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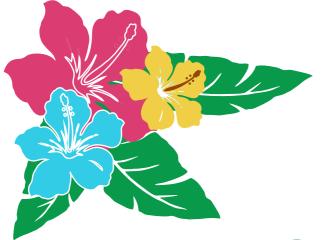
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# LIFELONG HEALTH OUR TAMARIKI

A critical window of opportunity to influence your child's future health

Siobhan Tu'akoi, Neti Tamarua Herman, Mark Vickers, Karen Tairea and Jacquie Bay







# **Health Across**



Build your future on solid foundations

Many different things can influence your health!

#### For example:

- Family history
- Food and nutrition
- Physical activity
- Lifestyle
- Your environment
- Social and economic factors

A healthy start to life for your baby can be influenced by the health of their parents and grandparents.



This means that being healthy is important for yourself and your future children!

# the Generations

## Akatumu i toou oraanga ki runga i te tango ngaueuekore





E maata te au tu ravenga no te akatuke i toou oraanga!

#### Akaraanga:

- Mero rikiriki o te kopapa
- Te au kai meitaki
- Akaetaeta uaua
- Tu oraanga
- Te ao rangi
- Te tu oraanga e te au tu akapuapinga anga moni

Ka riro te oraanga meitaki o te au Metua i te akamatutu katoa i te tupuanga meitaki o te pepe.

Ko te aiteanga e puapinga te oraanga meitaki noou e te uanga ki mua!



# Healthy

#### Eat lots of fruits and vegetables!

- Leafy greens
- Pinapi
- Rukau
- Tarati/Lettuce
- Pi/Beans
- Oniani/Onions
- Maniota
- Uto
- Eggplant
- Kumara
- Karaoti/Carrots

- Nita/Pawpaw
- Vi/Mango
- Meika/Banana
- Akari/Coconut
- Parapotini/Passionfruit
- Ara/Pineapple
- Tomati/Tomato



#### Include some fish, lean meat, grain foods and dairy products in your diet.

- Fish
- Chicken
- Lean red meats
- Kidney beans
- Chickpeas
- Unsweetened yoghurt

- Wholemeal bread
- Brown rice
- Pasta
- Milk
- Eggs



#### Avoid foods high in fat, sugar and salt.

- · Corned beef
- Coconut cream/oil
- Doughnuts

- Fizzy drinks
- Hot chips
- Potato chips



# **Habits**



Teia te akaraanga o te mereki kai:

A typical plate of food may look like:



- Eat healthy local foods
- Avoid drinking alcohol and stop smoking
- Drink plenty of water



# **Before conception**

#### Akapapaanga

- □ Aere ki te taote e te neti, kia akaraia toou e toou tokorua paunu meitaki o te kopapa
- □ Akamakoia tetai au maki ke atu mei te toto vene
- □ Takore i te kai avaavaa, kai apinga akakona e te inu kava kona
- Uriruri manako ki toou taote/neti no runga i te kaikai meitaki e te au mea tauturu
- ☐ Aere ki ko i te taote nio kia akaraia toou nio

#### **Checklist**

- □ Check you and your partner's BMI with a doctor/nurse
- □ Get any health conditions under control e.g. diabetes
- □ Stop smoking, drug use and drinking alcohol
- $\hfill\Box$  Talk to your doctor/nurse about healthy eating
- □ Check your oral health with your dentist





## **Before Conception**

Create the best future for your tamariki

The weight of both partners before having a baby is important. A doctor or nurse can check your BMIs (body mass indicies) to see if you're within the healthy range.

#### Eaa te puapinga o te BMI meitaki?

#### Why is a healthy BMI important?

#### Va'ine

#### Tāne

- Akakiti i te turanga e ka tuia koe i te maki toto vene i te tuatau e nui ra koe
- Akaiti i toou turanga kia tuia e te maki toto vene, paunu kopapa teimaa a muri ake
- Akaiti i te turanga kia kore e topa te pepe
- Lower risk of diabetes or gestational diabetes
- Lower risk of putting on weight in later life and can affect chances of becoming pregnant
- · Lower risk of miscarriage

- Akameitaki i te vai o te tane
- Akameitaki atu i te turanga e ka nui mai tona tokorua
- Akatupu meitaki i te tupuanga o te pepe i roto i te kopu o te mama
- For sperm health
- Improve his partner's chances of getting pregnant
- Normal development of unborn child



# **Pregnancy**

#### Akapapaanga

- Me kua teimaa roa toou paunu kopapa, aere ki te taote/neti kia akaraja koe
- □ Takore i te kai avaavaa, kai apinga akakona e te inu kava kona
- □ Ei akaiti mai i tetai tu kaui ki te tupuanga o taau pepe, kai i te au kai meitaki mei te meika para, kai raurau e te aai
- □ Aere ki ko i te taote nio kia akaraia toou nio

#### **Checklist**

- $\hfill\Box$  Check your weight gain with your doctor or nurse
- $\hfill\Box$  Avoid second-hand smoke, stop smoking, drinking alcohol and drug use
- □ To reduce risk of your child developing allergies, eat healthy foods such as bananas, leafy greens and fish
- Check your oral health with your dentist





### **Pregnancy**

Make the baby's environment healthy!

