo suau'u e fa'aaoga ile kukaina o mea tausami. O lo'o aofia ai fo'i faamatalaga i ituaiga suau'u eseese o loo maua, ma lona fa'aaogaina talafeagai ina ia maua se taumafa maloloina, auā le fo'ia poo le puleaina lea o faama'i le pipisi.

O le Ethnic Communities Council of Queensland (ECCQ) o se faalapotopotoga tumaoti (NGO) o loo fesoasoani i mana'o o tagata mai atunuu eseese (Culturally and Linguistically Diverse Communities) i Kuiniselani. O le ECCQ Chronic Disease Program, o loo saunia ia faamatalaga, a'oa'oga ma lagolago ile fo'ia ma le pulea lea o faama'i le pipisi, e ala lea ile feiloa'i ma talanoa atu ile mamalu ole atunuu poo luga fo'i ole telefoni.

A manaomia nisi faamatalaga, faafesoota'i mai le telefoni **07 3844 9166** poo le **www.eccq.com.au**

Ituaiga ga'o

O ga'o i totonu o tatou taumafa, e taua tele ma mana'omia e maua ai e le tino le malosi ma fesoasoani mo le faatupu tino (cell growth). E fesoasoani foi e puipui ma faamafanafana i totoga o lou tino. E fesoasoani foi ga'o e miti'ia ia porotini, vaiamini ma minerale mai mea'ai, ona gaosia ai lea o hormone e aoga mo le tino. E mautinoa le mana'omia e o tatou tino ia ga'o ia.

E fa (4) ituaiga ga'o o loo i totonu lea o a tatou taumafa:

1 Monounsaturated fats
(Ga'o suavaia)

3 Saturated fats
(Ga'o to'a)

2 Polyunsaturated fats
(Ga'o suavaia)

4 Trans fats
(Ga'o mai taumafa gaosi)

Ga'o suavaia (Monounsaturated fats)

- O le monounsaturated fat o se ga'o lea e suavaia pea taatia mo se taimi (at **room temperature**).
- **Taumafa e maua ai:**
 - Suau'u ole canola, olive ma le pinati
 - Isi fatu laau, pei ole cashews ma le almonds
- ✓ E faaitiitia le aofaiga ole cholesterol ile toto (blood cholesterol levels), pea faaitiitia le aofaiga ole ga'o to'a ile mea'ai
- ✓ E faapena ona faaitiitia ai fo'i lou ono maua i faama'i ole fatu (coronary heart disease)



Ga'o suavaia (Polyunsaturated fats)

- O le polyunsaturated fat o se ga'o lea e suavaia pe a taatia mo se taimi (at room temperature).
 - E lua ituaiga polyunsaturated fats, ole omega-3 fats ma le omega-6 fats. E taua tele le omega-3 ma le omega-6 fats ile mea'ai ona e lē mafai ona gaosia ele tino ia ituaiga ga'o nei.
 - **Taumafa e maua ai**
 - O le Omega-3 fats, e maua lea i i'a, aemaise i'a lololo e pei ole samani, satini, ma le anchovies
 - O le Omega-6 fats, e maua lea i suau'u e pei ole safflower ma le soybean oil, ma isi fatu laau, e pei ole brazil nuts
- ↓ **E faaititia le aofaiga ole cholesterol ile toto (blood cholesterol levels), pea faaititia le aofaiga ole ga'o to'a ile mea'ai**
- ↓ **E faapena ona faaititia ai fo'i lou ono maua i faama'i ole fatu (coronary heart disease)**



¹ Nutrient Reference Values for Australia and New Zealand. www.nrv.gov.au/chronic-disease/summary

² Nutrient Reference Values for Australia and New Zealand. www.nrv.gov.au/nutrients/fats-total-fat-fatty-acids

³ The Dietitian Association of Australia. www.daa.asn.au/for-the-public/smart-eating-for-you/nutrition-a-z/fat

Ga'o to'a (Saturated fats)