E puapinga tikai te paunu kopapa anau o te pepe no te oraanga meitaki a te tuatau ki mua.

No te paunu kopapa meitaki o te pepe, ka anoanoia te tauturu a te kopu tangata na roto i te akamako anga i te paunu kopapa o te mama i te tuatau e nui ra aia.

Your baby's birth weight is important for their future health.

For a healthy birth weight, families can help to make sure the mother's weight gain during pregnancy is within recommendations.

Ka riro te paunu kopapa tau i te tuatau e nui ra te mama i te akatano i te paunu me anau mai te pepe



Pregnancy weight gain can impact birth weight which can impact future health 8

#### Eating for two is a myth!

You only need an extra 450 calories in the third trimester, above your usual 2000 calories. The 'eating for two' myth can put your baby at risk as excessive weight gain during pregnancy increases risk of gestational diabetes, maternal hypertension and high birth weight. Talk with your doctor or nurse about your weight changes.

BMI before pregnancy	Recommended total weight gain
Less than 18.5	12.5 to 18kg
18.5 to 24.9	11.5 to 16kg
25 to 29.9	7 to 11.5kg
More than 30	5 to 9kg

#### **HELP PROTECT AGAINST ALLERGIES**

Ka riro te tu kaikai meitaki a te mama i te tuatau e nui ra aia i te takore atu i te turanga e ka tuia tana pepe e tetai au manamanata ke i roto i tona oraanga. Eaa ta tatou ka rave?

The type of nutrition a mother gets during pregnancy may be linked to their child's risk of developing allergies later in life. So what can you do?

#### 1. Make sure the mother's gut is healthy

No te turanga e kia tiratiratu te turanga o te ngai tavirianga kai, ka anoanoia tetai au manumanu meitaki i roto i te vairanga kai. Me meitaki te turanga vairanga kai o te mama ka meitaki katoa to te pepe. E puapinga tikai teia no te oraanga a muri ake e te akaiti mai i te turanga o tetai au manamanata ke atu o te pepe auraka kia tuia e te au maki tuketuke.

For healthy digestion, we need good bacteria inside our gut. A healthy gut for mums can influence a healthy gut for their baby. This is important for later health and reducing allergies.





Foods that mums can eat for a healthy gut:







**Local root crops** 

#### 2. Eat foods containing Omega-3

Ko te fatty acids i roto i tetai au ika e meitaki tetai i roto te ka tauturu i te paruru e te tauturu katoa i te akaiti mai te turanga o taau pepe auraka kia tuia e tetai maki ke atu.

Kai mei te rua – toru tuanga kai mei te aai i te au epetoma ravarai. Kia matakite i te mercury i roto i tetai au ika. Auraka e kai i te ika mei te akura, e te mango.

The fatty acids found in some fish have anti-inflammatory properties that can lower the risk of your child developing allergies.

Aim to eat 2-3 servings of fish such as canned tuna each week. Watch out for high mercury levels in some fish. Avoid eating swordfish, marlin, deep sea perch, wahoo and shark.





Note: You shouldn't eat uncooked seafood while pregnant!

#### 3. Don't avoid foods that might cause allergies

E kai rai i te au kai e manamanataia ana koe mei te au kai e nut,te au kai e u to roto, te kai moana e te uamoa. E meitaki me kai maata i te au kai meitaki e te tukeke.

Only avoid foods that you yourself are allergic to e.g. nuts, dairy, seafood and eggs. Eating a wide variety of foods during pregnancy is healthy and helps to protect your child from developing allergies.

#### 4. Vitamin D levels

E puaping maata te Vitamin D i te tuatau nui. Me meangiti ua te vaito o te Vitamin D ka akatupu mai te reira i te manamanata ke atu. Ka rauka mai te vaito Vitamin D no roto mai i te ra, kai uamoa e te au kai e u to roto.

Vitamin D is important during pregnancy. Having low levels of Vitamin D is known to increase the likelihood of a person developing allergies. Get Vitamin D from being out in the sun or eating eggs, fish and dairy products.