- Saturated fat o le ga'o lea e to'a pea taatia mo se taimi (at **room temperature**). E faaigoaina o "ga'o leaga".
- E le mana'omia ele tino ia ga'o ia ona e le mafai ona faaaogaina e le tino.
- **Taumafa e maua ai**
 - Susu, kulimi, pata ma le sisi
 - Aano manu fasi
 - Ga'o mai le popo ma le pama (palm and coconut oils)
 - Mea'ai pei ole paté, pai, masi, keke, ma pai faatumu (pastries)
- O le fautuaga faatapulaa (NRVs) **mo saturated fats (ma trans fat) e le tatau ona sili atu ile 10% ole malosi e maua mai lau mea tausami i aso ta'itasi (daily energy intake)**.¹ Faata'ita'iga: A e tausami le 8,000 kcal ile aso, e tatau ona i lalo ifo ole 22 g o le ga'o to'a.
- ↑ **A alu i luga ia le aofaiga ole cholesterol ile toto (blood cholesterol levels)**
- ↑ **Ua alu fo'i i luga lou ono maua i faama'i ole fatu (coronary heart disease)**²



Ga'o mai taumafa gaosi (Trans fats)

- E maua Trans fats i mea'ai e faaaoga ai suau'u ma ga'o i lona gaosiga. I le gaosiga o nei mea'ai, e maualuga tele se vevela na kukaina.
- **Taumafa e maua ai:**
 - Mea'ai falai ma mea'ai takeaway
 - Keke, Masi ma Pai faatau

- ↑ **A alu i luga le aofaiga ole cholesterol ile toto (blood cholesterol levels)**
- ↑ **Ua alu fo'i i luga lou ono maua i faama'i ole fatu (coronary heart disease)**
- E maua Trans fats i totonu ole margarines?
 - Ua mafai ona aveese e le 'au gaosi oloa a Ausetalia ia le transfat mai le margarines. O margarines mai Australia o se mea'ai maloloina mo tatou ona o loo maua ai ga'o suavaia (unsaturated fat).³



Vevela asu ole suau'u (Smoke point)

O le vevela asu poo le **smoke point**, ole vevela lea e 'ausia e le ga'o poo le suau'u ona amata lea ona asu. E taua tele le aua le sili atu le vevela ile vevela asu, ona e **afaina ai le fofoga ma le ala manava ile asu mai le suau'u poo le ga'o**. A oo le vevela ile **316 °C** [flash point], e ono **sasao se tama'i afi ile mea'ai poo le suau'u**, ma oo ai lava ina **mu le mea'ai poo le suau'u**, mo se 5 sekone pe umi atu pe a oo le vevela ile **371 °C** [fire point].⁴



Faatapulaa fautuaina mo suau'u

O le fautuaga mo le soifua maloloina mo suau'u ia aua nei sili atu ile **21.7 g ole ga'o to'a (saturated fat)**, ma le aua le sili atu ile **1.1g ole o le trans fat** ile 100 ml ole suau'u. E le o manaomia le tusia ile pepa o faaupuga o mea'ai (food label) i Ausetalia e aofaiga ole **trans fat** o iai i totonu, sei vagana ua iai se Claim (**nutrition claim**) a le vaega gaosi oloa i Ausetalia, e fia faailoa le aofaiga o ituaiga ga'o (saturated fat, trans fat, monounsaturated fat, polyunsaturated fat, omega-3 fatty acid, omega-6 fatty acid or cholesterol) o loo i totonu o lea mea'ai.⁵



Vevela e kukaina ai mea'ai

	Fua ole Vevela
Vevela ole Vai Puna	100 °C
Vevela Masani o Kuka	107 – 177 °C
Vevela Maualuga o Kuka	177 – 232 °C Vevela talafeagai: 191 °C Fasi mea'ai la'ititi: 191-199 °C Fasi mea'ai lapo'a: 177-185 °C

⁴ Brown, A. C. (2014). Chapter 22 of Understanding food principle and preparation (5th edition). Australia: Cengage Learning.

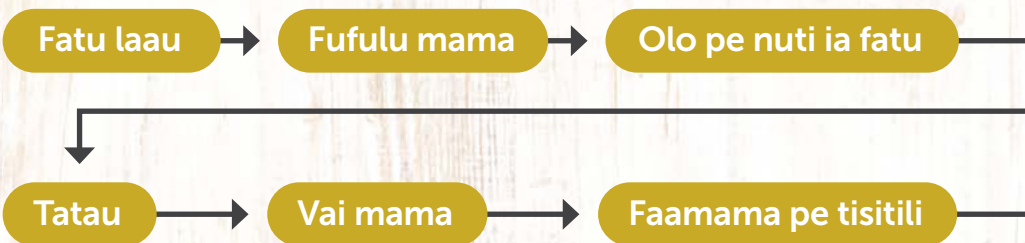
⁵ National Health Foundation of Australia. (n.a.). The healthier oil program. Retrieved from www.heartfoundation.org.au/programs/healthier-oils-program

O le gaosiga o suau'u e fa'aaogaina i kuka

O le suau'u e maua mai lea e i vaega eseese ole la'au, aemaise lava le fatu (e aofia ai le sunflower, pama, safflower, cotton, sesame, ma le grapeseed oils) poo fua o la'au (e aofia ai le pinati, soybean, almond, ma le walnut oils). E iai isi suau'u e maua pea tatau le a'ano ole fua olea o lea la'au. Faata'ta'iga, o le suau'u popo, ole o le suau'u ole pama (palm oil), ole o le suau'u ole olive (olive oil), ma le suau'u ole saga (corn oil), e maua uma mai ile a'ano ole fua o ia la'au.

O le faasologa masani ole gaosiga o suau'u, e amata lea ile fufulu mama o fatu, ona olo lea pe nuti ia ninii, ona tatau lea ia maua mai le suau'u. O le suau'u e maua mai, o le a vai mama, faamamaina, pe tisitili (distil) ma faasauni loa mo le tuu fagu ma tapena mo le faatauina. (O faamatalaga o le gaosiga sa maua mai lea ile website ole www.madehow.com/Volume-1/Cooking-Oil.html).

O le faagasologa ole gaosiga ole suau'u






Oomi

Tuu fagu

Faatulagaga o suau'u e masani ona fa'aaogaina i kuka

Suau'u	Monounsaturated fat (g/100ml)	Polyunsaturated fat (g/100ml)	Saturated fat (g/100ml)	Vevela Asu
Canola oil	62 g	30 g	8 g	204 °C
Grape seed oil	18 g	70 g	12 g	204 °C
Sunflower oil	24 g	64 g	12 g	232 °C
Pure olive oil	~ 76 g	~ 10 g	~ 14 g	Le maua se faamatalaga
Extra virgin olive oil	~ 76 g	~ 10 g	~ 14 g	208 °C
Virgin olive oil	~ 76 g	~ 10 g	~ 14 g	216 °C
Light olive oil	~ 76 g	~ 10 g	~ 14 g	Le maua se faamatalaga
Extra light olive oil	~ 76 g	~ 10 g	~ 14 g	242 °C
Corn oil	33 g	53 g	14 g	227 °C

 Ua fautuaina le fa'aaogaina

 Ua fautuaina le fa'aaoga faatatau

O lona fa'aogaina

Faamatalaga

Fa'aogaina mo kuka vevela ma kuka malulu

Suau'u lelei toe taugofie, toe manaia lona tofo, e fetau mo kuka vevela e oo lava i kuka e maualuga tele le vevela. Ona e maualuga le aofaiga ole ga'o suavaia (high unsaturated content), ae maualalo le aofaiga ole ga'o to'a (low saturated content), ua **fautuaina le fa'aoga** e le Heart Foundation ma le Dietitian Association of Australia.

Masani ona fa'aoga i salati

E lanu samasama-meamata, manaia lona manogi ma lona tofo. E fetau mo salati, fa'aoga e soka ai mea'ai (marinade), fetau foi mo kuka eseese.