# 0-12 months

#### Akapapaanga

- □ Angai ki te u mama kia roa te tuatau
- Akakite ki toou taote, neti me kare e rauka iakoe te angai i taau pepe ki te u mama
- □ Kai i te au tu kai memeitaki iakoe e angai ra i taau pepe ki te u mama
- Akamata i te angai i te pepe i te ono marama ki te kai e auraka i mua ake i te reira
- □ Aere ki ko i te taote nio kia akaraia to korua ko te pepe nio

#### Checklist

- □ Give only breastmilk for the first 6 months if possible
- □ Talk to your doctor, nurse or midwife if you have any difficulties breastfeeding.
- $\hfill\Box$  Eat a wide variety of healthy foods while breastfeeding
- Start giving healthy solids to your baby at about 6 months, but not before then
- □ Check you and your baby's oral health with your dentist



#### **0-12 MONTHS**

Give them the best start for a healthy future

#### **BREASTFEED AS LONG AS POSSIBLE**

Ko te angai i taau pepe ki te u mama tetai ravenga meitaki roa atu no te oraanga tiratiratu no te tuatau ki mua no te au pepe. Ka akaiti te reira i te turanga auraka te pepe e matu roa.



Me ka rauka, angai ki te u mama mei te ono marama.

Mei reira mai, tamata i te angai ki te kai e pera te u mama e tae uatu ki te rua Mataiti me kore roa atu.

Breastfeeding is one of the best things for your child's future health. It can reduce chances of your child becoming obese later in life.

If you can, breastfeed exclusively for the first 6 months.

From 6 months onwards, slowly start to give your baby solid foods while still breastfeeding until 2 years old or longer.

Talk to your doctor or nurse about other options if you are having trouble breastfeeding!

#### **Mother's Diet**

Kai maata i te au kai tukeke meitaki no te oraanga.

Ka riro teia i te akapapu mai i ta taau pepe ka inangaro i te kai.



Eat lots of different types of healthy foods.

This can positively influence your child's later food preferences.

#### **Baby's Diet**

- Mei te 0 ono marama kia angai ua i te pepe kit te u mama.
- Akamata i te oake i te kai ki te pepe e pera katoa te u mama i te ono marama (kai mei te rukau, kai raurau matie, kiko manu taviriia kua maoa).
- Mei te ono tai Mataiti kia
   oakeia te au kai mei te uamoa
   maoa, te au kai maaniia ki te
   u, e te pinati pata. Me tu kaui
   tetai, apai i te pepe kia akaraia
   e te taote.
- From 0-6 months baby should only have breastmilk.
- At 6 months keep feeding breastmilk + start solid foods (especially food rich in iron such as rukau, leafy greens, pureed cooked meat).
- From 6-12 months infants should also be given allergenic foods e.g. cooked egg, dairy, peanut butter. Monitor reactions and talk to your doctor.



Blend your own fruit + veges to make puree. If you don't have a blender, push food through a

#### OTHER HEALTH TIPS

- Te turanga o te nio tetai tuanga puapinga roa atu. Uruia te nio o taau pepe me akamata mai te reira i te tupu. Auraka e oake i te vai venevene, te vai ua rakau e tetai au kai venevene.
- Akapapu meitaki e kua pou te patia o pepe.
- Akakoukou mai i te kopu tangata kia tauturu no te oraanga meitaki o te pepe ma te akamaroiroi atuia ratou kia oake i te kai meitaki tikai ki te pepe.
- Akono meitaki iakoe! Tuatua ki toou taote/neti me kite koe i te tu kaui, manamanata, kare koe e inangaro i te rave i tetai angaanga. Piapa ua te maki manako i muri ake i te tuatau kua anau te mama. Ka ngoie ua te au mama e te papa i te tuia e teia maki.



- Oral health is important! Start brushing your baby's teeth as soon as they appear. Do not give them sugary drinks, juice or sweets. See a dental therapist to check on you and your baby's teeth.
- Make sure your baby is up to date with all immunisations.
- Get the whole family involved in supporting your baby's health by encouraging them to only give healthy food to the baby.
- Look after yourself! Talk to your doctor/nurse if you feel overwhelmed, hopeless or anxious. Postnatal depression is common. It can affect both mothers and fathers.



# 1-3 years

#### **Akapapaanga**

- □ Angai ki te u mama kia roa te tuatau
- □ Akapapu meitaki e te kaikai meitaki ra taau tama
- Akatanoia ratou kia rave i te au ra tetai au angaanga, mei te kaikai kapiti ki te kopu tangata katoatoa
- □ Akapapu e au apiianga meitaki ta te kopu tangata e apii nei ki taau tama

#### **Checklist**

- $\hfill\Box$  Breastfeed as long as you can
- □ Make sure your toddler gets healthy food
- $\hfill\Box$  Get them into a regular routine, such as eating as part of the family
- Make sure the whole family is setting good examples for the child



#### 1-3 Years

#### Make healthy routines for your family

Akanoo tamou ki te au kaveinga meitaki i roto i toou kopu tangata no te kaikai meitaki e te akaetaeta uaua kia riro te katoatoa ei akaraanga meitaki no te au tamarki.

E iriiri kai ana rai te au tamariki e mea puapinga kia oake uatu rai tatou i te au kai meitaki kia ratou - noatu e ka **tutuaia** mai ki vao. Auraka e oake i te au kai e maata te matu, tuka i roto mei te tonati, raore, vai venevene e te vai atura.

Ko te tanutanu kai, tunu kai kapiti e te kopu tangata tetai au mea puapinga roa atu te ka riro i te akataka meitaki i te tu oraanga meitaki no te au tamariki.



Akamata vave i te kaveinga meitaki Start healthy patterns early



As a family, stick to healthy patterns of eating and being active so everyone is a good role model for your child.

Toddlers can be picky about food but it is important that you continue giving them healthy foods - even if they spit it out the first time! Don't give them foods high in fat, salt or sugar such as doughnuts, chips, lollies, soft drinks and cordials.

Growing food, cooking meals and eating together as a family are all important opportunities that can shape the future healthy habits of your children.



Akapapu meitaki e kia akaetaeta uaua te au tamariki! Make sure the kids are active!







# Au ravenga no te Metua tane

#### I mua ake ka nui ei

E puapinga te tu oraanga meitaki o te Metua tane i mua ake ka nui ei te mama. Kai i te au kai memeitaki, akaruke i te kai avaava, auraka e kai i te au mea akakona, auraka e inu i te kava kona (auraka e maata atu i te toru vaito tano meitaki no te inu kava kona i te ra i roto i te taingauru ma rima ra i te epetoma).

#### Tuatau nui

- Tauturu i toou tokorua na roto i te marama anga i te au tu tieni anga te ka na roto aia, mei te roiroi, tauiui te tu e te maki.
- Tauturu iaia i te au angaanga ngutuare, tunu kai, tataki au apinga teimaa mei te apai i te au kou kai oko ia mai no roto i te toa.
- Kia vai meitaki rai koe kaikai meitaki, moe meitaki, akaetaeta i te uaua e te akaruke i te kai avaava. E kino maata me ka akaea koe ki roto i te auai avaava a toou tokorua e te pepe katoa.
- Kia vai teateamamao no te anauanga. Akapapa i tetai manga kete kakau no te aremaki e te akapapa katoa i toou ngutuare no te pepe.

#### Te tupu anga o te tama

- Kia riro koe ei akaraanga meitaki! Akari meitaki ki taau tamariki na roto i te akaetaeta uaua, kaikai memeitaki e te tanu i te au kai meitaki.
- Akapapa te kai meitaki na taau tamariki.
- Akamaroiroi i taau tamariki kia akaetaeta uaua i te au ra.



# **Tips for Dads**

#### **Before Conception**

Dads' health before the baby is conceived is important! Eat a wide variety of healthy foods, stop smoking tobacco, don't take any drugs and avoid drinking too much alcohol (no more than 3 standard drinks a day and 15 standard drinks a week).

#### **During Pregnancy**

- Support your partner and understand the changes she will be going through, such as tiredness, mood swings and morning sickness.
- Make sure you help with the housework, cooking and any heavy lifting such as carrying groceries.
- Stay healthy yourself eat well, sleep well, be active and stop smoking. Second-hand smoke is harmful to your partner and your baby.
- Be prepared for the birth. Pack a hospital bag and prepare your home for your baby.

#### As the Child Grows Up

- You are a role model! Set an example for your child by being active, eating healthy foods and growing fruit and vegetables.
- Help to make sure your child gets a healthy diet.
- Encourage your child to be active daily.