Fetaui mo kuka malulu toe vevela

E lanu samasama vaivai, leai sona tofo, toe taugofie. E fetau mo kuka maualalo, feololo pe maualuga foi le vevela.

Le maua se faamatalaga

O le Pure olive oil o se fefiloi lea ole virgin ma le olive oil ua uma ona faamama. E vaivai atu lona tofo (flavour) nai lo le extra virgin ma le virgin olive oil.

Le fetau mo kuka maualuga tele le vevela

O le suau'u sili lea ona lelei ma maloloina, ae taugata. E le'i vaimamaina, e le'i faavevelaina pe ave iai ni vailaau i lona gaosiga. O le mafuaaga lea ole malosi o lona manogi i suau'u uma e gaosi mai le fatu olive.

Le fetau mo kuka maualuga tele le vevela

Le maua se faamatalaga

Le maua se faamatalaga

E tai tutusa ia suau'u nei e lua, o suau'u ua uma ona vaimamaina (refined oil). E vaivai lona lanu ma lona tofo. E tai tutusa foi le aofaiga ole ga'o ma le malosi (energy and fat content) o nei suau'u.

Le maua se faamatalaga

Fetaui mo kuka malulu toe vevela

E le malosi tele lona tofo, e lelei mo le faiga o masi, keke ma pai (baking).

Suau'ú	Monounsaturated fat (g/100ml)	Polyunsaturated fat (g/100ml)	Saturated fat (g/100ml)	Vevela Asu
Soybean oil	23 g	62 g	15 g	256 °C
Sesame oil	39.2 g	41.2g	15.2 g	210 °C
Peanut oil	48 g	34 g	18 g	232 °C
Vegetable oil (fefiloi)	E suisui	E suisui	E suisui	E suisui
Rice bran oil	43 g	35 g	22 g	253°C – 261°C
Palm oil	~39 g	~10 g	~51 g	Le maua se faamatalaga
Palm olein	~39 g	~10 g	~51 g	230°C
Coconut oil	7 g	2 g	91 g	171 °C – 179 °C
Ghee (Indian clarified butter)	22.7 g	1.7 g	65 g	252 °C

● Ua fautuaina le fa'aaoga faatatau

● E le fautuaina le fa'aaogaina

O lona fa'aaogaina

Faamatalaga

Fetaui mo kuka
malulu toe vevela

E aoga i soo se ituaiga kuka, ona e laititi lona manogi, toe maualuga le aofaiga ole ga'o suavaia (high polyunsaturated fat content).

Le fautuaina le
fa'aaoga ile deep-
frying

Light sesame oil: aoga mo le falai.
Dark sesame oil: aoga mo kuka stir-fry, keke ma pai, faiga o sosi ma kuka manogi (sauce and spreads)

Fetaui mo kuka
malulu toe vevela

E le tele sona tofo (flavour), o se suau'u lelei mo kuka aua na te le taomia le tofo o mea'ai o loo kukaina.

E faalagolago ile
tele ole ga'o

O le Vegetable oil o se suau'u e fefiloi, ma e faalagolago lona lelei ma le maloloina ile aofaiga ole ga'o to'a. E masani ona maua ai le palm oil, cottonseed oil poo le coconut oil, o suau'u ia e maualuga le ga'o to'a (saturated fat).

Taua Tele: Siaki le Nutritional/Food Label pea faatau sau suau'u. O suau'u e lalo ifo ma le 21.7 g/100 mL ole saturated fat ma le 1.1g /100 mL ole trans fat, ua fautuaina le fa'aaoga.

Le fautuaina le
fa'aaogaina mo kuka
ma mea tausami

E le ta'ua ose suau'u maloloina, ona e fai sina maualuga ole aofaiga ole ga'o to'a (high saturated fat content).

Le fautuaina le
fa'aaogaina mo kuka
ma mea tausami

O le suau'u o le Pama (palm or palm olein oil) e le fautuaina le faaaogaina ona e maualuga le aofaiga ole ga'o to'a (very high saturated fat content).

Le fautuaina le
fa'aaogaina mo kuka
ma mea tausami

I totonu o Ausetalia, e mafai ona ta'ua ma label le palm oil ole vegetable oil, ua le mafai ai ona iloa ele tagata faatau poo iai se palm oil i lea suau'u pe leai. E tatau lava ona siaki le Nutritional/Food Label ole suau'u mo le aofaiga ole ga'o to'a a'o lei faatauina.

Le fautuaina le
fa'aaogaina mo kuka
ma mea tausami

E maualuga tele le aofaiga ole ga'o to'a o loo iai (very high in saturated fat content).

Le fautuaina le
fa'aaogaina mo kuka
ma mea tausami

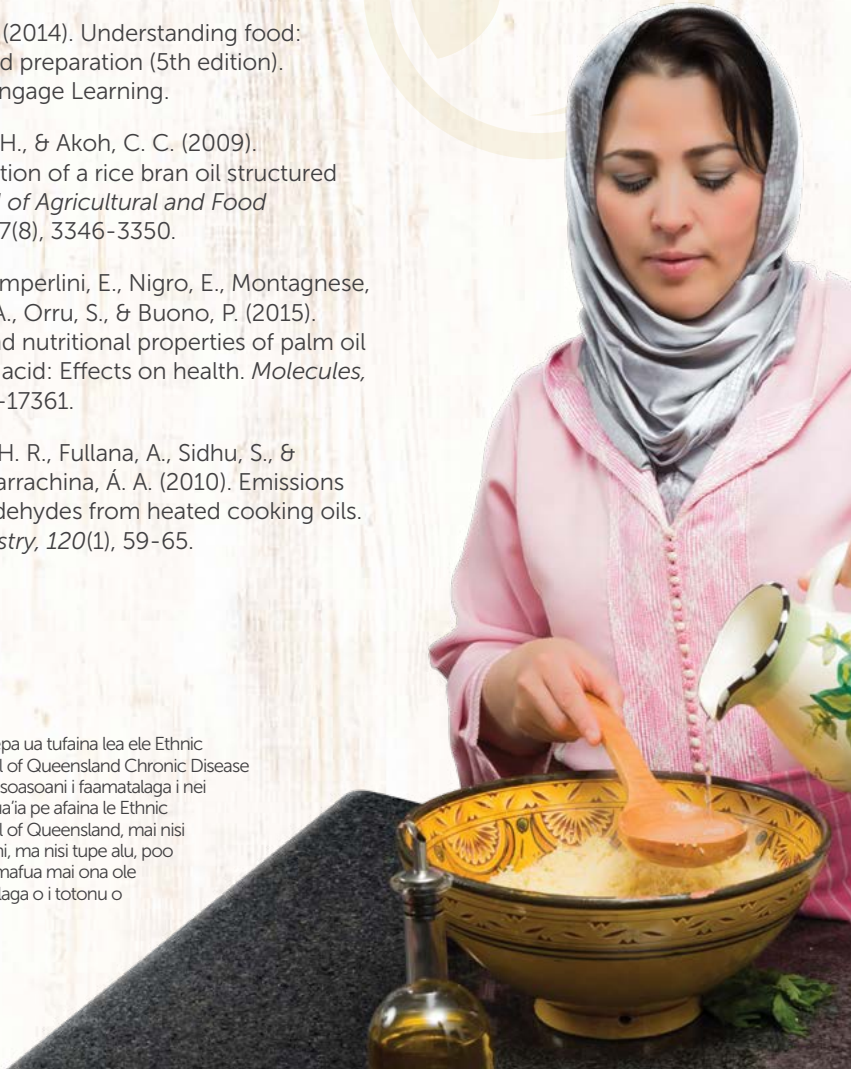
O se ga'o e fa'aaoga i kuka faa-Initia, e maualuga tele le aofaiga ole ga'o to'a o loo iai, toe maualuga lona vevela asu nai lo le pata masani.

* *<FoodWork8> ua fa'aaogaina e su'ea le aofaiga ole ga'o.

Mo nisi faamatalaga

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