#### **Before Conception Trimester Trimester Trimester**

1st

2nd

3rd

**Before** pregnancy

First 3 months of pregnancy

Second 3 months of pregnancy

Last 3 months of pregnancy

**Iodine** 









**Folate** 

Iron











Vitamin D







Omega-3







# **Nutrients**



Breast- feeding  After birth	Where Can I Get This?*	Why?
<b>\</b>	Seaweed, seafood, fish, dairy products and eggs.	Helps with baby's thyroid, cognitive and physical development.
	Rukau, rukau viti, broccoli, beans, lentils, citrus fruits, papaya.	Helps with your baby's development and lowers risk of spina bifida.
	Eat 2 servings of iron rich foods <b>daily</b> such as rukau, eggs and red meats.	Lowers the risk of premature birth and low birth weight for baby; and anaemia in the mum.
<b>✓</b>	From being in the sun or eating dairy products.	Essential for bone development and skeletal health.
$\checkmark$	Eat 2-3 servings each week of fish (avoid high mercury fish).	Good for brain development and reducing allergies in your child.

\*Talk to your doctor about any supplements you may need.



# Track Your Pregnancy



Your pre-pregnancy	/early pregnancy weight:	кд
Your BMI is:	_kg/m²	
It is recommendedkg in your p	that you gain between regnancy.	_kg to
•	u will ideally weigh between _ id of your pregnancy.	kg and

Track your weight gain on this table. Try to weigh yourself every four weeks!

WEEK	WEIGHT (KG)



# Glossary



**Before conception:** The time before you are pregnant.

**BMI:** This stands for 'body mass index'. BMI is a calculation using your height and weight that can indicate whether you are a healthy weight, overweight or obese.

**Gestational diabetes:** A condition during pregnancy when a woman has high blood sugar levels. This can be harmful to the mother and baby's health.

**Exclusive breastfeeding:** Feeding a baby only breastmilk.

**Postnatal depression:** A type of depression and anxiety that can affect either parent following the birth of their child. This can be due to the adjustment to parenthood, hormonal changes and tiredness and fatigue.

**Trimester:** A period of three months. There are three trimesters during pregnancy, each marking a key stage.





#### For your child:

- Read the *Child Health & Development Record Book* by Te Marae Ora, Cook Islands Ministry of Health
- Advice for growing newborns and toddlers: <a href="www.plunket.org.nz/your-child/">www.plunket.org.nz/your-child/</a>

#### For mothers:

- Talk to your doctor or nurse
- Pregnancy advice from the New Zealand Ministry of Health: <u>www.health.govt.nz/your-health/pregnancy-and-kids/ pregnancy</u>

#### For fathers:

- Becoming a Dad: <a href="https://www.pregnancybirthbaby.org.au/becoming-a-dad">www.pregnancybirthbaby.org.au/becoming-a-dad</a>
- More advice: <a href="www.health.govt.nz/your-health/pregnancy-and-kids/pregnancy/helpful-advice-during-pregnancy/advice-dads">www.health.govt.nz/your-health/pregnancy-and-kids/pregnancy/helpful-advice-during-pregnancy/advice-dads</a>





# **Important Contacts**



#### Rarotonga

Hospital & Maternity Ward	22 664
Community Health Services	29 110
Dental Health Department	29 312
Child Welfare Association	23 678
Internal Affairs (family, child, gender divisions)	29 370
Mental Health Unit	20 066
Youth Helpline	0800 4357

Fill in the numbers for your island!

#### Pa Enua

Hospital/Health Centre	
Ministry of Health Office	
Dental Services	
Youth Helpline	0800 4357



# **Acknowledgements**

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- Te Marae Ora, Cook Islands Ministry of Health
- Te Tango Ropianga, Cook Islands Ministry of Internal Affairs
- Takamoa Theological College
- Cook Islands Child Welfare Association
- Cook Islands National Youth Council
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#### **How Did This Booklet Come About?**

The beginning of a new life is an amazing time, when a child's whole future is before them. Whilst your baby's DNA is inherited, the way their genes behave can be strongly influenced by their environment. Nutrition during their early life is a key factor that can positively shape their future health.

In 2014, an Australian and New Zealand Early Life Nutrition (ELN) Working Party looked at the evidence about nutrition, from before conception through to toddlerhood, and created recommendations. These formed a nutrition booklet distributed in Australia and New Zealand.

A need for a similar resource in the Cook Islands was identified. In order to ensure the content was relevant, several changes to the original booklet were discussed by a wide variety of groups in Rarotonga. This current booklet is a result of those discussions, aiming to provide Cook Islanders with information that can give tamariki a healthy start to life.

The original recommendations were developed by an expert panel:

- Professor Peter SW Davies, The University of Queensland
- Professor John Funder, Prince Henry's Institute
- Associate Professor Debbie Palmer, University of Western Australia
- Associate Professor John Sinn, University of Sydney
- Professor Mark Vickers, University of Auckland
- Associate Professor Clare Wall, University of Auckland



